

## 2005 Undergraduate Catalog

## Central Missouri State University Warrensburg, MO 64093

1-800-SAY-CMSU (1-800-729-2678)

#### www.cmsu.edu

Announcements in this catalog are subject to change and thus do not constitute an agreement or contract. This publication was prepared by the Registrar's Office, Central Missouri State University.

## **Central Missouri State University**

#### **Greetings** -

Welcome to Central Missouri State University. We hope the information provided in this catalog will help you

become better acquainted with our institution, its nationally and internationally known academic programs, and the advantages of studying on our campus.

As a major

comprehensive



Bobby R. Patton University President

university with a statewide mission in professional applied sciences and

technology, Central Missouri offers more than 150 areas of study. More important than numbers, however, is the high quality of our programs. CMSU is a state leader in discipline-specific accreditations and program assessment. Small class sizes, opportunities for hands-on experience from the beginning, outstanding facilities, and personalized attention from a dedicated faculty are Central Missouri hallmarks.

Students from all over the state, nation and world help to make our learning environment positive and

For updated information, visit the university's web site:

#### www.cmsu.edu

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Every effort is made to provide accurate and up-to-date information, however, the university reserves the right to change without notice statements concerning rules, policies, fees, curricula, courses or other matters when necessary.

This publication was prepared by the Registrar's Office, Ward Edwards Building 1000, with help from the Office of Undergraduate Studies, JCKL 1450, and University Relations, Administration 302, Central Missouri State University, Warrensburg, MO 64093.

Photo: The Office of Student Financial
Assistance and the Office of Student
Accounts are located on the ground floor of the
Administration Building on the east end of the
quadrangle.

friendly. Central Missouri focuses on strong baccalaureate programs designed to help all students obtain the skills necessary for lifelong success. Additionally, we offer an extensive array of graduate programs for people who seek greater expertise in a discipline or who are pursuing career advancement.

CMSU has an excellent reputation as a teacher education institution, and we are also widely known for our prominence in human services and applied sciences. Our statewide mission allows us to provide one of the most comprehensive applications of discipline-specific technology in higher education.

One of our most exciting educational experiences is the opportunity to spend time abroad studying, working as an intern, or student teaching. Please consider taking advantage of our many outstanding, and affordable international programs.

We hope you will enjoy your time at Central Missouri State University, and we are delighted to serve you.

> BOBBY R. PATTON University President

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Student Member Chesterfield

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Many offices frequently visited by students are located in the Ward Edwards Building on the north side of the quadrangle.

#### Registrar

Ward Edwards 1000

#### Admissions

- Undergraduate:
   Ward Edwards 1401
- · Graduate School Ward Edwards 1800

Academic Advisement Ward Edwards 1100

International Center Ward Edwards 1200

#### 2005-2006 Calendar

#### **SUMMER SESSIONS 2005: MAY 9 - JULY 29**

| May 8 Sunday, housing facilities open at 1 p.m. for 1st Session students.                 |
|---|
|   |
| May 9 Monday, 1st 3, 6, 9, 12 Sessions begin.   |
| May 27 Friday, 1st 3-week Session ends and Final Exams.                                   |
| May 27 Housing facilities close, 6 p.m.   |
| May 29 Housing facilities open at 1 p.m. for 2nd Session students.                        |
| May 30 Monday, Memorial Day holiday, CLASSES  |
| DISMISSED, UNIVERSITY OFFICES CLOSED.   |
| May 31 Tuesday, 2nd 3, 6, 9-week Sessions begin.  |
| June 17 Friday, 2nd 3-week, 1st 6-week Sessions end and                                   |
| Final Exams.  |
| June 17 Housing facilities close, 6 p.m.  |
| June 19 Housing facilities open at 1 p.m. for 3rd Session students.                       |
| June 20 Monday, 3rd 3, 6-week Sessions begin.   |
| July 4 Monday, Independence Day holiday, CLASSES DISMISSED, UNIVERSITY OFFICES CLOSED.    |
| July 8 Friday, 3rd 3-week, 2nd 6-week, 1st 9-week   |
| Sessions end and Final Exams.   |
| July 8 Housing facilities close, 6 p.m.   |
| July 10 Housing facilities open at 1 p.m. for 4th Session                                 |
| students.   |
| July 11 Monday, 4th 3-week Session begins.  |
| July 29 Friday, 4th 3-week, 3rd 6-week, 2nd 9-week, 12-week Sessions end and Final Exams. |
| July 29 Housing facilities close, 6 p.m.  |
|   |

| FALL SEMESTER 2005: AUG. 24 - DEC. 16  |
|--|
| August 19 University apartments open, 8 a.m.   |
| August 21 Residence halls open, 8 a.m.   |
| August 22, 23 Monday, Tuesday, faculty planning.   |
| August 24 Wednesday, 8 a.m., classes begin.  |
| August 30 Last day for Fall Semester enrollment and changing classes.                                  |
| September 5 Monday, Labor Day holiday, CLASSES DISMISSED, UNIVERSITY OFFICES CLOSED.                   |
| September 27 Last day to drop First Half Semester classes with . a W recorded.                         |
| October 13 Thursday, Final Exams for First Half Semester classes and end of First Half Semester.       |
| October 17 Monday, Second Half Semester classes begin.   |
| October 21 Mid-Semester Break. CLASSES DISMISSED.  |
| November 2 Last day to drop Semester classes with a W recorded.  |
| November 18 Last day to drop Second Half Semester classes with a W recorded.                           |
| November 22 Residence halls close, 9 p.m.  |
| November 23 Wednesday, Thanksgiving holiday, CLASSES   |
| DISMISSED.   |
| November 24, 25 Thursday, Friday, Thanksgiving holidays, CLASSES DISMISSED, UNIVERSITY OFFICES CLOSED. |
| November 27 Residence halls open, noon.  |
| Dec. 12-16 Monday through Friday, Fall Semester Final Exams (includes Second Half Semester classes).   |
| December 16 Residence halls close, 6 p.m.  |
| December 16 Friday, Graduate School Commencement.  |
| 5 1 47 6 1 11 1 1 1 1 6  |

December 17 ... Saturday, Undergraduate Commencement Dec. 23-Jan. 2 .. Winter holidays, UNIVERSITY OFFICES CLOSED.

#### SPRING SEMESTER 2006: JAN. 17 - MAY 12

| January 3 UNIVERSITY OFFICES OPEN.  |
|---|
| January 6 Residence halls open, 8 a.m.  |
| January 9 Monday, 8 a.m., classes begin.  |
| January 13 Last day for Spring Semester enrollment and  |
| changing classes.   |
| January 16 Monday, Martin Luther King, Jr. holiday, CLASSES DISMISSED, UNIVERSITY OFFICES CLOSED. |
| February 10 Last day to drop First Half Semester classes with a W recorded.                       |
| March 1 Wednesday, Final Exams for First Half Semester  |
| classes and end of First Half Semester.   |
| March 2 Thursday, Second Half Semester classes begin.   |
| March 3 Residence halls close, 6 p.m.   |
| March 6-10 Monday through Friday, Spring Break, CLASSES   |
| DISMISSED.  |
| March 10 Friday, Spring holiday, UNIVERSITY OFFICES CLOSED.                                       |
| March 12 Sunday, residence halls open, noon.  |
| March 24 Last day to drop Semester classes with a W   |
| recorded.   |
| April 1 Priority date for students to submit the 2006-07  |
| federal financial aid application (FAFSA) to  |
| the national processing agency  |
| (www.fafsa.ed.gov).   |
| April 11 Last day to drop Second Half Semester classes  |
| with a W recorded.  |
| May 1-5 Monday through Friday, Spring Semester Final  |
| Exams (includes Second Half Semester classes).  |
| May 5 Housing facilities close, 6 p.m.  |
| May 5 Friday, Graduate School Commencement.   |
| May 6 Saturday, Undergraduate Commencement.   |
| , ,   |
| CUMBARD CECCIONE OCCC. MAY O Like OC  |

#### SUMMER SESSIONS 2006: MAY 8 - July 28

| May 7 Sunday, housing facilities open at 1 p.m for  |
|---|
| 1st Session students.   |
| May 8 Monday, 1st 3, 6, 9, 12-week Sessions begin.  |
| May 26 Friday, 1st 3-week Session ends and Final Exams.   |
| May 26 Friday, Housing facilities close, 6 p.m.   |
| May 28 Housing facilities open at 1 p.m. for 2nd Session students.                                  |
| May 29 Monday, Memorial Day holiday, CLASSES DISMISSED, UNIVERSITY OFFICES CLOSED.                  |
| May 30 Tuesday, 2nd 3, 6, 9-week Sessions begin.  |
| June 16 Friday, 2nd 3-week, 1st 6-week Sessions end and Final Exams.                                |
| June 16 Housing facilities close, 6 p.m.  |
| June 18 Housing facilities open at 1 p.m. for 3rd Session students.                                 |
| June 19 Monday, 3rd 3, 6-week Sessions begin.   |
| July 3, 4 Monday & Tuesday, Independence Day holiday, CLASSES DISMISSED, UNIVERSITY OFFICES CLOSED. |
| July 7 Friday, 3rd 3-week, 2nd 6-week, 1st 9-week Sessions end and Final Exams.                     |
| July 7 Friday, housing facilities close, 6 p.m.   |
| July 9 Housing facilities open at 1 p.m. for 4th Session students.                                  |
| July 10 Monday, 4th 3-week Session begins.  |
| July 28 Friday, 4th 3-week, 3rd 6-week, 2nd 9-week,   |
| sal, zeminim mas, in a mon, ord o mon, zna o mon,   |

12-week Sessions end and Final Exams.

July 28..... Housing facilities close, 6 p.m.

#### **The Central Community Creed**

Choosing to become a citizen of Central Missouri State University implies an acceptance of and willingness to contribute to the common goals and purposes of the community. The Central Community Creed outlines the principles which guide the creation and maintenance of desired community at CMSU. The creed also provides a framework for individual behaviors which help build our vision.

#### As a member of the CMSU community, I will join in building $\dots$

- a **learning** community by striving for academic and personal excellence and by promoting the value of education and lifelong learning;
- an **open** community by creating and maintaining effective channels of communication and by accepting and respecting individuals whose values, ideas, beliefs, and life experiences may be different from my own;



- a **caring** community by seeking opportunities to serve and by supporting and affirming the well-being of others;
- a **just** community by behaving in ways which are ethical, honest, equitable, trustworthy, civil and respectful;
- a **disciplined** community by seeking to understand and fulfill personal responsibilities, by upholding University guidelines and by working toward self and community betterment;
- a **celebrative** community by observing and honoring existing traditions and by seeking and creating opportunities to enrich and define CMSU;
- a **purposeful** community by helping to shape and achieve the common goals of Central Missouri State University.

The Maastricht Friendship Tower in West Park symbolizes international understanding and friendship.

#### **SECTION I**

## **General Information, Services and Facilities**INTRODUCTION

#### Your Catalog

Your Central Missouri State University catalog contains a wealth of information for students and faculty members. Examine it carefully. Organized for your convenience, it has four main sections:

- I. General Information, Policies and Regulations, Services and Facilities;
- II. Academic Programs and Courses; and
- III. University Personnel.
- IV. Appendix with Four-year Plans for Most Degrees

This catalog is a reliable guide for entering the University, reviewing available programs of study, planning a program, selecting courses, and meeting graduation requirements. If you are a student entering the University, keep this catalog. To the extent possible, the University will accept the degree requirements in it for an eight-year period. (See Section I, Date of Catalog for Checking Degree Requirements.)

Since the policies and programs of the University are constantly changing, no catalog can be completely up-to-date, even when it is published. Students, therefore, should review their programs periodically with an academic advisor and with departmental advisors to allow for necessary changes.

#### The University

Central Missouri State University is located in Warrensburg, a west central Missouri community of 16,350, 50 miles southeast of Kansas City at the junction of Highways 50 and 13. It is easily reached by automobile, Greyhound Bus, or AMTRAK.

Central Missouri has provided more than a century of service, having been founded in 1871 as the State Normal School for the Second Normal District of Missouri. Formal accreditation and continued growth led the campus to be recognized as Central Missouri State Teachers College in 1919, Central Missouri State College in 1946, and Central Missouri State University in 1972. CMSU is an affirmative action EEO/ADA institution.

Including its airport and other special facilities, the University occupies more than 1,000 acres. It offers over 150 graduate and undergraduate programs for nearly 11,000 students. Its facilities are exceptional – not only its modern classrooms, laboratories, technical developments, and residence halls, but also its airport, Pertle Springs Park, and recreational and sports areas.

With a University motto of "Education for Service," it is not surprising that the University's faculty members have earned a reputation for teaching excellence, on and off campus. They have also distinguished themselves as scholars, achieving recognition in academic and professional organizations, in addressing learned societies, in performing in music and the arts, and in writing many books and journal articles.

#### **Mission Statement**

Central Missouri State University is a comprehensive, public university dedicated to student learning and committed to service and excellence. Through a foundation in the liberal arts, professional degree programs, personalized higher education experiences and use of current technologies, CMSU prepares a diverse body of students to be lifelong

Mission Statement, continued on page 4

#### Mission Statement, continued from page 3

learners who are proficient in their fields of study, able to adapt to a changing world and contribute to the betterment of society.

CMSU serves as Missouri's lead professional technology institution and is committed to acquiring, disseminating, and utilizing technology to enhance the University's comprehensive educational mission and to enrich the lives of all Missourians. In fulfilling its mission, Central Missouri State University:

- admits graduates of accredited high schools based on specific admission criteria, actively recruits traditionally under-represented students, and offers a strong merit-based scholarship program to attract highly capable students.
- provides a learner-centered academic environment which challenges individuals to participate actively in the educational process and empowers the faculty to excel in teaching while engaging in scholarship, research, creative activities and public service.
- offers an undergraduate foundation in the liberal arts, with an emphasis on integrating critical thinking, interaction, valuing, communication skills and technological applications into the curriculum across all disciplines.

- provides pre-professional, professional, academic and career-oriented undergraduate and graduate programs to meet the changing and technological needs of the workforce.
- provides inservice instruction for technical educators and other professionals needed to make Missouri competitive in a national and world market.
- continues its historical emphasis in preparing educators for Missouri.
- provides advanced graduate studies and research in areas of particular strength and need.
- uses assessment to improve teaching, learning, research and all university operations.
- fosters a campus community responsive to the needs of a diverse student population, provides opportunities for global awareness, and promotes an appreciation for human diversity.
- shares human and academic resources with schools, businesses, industries, and public agencies through partnerships and outreach activities.
- serves as a cultural, artistic and information center for the citizens of Missouri.

Approved by the Board of Governors, February 2003

#### **ACCREDITATIONS**

Central Missouri State University is accredited by The Higher Learning Commission (HLC) a member of the North Central Association. For information about HLC Accreditation, contact The Higher Learning Commission, 30 North La Salle Street, Suite 2400, Chicago, IL 60602-2504, telephone 800-621-7440, www.ncahigherlearningcommission.org.

In addition, CMSU has earned the following specialized accreditations:

- Art baccalaureates, National Association of Schools of Art and Design;
- Aviation Technology baccalaureate, Council on Aviation Accreditation;
- Business baccalaureates and graduate programs, AACSB -International;
- Chemistry baccalaureate, American Chemical Society;
- Dietetics baccalaureate, American Dietetic Association;
- Industrial Hygiene graduate and Occupational Safety and Health baccalaureate, Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology;
- Manufacturing and Construction baccalaureates, Electronics baccalaureate, National Association for Industrial Technology and

- American Council for Construction Education:
- Music baccalaureate and graduate programs, National Association of Schools of Music;
- Nursing baccalaureate and graduate programs, Commission on Collegiate Nursing Education
- Physical Education baccalaureate and graduate programs, National Association for Sport and Physical Education;
- Social Studies baccalaureate in education, National Council for the Social Studies;
- Social Work baccalaureate, Council on Social Work Education;
- Speech Pathology and Audiology master's program, American Speech-Language-Hearing Association;
- Teacher Education baccalaureate and graduate programs, National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education;
- Technology and Occupational Education baccalaureate, Council for Technical Teacher Education.

The University has institutional membership in:

- American Association for Higher Education
- American Association of State Colleges and Universities
- American Association of University
   Women
- American Council on Education
- Association for Gerontology in Higher Education
- Association of American Colleges and Universities
- Association of Governing Boards of Universities
- Center for Academic Integrity
- Council for Public Higher Education for Missouri
- Council on Undergraduate Research
- Council on Social Work Education
- Institute of International Education Membership Services
- Mid-America Intercollegiate Athletics
   Association
- . Missouri Academy of Science
- Missouri Campus Compact
- National Collegiate Athletic Association
- National Collegiate Honors Council
- National Council for Accreditation of Teacher Education
- National Council of Educational Opportunity Associations
- North Central Association of Colleges and Schools
- The Renaissance Group

### **Enrollment Management**

#### **ADMISSIONS** -

**High School Students.** Students admitted to Central Missouri State University are expected to have completed a 16-unit Missouri core curriculum requirement and either have a 21 or higher on the ACT (or SAT equivalent) or an admissions index score of 100. The index score is obtained by combining high school class percentile rank and the national percentile rank of the ACT score.

Other applicants will be considered on an individual basis. All admitted students will be assessed for the purpose of placement in courses which will provide an appropriate challenge for their level of preparedness and enhance their opportunity for success.

From Other Colleges and Universities. Students who are in good standing at other regionally accredited colleges and universities may apply for admission and transfer appropriate credit. (See Transfer of Credit.)

**GED Applicants.** General Education Development (GED) test scores may be used as a basis for admission to the University. (See GED Applications.)

**Application Fee.** A non-refundable application fee of \$30 must accompany the application. International students should remit \$50.

University Health Policies. Students must have documentation of receipt of two doses of measles vaccine after the first birthday or other evidence of measles immunity at the time of entry. Proof of these vaccinations from a physician, a school health nurse, or a community health department is required. A current medical history is requested. (Forms are available from the University Health Center.)

#### Academic Preparation

Students who meet the following criteria are considered academically prepared and better able to take advantage of the opportunities available at Central Missouri: at least 16 units of college preparatory work, including these courses:

- a. Four units of English with an emphasis on writing skills.
- b. Three units of mathematics (Algebra I and beyond).
- c. Two units of science (one must be a laboratory course in biology, physics, or chemistry).
- d. Three units of social science.
- e. One unit of visual/performing arts.
- f. Three additional academic units selected from foreign language, mathematics, science, social science, English (language arts), speech, or debate.

#### How to Apply

The Office of Admissions must receive all admission applications prior to the first day of class.

**During High School.** Graduating high school students who wish to enter Central Missouri State University should apply for admission early in their senior year so that the admissions process may be completed well in advance of enrollment. Each student should submit the following credentials to the Office of Admissions:

- 1. A completed application for admission.
- An official transcript mailed directly from the high school to the University Office of Admissions.

- 3. American College Test (ACT)/SAT scores, including subscores and composite.
- 4. \$30 application fee. **After High**

School. Other students who have graduated from high school but have not attended a college/ university should apply as early as possible. They should submit an application, \$30 application fee, and a final high school transcript.

#### From Other Colleges and Universities.

Students who wish to transfer to Central Missouri from other regionally accredited colleges and universities should (1) submit a completed application



The Office of Admissions is located on the ground floor of the Ward Edwards Building in Suite 1401. The phone number is 800-SAY-CMSU (800-729-2678).

form with \$30 application fee and (2) arrange to have an official transcript sent to the Office of Admissions from each college or university previously attended. Transfer students with less than 24 hours of college credit must submit a high school transcript.

Admission requires students to be in good standing and to have a grade-point average of C (2.00). Central Missouri's Office of Admissions will make an admission decision upon receipt of unofficial university transcript(s) and will permit enrollment for one semester. However, transfer students must provide the Office of Admissions with official transcript(s) from each university attended before being permitted to enroll in subsequent semesters.

**GED Applications.** Applicants should submit a completed application form with a \$30 application fee, official GED test results and ACT/SAT scores. As soon as these documents are on file in the Office of Admissions, the University considers the applications on an individual basis.

**Readmission.** Returning students who have been out of school less than a year complete an application for readmission and follow the procedure noted above for other entering students. Students who have been out of school for one semester or longer need to submit a new application for admission to the Office of Admissions. After review of their academic records and readmission to the University, they may proceed with enrollment.

#### **Current High School Students**

**Seniors.** High school seniors who can meet their graduation requirements with less than a full load of classes may apply for admission to take one or more courses at Central Missouri if they can meet the following requirements:

- 1. Class rank in the upper half.
- 2. Recommendation from counselor or principal.
- A plan for total class work not to exceed a full-time load.
- 4. Released time to take University classes.

The application process is the same as that for a full-time University student. (See How to Apply.)

**Juniors.** High school juniors may apply to take CMSU classes during the summer before their senior year if (1) they rank in the upper half of their class and (2) are recommended by a counselor or principal.

NOTE: Students persuing a high school diploma are not eligible to receive federal or state financial aid for university classes taken at Central Missouri. Before any financial aid can be authorized, all high school graduation requirements must be met and the student must be fully accepted for admission to CMSU.

#### Visiting College Students

A student currently attending another college or university is permitted to enroll at CMSU as a visiting college student. Enrollment under this status is limited to one semester per academic year. In order to apply, students must submit the application for admission along with a \$30 application fee.

At the completion of the course or courses at CMSU, the visiting student should request that Central Missouri's Registrar's Office send an official transcript to the certifying institution. Courses taken at CMSU for the purpose of transfer will apply toward a degree at CMSU should regular admission status to Central Missouri be desired.

NOTE: Visiting students are not eligible to receive federal or state financial aid from Central Missouri. All financial assistance for which a visiting student may be eligible is processed by the student's home school, the college or university at which the student has been admitted to pursue a degree program.

#### CMSU's sports facilities are among the best in the conference.

# Missouri residents who are sixty-five years of age on or before August 1 of our school year may enroll for courses without tuition payment. Persons seeking this scholarship shall provide documentation of age to Central Missouri and satisfy all other necessary entrance requirements to include a completed application. This enrollment is for non-credit (audit) purposes and may only be used for classes located on the **Warrensburg campus.** This scholarship may not be utilized for any Extended Campus class offerings. Enrollment will be allowed no sooner than 5 days prior to

Enrollment will be allowed no sooner than 5 days prior to classes beginning and on a space available basis only. Contact the Office of Admissions for further information.

#### Midwest Student Exchange Program

Senior Citizens

The Midwest Student Exchange Program (MSEP) is an interstate initiative established by the Midwestern Higher Education Commission to increase the educational opportunities for students in its member states. Central Missouri is an active participant. MSEP permits legal residents of Kansas, Michigan, Minnesota, Nebraska and North Dakota to enroll at Central Missouri at a reduced rate of tuition. The number of MSEP recipients is limited, however, and is based on factors such as date of admission to Central Missouri, ACT/SAT score, etc. Complete information about MSEP eligibility is available from the Office of Student Financial Assistance, Administration Building 104.

#### Non-Resident Fee Credit

If a nonresident student pays income tax in Missouri, or is in the legal custody of a parent who pays income tax in Missouri, a credit can be provided against the nonresident student fees normally charged to the student. For information on this credit contact the CMSU Office of Student Financial Assistance.

#### Stateline Grant

A graduating high school or transfer student who is eligible for admission to CMSU and resides in one of the following 10 Kansas counties will be permitted to pay the equivalent of in-state tuition and fees for all classes taken on the Warrensburg campus: Atchison, Bourbon, Cherokee, Crawford, Doniphan, Johnson, Leavenworth, Linn, Miami and Wyandotte.



#### INTERNATIONAL STUDENT ADMISSIONS

**The Application Process.** To apply for admission, international students file the following credentials with the Office of International Admissions.

- 1. A completed application form.
- 2. Official (or notarized) transcripts in English from each high school or college previously attended.
- Evidence of the availability of sufficient financial support to cover all university expenses for at least one full academic year.
- A brief statement describing educational objectives and career plans.
- 5. \$50 application fee.

Applicants sending applications from another country should submit credentials at least three months before enrollment; those transferring from another institution in the United States, should submit credentials at least one month before enrollment.

Demonstration of English Proficiency. To provide the best opportunity for academic success and appropriate course placement, international students must submit evidence of English proficiency. Prior to enrolling in regular university courses, a satisfactory score on the TOEFL is required of all international students whose native language is not English. The acceptable TOEFL score for undergraduate placement in regular university courses is 500 paper-based or 173 computer-based. The TOEFL requirement is waived for applicants who have completed a minimum of 60 semester hours at an accredited college or university in the United States or who are citizens of a country whose native language is English.

International students who do not meet the minimum English proficiency requirement are not permitted to enroll in regular university classes and must participate in CMSU's Intensive English Program until the minimum TOEFL requirement is satisfied or they have successfully completed level six of the Intensive English Program. Institutional TOEFL results earned at other institutions are not valid at CMSU.

During the orientation session, any international student whose native language is not English will undergo further evaluation for oral and written proficiency and, depending upon evaluation results, may be required to enroll in special



Through Intensive English Program classes conducted throughout the year, including the summers, students learn not only English, but the customs and culture of the United States.

classes designed to improve communication skills. The departmental initiated oral and written evaluations are waived, however, for students who either present a minimum TOEFL score of 580 paper-based (237 computer-based) or have earned a baccalaureate degree from an accredited United States college or university.

**Orientation.** All international students admitted to CMSU for the first time are required to arrive on campus on a set date (typically ten days prior to the first day of classes) for orientation and evaluation sessions.

**Health Insurance.** All international students are required to participate in the Student Health Insurance Program or provide proof of adequate health insurance from their native country.

NOTE: An international student normally does not qualify for federal or state financial assistance unless the student has been designated an "eligible non-citizen" or a "permanent resident" by the U.S. Citizenship and Immigration Services (USCIS) of the Department of Homeland Security (DHS). Documentation verifying the student's citizenship status may be required by the CMSU Office of Student Financial Assistance to determine the student's eligibility for financial aid.



The International Student Organization traditionally sponsors a very colorful entry in the Homecoming parade.

#### **SELF-ENROLLMENT SYSTEM (The MULE)**

Central Missouri is pleased to provide students with access to enrollment using the Student Self-Enrollment System (the MULE System). Following admission and advisement, students will have the opportunity to complete their own enrollment. Students may enroll from any computer connected to the Internet using CMSU's website <a href="https://www.cmsu.edu/online">www.cmsu.edu/online</a>. The MULE system is designed to provide students maximum control of their enrollment, ease of choosing their classes and the opportunity to add and drop courses at their discretion.

If a class is full, students will be given the option to be placed on a waiting list for the class if the course prerequisites are met. A student will remain on the waiting list until

- (1) he/she reaches the top of the waiting list and a seat becomes available in the class,
  - (2) the student removes him/herself from the list, or
- (3) the waiting list expires five days prior to the beginning of the class.

The waiting list blocks out the time period just as if the student had actually enrolled in that class, and the class counts toward the student's total hours enrolled. For the purposes of calculating the student's maximum credit hours allowed per semester (see the 18-credit hour limit on page 17), waiting list credit hours are considered part of a student's total hours enrolled. For all other purposes, including but not limited to the calculation of Financial Aid, waiting list credit hours are not considered part of a student's total hours enrolled.

If a seat in the class becomes available and the student is at the top of the list, the MULE System will automatically enroll the student in the class (overnight). The appropriate billing adjustment will be made and the student will be notified via his/her campus e-mail account that he/she has been placed in the class. If a student places himself/herself on the wait list, it is their responsibility to

monitor his/her CMSU e-mail account and/or class schedule to determine if he/she has been added to a class(es) from the wait list.

After the waiting list expires, students will not retain the priority they held on the waiting list. Seats that become available after the waiting list expires will be filled by the first student who tries to enroll in that class.

The system utilizes prerequisite checking to notify students when they are attempting to enroll in a class for which they have not satisfied the prerequisites. The enrollment system also notifies students whenever they require department consent or override action to enter a course when they do not meet specific requirements stated in the university catalog.

To enroll using the MULE, students must know their student identification number and personal identification number (PIN).

Additional information concerning student self-enrollment can be obtained at the Office of Academic Advisement (Ward Edwards 1100) or call 660-543-4721.

The Department of Information Services has a printer-friendly MULE System Introduction sheet online at www.cmsu.edu/infoserv/documents/ that can guide a student through the logon process and signing up for classes.

#### PLANNED PLACEMENT

All new students and transfer students with fewer than 24 semester hours must be placed according to university policy. Criteria used to make decisions include ACT scores (sub-scores and composite), class rank and courses previously completed. Placement decisions are made to facilitate student success. Three core components are considered: reading, writing, and mathematics. A free testing option is available if a student wishes to have a placement score reconsidered.

Students admitted without a recent ACT score (within the last 5 years) or with a GED score need to schedule placement examinations. Students without placement criteria will be placed into introductory math, English and reading courses. For information about planned placement, contact the Office of Assessment and Testing Services at 660-543-4919.

Placement options are listed as follows: (Note: Students may be considered on an individual basis.)

**AE 1000:** (Introduction to College Writing) ACT English score 17 or below, class rank 50% or below

**ENGL 1020:** (Composition I) ACT English score 18 or above and class rank 50% or above

**ENGL 1080:** (Advanced Composition) ACT English score 26 or above and class rank 50% or above

**AE 1010:** (Textbook Reading Techniques) ACT Composite score 18 or below

**AE 1030:** (Introduction to Algebra) ACT Math score 16 or above and class rank 49% or below

**MATH 1101:** (Intermediate Algebra) ACT Math score 17 or above and class rank 50% or above

MATH 1111: (College Algebra) ACT Math score 20 or above and class rank 70% or above

**MATH 1620:** (Contemporary Math) ACT Math score 20 or above and class rank 70% or above

MATH 1131: (Calculus for Business and Economics) ACT Math score 21 or above and class rank 75% or above, High school advanced algebra and geometry or MATH 1111

**MATH 1150:** (Pre-Calculus) ACT Math score 21 or above and class rank 75% or above, High school advanced geometry and trigonometry

**MATH 1151:** (Calculus/Analytical Geometry) ACT Math score 24 or above and class rank 80% or above, High school advanced algebra, geometry and trig, or MATH 1112 or MATH 1150

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#### CREDITS -

Validated Credit. Validated credit is also an option within the oral communication area of General Education (Public Speaking or Oral Interpretation), through the Modern Language Department (French, German or Spanish) and through the Mathematics Department. A student is able to earn transcripted college credit by demonstrating specific competencies. These tests or measurements vary by department and are free to the student.

Transfer Credit. Transfer credit is evaluated on the same basis used for Central Missouri Missouri students. Applicants who hold an Associate of Arts degree from an accredited Missouri two-year institution or have met the Missouri 42-hour General Education Core requirements are considered to have met Central Missouri's requirements in General Education, Divisions I and II. Transfer students who have completed the Missouri AA or the 42-hour General Education Core must also complete additional institutional requirements in Divisions III and IV and any major specific General Education courses. Note that the State of Missouri requires certain education courses for teacher certification.

For those with degrees other than the AA or degrees from an institution outside the State of Missouri, the University reviews transcripts and accepts applicable credit toward Central Missouri graduation on a course-by-course basis. Courses taken at a two-year college will not be applicable toward upper-level-hour requirements.

For current course equivalencies as provided by academic departments, visit CMSU's website **www.cmsu.edu/corequiv**.

Appeal of Transfer Credit. A student may request special consideration of transfer course work to meet degree requirements. For General Education requirements, students may submit a written appeal to the General Education Exceptions Committee in the Office of Academic Advisement (WDE 1100). For major or minor requirements, the student should visit with the respective department chair to discuss possible course equivalencies or substitutions.

If a student wants to appeal the decision of Central Missouri State University in accepting the transfer of credit from another accredited Missouri institution of higher education, an established appeal process exists. This appeal process is articulated in the publication, *Transfer of Credit From Accredited Missouri Institutions of Higher Education* and can be obtained through the Office of Admissions.

Undergraduate Enrollment in Graduate Courses. Graduating CMSU seniors may arrange, in their final semester of undergraduate study, to take courses for graduate credit, as long as their total load does not exceed 16 hours. To do so, each student submits an application for admission to Graduate School in advance of enrollment. Upon notification of admission to Graduate School, students enroll in the usual way for either undergraduate or graduate courses.

NOTE: A financial aid applicant classified as a senior should be aware that only those classes taken for **undergraduate** credit can normally be 'counted' when determining the enrollment status (full-time, half-time, etc.) for qualifying for federal and state financial aid. A student may not receive financial aid to pay for graduate credit hours unless the student is fully admitted by an academic department to a graduate program of study offered at CMSU.

Concurrent Credit from Other Institutions

Students desiring extension, correspondence, examination, and/or residence credit earned from another institution while concurrently enrolled at Central Missouri should receive prior approval from the Registrar. The University reserves the right to evaluate and accept or not accept academic credits from any institution.

#### Credit from Missouri Institutions

Central Missouri follows guidelines of the Council on Public Higher Education as described in *Policies and Procedures for the Review of Academic Program Proposals: New Academic Programs, Off-Site Delivery of Existing Programs and Program Changes* (Missouri CBHE, April 1997).

#### **Educational Tours**

No more than nine semester hours of credit earned as part of tours will be acceptable toward an undergraduate degree.

#### Special Credit Assessments

The total credit earned by way of Advanced Placement Examinations (AP), College-Level Examination Program (CLEP), official certification, military service, Defense Activity for Non-Traditional Education Support (DANTES), and similar assessments will not exceed 30 semester hours for a bachelor's degree or 15 semester hours for an associate degree. Special credit can not be applied to any upper-level hour requirements. A student must be currently enrolled at Central Missouri State University and pursuing a defined program of study in order to be considered eligible for any special credit. Special credit is not posted to the student transcript until the student has completed one full semester of work at CMSU. All special credit is subject to a \$5.00 per hour recording fee. For clarification and/or information regarding special credit at CMSU contact the Office of Assessment and Testing Services, Humphreys 223, 660-543-4919, www.cmsu.edu/testingservices.

Advanced Placement Examinations. Credit may be granted for successful performance on Advanced Placement Examinations. These are available in a number of subject areas and are of two types: (1) those given by the College Entrance Examination Board which must be taken prior to or during a student's first semester at CMSU; and (2) those prepared and administered by departments of the University. Additional information may be obtained from the Office of Assessment and Testing Services, Humphreys 223, 660-543-4919, www.cmsu.edu/testingservices.

**College-Level Examination Program** (CLEP). All CLEP examinations must be taken prior to the earning of college course credit in the subject.

Credit obtained based on taking the College-Level Examination Program may be used to satisfy electives or general education requirements in some programs. To receive and apply such credit, it is necessary for scaled scores or scaled subscores to be at or above the level set by the respective department. Additional information may be obtained from the Office of Assessment and Testing Services, Humphreys 223,

660-543-4919, www.cmsu.edu/testingservices.

Credit for Official Certifications. In certain instances, academic departments will evaluate official certifications, licenses, and diplomas granted by fully accredited national and state boards and officially recognized professional organizations to determine whether or not undergraduate credit may be assigned by the Provost and Vice President for Academic Affairs toward the fulfillment of degree requirements in specific major or minor related areas. Appropriate departments of the University reserve the right to test competencies and performances in these areas and to determine the hours and the nature of the credit to be assigned, if any. All requirements as stated in the *Undergraduate Catalog* must be met before a degree is conferred.

Military Service Related Credit. Credits earned by service personnel in specialized training programs of the United States armed services under certain circumstances may be accepted. The guidebook published by the American Council on Education is used to determine the credit value. The Division III Personal Interaction requirement of the General Education Program may be met by veterans upon presentation of evidence of 12 months or more active military training in a U.S. service. Students who have completed six months of active military service, although not considered veterans, may meet two semester hours of the physical education requirement through presentation of appropriate evidence of their service experience. U.S. Armed Forces Military Credit is reviewed by the Registrar's Office.

#### **HOUSING**

Central Missouri State University requires first-year students to reside in University housing. For housing purposes, upperclass status is determined by the completion of 24 or more credit hours of course work, on-campus residence at CMSU for one academic year, or the student's being 21 years of age or older.

#### On-Campus Housing

Central Missouri State University provides a variety of on-campus housing opportunities. Except for freshmen, who must receive permission to live in locations other than residence halls, on-campus housing is optional. Our accommodations attract a substantial number of upperclass students. Early application for housing is wise.

Arranging for Housing. Contact the Office of University Housing, L23 Ellis Complex, or call 660-543-4515 for applications and information. Assignments are made according to agreement date. A deposit of \$100



During the annual competition for the best decorated rooms, some entries stand out. Residence hall dwellers are surprisingly creative in designing their homes away from home. This entry featured bright colors, twinkling lights and movie posters.

must accompany the application. Apartments will require an additional deposit of \$100 or \$200 (depending on location) prior to occupancy. This deposit may be forfeited for late cancellation, damage to University property, outstanding account or other agreement violations.

Students with requests due to disability will need to provide Housing

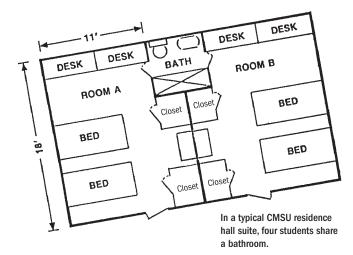
or Accessibility Services with appropriate professional verification supporting the request. Six to eight weeks notice is recommended.

Residence Halls. Residence halls are located on the east and west sides of the campus. Students may choose from a variety of housing options. Most halls are air-conditioned.

First-year students are required to live on campus. First-year students are also required to have a meal plan. Freshmen (under 21 years) are assigned to First-Year floors. These environments are carefully designed to help acclimate the new student to the CMSU campus. Special staffing, educational and social activities, faculty involvement, student government, and access to a variety of campus resources create an environment where student success is emphasized.



You can take a virtual tour of the residence hall complexes online at www.cmsu.edu/housing.



Friendly, trained housing staff help new students adapt to residence hall and campus life. Visit www.cmsu.edu/housing for more information, such as the 10 Great Reasons to Live on Campus.

Students with 24 or more credit hours or those over 21 years old may live in upperclass housing. Residence hall accommodations offer the student convenience, opportunities for involvement and a variety of choices. Residence hall agreements are for a full academic year. Single rooms are available at an additional cost. Meal plans for upperclass students are available, but optional.

In the residence halls, students in each pair (suite) of rooms share a private bath. Each student room has a phone jack, cable television capability and internet access. All rooms are furnished with desks, beds, mattresses, chairs, draperies, a chest of drawers and mirror. However, residents may bring additional items to make their rooms more home-like. Residents have ready access to coin-operated washers and dryers, but they must furnish their own irons and fireproof ironing boards. Mail is delivered regularly to the main desk at each residence hall. Lounge areas and recreation facilities are open to all residents. Residence hall libraries and study areas provide a quiet place for reading and study.

The University tries to honor student preferences in housing assignments. Room changes will be permitted beginning on designated dates during the first part of each semester. Housing agreements for students who do not check in are canceled after 5 p.m. on the first day of classes, unless students have made arrangements to arrive late.

**Family Housing.** Apartments are available for married couples with or without children and single parents with children living with them full time. These apartments are available for twelve-month accommodations.

**Meals.** Students in First-Year halls must be on a meal plan. Students may choose from a variety of meal plan options. Full-meal service is available daily. The University

Union provides additional on-campus dining alternatives. The food service accommodates students with special dietary needs. This service requires a doctor's request.

Fraternities and Sororities. Members of seven sororities live in Panhellenic Hall. Similarly, the Fraternity Complex accommodates eight fraternities. Other sororities and fraternities are housed or provided Chapter Room space in South Todd Hall.

**Graduate/Upperclass Residence.** Special accommodations have been designated in residence halls and/ or University apartments for students 21 years of age or older, for those who have completed at least four semesters, or for those enrolled in graduate school.

**Twelve-Month Accommodations**. Twelve-month housing accommodations are available for students seeking year-round housing.

#### Insurance and Safety

The Department of Public Safety and the Office of University Housing work together to provide a safe campus environment. However, the University is not responsible for loss of, or damage to, personal property. Parents and/or students are urged to arrange privately for insurance coverage of personal property.

#### University Conference Center

The University Conference Center is located on Anderson Street, east of the main campus. A variety of suites and rooms are available for guests of the University. For reservations, call the University Conference Center at 660-543-4034.

Central Village and Greenwood Park are family housing areas just south of campus. For more housing options visit www.cmsu.edu/housing.





#### NONDISCRIMINATION/EQUAL **OPPORTUNITY STATEMENT**

Central Missouri State University actively follows a policy of nondiscrimination in regard to age, race, color, religion, sex, national origin, sexual orientation, marital status, Vietnam Era veterans, and persons with handicaps and disabilities.

This policy applies to the awarding of student financial aid, and the recruitment, admission, housing, placement, and retention of students, faculty and staff. The University complies with the regulations implementing Title VI and Title VII of the Civil Rights Act of 1964 regarding race, color, national origin, religion and sex discrimination; Title IX of the Education Amendments Act of 1972 regarding sex discrimination; the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 regarding discrimination based on disabilities and handicaps; the Age Discrimination in Employment Act; and other state and federal laws and regulations.

Persons having inquiries concerning the University's compliance with the regulations implementing any of the above are directed to contact the General Counsel, Administration 208, 660-543-4730, or the Director of Human Resources, Administration 101, 660-543-4255, Central Missouri State University, Warrensburg, MO 64093. Toll free numbers for Relay Missouri are 800-735-2966 for TTY, and 800-735-2466 for voice callers.



CMSU enjoys a student population that is 8 percent multicultural and 4 percent international. Last year students from 44 states and 59 foreign countries attended Central Missouri.

#### **Institutional & Financial Information**

Federal law requires institutions of higher education, including Central Missouri State University, to inform prospective students, faculty and staff of institutional and financial information. This information is available at www.cmsu. edu/rsearch/ir/toc.htm.

#### **First-Year Residential Requirement Policy**

#### I. Purpose

The purpose of the First-Year Residential Requirement Policy is to enhance each student's educational experience and personal development.

#### II. Policy

First-year students are required to live in University Housing. Students whose circumstances meet one of the exemptions or have changed since signing the Housing Agreement may apply for an exemption to this requirement. A list of exemptions may be obtained from the Office of University Housing. Exemptions may be granted based upon acceptable documentation submitted to the Director of University Housing.

#### III. Procedures

Reasons other than those listed may qualify as exemptions based on the determination and at the discretion of the Director of University Housing.

The Vice President for Student Affairs shall review appeals of these determinations and the decision upon any such appeal is a final action.



The price of a residence hall room includes local phone service, cable service, Internet access, and utilities. A room comes furnished with two twin beds, one dresser, two desks, two chairs, and a trash can.

#### COSTS AND FINANCIAL ASSISTANCE

#### Fees and Expenses

Housing, food service, and instructional fees are assessed for payment prior to the beginning of the semester. Rates are set by action of the Board of Governors and are subject to change. Information regarding rate changes is available from the Office of Student Accounts or by visiting www.cmsu.edu/revenue. The following rates are in effect for the fall 2004 semester.

#### Residence Hall Room and Board Rates for 2004-2005 Per Semester

#### RESIDENCE HALLS

| Basic Rate, double room, per person \$1,599/semester          |
|---|
| Single Room   |
| Room rates include Internet access, cable TV, local telephone |
| and all utilities. The agreement is for a full academic year; |
| the rates are per semester.                                   |

#### FIRST-YEAR MEAL PLANS

| Required for all I | First-Year Students |
|--------------------|---------------------|
| Access Plan        | \$935/semester      |
|                    |                     |

| 175 meals and \$40  | \$935/semester |
|---------------------|----------------|
| 135 meals and \$125 | \$935/semester |

#### UPPERCLASS MEAL PLANS

| Access Plan           | \$935/semester |
|-----------------------|----------------|
| 175 meals and \$40    | \$935/semester |
| 135 meals and \$125   | \$935/semester |
| 30 meals per semester | \$180          |
| Dining Service Funds  | \$25           |
| Block of 10 Meals     | \$60           |
|                       |                |



Students can choose from a wide variety of menus each day in the residence hall dining rooms. Learn about all the options at www.cmsu. edu/diningservices/

#### APARTMENTS MONTHLY RENT SCHEDULE

#### Central Village

| • One Bedroom, unfurnished    | \$459/month |
|-------------------------------|-------------|
| • Two Bedrooms, unfurnished   | \$510/month |
| • Three Bedrooms, unfurnished | \$578/month |

Greenwood Park, two bedrooms, unfurnished \$568/month

Rent for Central Village and Greenwood Park includes cable TV, Internet access, trash collection. Resident pays for gas and electricity. Deposit is \$300.

Foster/Knox and Nickerson - Must have completed at least four

full semesters OR be 21 years of age OR have completed at least 60 credit hours. Must be in good standing with the University.

• One Bedroom, furnished . . . . . . . . . . \$556/month

Hawkins Hall - Graduate students OR at least 21 years old.

- One Bedroom, furnished ...... \$533/month
- Two Bedrooms, furnished ...... \$557/month

**Economy Suites, Unfurnished** – Must have completed 30 credit hours OR be 21 years of age OR have completed two full semesters. Must be in good standing with the University.

- Two bedrooms plus bathroom ..... \$489/month
- One bedroom plus bathroom..... \$250/month

Rent for Foster/Knox, Nickerson, Hawkins and the Economy Suites includes ALL utilities, plus cable TV, local telephone, and Internet access. Deposit is \$200 or \$100 per roommate.

#### **Instructional Fees, 2004-2005**

#### **ON CAMPUS**

#### Undergraduate

| Missouri Resident | \$178 per hour |
|-------------------|----------------|
| Non-resident      | \$342 per hour |

#### Graduate

| Graduate   |  |
|--|--|
| Missouri Resident \$222 per hour   |  |
| Non-resident \$430 per hour  |  |
| These fees include a \$14 per credit hour general fee which supports       |  |
| facilities (\$1.20), Pertle Springs (\$1), Elliott Union (\$6.20), Student |  |
| Activity (\$1.60), and Technology (\$4).                                   |  |

#### Doctorate of Education (UM-C current fee)

| Missouri Resident     | \$254.30 per hour |
|-----------------------|-------------------|
| Out-of-State Resident | \$656.70 per hour |

#### **OFF CAMPUS**

| General - Central's Summit Center, Lee's Sum | IIIIII         |
|--|----------------|
| Undergraduate                                | \$198 per hour |
| Graduate                                     | \$235 per hour |
| Doctorate of Philosophy in Technology        | \$292 per hour |
|  |                |

#### **Textbook Rental Fees**

(as of May 2004)

The textbook rental system supplies students with required texts in many undergraduate courses. Students enrolled in off-campus courses do not receive rental books from the textbook rental system. Textbook fees are assessed as follows:

- 1. Student rental charge per semester per textbook.... \$30
- 2. Textbook late fee per book (assessed following last day of finals)......\$30
- 3. Textbook damage fees assessed by University Store according to damage.

Note: Failure to return a book after dropping a class will result in the late fee being assessed.

Costs and Financial Assistance, continued on page 14

#### Special Fees, 2004

| The following fees are paid only for special purposes or       |
|--|
| because of certain conditions.                                 |
| • Application fee (Undergraduate and Graduate) \$30            |
| • Graduation Fee   |
| (\$25 for those who have previously received a degree or       |
| certificate from CMSU)   |
| • Early or late examination fee per final (by permission) \$10 |
| • Service fee for credit earned through Advanced Placement,    |
| certain professional schools and experiences                   |
| (per semester hour)  |
| • ROTC Summer Camp   |
| • Transcript Review for Teacher Certification \$35             |
| • Transcript   |
| • Faxed Transcript   |

#### **Supplemental Course Costs**

Certain specific courses and programs require supplementary fees, materials, supplies, and activities at additional expense to the student.

#### Determination of Missouri Residency for Fee Purposes

"The Missouri Department of Higher Education has issued regulations to be applied by Missouri universities to determine the resident status of students. This regulation is available at 6 Code of State Regulations 10-3.010. The burden of proof in establishing residency rests with the student. Students who are legal minors or tax-dependents whose parents reside outside the State of Missouri are not eligible for resident fee paying status. One can be classified as a resident for fee purposes immediately upon moving to the state if the move is to accept full-time employment (or if one is the dependent of someone who came to Missouri to accept full-time employment.) In other situations continuous domiciliary presence in the state for twelve months must be proven AND sufficient proof of intent to be domiciled in Missouri permanently must be provided.

Residency is determined by each educational institution and residency for attendance at a community college or obtaining a driver's license or serving in the Missouri Guard will not necessarily mean a residency determination for fee purposes.

Applications and additional information is available for prospective students in the Admissions Office, for undergraduates in the Registrar's Office and for graduate students in the Graduate School Office.

#### Financial Responsibility

Students have the primary responsibility for paying all charges incurred due to class enrollment, room and board choices, departmental charges and fines. Payment for a semester's cost is due in full approximately ten (10) days before the semester begins. Full payment dates are published in the *Student Planner/Handbook*, on the Office of Student Accounts web-site and on the student billing statement. Non-payment of charges or failure to make payment arrangements by the due date will result in classes being dropped. Late payment fees are added to the student bill each month that payment is not made when due. Collection costs are assessed if collection action becomes necessary. For additional information regarding the payment of student accounts, visit www.cmsu.edu/revenue.

#### Refund Policy

**Reduced Load.** Refunds of **instructional fees** for student-initiated reduction in class load will not be processed until after the fourth week of classes. The following schedule for such refunds will apply for semester hours dropped:

- · First week of classes: full refund.
- Second week of classes: 50%.
- Third week of classes: 25%

No refund of instructional fees will be made for student-initiated reduction in class load after the third week.

If a fee amount would be reduced due to load changes caused by failure of classes to materialize or class cancellation by the University, a full refund for that class will be made.

NOTE: A federal financial aid recipient who drops to less than half-time enrollment status should be aware that depending on his/her class attendance records, some or all of the assistance credited to the student's CMSU account for the semester may have to be reversed.

Withdrawal. Students who find it necessary to withdraw from CMSU should initiate the procedure in the Office of Student Affairs. The following refund schedule for instructional fees applies to students who are **not** financial aid recipients.

- Withdrawal prior to the announced deadline for full payment of all charges for the current .... semester: full refund.
- Withdrawal during second week of classes: 50%
- Withdrawal during third week of classes: 25%

No instructional fees are refundable if the student withdraws after the third week of classes.

NOTE: In accordance with federal regulations, a financial aid recipient who officially or unofficially withdraws from CMSU will be required to repay some or all of the grant and loan assistance credited to his or her CMSU account, based on the date of withdrawal and last date of class attendance for the semester. A copy of the withdrawal policy is available from the CMSU Office of Student Financial Assistance, Administration 104.

Refund Appeal. A student who believes that a refund greater than the established schedule should be issued may submit a written request to the Office of Student Affairs for complete withdrawals and to the Office of Academic Advisement for reduced load appeals. The reasons and unusual circumstances believed to justify a larger refund must be outlined in the written request. All requests for refunds must be submitted within two weeks of the end of the semester for which the fees were paid.

#### FINANCIAL ASSISTANCE

To help an individual reach his or her educational goals, Central Missouri State University offers a variety of federal and state grant, loan, and employment assistance, much of which is awarded on the basis of a student's calculated financial need.

The Office of Student Financial Assistance annually processes over \$40 million in assistance to nearly two-thirds of the students who attend Central Missouri. Each student's family and economic situation is recognized as unique, and every financial aid application is examined on an individual basis. The number of applications for financial aid, however, almost always exceeds the total amount of assistance available. Therefore, it is very important for each applicant to:

- apply on-time (by April 1st) each year
- comply with all financial aid instructions, policies, and requests for follow-up information and documents
- contact the Office of Student Financial Assistance with any questions or concerns:

In person - Administration 104 Telephone - 660-543-4040 Fax - 660-543-8080

Email - finaid@cmsu1.cmsu.edu

Federal and state financial assistance may be used to help pay direct educational expenses, such as fees, books/supplies, and housing/meal plan charges, as well as variable living costs, such as off-campus housing, food, transportation, child care, and other personal costs related to attending CMSU. In accordance with federal and state regulations, the responsibility for meeting these costs lies primarily with the student and his or her family. However, financial aid from one or more of the following programs can be awarded to supplement the family's financial contribution.

#### Types of Financial Aid

**Grants** (Federal Pell Grant, Supplemental Educational Opportunity Grant, and several state programs) are types of aid/assistance that do not have to be repaid.

**Loans** (Federal Stafford Loan, Perkins Loan and several state programs) are types of aid that must be repaid, but normally not until after the student graduates, withdraws, or drops to less than half-time enrollment status.

**Employment** (Federal Work-Study) assistance enables a student to earn a portion of his or her educational resources through part-time work on-campus and off-campus. Information about available Federal Work-Study positions, as well as University-funded student employee positions, are available at the CMSU Office of Career Services, Union 302.

#### How to Apply

To apply for the above types of federal and state financial aid, a student must submit a **Free Application for Federal Student Aid (FAFSA)**. A student files the FAFSA online, using **FAFSA-on-the-Web**, at **www.fafsa.ed.gov**. There is no charge to apply.

After submitting the FAFSA, a financial aid applicant may be required to provide supporting documents or clarifying information to the CMSU Office of Student Financial Assistance. If required to do so, the applicant will be contacted by CMSU, and should respond promptly.

#### Financial Need

A student's calculated need for federal and state financial assistance is determined by a careful analysis of the results of the applicant's FAFSA data. Once this calculation has been completed, one or more types of financial aid are awarded to help meet the individual's level of need. The student is then notified of his/her award package by way of a Financial Aid Notification, which outlines the type(s) and amount(s) of aid offered. The notification process begins each spring for CMSU's earliest applicants and continues throughout the year.

#### **Scholarships**

Nearly \$4.5 million in merit-based scholarship aid is awarded annually to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. CMSU also offers scholarships to children of Central Missouri alumni and other special groups.

To be considered for an undergraduate scholarship, a student must:

- 1. be admitted to CMSU,
- 2. meet minimum qualifying criteria,
- 3. not be on academic probation,
- 4. be a full-time enrolled undergraduate student (12 or more credit hours). A scholarship recipient may enroll for less than 12 hours and be considered to receive a proportional amount of an award under the following conditions:
  - be enrolled in a CMSU-approved internship or be student teaching, or
  - be a last semester senior completing a bachelor's degree program.
- 5. earn a minimum of 12 undergraduate hours per semester at CMSU.

If a student is the recipient of more than one Central Missouri State University or State of Missouri scholarship, the combined total may not exceed the cost of education at CMSU. Scholarships may also be adjusted or canceled if the recipient fraudulently misrepresents any information on a CMSU application or engages in serious misconduct which warrants substantial disciplinary penalty.

For information about scholarships associated with specific majors, students should contact the academic department offering the major. For general undergraduate merit scholarship information, visit www.cmsu.edu/scholarships or the CMSU Office of Student Financial Assistance.

#### Other Assistance

Financial assistance other than federal aid is also available from Central Missouri State University. Many scholarships from a wide variety of sources are awarded each year to undergraduate and graduate students. Information and applications may be obtained from the Office of Student Financial Assistance, Administration 104. The State of Missouri also offers grant and loan programs to eligible undergraduate students. Students initiate the application process for these opportunities by submitting the FAFSA online at www.fafsa.ed.gov. Financial aid recipients should be aware, however, that receiving 'external' types of financial aid or educational benefits can result in an adjustment to the federal aid that may have already been awarded and/or disbursed.

#### Satisfactory Academic Progress

Federal regulations require that every student who wishes to **continue** receiving federal financial aid (after having completed at least one semester at CMSU) must maintain satisfactory academic progress toward the completion of his or her degree or certification program. Satisfactory academic progress for federal financial aid purposes is defined as successfully completing at least two-thirds of the credit hours attempted during a school year. In addition, undergraduate students with 60 or more credit hours must maintain at least a 2.00 cumulative grade-point average to remain eligible for federal assistance. Students should be aware that certain state financial assistance programs require a recipient to maintain different standards of satisfactory academic progress.

#### Short-Term Loans

Central Missouri State University realizes that many students are dependent upon federal financial assistance to satisfy the costs of attending CMSU. However, it is important to have some money on hand when starting classes each semester to help pay incidental costs during the first few weeks of classes. If an emergency arises, a student can apply for short-term loan funds at the Office of Student Financial Assistance. This assistance must normally be repaid within 60 days. A service charge of \$10 is levied to borrow from the CMSU short-term loan fund.

#### Veteran Services

The CMSU Veteran Services Office assists more than 450 students annually. This office is located in Administration 104 and acts as a liaison between students requiring veteran services and the Veterans Administration offices in St. Louis and Kansas City.

Support is provided to students enrolled at Central Missouri who are in the Military Reserve/National Guard (Chapter 1606), on active duty or no longer in the military but eligible for VA educational benefits (Chapter 30), Veterans Vocational Rehabilitation students (Chapter 31), dependents of military personnel (Chapter 35), and personnel who contributed to the Veterans Educational Assistance Program (Chapter 32).

For information and assistance in completing and maintaining the proper documents to receive VA benefits, a student should contact the Veteran Services Office in person, by telephone 660-543-4983, fax 660-543-8080 or email finaid@cmsul.cmsu.edu.

## STANDARDS AND REGULATIONS CONCERNING UNDERGRADUATE STUDENTS

#### Philosophy of Academic Standards

To maintain standards which foster an atmosphere of academic excellence:

Central Missouri admits individuals who have demonstrated a potential for successful academic achievement in a university community. Admission is without regard to age, race, creed, color, religion, sex, national origin, or handicap status.

Central Missouri retains students who, through periodic University-administered assessment and evaluation, meet or exceed established University academic standards.

Central Missouri grants degrees to students who fulfill prescribed program requirements and meet or exceed the minimum academic standards established by the University and the State of Missouri.

Central Missouri assesses former students to determine to what extent the university experience has helped them attain an intellectual orientation by which they can develop, throughout their lifetimes, the capacity for self improvement, career achievement, and responsible living in a free society.

#### Student Responsibility

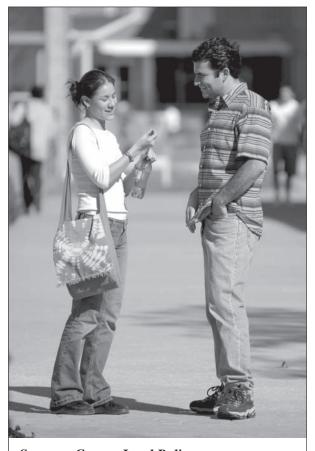
Central Missouri, through action of the faculty, administration, and Board of Governors, establishes and maintains requirements for its various degrees. These requirements must be completed before a degree is granted. The staff of the University will assist students in understanding and meeting these requirements, but the individual student ultimately is responsible for fulfilling them. Therefore, it is important for each student to be familiar with the requirements pertaining to the degree being sought and to remain currently informed throughout the period of enrollment. The academic advisors, Registrar and faculty can be of assistance in this process.

#### Academic Load

Following admission, each student will be granted an appointment with an advisor in the Office of Academic Advisement and will be assisted in building an academic program of study and making a schedule of courses.

The normal load per semester for an undergraduate student is fifteen or sixteen semester hours. A full-time undergraduate student is one pursuing twelve or more semester hours of work per semester or nine semester hours in the summer session. The maximum academic load is eighteen semester hours; however, upperclass students in good academic standing may enroll for as many as nineteen semester hours without special permission. Freshmen and sophomores desiring to exceed eighteen semester hours must have an application for overload approved. Such application should be initiated with the Director of Academic Advisement if there is not a declared major or with the appropriate department chair if a major has been declared. Students on academic probation may not enroll in more than fifteen semester hours during any semester of academic probation.

If students are enrolled for course work at other institutions of higher education while concurrently enrolled at Central Missouri, the total number of semester hours taken in any enrollment period may not exceed the maximum specified for a full-time, resident student at Central Missouri.



#### Summer Course Load Policy

Maximum course loads for summer are six hours during a three-week session and 12 hours for the entire summer semester. Undergraduate students may enroll for more than 12 hours with the approval of the department chair.

#### Academic Standards

Grading System. The grading system used in evaluating a student's work is as follows:

A-Work of marked excellence.

B-Work of superior quality.

C-Work of average quality.

D-Work of inferior quality.

F-Failure to do work of passing quality.

NC-No credit granted for course.

P-Work of passing quality in a-Pass/Fail Course.

U-Course not completed for justifiable reasons.

W-Course dropped during withdrawal period.\*

WP-Work was of passing quality at time of

approved withdrawal.\*

WF-Work was of failing quality at time of approved withdrawal.\*

\* For more information about the grading system, refer to the section Changes in Schedules, and either the Calendar in this catalog or the *Student Calendar/Handbook*.

Unfinished Work. An instructor may report a semester grade of U when, for justifiable reasons, the student has not completed the work of the course. During the next semester (Fall, Spring or Summer) the U becomes an F unless the requirements of the course have been satisfactorily completed or the course is of an individualized nature, e.g., thesis, research report, or similar investigation. A student having more than one U grade is expected to reduce his/her course load accordingly in order to complete the unfinished work. It is the student's responsibility to contact his/her instructor concerning the removal of the U grade.

#### Grade Requirements for Acceptance Into Programs.

In addition to the general requirements applicable to all areas, several academic programs specify special qualitative grade standards. For example, a cumulative average of 2.50 is necessary after taking specified courses in order to be admitted to the Teacher Education Program and the Nursing Program, and a cumulative average of 2.25 is necessary after taking specified courses to be admitted to B.S. in Business Administration degree programs in the Harmon College of Business Administration. Such special standards are listed under the major programs.

The Pass/Fail Program. The primary objective of the Pass/Fail opportunity is to encourage students to experience courses they normally might avoid because of lack of confidence or initial competence. Courses taken for Pass/Fail must satisfy one of the following three criteria and procedures:

1. An undergraduate student may choose to take any free elective for Pass/Fail credit. A free elective is a course which is not a requirement or elective for the student's major or minor and is not used to satisfy General Education requirements. A student must designate the course or courses to be taken Pass/Fail by the end of the fifth week of classes. A course designated as Pass/Fail may not be changed to a graded course after that date. Instructors will not be informed that a student is taking a course for Pass/Fail credit. Students who earn an A, B, C or D will have a P (Pass) recorded on their transcripts and the grade will not be calculated in the grade-point averages. Students who fail will have an F (Fail) recorded on their transcripts and the F will be calculated in their grade-point averages. In cases of academic dishonesty, an academic F may be recorded at the discretion of the instructor.

A student may elect to count a maximum of nine (9) such Pass/Fail semester credits toward graduation requirements.

- 2. A department may elect to offer an internship or practicum for Pass/Fail credit only. A student will either have a P (Pass) or an F (Fail) recorded on the transcript. A P (Pass) will not be calculated in the student's grade-point average while an F (Fail) will. Courses that are offered only for Pass/Fail credit must be so designated in this catalog.
- 3. Students who plan to study at an institution outside the U.S. may elect to have all or none of the courses completed abroad count as Pass/Fail credit. If they elect to take these courses for Pass/Fail credit, they must provide written notification to the Executive Director of International Programs before beginning study abroad. A student who earns an A, B, C or D will have a P (Pass) recorded on the transcript and the grade will not be calculated in the student's grade-point average. A student who fails will have an F (Fail)

grade recorded on the transcript, and the F will be calculated in the grade-point average. This policy does not apply to study tours sponsored or recognized by Central Missouri.

Audit Courses. A student may audit a class for no grade and no credit. Acceptable performance, attitude and attendance as determined by the instructor in charge are expected. Regular fees and enrollment procedures are required. Courses taken as an audit must be so designated prior to the final date for changing class schedules as announced in the official calendar. Audited classes do not fulfill requirements for load consideration, nor do they count as part of a student's enrollment status for receiving federal financial aid or VA educational benefits.

**Computation of Grade Average.** In order to compute the cumulative grade-point average, total honor points earned are divided by total hours attempted. Each semester hour is assigned a grade-point value as indicated below:

- 1. Each semester hour of A is assigned 4 honor points.
- 2. Each semester hour of B is assigned 3 honor points.
- 3. Each semester hour of C is assigned 2 honor points.
- 4. Each semester hour of D is assigned 1 honor point.
- 5. Each semester hour of F or WF is assigned 0 honor points.
- 6. Each semester hour of P, W, WP, or NC is not considered.
- 7. Each semester hour of U is not considered until complete.

Repeat Enrollment in Courses. A student receiving a grade lower than B in an undergraduate course may repeat the course at Central. The higher of the two grades will be utilized in computing the cumulative grade-point average; however, the lower grade will remain as a matter of transcript record. This process is NOT AUTOMATIC AND WILL BE INITIATED ONLY UPON A STUDENT'S REQUEST and a subsequent review by the Registrar's Office.

The following specific stipulations apply to the above repeat enrollment policy:

- 1. Courses taken at another institution and subsequently repeated at the same institution are transferred using the same rules applicable for Central Missouri courses which have been repeated. Courses taken at another institution and repeated at Central Missouri with a passing grade use the same rules applicable for Central Missouri courses which have been repeated. Courses taken at Central Missouri and then repeated at another institution will have the grades averaged.
- 2. A course may be taken more than twice only if a grade of F has been earned both times unless departmental requirements stipulate otherwise.
- 3. If two consecutive grades of D are earned, or if two consecutive grades of F are earned, only the second will be used in computing the cumulative grade average.
- 4. If it becomes necessary for a course to be taken a third time, the second F will not be discounted but will be averaged into the cumulative grade average.
- 5. A course may not be repeated for the purpose of raising a grade average if a more advanced course in a sequence has been completed.
- 6. Repeating a course under the Pass/Fail option will not negate the initial grade received.
- 7. Credit hours for repeated courses will be counted only once in the number of course hours earned toward a degree.

**Dean's List.** To be eligible for the Dean's List, a student must be an undergraduate who earns twelve or more semester hours of residence credit with a grade-point average for the semester of 3.50 or above.

**Students in Good Standing.** Central Missouri students are in good standing if eligible to enroll for classes.

Academic Probation. A student whose Central Missouri or cumulative GPA or total CMSU GPA drops below 2.00 will be placed on academic probation. A transfer student will be placed on academic probation at the time of admission if his/her cumulative GPA is less than 2.00. Students placed on academic probation may continue to enroll in classes. Students are encouraged to seek advice from the Office of Academic Advisement about future enrollments. Students on academic probation may not enroll in more than 15 semester hours during any semester of academic probation.

Removal From Probation. A student placed on academic probation will be continued on probation until both the total CMSU GPA and the cumulative GPA are 2.00 or higher, unless for academic reasons he/she is suspended or dismissed. When a student on academic probation raises both their CMSU GPA and their cumulative GPA to 2.00 or above, the student is removed from probation. Transfer credit may not be used to raise a total CMSU GPA.

Academic Suspension. A student on academic probation will be suspended from Central Missouri at the conclusion of his/her next semester/enrollment period if his/her semester/enrollment period GPA is less than 2.00. A transfer student who was admitted on probation will be suspended from Central Missouri at the conclusion of his/her first semester/enrollment period if his/her semester/ enrollment period GPA is less than 2.00. Academic suspension is for a period of one full semester, after which, students may apply for readmission.

Academic Dismissal. A student who has been suspended and later readmitted and continued on probation but does not achieve a semester GPA of 2.00 or higher in a subsequent semester/enrollment period will be dismissed. Academic dismissal is for a period of one calendar year, after which, a student may apply for readmission.

**Readmission.** The readmission of students who have been suspended or dismissed from Central Missouri is not automatic. Such students may apply for readmission as follows:

- 1. Students who have been suspended may apply for readmission after one semester excluding Summer Session. Students who have been dismissed may apply for readmission after one calendar year. Requests for readmission should be sent to CMSU's Office of Admissions.
- 2. A student with extenuating circumstances who has been suspended or dismissed may apply for immediate (or early) readmission. A letter should be written to CMSU's Office of Admissions. This letter should include (1) a request for readmission, (2) an explanation of any extenuating circumstances for earlier poor performance, and (3) an explanation of activities and plans which may lead to improved scholastic performance at CMSU. Other substantiating evidence may also be submitted.

Course Prerequisites. A student is expected to have satisfied prerequisites required of any course in which he/she is enrolled. Students without prerequisites should not enroll in these classes and may be dropped from the class rolls if they do enroll. A student will not be allowed to enroll in a course that is a prerequisite to a course he/she has already successfully completed with a grade of C or better, except as an audit enrollment.

Class Attendance. Students are expected to attend all lectures, seminars, laboratories, and field work for each registered class and to complete all work assigned by the instructor for the course. Advance arrangements for unavoidable absences should be made with the instructor whenever possible. Neither absence nor notification of absence relieves the student of the responsibility for meeting all course requirements.

The only arrangements at CMSU whereby a student may enroll and receive credit while not actively in class attendance are those under the direct and regular supervision of a CMSU faculty member assigned to a student who has enrolled for a readings, thesis, special problems or a similar arranged course.

Make-up of course requirements missed because of extenuating circumstances shall be worked out between the instructor and the student upon the student's initiative. Instructors are required to allow for such make-up when a student is absent because of participation in approved University activities, University programs (that the student is required to attend) or when absence is required by order of a qualified physician. A student must contact his/her instructor on the first day the student returns to class. The instructor may have special attendance/requirement policies for particular classes, whenever those policies are not in conflict with the student's right to make up missed requirements as described above.

When absent for three consecutive days or more, a student may ask the Office of Student Affairs to send an informational note to his/her instructors; however, excused absences may only be granted by the instructor of the class.

The Student Health Center does not provide medical excuses to students for the purpose of being excused from class. The only medical excuse provided will be for those students who have a physical disability and cannot participate in a class activity. This excuse will be for the activity only and not from attending the class.

An enrolled financial aid recipient who fails to attend classes (or stops attending) may be required to repay some or all of the assistance credited to his/her CMSU account for the semester.

Changes in Schedules. Changes in class schedules should be made during the Drop and Add period (first five class days of the semester). Such changes will not be entered on the permanent record. Courses may not be added after the initial Drop and Add period.

During the Withdrawal period (second week through the tenth week), a student may withdraw from any full-semester class using the self-enrollment system. Students may wish to consult with an Academic Advisor and/or the course instructor prior to withdrawal. A grade of W is recorded as the final grade. Exception to this will be effected in the event that a failing grade is given for cause such as academic

Changes in Schedules, continued from page 19

dishonesty. In this instance, a WF will be recorded. After the tenth week of the semester, withdrawal from a class is normally not allowed. In enrollment periods other than a semester, withdrawal from classes is not permitted during the last one-third of the period.

WITHDRAWAL FROM THE UNIVERSITY. Students who leave the University must officially withdraw through the Office of Student Affairs. In the event that a student fails to initiate this process, his/her withdrawal is not considered

complete and grades of F will be recorded for failure to attend classes. Withdrawal during the last five weeks of a semester while receiving a failing grade in a course will result in the recording of a WF on the permanent record. Regulations governing credit for room and board payments are found in the housing contract. (See Refund Policy for information on the credit of fees.) A financial aid recipient who officially or unofficially withdraws from CMSU will be required to repay some or all of the grant and loan assistance credited to his or her CMSU account, based on the date of withdrawal and last date of attendance for the semester.

## REGULATIONS APPLYING TO UNDERGRADUATE DEGREES

#### Course numbers

The courses offered on the undergraduate level are divided into five categories.

In general, the following may be considered as guidelines: 0000 level courses are primarily used for skills development and are not used to satisfy degree requirements.

1000 level courses are primarily for freshmen students.2000 level courses are primarily for sophomore studentsand those students with essential prerequisites or backgrounds.

**3000** level courses are primarily for junior students and those students with essential prerequisites or backgrounds.

**4000** level courses are primarily for senior students and those students with essential prerequisites or backgrounds.

Graduate level courses cannot be applied to the undergraduate degree programs.

#### Classification of Students

Freshmen are defined as those students who have completed zero through 29.5 semester hours of college credit. Sophomores are those who have completed 30 through 59.5 semester hours. Juniors must have completed 60 through 89.5 semester hours. Seniors are defined as all students who have completed more than 89.5 semester hours.

#### Upper-level Credit

Candidates for bachelor degrees must satisfactorily complete a minimum of 40 semester hours of upper-level work (3000 and 4000 level courses) excluding special credit. 12 upper-level hours must be in the major subject. Each baccalaureate degree candidate must have earned upper-level course work at CMSU in their major and their minor.

#### Degree Audit Reporting System (DARS)

The Degree Audit Reporting System (DARS) produces a report form that reflects a student's degree requirements in a given catalog year, applicable transfer credit and progress toward graduation. This report also designates the number of credit hours earned, both cumulative and Central Missouri's grade-point average, and a listing of courses completed. Deviations from the major or minor requirements must be approved in writing by the department chair and submitted to the Office of the Registrar to be reflected on the DARS. A student may request this report at any time from the Office of Academic Advisement.

#### Grade-point Average

In order to receive a degree, a student must earn a minimum grade-point average of 2.00 (C) in each of the following areas unless otherwise noted for the major/certification:

- All work attempted at Central Missouri and on all work attempted.
- All work taken to satisfy major requirements at Central Missouri and on all major work attempted at all colleges and universities attended.
- 3. All work taken to satisfy minor requirements at Central Missouri and on all minor work attempted at all colleges and universities attended.
- All courses bearing the prefix of the major attempted at Central Missouri and at all colleges and universities attended.
- All courses bearing the prefix of the minor attempted at Central Missouri and at all colleges and universities attended.

Each student must review the degree program for all minimum GPA requirements. For example, for teacher certification degree programs minimum cumulative grade-point averages of 2.50 are required. For B.S.B.A. degree programs, a minimum cumulative grade-point average of 2.25 based upon total hours attempted is required.

#### **Grade Appeals**

Students appealing a grade have one calendar year from the time the grade was issued to appeal any grade changes. These appeals should be directed to the instructor that taught the course in question.

#### **Graduation with Honors**

To be eligible for graduation with honors a student must have earned both cumulative and Central Missouri grade averages of 3.50 and must have completed a minimum of 30 semester hours of credit at CMSU. Those with a cumulative and Central Missouri grade average of 3.50 to 3.74 graduate *Cum Laude*; 3.75 to 3.84, *Magna Cum Laude*; and 3.85 and above, *Summa Cum Laude*. Should the Central Missouri and cumulative GPAs be in different categories, the lower designation of honors will be recognized.

#### Residence

A candidate for any bachelor's degree must have earned at least 40 semester hours of junior/senior level coursework at

an accredited senior institution of which at least 30 of those hours must be completed at Central Missouri. Fifty-percent of the major and minor coursework must be completed through CMSU. The last 12 semester hours required for the degree must have been earned CMSU.

For an associate degree, the student must earn at least 20 semester hours with Central Missouri, with the last 12 semester hours completed at Central Missouri.

#### State Requirement

Section 170.011 RSMo prescribes that all candidates for a degree issued by the colleges and universities in Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American history, including the study of American institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to upper-level work, or (2) by certification of the completion of such requirements at another Missouri collegiate institution.

Students in the following categories will have fulfilled the requirements of this law.

- 1. All CMSU majors in the social studies.
- 2. All students who have taken HIST 1350, HIST 1351, or POLS 1510 in Division II, Area B, of the General Education Program.

Additional information about types of credits accepted at Central Missouri appears on pages 9-10 of this catalog.

#### Date of Catalog for Checking Degree Requirements

Students are always subject to current administrative, academic and general policies and regulations. The 2005 Undergraduate Catalog becomes effective Summer 2005.

In most instances a candidate may use as a basis for degree requirements the *Undergraduate Catalog* issued for any year following the date of his/her first enrollment in the University so long as it is dated not more than eight years prior to the date the degree is conferred. A student must earn academic credit at CMSU during the year of the catalog chosen or have attended consecutive semesters at another institution of higher education. CMSU follows the catalog agreement described in Policies and Procedures for the Review of Academic Program Proposals: New Academic Programs, Off-Site Delivery of Existing Programs and Program Changes (Missouri CBHE, April 1997). However, the University reserves the right to add, change, delete, and interpret policies at any time and to require these be met by those seeking degree candidacy and/or conferral.

#### Choice of Degrees

Upon application for a degree program, a student may pursue a second degree different from that of the initial degree granted. Two identical degrees are not permitted. A second degree requires a minimum of 30 additional semester hours beyond the requirements of the first degree. Each degree must meet all degree requirements including:

- 1. a functional major
- 2. a major and minor
- 3. multiple majors.

Majors and minors must be unique to each degree.

#### Application for Degrees

An application for each undergraduate degree to be awarded must be made in the Registrar's Office. Such applications must be received by the Registrar not fewer than 30 days before the date the degree is to be conferred. Reports showing satisfactory completion of all degree requirements must have been received by the Registrar not fewer than 48 hours before the commencement exercises are scheduled to begin.

#### Final Examinations

Final examinations are given at the end of each semester according to an announced schedule. Permission to take an examination out of scheduled hours is granted only in special cases, with the approval of the instructor of the class and the Vice President for Student Affairs. A fee of \$10 per final is charged for rescheduling of final examinations. Any student who has three final examinations scheduled on any one day may request permission to move one of the examinations to another day during the final examination period. There is no charge for this, but approvals must be secured as described above. Resolution of conflicting examination schedules, as well as arranging make-up examinations, must be made with class instructors.

#### Final Grades and Transcripts

Final grades can be reviewed online via Central Missouri's web site, *www.cmsu.edu*, or by calling 660-543-8888. A student number and pin number is required. Transcripts are furnished by the Registrar's Office.

#### Field Trips

At times, field trips are planned in conjunction with course assignments. Students in classes for which such trips are planned are to be given sufficient advance notice to make necessary arrangements for absence from the campus. Field trips are not scheduled during final examination periods nor can they be required by an instructor. Work missed in other classes may be made up, although instructors are not required to provide tutoring. All arrangements are subject to the limitations of University liability coverage.

When transportation is provided for the class, faculty may arrange for wheelchair accessible transportation by contacting Accessibility Services.

#### Family Educational Rights and Privacy Act

Central Missouri adheres to the federal Family Educational Rights and Privacy Act (FERPA). Copies of the full policy implementing the FERPA may be obtained from the Office of the Vice President for Student Affairs.

#### Assessment

All students are required to participate in the University's assessment program.

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#### Degree Revocation Policy

#### I. Purpose

The purpose of the degree revocation policy is to describe the conditions under which a degree granted by CMSU may be revoked.

#### II. Policy

It is the policy of Central Missouri State University that a degree may be revoked when it is demonstrated by clear and convincing evidence that:

- A degree had been erroneously conferred when all requirements had not been satisfied at the time the degree was granted.
- A degree had been erroneously conferred as a result of an act of academic dishonesty.

#### III. Procedures

The President of the University is charged with developing procedures to implement this degree revocation Policy. The President of the University, the Provost and the faculty will develop such procedures including the appropriate levels of procedural due process extended to the degree recipient.

#### Unauthorized Persons in Classrooms

Persons who are not officially enrolled in a course may not attend a class session without the prior consent of the instructor.

Persons bringing children on campus are responsible for their supervision and any inappropriate behavior.

#### Vehicles on Campus

Because parking space is limited, the University asks that students who can arrange other transportation not bring vehicles to campus. Old Drum Transportation, handicap accessible community transportation, services campus at no fee for Central Missouri students and employees.

To park in student lots, students may buy parking permits at Parking Services (306 Broad Street). However, parking permits are limited by the number of parking spaces and may not be available for purchase.

Handicap parking permits are available at the standard student rate when medical verification is presented to Parking Services or Accessibility Services, Elliott Union 220.

Students may get complete information on parking and operating motor vehicles on campus by picking up a copy of *Central Missouri State University Parking and Traffic Regulations* at Parking Services, or contacting Parking Services at *parking@cmsu1.cmsu.edu* or toll free at 800-873-8577.

#### Alcohol and Other Substances

The University has established and is committed to enforcing clear policies that promote an educational environment free from the abuse of alcohol and other substances.

The University complies with federal regulations that require alcohol and drug testing for safety sensitive positions. The University expects students, employees, visitors, and organizations to adhere to state statutes prohibiting individuals under the age of 21 from drinking or having alcohol in their possession. Drinking or possession of alcoholic beverages is prohibited in university buildings and residence halls except in those places where an explicit exception has been granted.

The university also expects students, employees and visitors to comply with laws that prohibit the possession, use, distribution and sale of alcohol and illicit drugs.

Anyone found to be in violation of such laws shall be subject to all applicable criminal penalties, as well as disciplinary action in accordance with applicable policies of Central Missouri State University.

Students under the age of 21 are reminded it is unlawful to use fictitious identification for purchasing alcohol. Health risks associated with the use of illicit drugs and alcohol include, but are not limited to, addiction, accidents as a result of impaired judgment and ability, overdose, damage to internal organs or a developing fetus and unpredictable or violent behavior. Resources for assistance with alcohol or drug-related problems include Counseling and Psychological Services, University Health Services, Employee Assistance Program and a variety of community and regional referral services.

For more information call 660-543-4060 or 660-543-4770.

#### SOCIAL OPPORTUNITIES

A college education is more than what happens in the classroom. At CMSU, students are encouraged to participate in a variety of activities outside of the classroom that create a well-rounded educational experience. Getting involved on campus gives students the opportunity to develop interpersonal and leadership skills that will serve them throughout their lives.

#### Campus Activities

From participating in Campus Activities events to membership in a fraternity or sorority, CMSU has it all! There are many things for students to do on campus including attending dances, plays, films, concerts, going bowling, and being involved in clubs, intramural sports and student government. Taking part in social, cultural and athletic events provides students with many opportunities to learn about themselves, other people and the world in which they live.

#### **Student Organizations**

Approximately 180 registered student organizations exist at Central Missouri. Students are able to affiliate with academic honoraries. departmental organizations, religious organizations, sports teams, and special interest groups. Research indicates a positive correlation between involvement and student academic success; one such experience is involvement in student organizations. Participation in student organizations offers a means to apply classroom learning, explore career choices, gain leadership experience and make valuable contacts.

For information, see the Office of Campus Activities, Union 217. To see a list of organizations and descriptions go to the Office of Campus Activities web page www.cmsu.edu/saffairs/oca/.

#### Greek Life

Fraternities and sororities are a special type of student organization that many students choose to join while at Central Missouri. Students join fraternities and sororities through a process called recruitment which typically occurs at the beginning of each semester. Greek Life offers students the opportunity to develop leadership and organizational skills, participate in community service, and

make life-long friends. Friendship, fun, scholarship, community service, and school spirit – Greek life has it all! For more information, visit the Office of Greek Life located in Union 217 or call 660-543-4007.

## Intercollegiate Athletics and Organized Sports

Central Missouri offers three general classes of organized activities in athletics and sports: intercollegiate athletics, intramural sports, and



In recent years Mules baseball and Jennies bowling have made it into the national championship playoffs.

sports-clubs.

Intercollegiate Athletics. Central Missouri belongs to the ten-member Mid-America Intercollegiate Athletics Association (MIAA) and the National Collegiate Athletic Association (NCAA), Div. II.

Varsity sports for women are basketball, bowling, cross-country, indoor track, outdoor track, softball, soccer, and volleyball. For men, they are baseball, basketball, cross-country, football, golf, indoor track, outdoor track, and wrestling. (See the Office of Intercollegiate Athletics, Multipurpose 203, for information.)

The Athletic Committee, composed of faculty and students from all parts of the University, advises the intercollegiate athletics program.

**Intramural Sports.** An extensive intramural program gives University



Whether intercollegiate or intramural sports, there's plenty for fans to cheer about at CMSU. Admission to regular season sports events is free with student ID.

students, faculty, and staff many opportunities to take part in competitive and non-competitive activities at low cost. Team and individual activities are available for men, women, and co-recreational groups. Among these are badminton, basketball, billiards, bowling, golf, racquetball, rifle and pistol shooting, soccer, softball, swimming, table tennis, tennis, touch football, track, volleyball, wrestling, and many others. (See the Office of Campus Activities, Union 217, for information.)

Sports Clubs. Sports clubs give students an opportunity to participate in sports which are not included in the University's intercollegiate program. Club activities may be intramural (all participants being Central Missouri students) or extra-mural (competition with teams from outside the University). The University funds club sports but assumes no liability for them. (See the Office of Campus Activities, Union 217, for information.)

#### Recreation Facilities

Morrow Fitness Center. The Morrow Fitness Center (MOR 106) is an educational facility developed to provide Fitness/Wellness and Physical Education majors with a laboratory for research, testing, and rehabilitation activities. The facility is operated by the Department of Health and Human Performance and is located in the Morrow Building.

The Fitness Center is utilized by faculty, staff and students. The Center houses computerized fitness equipment and Cybex weight equipment. Students, staff, and faculty are

Opportunities, continued on page 24

Opportunities, continued from page 23 encouraged to inquire at the Health and Human Performance Office, Morrow 100 (660-543-4256) or Morrow 106 (660-543-4387), about usage.

Multipurpose Building. The "Multi," located just west of the stadium, seats up to 10,000 in its arena and provides recreational facilities for students, faculty, and community. Its basketball area accommodates four courts, five volleyball courts, and a six-lane, 220-yard indoor track. It also has eight handball/racquetball courts, two weight rooms, a six-lane, 25-meter pool with a one-meter diving board, conference rooms, and an activity area.

Pertle Springs. Located at the end of Holden Street one mile south of campus, Pertle Springs is a 300-acre recreational, instructional, biological research area. Popular activities on the wooded grounds are boating, fishing, hiking, and picnicking. Especially popular is the eighteen-hole golf course with its air-conditioned golf shop and fleet of golf carts.

The Recreation Center (Cosmo Bowl) is located in the University Union and provides 10 bowling lanes, 10 billiards tables and a variety of video games. The facility can be



Pertle Springs, a popular recreation area owned by the University, offers hiking trails, a-golf course, a lake for boating, and picnic areas.

reserved for student organizational, departmental or general public events. Freshens® is located here providing drinks, fruit smoothies, yogurt, popcorn, and pretzels.

Recreational Programs. At CMSU, we work hard and play hard. Our recreational programs have something to meet everyone's needs. Intramural sports offers a wide range of individual and team activities including flag football, softball, volleyball, basketball, and soccer. We also have an indoor rifle and pistol range (located in the Humphreys Building) where students can experience the challenges of recreational shooting. Contact the Intramural Office at 660-543-4007 or visit us in Union 217.

Other Facilities. Other campus facilities include eleven all-weather tennis courts, a play field east of the Morrow Building, eight acres of recreational and practice fields west of the stadium, a 400-meter track in the stadium, a play field southeast of Diemer Hall and the South Recreational Complex.

Five city parks are located within walking distance of campus. Knob Noster State Park, 10 miles east of the campus, offers group and family picnic grounds, hiking trails, and a swimming pool.

#### SERVICES FOR STUDENTS

#### Academic Advisement

Academic advising is critical to the success, satisfaction, retention and graduation of Central Missouri State University students. Academic advising is an ongoing interactive process involving the student, advisors, and institution. The primary goal of academic advising is to assist students in the development and accomplishment of meaningful educational plans that are compatible with their life goals. Central Missouri State University utilizes a "split model" form of Academic Advisement. A centralized academic advisement office serves special student populations such as open option students and conditionally admitted students. All other students are assigned to the colleges for advising by both professional and faculty academic advisors. Academic advisors help undergraduates plan career opportunites, determine degree programs, select courses and coordinate their academic progress. Students may access degree audits online at www.cmsu.edu/online.

#### Academic Enrichment

The Department of Academic Enrichment (AE) improves academic success by helping underprepared students prepare, prepared students advance and advanced students excel. AE services include both credit classes and non-credit labs with all services free except for regular class fees. Stop by Humphreys 127, or call 660-543-4061 for information on any of the following programs:

**AE Courses.** Students may choose courses that provide a solid foundation for learning in college. Courses include:

- AE 1000 Introduction to College Writing
- AE 1010 Textbook Reading Techniques
- AE 1012 Speed Reading
- AE 1020 College Study Skills
- AE 1030 Introductory Algebra

Learning Center. The AE Learning Center offers free individualized tutoring to all CMSU students in math, study skills, test taking, and test preparation. The Learning Center also offers credit courses in math review, speed reading, Microsoft Excel, Word, and PowerPoint. These 1/2 credit or 1 credit courses are by arrangement which means students can scedule the work for these classes around regularly scheduled courses. Each course is designed to be completed in 8 weeks.

Other assistance available through The Learning Center include

- Vocabulary & Reading Development
- Standardized Test Preparation (C-Base, GRE, LSAT, GMAT, and TOEFL)
- Study Skills
- Study Groups

The Learning Center is located in HUM 110 and is open from 9 a.m. to 4 p.m. Monday through Friday. Math tutoring is also available Sunday and Wednesday evenings in Fitzgerald Hall from 8 p.m. to 10:30 p.m.

Writing Center. In one-on-one conferences, instructors assist students at all stages of the writing process, from brainstorming ideas to polishing drafts. In addition, computers, handbooks, style manuals and instructional handouts are provided to support any writing task, from crafting an effective thesis statement to building an eye-catching résumé. The Writing Center is open Monday through Friday in Humphreys 116, and evening hours in the residence hall satellites are announced early in each semester. Online writing assistance, along with instructional handouts and general information, is available at www.cmsu.edu.writingcenter.

McNair Scholars Program. Designed primarily for juniors and seniors, McNair offers preparation for doctoral study for U.S. citizens and permanent residents who meet government eligibility requirements. Activities include information seminars, faculty mentoring, and a paid summer research internship. Because of federal guidelines, students must apply for acceptance to the McNair program through the Department of Academic Enrichment.

Student Support Services (TRIO-SSS). Funded by a U.S. Department of Education grant, TRIO-SSS offers tuition-free developmental education courses in writing, reading, mathematics and college success strategies. These courses offer small class sizes, individualized learning methods, one-on-one tutorials and advisement sessions. TRIO-SSS also offers extra advisement opportunities and free tutoring in a variety of high-risk courses. Because of federal guidelines, students must apply for acceptance to the TRIO-SSS program through the Department of Academic Enrichment.

Summer Suspension Waiver Program. Students on academic suspension, with GPAs of 1.50 or higher, may request readmission for summer classes. Faculty mentors meet weekly with students to discuss strategies for improving academic performance. Students who successfully complete the summer program and achieve at least a 2.00 summer GPA are permitted to enroll for fall classes.

AE 1400 Student Development Seminar. This course orients new students to Central Missouri through discussion of academic purpose, university resources, academic skills, relating to others, making choices, and creating goals. Central Missouri encourages all freshmen to enroll in this one credit hour course during their first semester.

**AE 1450 Valuing Differences.** Within the context of a one-hour personal, experiential, and interactive learning course, explore current issues and challenges related to race, gender, and culture. This course is one semester hour and runs a half semester.

#### Assessment and Testing Services

The Office of Assessment and Testing Services is located within the Office of Institutional Effectiveness. Currently, the Director of Assessment and Testing Services is located in Administration Building 304, 660-543-8582, and the Assistant Director of Assessment and Testing Services is located in Humphreys Building, Room 223, 660-543-4919. The Office of Assessment and Testing Services administers, supports and coordinates Central Missouri's Assessment and Testing Services Programs. The University's assessment program is called "Central's Quality Improvement Program (CQIP)." A description of the major goals and components of CQIP can be found at www.cmsu.edu/testingservices.

Official Score Report Policy. Only score reports that are sent directly from the test company to the Office of Assessment and Testing Services, Humphreys 223, Warrensburg, MO 64093, are considered official. Official score reports are required to be on file for students to meet admission and/or other program requirements.

At Central Missouri, assessment is an integral part of the continuous process of learning and development with the purpose of enhancing a student's total university experience. Assessment uses well-defined outcomes and criteria employing multiple measures. All students are required to participate in CMSU's assessment program. This assessment may include periodic measurements of student intellectual and personal growth through examinations/assessments in General Education, intellectual skills, or the major field of study and various opinion surveys.

To protect confidentiality and privacy, score reports are not available by telephone, fax, e-mail, Internet, or proxy. An official photo ID with signature is required for most services.

Assessment and Testing Services is a member of the National College Testing Association (NCTA) and the Consortium of College Testing Centers; and adheres to the NCTA Professional Standards and Guidelines.

General Education Assessment. All Central Missouri State University students are required to take the *College*-BASE-in which the total number of hours earned plus the number of hours enrolled meets or exceeds 60 hours. New freshmen and transfer students beginning with Fall 2004 will be required to complete a 15-hour set of General Education courses by the end of the semester in which the total number of hours accumulated equals or exceeds 60 hours AND obtain a minimum score on the *College*-BASE General Education Assessment as a condition for graduation. (More information on pages 35-37 or at www.cmsu.edu/testingservices.)

Exceptions. Teacher education majors are required to take and pass the College-BASE for Teachers Assessment to meet one of the conditions for admission into teacher education. Scores from the College-BASE for General Education cannot be used for admission into teacher education as the scores are not comparable. Nursing majors are required to take and pass the College-BASE for General Education Assessment to meet one of the conditions for admission into the nursing program. Students who have taken the Academic Profile, the CAAP test or the College-BASE at-another institution are exempted from taking the College-BASE for General Education Assessment. However, a score report sent from the previous institution to the Office of Assessment and Testing Services is required.

**Major Field Assessment.** Each academic program establishes the conditions and requirements for assessment of

its majors. All students are encouraged to contact faculty within their program to determine the policy, practice and standards for assessment in their major field. Advanced test registration and test administration for many of the major field assessments prescribed by departments is administered by the Office of Assessment and Testing Services. Students are encouraged to contact their faculty advisor to determine the policy for their degree program.

**Surveys.** In addition to standardized and locally developed assessments in General Education and the major field, Central Missouri utilizes a variety of opinion surveys designed to measure student perceptions of their experiences at CMSU, both academic and non-academic. The information derived from assessment activities is used to facilitate student learning and development, to promote faculty and staff growth, and to improve the quality of academic and non-academic programs, services and facilities.

The Office of Assessment and Testing Services administers, supports and coordinates CMSU's Assessment and Testing Services Programs. Staff can assist students in identifying appropriate tests, register students for tests and/or provide test registration information.

#### Information Related to Test Registration and Score

Reports. In addition to the administration of a variety of tests and surveys, the Office of Assessment and Testing Services also maintains test scores and distributes registration material for other examinations not administered by Assessment and Testing Services. CMSU is not authorized, for example, to administer computer-based tests such as the Graduate Management Admission Test (GMAT), the Graduate Record Examination - General Test (GRE-General), or the Test of English as a Foreign Language (TOEFL). These computer-based tests used for admission into specific graduate programs are administered only at computer-based test centers. However, the office does maintain official test scores and provides registration materials and information for students who are interested in taking these exams.

## Tests Administered or Registration Materials Supplied. The Office of Assessment and Testing Services maintains test scores and provides registration information and materials for all of the tests listed below. Those tests administered at Central Missouri through Assessment and Testing Services are marked with an asterisk (\*).

- \* Advanced Placement (AP)
- \* American College Testing Program (ACT)
- \* American Drafting and Design Association Exam (ADDA)
- \*Area Concentration Achievement Test (ACAT)
- \*Arnett Development Corporation "Complete RN Testing Success" Exams
- \*Certified Manufacturing Technologist Exam (CMTE)
- \*College Basic Academic Subject Examination for General Education
- \*College Basic Academic Subject Examination for Teachers
- \*College-Level Examination Program (CLEP-CBT)
- \*Constructor Certification Exam (CCE)
- \*Counselor Preparation Comprehensive Exam (CPCE) Diagnostic Readiness Test (DRT)
- \*General Education Development (GED) Graduate Management Admission Test (GMAT) - CBT

Graduate Record Examination - General Test (GRE-General) - CBT

\*Graduate Record Examination - Subject Tests (GRE-Subject)

\*Institutional Test of English as a Foreign Language (ITP)

\*Law School Admissions Test (LSAT)

\*Major Field Achievement Test (MFAT)

Medical College Admissions Test (MCAT)

\*Miller Analogies Test (MAT)

\*Missouri Police Officers State Certification Exam (MPOSCE)

\*National Association of Industrial Technology Exam (NAIT)

\*National Automotive Technicians Education Foundation ...
- End of Program Exam (NATEF)

National League of Nursing Achievement Tests (NLN- . . . . following examinations: Achievement) Advanced Placement

\*National Registry of Emergency Medical Technician -First Responder (NREMT-FR)

\*PRAXIS Series (previously National Teacher Exams)

\*Professional Photographers of America (PPA)

\*School Leadership Licensure Assessments (SLLA and SSA)

**TeckChek** 

Test of English as a Foreign Language (TOEFL) Test of Spoken English (TSE)

\*Travel Agency Proficiency Exam (TAP)

Watson-Glaser Critical Thinking Appraisal (WGCTA)

It is recommended that students considering admission to Central Missouri State University take the national ACT test due to its greater applicability. Official score reports are to be on file in the Office of Assessment and Testing Services. To request a free official ACT score report be sent to Central Missouri, applicants should enter 2272 on the ACT test registration form. The ACT Residual, however, is administered at selected times in the year. Scores from ACT Residual testing cannot be used for scholarships, athletic admission requirements, or admission to other institutions. Contact the Office of Assessment and Testing Services to obtain Central Missouri's institutional score recipient code for other standardized tests. All students must take the ACT as a condition for acceptance into the Harmon College of Business Administration degree programs.

## Alternate Opportunities to Earn College Credit. The University offers students the opportunity to gain academic credit for knowledge they may have acquired through course work or independent study. Special credit awards may or may not apply towards a degree program. Not all exams have a course equivalent. Several options may be available for earning special credit in a specific subject area. It is important to know that duplicate credit for a course in which credit has already been earned is not available.

Official Score Report Policy. For credit to be considered, the Office of Assessment and Testing Services must receive an official score report sent directly from the test company.

Students must score at or above the level established by the University to receive special credit and may only receive credits in areas for which course equivalents have been established. Special credit cannot be applied to any upper-level hour requirements. The total credit earned by special credit will not exceed 30 semester hours for a bachelor's degree or 15 semester hours for an associate degree. All special credit is subject to a \$5.00 per hour recording fee. Students must be enrolled at Central Missouri and have completed a semester before any special credits are posted on the transcript.

Credit may be granted for successful performance on the following examinations:

**Advanced Placement Exams** (AP). For information and/or to request an official score report contact: P.O. Box 6671, Princeton, NJ 08541-6671; 888/225-5427 (609/882-4118 for TTY); www.collegeboard.com/ap.

**International Baccalaureate Program** (IB). For information and/or to request an official score report contact: 475 Riverside Dr., 16th Floor, New York, NY 10115; 212/696-4464; www.IBO.org.

**College Level Examination Program** (CLEP). For information and/or to request an official score report contact: P.O. Box 6600, Princeton, NJ 08541-6600; 800/257-9558; www.collegeboard.com/clep.

Chauncey Group International - DANTES. For information and/or to request an official score report contact: ATTN: DSST Program/Transcript Service, 664 Rosedale Rd., Princeton, NJ 08540; 877/471- 9860; www.getcollegecredit.

**Math-for-Credit** in MATH 1111 College Algebra and MATH 1620 Contemporary Math. These locally developed exams are similar to course finals. For information contact: the Office of Assessment and Testing Services.

Advanced test registration is required for all exams. Online test registration is available for some but not all tests. In compliance with the Americans with Disabilities Act, test accommodations are available for students who meet eligibility requirements. Contact the Office of Assessment and Testing Services for additional registration/test accommodation information. Visit www.cmsu.edu/testingservices to view the test calendar.

#### Campus Advocate

The Campus Advocate serves as a support office for students with questions, concerns and/or problems. The advocate's role is to facilitate communication between students and others (faculty, administration, other students) and to assist students in knowing how to address/resolve problems within the framework of the University's organizational structure.

#### Central's Summit Center

Central Missouri State University's Office of Extended Campus and Distance Learning operates a center in Lee's Summit, Mo., in an effort to serve students in the greater metropolitan area. Central's Summit Center is located in the Summit Technology Campus at the junction of Missouri highways 50 and 470. The facility features 14 multi-use classrooms and seminar rooms equipped with state-of-the-art technology, interactive television classrooms, computer labs and conference rooms. Offerings include courses toward the completion of 13 degree programs and non-credit courses, workshops and seminars.

#### Chapel

The Alumni Memorial Chapel was built in 1956 in memory of Central Missouri students who served in World War II and the Korean War. Funds were donated by private individuals and organizations. The Alumni Chapel seats 200 in the sanctuary, has a meeting room for twenty people, and contains a complete kitchen and dining area in the undercroft. The Danforth Foundation funded the attached Danforth Chapel which contains six kneeling benches and is open to the public during the day. In the Fall of 1994 a bronze sculpture entitled "Guardian," which is a memorial to all men and women who have served our country in armed services, was placed near the entrance of the Danforth Chapel. The Chapel is used by Central Missouri students as a meeting place for social and religious organizations, choir practice, initiation ceremonies, group testing, parties, and weddings. Students also use it for individual or group meditation and communion.

#### Counseling and Psychological Services

Counseling and Psychological Services, located in Humphreys 131, offers CONFIDENTIAL counseling for CMSU students concerned about educational, career, and personal issues. Psychologists provide individual and group counseling, psychological assessment and referral, outreach programming on psychological issues, consultation, and crisis intervention. Call 660-543-4060 for an appointment.

#### **Dining Service**

In addition to regular meal service in residence halls, dining service is also available in the University Union. The Union features, on the first level, the Central Courte offering Burger King® Express, Pizza Hut® Express, Taco Bell® Express, Sub Connection®, and the Corner Market™, which offers daily entrees with all accompaniments, soup, salads and desserts. Located on the main level in the Recreation Center is Freshëns® which features drinks, fruit smoothies, popcorn, yogurt and pretzels. Also on the main level in the Union atrium is Jazzman's® Cafe with delicious Seattle's Best® coffee, espresso, latte, tea and fresh baked desserts.

Both on- and off-campus groups and organizations may arrange for catered refreshments and full meals through the Union Catering office, Union 108.

#### Distance Learning

Distance Learning at Central Missouri State University encompasses internet-based, electronically-delivered education via online and interactive television (ITV). Within the Office of Extended Campus, Distance Learning manages, schedules, coordinates and assists in marketing all distance education courses and degree programs. Appropriate student services, including library resources, an online writing lab and technical support, are provided to meet the additional needs of the distance learner.

#### Faculty and Staff Resource Advisors

Each academic department which offers major or minor programs has identified faculty and staff members as Resource Advisors. Advisors confer with students interested in those fields of study and help those who plan to major or minor in them with their individual programs. Inquire at the Office of Academic Advisement or the major department for names and offices of Resource Advisors.

#### International Student and Scholar Services

Located within the International Center, Ward Edwards 1200, International Student and Scholar Services assists all international students and visiting international faculty through orientation, advocacy and programming activities. Other areas of service include immigration and student status certification activities, sponsorship of the International Student Organization, and promoting the role of international education.

#### KMOS-TV/KTBG-FM

KMOS-TV is a non-commercial public broadcasting station operating on Channel 6 with 100,000 watts of power. Studios are located on campus in the Martin Building. The station can be received by over 1,000,000 residents in central Missouri. A satellite receiving dish on campus permits direct reception of TV programs from the main PBS transmitting station in Alexandria, VA, and from other producers around the country. The station airs a full range of programs including instructional courses, PBS programs, and locally produced shows.

KTBG-FM 90.9 The Bridge, the radio voice of Central Missouri, is a 100,000 watt stereo operation. The station broadcasts to a potential listening audience of one million people. Studios and offices are located in the Martin Building. KTBG-FM broadcasts a full range of National Public Radio programs and Adult Alternative music. The station also produces and airs a number of local programs.



KTBG-FM can also be heard at the Lake of the Ozarks on 104.9 FM.

Both KMOS-TV and KTBG-FM are managed by professional core staffs with most of the actual operations carried on by volunteers and paid students.

#### **Library Services**

Central Missouri's Library Services supports the instructional, research, and public service programs of the University. James C. Kirkpatrick Library has a centralized reference area, which includes periodicals, government documents, and special collections. The government documents area houses the depository collections for federal and Missouri documents. Library holdings include approximately 521,324 books and bound volumes, 809,606 pieces of microform, 735,936 government documents, and 2,552 periodical subscriptions.

The library faculty and staff provide reference and bibliographic services, teach library skills and research techniques, lecture to classes, and conduct library orientation tours. *Quest*, a computerized catalog, provides online access to library collections. The library is a participant in the Missouri Bibliographic Information User System (MOBIUS) giving students access to the library holdings of more than 57 Missouri academic libraries. External library databases and collections are available via the Internet and interlibrary loan services. Library Services is committed to providing quality services using a variety of information resources and technologies including assistive technology for accommodating those library users with disabilities. For more information about Library Services, please visit the web page *http://library.cmsu.edu*.

Harmon Computer Commons (HCC) provides networked IBM and Mac workstations on a first-come first-served basis, access to software, the Internet, *Quest* (the library on-line catalog), e-mail, and class assignments. Faculty may schedule any of the four computer classrooms for hands-on instruction. Research aids, tutorials, and supplementary material are available in the reference area of HCC. Typewriters are available, and staff is available for assistance. Contact HCC in Library 1250, call 660-543-4196 or e-mail *HCC@libserv.cmsu.edu*. Visit HCC's web page <a href="http://library.cmsu.edu/hcc">http://library.cmsu.edu/hcc</a>.

Classroom Media Resources (CMR) (Library 1340, 660-543-4142) supports the University community by circulating audiovisual equipment and the media collection. Reservations may be made up to two semesters in advance. Student requests for classroom presentation audiovisual equipment requires check-out by the instructor. Lamps for departmentally-owned audiovisual equipment may be purchased through CMR. Interlibrary film and video rental services are also available. Classroom instruction has priority, but support to non-academic areas and community groups is also provided.

#### Non-Traditional Student Services

Non-Traditional Student Services is a resource office for Central Missouri's students who are age 24 and over, have a gap of five or more years since high school, are married, single, have children, or are a veteran. This office provides information, support, advocacy, and referrals to campus and community support services. The office has information on non-traditional scholarships, commuter ride-sharing network,



The James C. Kirkpatrick Library is a state-of-the-art research facility as well as a quiet place to study.

housing, child care, and tutoring or other skill enhancers. Non-Traditional Student Services is located in Union 217. Call 660-543-4007 for more information.

#### Office of Accessibility Services

The Office of Accessibility Services provides students and visitors with disabilities with the services necessary to achieve equal opportunity while at CMSU. OAS works with faculty, housing, facilities and other campus programs to provide opportunities for persons with disabilities. Some of the disabilities that are included are learning disabilities, attention deficit disorder, orthopedic and mobility issues, mental health, vision, hearing and health issues such as migraines, seizures, HIV, IBS and diabetes.

Students seeking accommodations will need to provide recent professional documentation of the disability to OAS. The documentation will need to be on a professional letterhead and indicate the nature of the impairment, that it is permanent or long term, and how it affects the student. More information is available on the OAS website. Accommodations depend upon the disability and the documentation and might include testing services, text in alternative format, sign language interpreters, or others.

For additional information, contact OAS at Elliott Union 222, 660-543-4421, fax 660-543-4724, www.cmsu.edu/access, or email oas22000@cmsu2.cmsu.edu.

#### Office of Career Services

The Office of Career Services helps students identify careers and stay in touch with the job market before and after they graduate. Its services include:

- Employment Referrals
- Career Fairs
- Teacher Placement Day
- On-Campus Interviews
- · Career Counseling
- Information on Employment Opportunities
- Career Library
- · Career Workshops
- Résumé Writing Assistance
- Interviewing (via videotaped mock interviews)
- Job Search Skills
- · Credential Services
- Part-Time Student Employment
- Experiential Education Opportunities
- Comprehensive Web page including job listings

Career Services, continued from page 29

These services are optional, but students are encouraged to use them for selecting careers and for help in finding positions. Students should register when they begin looking for any type of employment opportunity or hands-on experience. After they graduate, they should notify the office of their employment status and any changes in address or phone number.

More than 600 employers will visit Central Missouri's campus to interview students for full-time, internship and summer positions. Both employers and students may call or write the Director of Career Services regarding their employment needs.

Please note that no course, program, certificate, and/or degree available at Central Missouri carries with it a promise, real or implied, of immediate or eventual employment within the specific areas covered or in any other specific or general areas. Although CMSU offers its services to those seeking jobs, employment is the responsibility of the student.

#### Office of Community Engagement

Central Missouri's Office of Community Engagement encourages understanding and appreciation of all aspects of human diversity within the Central Missouri community and engages surrounding communities to collaboratively address social justice and community issues, as it relates to human diversity. Located in Union 224, phone 660-543-4156, the office encourages understanding and appreciation of all members of Central Missouri's community. The office's goal is to foster an open and inclusive community on Central Missouri's campus. The Office of Community Engagement achieves its mission through:

- Oversight of the University Campus Diversity Plan.
- · Oversight of the Kansas City Task Force and the Kansas City Task Force Advisory Board.
- · Assistance on University accreditation related to human diversity.
- Facilitation of campus and community educational programming and activities related to human diversity.
- Maintenance of campus diversity resource library.
- · Incorporation of human diversity understanding into university operations and policies.
- Fostering of the Central Missouri Creed.
- · Assistance to campus student multicultural
- Assistance to all University programs on incorporation of diversity awareness programs and initiatives.
- Facilitation of goals related to human diversity as stated in the University Mission Statement.
- · Interaction with diversity related offices and organizations on campus and in surrounding communities to build partnerships.

#### Office of Extended Campus and Distance Learning

With the cooperation of Central Missouri academic departments, the Office of Extended Campus and Distance Learning administers courses and degree programs off campus, online and through interactive television. The Office also coordinates the University's Summer Session, workshops, non-credit courses, contract training, high school dual credit courses, continuing education units (CEUs), vocational education courses and entrepreneurial courses.

#### Office of International Programs

The Office of International Programs is also known as the International Center and is located in Ward Edwards 1200. Housed together are the International Programs and Study Abroad services, International Admissions, International Student and Scholar Services and the Intensive English Program.

Students interested in attending school or traveling in another country are encouraged to visit the International Center and inquire about Central Missouri's study abroad programs. Placement opportunities exist in approximately 100 schools in over 40 countries.

#### Office of Student Financial Assistance

The Office of Student Financial Assistance administers a wide variety of federal, state, and CMSU scholarship, grant, loan, and employment programs, all of which provide funds to help eligible students satisfy the educational and living expenses of attending CMSU. Knowledgeable staff members are available to assist students and their families with all aspects of applying for financial assistance and V.A. educational benefits. The office is located at Administration 104 and may be contacted by telephone at 660-543-4040, fax 660-543-8080, or email at finaid@cmsu1.cmsu.edu.

#### Union Station: Crossroads to Technology

Union Station sells educationally priced computer hardware and software and is located in Union 119. Current faculty, staff and students are eligible to purchase hardware and software. Check our website at http://ustore.cmsu.edu.

#### University Health Center

Clinical Services. The University Health Center, located at 600 S. College St, just south of the Elliott Union, offers a full range of primary health care services to students and their spouses, as well as selected services for faculty and staff. The Health Center is staffed by physicians, nurse practitioners, nurses, and other qualified professional and support staff, and operates primarily on an appointment system, although urgent illnesses and injuries are given priority. Fall and spring semester hours are Monday through Friday, 8 a.m. to 5 p.m. Summer hours and semester break hours are posted. Check out our website at www.cmsu.edu/uhs or call 660-543-4770 to schedule an appointment.

Emergencies. In the event of an emergency, call 911 from any campus phone, or visit Western Missouri Medical Center at 403 Burkarth Rd, in Warrensburg.

Health Insurance. All students attending Central Missouri should have adequate health insurance coverage. All international students are required to show proof of insurance, or must enroll in the student health insurance plan. Domestic students may also enroll in the student health insurance plan for themselves and their dependents.

The student insurance plan provides benefits to insured students and their insured dependents on or away from campus, 24 hours a day. The insurance year runs from August to August, and may be paid for the entire year, or on a per semester basis. For more information about the student insurance plan, call 660-543-4771, or stop by the University Health Center to pick up a brochure.

Health Promotion and Wellness Services. The Health Promotion office offers information and programs for students to help them make healthy choices while on campus, and to help them establish healthy habits to last a lifetime. Programs and information areas include alcohol risk reduction, healthy relationships, sexual health, stress management and more. For information on programs, or to get involved as a volunteer, call 660-543-8338, or stop by the office in the University Health Center at 600 S. College St.

#### University Store

The University Store is the primary source for undergraduate and graduate textbooks. The University Store also sells a variety of tradebooks and magazines, supply items for the classroom and Central Missouri apparel and gifts. A textbook reservation service is available for fall semester classes. A special order desk accepts orders for a variety of merchandise. "A partner in education," the University Store is located on the lower level of the University Union. Check our website at http://ustore.cmsu. edu.

#### Elliott Union

The Elliott Union is centrally located on the main campus, serving as the "living room" for the campus community. The Union provides facilities for dining, meetings, social functions, conferences, student activities and programs, a computer lab, a copy center, ATMs, student organization offices, study lounges, and quiet areas. The Union also houses student services offices which include: Department of Student Life, Office of Campus Activities, Office of Community Engagement, Dining Service/Catering, Office of Career Services, Office of Campus Advocate, Student Government Association, Facilities and Conference Services Office, and the Office of Accessibility Services. The Union also features an Information Desk that provides campus-wide information to students, staff, faculty, and guests.

#### Welch-Schmidt Center for Communication Disorders

Central Missouri has a comprehensive speech-language and hearing clinic in the Welch-Schmidt Center for Communication Disorders (Martin 34). Undergraduate and graduate student clinicians, supervised by faculty of the Department of Communication Disorders, provide assessment and treatment to students, faculty and members of the community with articulation, voice, swallowing, stuttering, language and/or hearing disorders.

The Center has treatment rooms with two-way mirrors, video and audio monitoring; an early childhood preschool for children with speech and language disorders who



Elliott Union houses the bookstore, student services offices, dining areas, a computer lab, a copy center, the bowling alley and a coffee shop among other amenities.

are between the ages of  $2^{1}/2$  and 5 years; a voice and swallowing laboratory including rigid and flexible endoscopy for vocal fold visualization, air-flow/pressure measurements and acoustic evaluation; four audiologic suites where hearing evaluations, impedance audiometry, otoacoustic emissions, video otoscopy, auditory brainstem response and electronystagmography are performed. The hearing aid laboratory is equipped with the latest technology for the fitting and dispensing of hearing instruments. Students have available a variety of current assessment and treatment materials and a student clinician workroom complete with Macintosh and PC workstations.

Students, faculty, staff and their immediate families may use the services of the Center at reduced fees. The Center welcomes self referrals and referrals from University faculty and staff, University Health Services and community health and educational agencies.



The university's Max B. Swisher Skyhaven Airport is home to a fleet of training aircraft for the aviation program.

#### OTHER SERVICES AND FACILITIES

#### Airport

CMSU owns and operates the Max B. Swisher Skyhaven Airport located three miles west of Warrensburg on Highway 50. It includes 402 acres of land; a 4,200-foot lighted runway, with a full-length parallel taxiway; a 2,800-foot lighted runway; and buildings for administration, maintenance, and other uses. The airport is a teaching laboratory for the University and a community airport serving the Warrensburg area.

#### Alumni Association

The Alumni Association of Central Missouri State University provides opportunities for alumni to stay connected with their alma mater after graduation by hosting alumni gatherings throughout Missouri and around the country. Reunions are held for classes and organizations to reunite alumni and bring them to campus. Events are planned in conjunction with athletic events for alumni and fans alike. The Alumni Association seeks to recognize the accomplishments of alumni through awards such as the Distinguished Alumni Award, Distinguished International Alumni Award, and the Outstanding Recent Alumni Award. Scholarships are also available to the children of alumni who are attending Central Missouri State University.

Membership in the Alumni Association is complimentary to graduates of Central Missouri State University. Members receive *Central Today*, the alumni publication, four times per year as well as invitations to events in their area. Other benefits include assistance with reunion planning and locating fellow alumni, access to university facilities, bookstore discounts, and career assistance.

More information on the Alumni Association can be found in the Smiser Alumni Center located in the University Union or by calling 660-543-8000.

#### The Center for Teaching and Learning

The Center for Teaching and Learning advances Central Missouri's academic mission by encouraging and supporting the advancement of instruction, the scholarship of teaching and learning, and service learning. Professional, technological and developmental assistance for faculty and staff is provided by means of a coordinated training program, modern laboratory facilities and expert technical advice and support. The Center seeks to integrate sound teaching practice with current instructional technology to foster faculty growth and to contribute to Central Missouri's statewide mission in professional technology.

#### Central Regional Professional Development Center

The CRPDC is the primary operating agency of the Central Professional Development Consortium. The Center's mission is to provide information and resources in proven instructional and administrative practices which promote quality instruction in the classroom, overall school improvement and school-linked services for children and youth and their families. The Center offers professional development opportunities, including inservices and workshops, to practicing teachers and administrators designed to address needs in all areas, particularly in science, math, technology and reading/writing. The Center's toll free number is 800-762-4146. The Executive Director may be e-mailed at Vinson@cmsul.cmsu.edu.

#### Child Care Centers

The University supports two child care centers on campus. The facilities are located at the Foster/Knox Building and the Central Village Apartment Complex. Both of these centers are licensed with the Missouri Department of Health and Senior Services. Central Village holds a certificate of accreditation from Missouri Accreditation and Foster/Knox is working toward their certification.

The child care facilities are available to all students, staff, and faculty. Children six weeks to ten years may enroll. Enrollment is accomplished through a waiting list. The child care centers have adopted Creative Curriculum to assist in planning appropriate learning experiences for every child in our program. All children in our care are provided meals.

Both centers offer full-day care, Monday-Friday and offer attendance options of Monday/Wednesday/Friday or Tuesday/Thursday. Central Village offers evening care for children of students attending night classes Monday through Thursday evenings. Foster/Knox Center is the only center open during the Summer Sessions and offers a Summer Camp program for school-age children. For more information or to take a tour, call Foster/Knox at 660-543-4605 or Central Village at 660-543-4793.

#### Gerontology Institute

The Gerontology Institute provides research, service, and training resources to agencies and individuals working in the field of aging. It convenes scholars, practitioners, and policymakers for workshops and seminars. It promotes research in the field of aging and disseminates recent scholarly findings. In addition, it provides public service to those serving in the field of gerontology.

#### Information Services

With the Chief Information Officer and most offices located in the Humphreys Building, the Department of Information Services provides information processing, computer support, network and telecommunications services for the entire University.

The Computer Support Services unit operates, on a nearly around-the-clock basis, the large-scale central IBM mainframe academic and administrative computer systems which house many databases critical to the University's operations. Access to these systems is provided through microcomputers and web interfaces.

The Management Information Systems unit designs, develops, acquires and supports application software systems, including financial, student services, developmental and human resource management for the many administrative offices of the University.

The User Services unit provides 24/7 campus-wide computing access through more than 4,500 workstations (with more than 3,500 connected to a high speed network), computer support through a central HELP Desk facility and support staff, general and customized training for faculty, staff and students along with World Wide Web user support and academic consulting. User Services also provides support for network servers and storage resources, as well as for many academic and administrative computing functions.

The Telecommunications unit administers and maintains the University fiber-optic and copper wire cabling system which provides voice, data and video support to over 50 buildings, as well as managing the campus telephone PBX and voice mail systems.

#### Missouri Safety Center

Promoting safety in Missouri and the nation, the Missouri Safety Center seeks to prevent injury and death through technology transfer, instruction, research and public service. The Center utilizes a staff of safety professionals dedicated to injury prevention. These safety professionals deliver programming to a diverse clientele which includes personnel from law enforcement, pupil transportation, industry, government and the general public. State-of-the-art information and use of advanced technology is at the core of the Center's various curricula and programs.

The Missouri Safety Center's Instructional Park is located just south of the main campus. This unique facility houses the professional training programs, off-street driving range, skid pad, and off-road and all-terrain vehicle range. The Center maintains a fleet of more than 100 vehicles for road, special training and range use. Also housed within this facility are an advanced computer software training

laboratory, and one of the nation's foremost breath alcohol instrument training and repair laboratories.

#### National Police Institute

The National Police Institute serves municipal, county, state, federal, and foreign law enforcement agencies by developing programs of technical assistance on request and conducting these wherever they are needed. Its offerings include police traffic operations, criminal investigation, police administration, and specialized courses in other police service areas.

The Institute is also a certified police academy offering basic police training to new officers as prescribed by the state's Peace Officer Standards and Training Act.

#### Prussing Agriculture Research Farm

The 260-acre Prussing Agriculture Research Farm, a teaching unit of the Agriculture Department utilizing the latest in agriculture technology, provides laboratory experience for students in agriculture classes and work opportunities for students interested in hands-on experience. The newest additions to the farm are a two-classroom Agriculture and Conservation building and a trapshooting range with skeet overlay funded by a grant from the Missouri Department of Conservation. Additional teaching/research facilities are a mature orchard, greenhouse complex with dwarf orchard, and research plots at the Max B. Swisher Skyhaven Airport. Agriculture research, funded by the University, private industry, and the Natural Resources Conservation Service is carried on by faculty and students at these facilities.

#### Public Safety

The Department of Public Safety includes the University Police, Key Control, Environmental Health and Safety and Parking Services. It is located at 306 Broad Street and is open twenty-four hours daily, 365 days per year. Call 660-543-4123.

For emergencies on campus, dialing 9-1-1 from the university phone system will reach the Department of Public Safety. Dialing 9-1-1 from a cell phone will connect the caller to the Johnson County Central Dispatch center. Additional information can be found at <a href="https://www.cmsu.edu/ps">www.cmsu.edu/ps</a>.



Students groom the horses at the Prussing Research Farm.

#### **Publications**

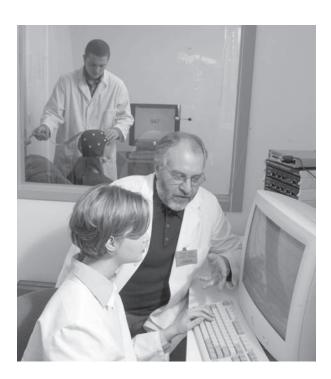
The following publications are produced and distributed by Central Missouri State University:

Central Today, a quarterly tabloid for alumni and friends of the University published by University Relations and the Office of Alumni Relations and Development. Central Missouri State University News, a monthly newsletter for faculty and staff published by University Relations. The Muleskinner, a weekly campus newspaper published by a Department of Communication student staff.

#### Research

The Office of Sponsored Programs establishes, administers and coordinates programs that guide Central Missouri in its research, scholarly activity and creative endeavors. The office maintains information about funding opportunities from government and private sources. This information includes newsletters, announcements, computer databases and electronic access to federal and private agencies. The office also maintains a research resource library that contains agency regulations and application forms, reference books and manuals on research administration, how-to books on grant writing and directories of foundation support. For assistance with any of your research needs contact the Office of Sponsored Programs or e-mail Research@cmsul.cmsu.edu.

Research Involving Human Subjects. In order to comply with federal regulations and to protect the health and safety of human subjects involved in research, all research protocols involving the use of human subjects must be in compliance with *Academic Procedures and Policies #9: Procedures for Human Subjects Review*. All projects involving human subjects in research must be approved in advance by the The Human Subjects Review Committee. Forms are available at <a href="https://www.cmsu.edu/osp">www.cmsu.edu/osp</a>.



**Research Involving Animals.** Federal law requires that all research projects involving the use of selected mammals and birds be conducted to ensure humane treatment of the animals. Accordingly, all such projects, regardless of the funding source, must be approved in advance by the Institutional Animal Use and Care Committee. Forms are available at <a href="https://www.cmsu.edu/osp">www.cmsu.edu/osp</a>.

#### Small Business Development Center

The Small Business Development Center offers consulting, counseling, training, and research services for business and industry. Students from various colleges work with Center staff and faculty members to collect and evaluate data and offer counsel on a variety of business and technical problems in today's marketplace.

#### Student Volunteer Programs

Student Volunteer Programs provide students with opportunities to become involved in the Warrensburg community. The office provides referrals to local agencies and schools for special projects and ongoing commitments. Each year a group of students spends Spring Break working with Habitat for Humanity building a home. This office also offers off-campus community service federal work study job positions. Students must qualify for work study through the Office of Student Financial Assistance. For information on how to be a part of this enriching experience, stop by the Office of Campus Activities, Union 217, or call 660-543-4007.

#### Workshop on Wheels Child Care Resource and Referral

The Workshop on Wheels Child Care Resource and Referral is an in-service training project for child care providers, early childhood professionals, and parents affiliated with the Department of Educational Leadership and Human Development - Child and Family Development Program. Its primary purpose is to provide programs and services throughout central Missouri which will improve and enhance the quality of child care offered to young children while they are away from their homes. Child care referrals and consumer education materials focusing on choosing quality child care, ADA guidelines, immunization schedules, and other relevant early childhood information are also available to families who are searching for child care options for their children. The Workshop on Wheels Child Care Resource and Referral is funded by grants from the Missouri Department of Elementary and Secondary Education; the Missouri Department of Health; Department of Social Services; and the Children's Trust Fund. For more information, visit www.cmsu.edu/workshop.

# **SECTION II**

# **Bachelor's Degrees**

Central Missouri offers the following baccalaureates:

- · Bachelor of Arts
- Bachelor of Fine Arts
- · Bachelor of Music
- Bachelor of Music Education
- Bachelor of Science
- Bachelor of Science in Business Administration
- Bachelor of Science in Education
- Bachelor of Science in Social Work

The following policies apply to the undergraduate degrees offered by the University:

#### **General Requirements for a Baccalaureate**

- A baccalaureate shall total a minimum of 124 semester hours.
- 2. Completion of a degree with a major/minor combination requires that a minimum of 20 semester hours of the major and a minimum of 10 hours of the minor must be taken through Central Missouri. Completion of a functional major requires that 30 hours of the functional major must be completed through Central Missouri. If a student completes more than one major, no minor is required. The last 12 semester hours earned toward a baccalaureate degree must be from Central Missouri.
- A baccalaureate shall include a minimum of 40 semester hours of upper-level credit, 12 of which must be part of a major or of a functional major. Upper-level course work must be earned at Central Missouri in the minor.
- A baccalaureate shall include the General Education Program as prescribed by the University. See "General Education" in this section.

# Specific Requirements for the Baccalaureate — BACHELOR OF ARTS

- 1. All General Requirements shall be met.
- A major for this degree normally shall be 30-35 semester hours.
- A minor for this degree normally shall be 20-25 semester hours.
- 4. A modern language requirement shall be 9 semester hours and may be met as follows:

The modern language requirement is fulfilled by successfully completing 9 semester hours of one modern language, or completing 6 hours of one modern language and 3 hours of modern literature in translation (ENGL 2220), or completing 3 hours of an upper-level modern language course.

Students with previous study of a modern language in high school who enroll in a second semester modern language class or higher may be eligible for validated credit. See Department of Modern Languages Statement of Policy. For further information contact the Chair of the Department of Modern Languages.

# Specific Requirements for the Baccalaureate - BACHELOR OF FINE ARTS

This is a professional performance degree available through the Departments of Art and Theatre.

- 1. All General Requirements shall be met.
- 2. A functional major for this degree normally shall be 60-80 semester hours.

# Specific Requirements for the Baccalaureate — BACHELOR OF MUSIC

This is a professional performance degree available through the Department of Music.

- 1. All General Requirements shall be met.
- A functional major for this degree normally shall be 80-82 semester hours.

# Specific Requirements for the Baccalaureate — BACHELOR OF MUSIC EDUCATION

This is a professional education degree available through the Department of Music. Students planning to obtain teacher certification should see "Teacher Education Policies and Procedures."

- 1. All General Requirements shall be met.
- A functional major normally shall total 60-66 semester hours.
- Professional education courses for this degree shall be 25-35 semester hours.
- A candidate for this degree must have a minimum cumulative grade-point average of 2.50 based upon total hours attempted.
- All students receiving this degree must obtain minimum scores on the area specialty test in music of the National Teacher Examination to be eligible for teacher certification (HB463). See "Teacher Education Policies and Procedures."

# Specific Requirements for the Baccalaureate — BACHELOR OF SCIENCE

- 1. All General Requirements shall be met.
- A major for this degree normally shall be 40-45 semester hours.
- 3. A minor for this degree normally shall be 20-25 semester
- A functional major for this degree normally shall be 60-70 semester hours.
- Candidates for this degree who are seeking teacher certification must satisfy teacher education certification standards. See BSE degree requirements below.

# Specific Requirements for the Baccalaureate — BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

- 1. All General Requirements shall be met.
- 2. A functional major in this degree normally shall be 60-70 semester hours.
- 3. Candidates for this degree must achieve a minimum cumulative grade-point average of 2.25.

# Specific Requirements for the Baccalaureate — BACHELOR OF SCIENCE IN EDUCATION

Students planning to obtain teacher certification should see "Teacher Education Policies and Procedures."

- 1. All general requirements shall be met.
- A major for this degree shall be in a certifiable area and normally shall be 30-36 semester hours except in those instances where certification requirements exceed this amount.
- 3. A minor for this degree normally shall be 18-24 semester hours
- 4. The semester hours required for a functional major for this degree normally shall be 50-60 semester hours.
- 5. Professional education courses for this degree shall be 25-35 semester hours.
- A candidate for this degree must have a minimum cumulative grade-point average of 2.50 based upon total hours attempted.
- 7. All students receiving this degree must obtain a minimum score on the appropriate exit test, generally the major area specialty test of the National Teacher Examination, to be eligible for teacher certification (HB463). Not obtaining the prescribed minimum score does not preclude receiving the degree. Students with double majors in education normally must plan to take tests in both areas, over a two-semester time period.

# Specific Requirements for the Baccalaureate — BACHELOR OF SOCIAL WORK

This is a professional degree available through the Department of Sociology and Social Work.

- The functional major for this degree normally shall be 65 semester hours.
- 2. No minor is required.
- 3. Candidates for this degree must maintain a minimum grade of C for all required social work courses.
- Candidates for this degree must successfully complete a fifty (50) hour Field Observation and Participation experience and a five hundred (500) hour Field Practicum experience.

#### **MAJORS AND MINORS for Bachelor's Degrees**

Central Missouri requires that candidates for bachelor's degrees provide evidence of depth of study through the completion of majors and minors. This requirement must be met for each degree earned by one of three options:

(1) completion of a major and a minor,

- (2) completion of a functional major, or
- (3) completion of a double major.\* The double major and the major-minor combination allow for preparation in two fields. The functional major is a comprehensive program which integrates, with the primary field, fields which are closely related. Each degree earned must have a major/minor unique to that degree and not recognized as a major or minor in another degree.

\*NOTE: with the exception of two or more functional majors, any course required in both the major(s) and/or the minor(s) constitutes an overlap and necessitates a comparable number of departmentally approved coursework hours to compensate for the overlap(s).

#### **RESIDENCE**

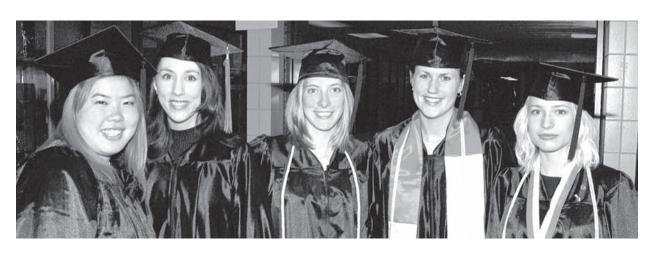
A candidate for any bachelor's degree must have earned at least 40 semester hours of junior/senior level coursework at an accredited senior institution of which at least 30 of those hours must be completed at Central Missouri. Fifty-percent of the major and minor coursework must be completed through CMSU. The last 12 semester hours required for the degree must have been earned from CMSU.

For an associate degree, the student must earn at least 20 semester hours with Central Missouri, with the last 12 semester hours completed at CMSU.

#### **ASSOCIATE DEGREES**

Central Missouri offers an Associate in Science degree. General Requirements for Associate Degree

- An associate degree consists of a minimum of 60 semester hours. For an associate degree, the student must earn at least 20 semester hours in residence at Central Missouri. The final 12 semester hours must be earned at CMSU.
- 2. An associate degree candidate must have a minimum cumulative GPA of 2.0 (C), based upon total hours attempted. In the case of a transfer student, a cumulative GPA of 2.0 must be earned at Central Missouri as well as an overall cumulative average of 2.0.
- All associate degree candidates are required to satisfy Missouri State requirements in regard to the Federal and State Constitutions. This requirement is filled by taking HIST 1350 or HIST 1351.
- In those cases involving two-year college transfer students, career-level courses may be counted toward the major requirement as determined by departmental evaluation.



# GENERAL EDUCATION PROGRAM

The goals of the General Education Program are to provide students the opportunity to enhance the skills of the intellect; expand their knowledge, understanding, and appreciation of the arts, natural sciences, technology, social sciences, literature and the humanities; and contribute to the improvement of human interactions. These goals can best be accomplished through exposure to a common core of knowledge, as well as through the opportunity to select courses to accommodate individual interests. A common thread throughout the program components is our effort to provide students with the required competencies called for by the Missouri Coordinating Board for Higher Education (CBHE). The CBHE competencies are divided into two parts: Skill Areas (Communicating, Higher-Order Thinking, Managing Information, Valuing) and Knowledge Areas (Social and Behavioral Sciences, Humanities and Fine Arts, Mathematics, Life and Physical Sciences).

The Intellectual Skills component of the General Education Program should enable the student to think independently, to write effectively, to speak fluently, to read with comprehension, and to listen attentively. Intellectual Skills also include the abilities to use mathematical reasoning and thinking as well as computation, and to conceptualize goals and ways to attain those goals. Concurrent with the development of these skills should come improved ability to think logically, to analyze and compare, to question and evaluate.

The **Integrative Studies** component of the program is expressly designed to help students examine and develop imaginative, yet disciplined, solutions to complex problems. They will do so by synthesizing the skills, knowledge, and methods developed in other components of the General Education Program. Selected information and skills developed in earlier classes should be so integrated that students discover connections among diverse human endeavors.

To contribute to the academic success of students, CMSU has a procedure for planned placement of students in Reading Skills, Modern Languages and in the Intellectual Skills. Students demonstrating exceptional preparation in the Intellectual Skills areas of Written Communication, Oral Communication and Mathematical Reasoning may be eligible to receive credit for the required General Education course(s) by meeting the established guidelines for exemption and credit. Requests for exemptions from required Intellectual Skills courses should be directed to the Office of Academic Advisement.

# POLICIES CONCERNING THE GENERAL EDUCATION PROGRAM

The Faculty Senate General Education Committee is charged with the development and interpretation of policies concerning the General Education Program. Policies must conform to the Statement of Philosophy and General Goals of the General Education Program.

Students will take courses in four divisions:

 I. Intellectual Skills; II. Core; III. Personal Interaction;
 and IV. Integrative Studies. In general, General Education courses in Divisions I-III are introductory in nature and open to all students.

- Courses in Division I. Intellectual Skills should be taken during the student's first year of study. Students with more than 30 semester hours of college credit who have not completed their Intellectual Skills requirements will be expected to make continuing progress toward completion of any remaining courses in this division.
- Students must meet state law requirements, Section 170.011 RSMo Supp (1988), that mandate specific instruction in State and federal constitutions and American history and institutions by the successful completion of one of the following courses: HIST 1350, HIST 1351, or POLS 1510.
- 4. In any division of the General Education Program where a requirement may be met in a variety of ways, colleges and departments shall allow students maximum freedom of choice whenever possible. However, colleges and departments may specify the General Education course(s) meeting that requirement for any or all of their degree programs.
- 5. Transfer students who complete their 42 credit hour General Education at other colleges and universities in Missouri are considered to have satisfied Central Missouri's 42 credit hour General Education requirement embodied in Divisions I and II. Transfer students, however, still must complete Central Missouri's Additional Institutional Requirements listed in Divisions III and IV of the General Education Program.
- 6. Courses taken to fulfill General Education requirements may not be taken on the Pass/Fail basis, but students who have fulfilled all General Education requirements in a specific area may elect to take additional General Education courses in the same area on the Pass/Fail basis.

#### **REVISED GENERAL EDUCATION ASSESSMENT POLICY**

As part of the University's quality improvement efforts, Central Missouri has established two new requirements for freshmen and transfer students taking classes for the first time at Central Missouri in Fall 2004. The following information is intended to help Central Missouri students and their parents understand the University's new requirements to ensure that no student's progress towards a degree is delayed in any way.

### First Time Freshmen and Transfer Students at CMSU

As of Fall 2004, all new freshmen and new transfer students will be required to:

• Complete a 15-hour set of General Education courses by the end of the semester in which the total number of hours accumulated equals or exceeds 60 hours.

#### AND

- Obtain a minimum score on the College-BASE General Education Assessment as a condition for graduation.
- A transfer student who has taken one or more of the 15-hour set of required General Education courses at another institution is responsible for having his/her transcript on file and evaluated in a timely manner. Failure to satisfy this responsibility will result in the student needing to enroll in General Education courses to meet the 15-hour set of required General Education courses. (Set listed on next page.)

# Effective Fall 2004: 15-hour Set of Required General Education Courses

These courses must be taken by the end of the semester in which the total number of hours accumulated equals or exceeds 60 hours. The *College-BASE* for General Education Assessment (except Teacher Education students) is to be taken the semester following the completion of the 15-hour set of required General Education courses. These General Education courses are recommended for students who have taken classes at Central Missouri prior to fall 2004.

# **DIVISION I, AREA A, Written Communication – ENGLISH**Select 6 credit hours from:

- ENGL 1020, Composition I (3 credit hours);
- ENGL 1030, Composition II (3 credit hours);
- ENGL 1080, Advanced Composition refer to catalog (6 credit hours)

#### **DIVISION I, Area C, Mathematical Reasoning - MATH**

Unless major requires *specific* General Education course(s), select 3 credit hours from:

- MATH 1111, College Algebra (3 credit hours);
- MATH 1150, Pre-Calculus Mathematics (3 credit hours);
- MATH 1620, Contemporary Math (3 credit hours)

# Division II, Area A, Part I – Life & Physical Sciences – SCIENCE

Unless major requires **specific** General Education course(s), select 3 or 4 credit hours from:

- BIOL 1003, Intro to Sciences: Ecology (lab not included)
   (3 credit hrs); OR
   BIOL 1004, Intro Sciences: Ecology (lab included)
   (4 credit hrs);
- BIOL 1005, Environmental Science (lab not included) (3 credit hrs);
- CHEM 1103, Intro to Sciences: Chemistry (lab not included) (3 credit hrs); OR
   CHEM 1104, Intro to Sciences: Chemistry (lab included) (4 credit hrs);
- EASC 1004, Intro to Sciences: Geology (lab included) (4 credit hrs);
- PHYS 1103, Intro to Sciences: Physics (lab not included) (3 credit hrs): OR
   PHYS 1104, Intro to Sciences: Physics (lab included) (4 credit hours)

# Division II, Area B, Social & Behavioral Sciences – SOCIAL STUDIES

Select three credit hours from:

- HIST 1350, History of the U.S. to 1877 (3 credit hours);
- HIST 1351, History of the U.S. 1877 to Present (3 credit hours);
- POLS 1510, American Government (3 credit hours)

#### **WAYS TO MEET THE REQUIREMENT**

There are two ways a student may meet the minimum score requirement on the *College*-BASE General Education Assessment.

1. A student must score 235 or better on all four subjects assessed in the exam (English, Mathematics, Science and Social Studies) OR

2. A student must score 235 or better on three of the four subjects assessed (English, Mathematics, Science and Social Studies) AND earn a grade of "C" or better in course(s) related to the general education subject area in which a score of 235 was not achieved.

### **EXCEPTIONS**

- Post-Baccalaureate and Graduate Students: The revised General Education Assessment policy does not apply to post-baccalaureate or graduate students.
- Undergraduate Students at Central Missouri Prior to Fall 2004: Undergraduate students, excluding teacher education majors, are required to take the College-BASE for General Education Assessment during the semester in which the total number of hours earned PLUS the number of hours enrolled meets or exceeds 60 hours. This policy applies to all transfer students at Central Missouri prior to fall 2004 regardless of the number of hours transferred.

No minimum score is required. A student at Central Missouri prior to fall 2004 is required to take the *College-BASE* for General Education Assessment in order to assist the University in Assessing the General Education program and to meet state-mandated assessment of General Education programs.

Teacher Education Students: Teacher Education majors are REQUIRED by the Missouri State Board of Education to take and pass (minimum score of 235 on each of five subjects) the College-BASE for Teachers exam as one criterion for admission to the Teacher Education Program.

New Teacher Education students (Fall of 2004) are required to complete the 15-hour set of General Education courses prior to testing. All other Teacher Education students are strongly encouraged to complete the 15-hour set of courses during their first two years. Registration for the *College-BASE* for Teacher's Exam must be completed in the Office of Assessment and Testing Services. Registration deadlines and fees apply. **Teacher Education students are NOT eligible to take the** *College-BASE* **for General Education Assessment.** 

### **General Education Program Requirements**

 Nursing Students: Students seeking admission to the Nursing program are required to score a minimum of 235 in each of the subject areas of the College-BASE for General Education Assessment. For additional admission requirements contact the Department of Nursing, University Health Center, Room 106. When eligible to test, it is important to schedule a testing date in a timely manner to allow time for score reports to be returned. Nursing application deadlines: For admission Spring Semester – July 1. For admission Fall semester – January 1.



CMSU nursing students at North Kansas City Hospital.

- *Transfer Students:* A student, who has taken the Academic Profile or the CAAP test (at Central Missouri or another institution of higher learning), and fulfills the following requirements is NOT required to take the *College-*BASE General Education Assessment:
  - Student must have a valid score report on file in the Office of Assessment and Testing Services. A valid score report is one that has been sent from the previous institution directly to the Office of Assessment and Testing Services and verified by the Assistant Director, Humphreys 233.

#### AND

 Have obtained a minimum score on each of the subject areas of the test taken as shown below:

### ACADEMIC PROFILE

| Subject          | Minimum Score |
|------------------|---------------|
| Humanities       | 113           |
| Social Sciences  | 112           |
| Natural Sciences | 115           |
| Math             | 112           |
| Writing          | 114           |

# COLLEGIATE ASSESSMENT OF ACADEMIC PROFICIENCY (CAAP)

| Subject           | Minimum Scor |
|-------------------|--------------|
| Writing Skills    | 58           |
| Math              | 54           |
| Science Reasoning | 57           |

Please see www.cmsu.edu/testing services/ for a complete discussion of the revised General Education Assessment Policy. For additional information, please contact the Assistant Director, Office of Assessment and Testing Services, Humphreys 223, bertalott@cmsul.cmsu.edu (660-543-4919).

# **Central Missouri State University CBHE General Education Reporting Matrix: SKILL AREAS**

**State-Level Goals SKILL AREAS** 

#### **Institutional Competencies**

Course(s) Credit Hours

#### Communicating

To develop students' effective use of the English language and quantitative and other symbolic systems essential to their success in school and in the world. Students should be able to read and listen critically and to write and speak with thoughtfulness, clarity, coherence, and persuasiveness.

- 1. Apply the criteria of effective communication to assess the communication of self and others.
- Conceive of writing as a recursive process that involves many strategies, including generating material, evaluating sources when used, drafting, revising, and editing.
- 3. Make formal written and oral presentations with consistent effectiveness.
- Adapt language and communication strategies to a variety of situations.
- 5. Employ various organizational structures in a variety of communications.
- 6. Adapt communication to a variety of audiences.
- Communicate effectively in groups by listening, reflecting, and responding appropriately and in context.
- 8. Identify the meaning of quantitative data, such as numbers, graphs, and charts, in a communication.
- 9. Employ quantitative data in communicating.

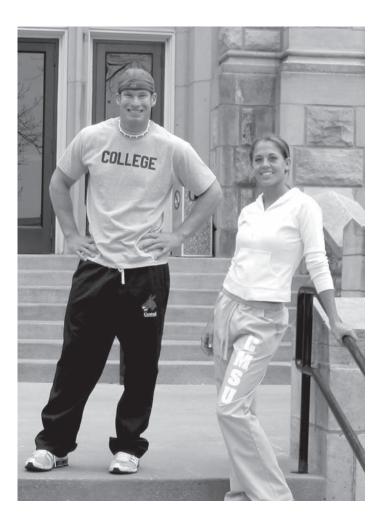
| AGRI   | 2130(3    | 3) |
|--------|-----------|----|
| COMM   | 1000(3    |    |
| ENGL   | 1020(3    |    |
| ENGL   | 1030(3    |    |
| ENGL   | 1080(6    | s) |
| ENGL   | 2200(3    |    |
| ENGL   | 2205(3    |    |
| ENGL   | 2210(3    |    |
| ENGL   | 2215(3    |    |
| ENGL   | 2220(3    |    |
| HIST   | 1350(3    | 3) |
| HIST   | 1351(3    |    |
| Modern | Languages |    |
| CHIN   | 1701(3    | 3) |
| FREN   | 1201(3    |    |
| GER    | 1301(3    |    |
| SPAN   | 1601(3    | 3) |
| MUS    | 1210(3    |    |
| MMGT   | 1012(2    | 2) |
| THEA   | 1100(3    | 3) |
| THEA   | 2400(3    |    |
| WS     | 2000(3    |    |

### Business students create their own company called "Just Scrub It"

Students enrolled in CMSU's first Integrative Business Experience (IBE) program in the spring of 2004 sold medical scrub pants imprinted with various CMSU insignias (as shown by some of the students modeling right). Their company, dubbed "Just Scrub It" was the first one created under a new program in the Adrian and Margaret Harmon College of Business Administration at Central Missouri.

The IBE program supplements business concepts in core courses with hands-on experience. Students start and run their own businesses and donate both time and profits to a community service project.

The IBE program requires students to enroll concurrently in three junior-level core business courses, marketing, management and computer information systems, as well as an entrepreneurship and a community service practicum course.



# **CBHE General Education Reporting Matrix: SKILL AREAS, continued**

**State-Level Goals SKILL AREAS** 

#### **Institutional Competencies**

Course(s) Credit Hours

## **Higher-Order Thinking**

To develop students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; and to solve problems by applying evaluative standards.

- Recognize that complexity, ambiguity, and uncertainty are persistent human conditions.
- Identify, develop, implement and evaluate alternative problem-solving strategies for a particular context.
- Employ both induction and deduction and manipulate quantitative and qualitative evidence to study relationships.
- Evaluate the strength of another's and one's own thinking in various contexts and disciplinary frameworks by recognizing unstated assumptions, ideological biases, stereotypes, inconsistencies, reasoning fallacies, irrelevancies, governing paradigms, and other factors.
- Assess the reliability, validity, and adequacy of evidence, for example by employing standards of measurement, sampling, and alternative hypotheses in evaluating analyses and interpretations of studies.
- Defend conclusions using relevant evidence and reasoned argument.
- Assess one's own problem-solving process.

#### Managing Information

To develop students' abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.

- 1. Access and/or generate information from a variety of sources, including the most contemporary technological information services.
- Evaluate information for its currency, usefulness, truthfulness, and accuracy.
- Use appropriate technology to organize, store, and retrieve information effectively.
- Reorganize information for an intended purpose, such as research projects.
- Present information clearly and concisely, and contemporary using traditional technologies, while avoiding plagiarism.

#### BE&O 1210.....(2) 1103.....(3) CHEM 1104.....(4) 1004.....(4) FASC 1020.....(3) **ENGL** 1030.....(3) **ENGL** 1080.....(6) FNGI LIS 1600.....(2) PHYS 1103.....(3) 1104.....(4) PHYS T&0E 2000.....(3)

**ACDI** 

2120

(2)

#### **Valuing**

To develop students' abilities to understand the moral and ethical values of a diverse society and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should be able to make informed decisions through identifying personal values and the values of others and through understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values.

- 1. Compare and contrast historical and cultural ethical perspectives and belief systems.
- Utilize cultural, behavioral, historical, and scientific knowledge to clarify and articulate a personal value system.
- Assess the alternatives and the consequences of various value judgments and their implications for individuals
- 4. Recognize conflicts within and between value systems and recognize and analyze ethical issues as they arise in a variety of contexts.
- Consider multiple perspectives, recognize biases, deal with ambiguity, and take a reasonable position.

| AGRI   | 2130      |     |
|--------|-----------|-----|
| ANTH   | 1820      | (3) |
| BIOL   | 1003      | (3) |
| BIOL   | 1004      |     |
| BIOL   | 1005(3)   |     |
| COMM   | 3000      | (3) |
| EDCI   | 2110      |     |
| MMGT   | 1012      | (2) |
| Modern | Languages |     |
| CHIN   | 1701      | (3) |
| FREN   | 1201      | (3) |
| GER    | 1301      | (3) |
| SPAN   | 1601      |     |
| MUS    | 1210      | (3) |
| MUS    | 1225      | (3) |
| PHIL   | 1000      | (3) |
| POLS   | 3522      | (3) |
| REL    | 1510      | (3) |
| SOC    | 1800      | (3) |
|        |           |     |

# Central Missouri State University CBHE General Education Reporting Matrix: KNOWLEDGE AREAS

# State-Level Goals KNOWLEDGE AREAS

#### Institutional Competencies

#### Course(s) Credit Hours

#### **Social & Behavioral Sciences**

To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students must understand the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. (Students must fulfill the state statute requirements for the United States and Missouri constitutions.)

- Explain social institutions, structures, and processes across a range of historical periods and cultures.
- Develop and communicate hypothetical explanations for individual human behavior within the large-scale historical and/or social context.
- Draw on history and/or the social sciences to evaluate contemporary problems.
- Describe and analytically compare social, cultural, and historical settings and processes other than oneis own.
- 5. Articulate the interconnectedness of people and places around the globe.
- Describe and explain the constitutions of the United States and Missouri.

| AGRI        | 2130(3) |
|-------------|---------|
| ANTH        | 1820(3) |
| BE&O        | 1210(2) |
| <b>ECON</b> | 1010(3) |
| EDCI        | 2110(3) |
| GEOG        | 2212(3) |
| GEOG        | 3201(3) |
| HIST        | 1350(3) |
| HIST        | 1351(3) |
| HIST        | 2402(3) |
| LIS         | 1600(2) |
| MMGT        | 1012(2) |
| MUS         | 1225(3) |
| POLS        | 1500(3) |
| POLS        | 1510(3) |
| POLS        | 3522(3) |
| PSY         | 1100(3) |
| SOC         | 1800(3) |
| WS          | 2000(3) |
|             |         |

#### **Humanities & Fine Arts**

To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge.

- Describe the scope and variety of works in the humanities and/or fine arts.
- Explain the historical, linguistic, stylistic, cultural, and/ or social contexts of the humanities and/or fine arts.
- 3. Identify the aesthetic values used to make critical judgments in various artistic fields.
- Form, communicate, and defend a response based upon aesthetic values to works in the humanities and/or fine arts.
- Identify the creative processes of artists in the visual, literary, and/or performing arts.

| AKI    | 1800(3    | ) |
|--------|-----------|---|
| COMM   | 1000(3    | ) |
| COMM   | 3000(3    | ) |
| ENGL   | 2200(3    | ) |
| ENGL   | 2205(3    | ) |
| ENGL   | 2210(3    | ) |
| ENGL   | 2215(3    | ) |
| ENGL   | 2220(3    | ) |
| Modern | Languages |   |
| CHIN   | 1701(3    | ) |
| FREN   | 1201(3    |   |
| GER    | 1301(3    | ) |
| SPAN   | 1601(3    | ) |
| MUS    | 1210(3    | ) |
| REL    | 1510(3    | ) |
| THEA   | 1100(3    | ) |
| THEA   | 2400(3    | ) |
|        |           |   |

#### **Mathematics**

To develop students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning. (The mathematics requirement for General Education should have the same prerequisite(s) and level of rigor as College Algebra.)

- Recognize and/or describe the cultural, historical, and/ or scientific contributions of mathematics to society.
- 2. Recognize and use connections within mathematics and between mathematics and other disciplines.
- 3. Create and interpret graphs and tables.
- 4. Use generalizations based upon pattern recognition.
- Apply various mathematical models, techniques, and reasoning to solve problems.

| MATH | 1111 | . (3) |
|------|------|-------|
| MATH | 1150 | (4)   |
| MATH | 1620 | (2)   |

# **CBHE General Education Reporting Matrix: KNOWLEDGE AREAS,** *continued*

# State-Level Goals KNOWLEDGE AREAS

#### **Institutional Competencies**

#### Course(s) Credit Hours

### **Life & Physical Sciences**

To develop students' understanding of the principles and laboratory procedures of life and physical sciences and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts.

- Explain how to use the scientific method and how to develop and test hypotheses in order to draw defensible conclusions.
- 2. Evaluate scientific evidence and argument.
- 3. Describe the basic principles of the physical universe.
- 4. Describe concepts of the nature, organization, and evolution of living systems.
- 5. Explain how human choices affect the earth and living systems.

| ANTH | 1810(3) |
|------|---------|
| BIOL | 1003(3) |
| BIOL | 1004(4) |
| BIOL | 1005(3) |
| CHEM | 1103(3) |
| CHEM | 1104(4) |
| EASC | 1004(4) |
| PHYS | 1103(3) |
| PHYS | 1104(4) |
| T&0E | 2000(3) |



# **GENERAL EDUCATION PROGRAM SPECIFICS**

Some General Education selections listed on these pages may be limited by major/minor choice. Check the major/minor listing in the catalog for specific General Education requirements within the major/minor.

NOTE: The following three requirements must be completed to fulfill University requirements for graduation. These can be met by making careful selections in the General Education sections listed below.

- Each student must take a course in fine arts (ART 1800, MUS 1210 or THEA 2400) in Div. II Area C, Part 2.\*
- 2. Each student must take a history course in Div. II Area B or D (HIST 1350, HIST 1351, HIST 2402 or HIST 2410).
- 3. Each student must take a course (HIST 1350, HIST 1351, or POLS 1510) to fulfill state law requirements, Section 170.011 RSMO Supp (1988).

# **Division I** Intellectual Skills . . . . . . 12

#### Area A: Written Communication - 6 credit hours

Students exceptionally prepared in written communication, as defined by Planned Placement guidelines, will take ENGL-1080 in place of ENGL 1020 and ENGL 1030. Completion of ENGL 1080 with a grade of C or above will result in 6 hours – ENGL 1080 (3) and ENGL 1020 (3).

| <b>ENGL</b> | 1020 | Composition I        | 3 |
|-------------|------|----------------------|---|
|             |      | Composition II       |   |
| <b>ENGL</b> | 1080 | Advanced Composition | 6 |

# Area B: Oral Communication - 3 credit hours

#### Area C: Mathematical Reasoning - 3 credit hours

Choose one course from the following:

#### 

Each student must take a course in fine arts (prefix ART, MUS, or THEA) in Div. II Area C. Each student must take a history course (prefix of HIST) in Div. II Area B or D.

#### Area A: Part I - Life and Physical Sciences - 7 credit hours

Choose any two courses with different prefixes from the following, one of which must have a laboratory component:

| llowing, oi | ne of v | which must have a laboratory component: |
|-------------|---------|---|
| BIOL        | 1003    | Introduction to the Sciences:           |
|             |         | Ecology (Lab not included) 3            |
| BIOL        | 1004    | Introduction to the Sciences:           |
|             |         | Ecology (Lab included) 4                |
| BIOL        | 1005    | Introduction to Environmental           |
|             |         | Science (Lab not included) 3            |
| CHEM        | 1103    | Introduction to the Sciences:           |
|             |         | Chemistry (Lab not included) 3          |
| CHEM        | 1104    | Introduction to the Sciences:           |
|             |         | Chemistry (Lab included) 4              |
|             |         |   |

| SPECIF     | CS        |   |     |
|------------|-----------|---|-----|
|            |           |   |     |
| EASC       | 1004      | Introduction to the Sciences:   |     |
|            |           | Geology (Lab included)  | 4   |
| PHYS       | 1103      | Introduction to the Sciences:   |     |
|            |           | Physics (Lab not included)  | 3   |
| PHYS       | 1104      | Introduction to the Sciences:   |     |
|            |           | Physics (Lab included)  | 4   |
| Area A: Pa | rt II - I | Technology - 2-3 credit hours   |     |
| Choose     | one te    | chnology course from the following:   |     |
| BE&O       | 1210      | Essentials of Managing Info   | 2   |
| LIS        | 1600      | Information Resources   | 2   |
|            |           | Global Production Technology  |     |
| T&OE       | 2000      | Technology and Change   | 3   |
| Area B: So | cial an   | d Behavioral Sciences - 9 credit hours  |     |
|            |           | nust take a course (HIST 1350, HIST 1351  | 1.  |
|            |           | fulfill state law requirements, §170.011  | -,  |
|            |           | 8). Choose three courses from the following   | ng: |
|            |           | Human Prehistory  |     |
| ECON       |           | Principles of Economics   |     |
|            |           | World Geography   |     |
| HIST       | 1350      | History of the US to 1877   | 3   |
| HIST       | 1351      |   | 3   |
| POLS       |           | Introduction to Political Science   |     |
| POLS       |           | American Government   |     |
| PSY        | 1100      | General Psychology  |     |
| SOC        | 1800      | General Sociology   |     |
| Area C: Hi | umanit    | ies and Fine Arts - 9 credit hours  |     |
|            |           | erature course from the following:  |     |
|            |           | American Literature to 1865   |     |
|            |           | American Lit. 1865 to Present   |     |
| ENGL       | 2210      | British Literature to 1750  | 3   |
| ENGL       | 2215      | British Lit. from 1750 to Present   |     |
| ENGL       | 2220      | World Masterpieces  | 3   |
| Choose     | two co    | ourses from the following, one course of  |     |
|            |           | , Music or Theatre.   |     |
| ART        | 1800      | Ideas and the Visual Arts   | 3   |
| COMM       | 3000      | Film Appreciation   | 3   |
| MUS        | 1210      | Experiencing Music  |     |
| PHIL       | 1000      | Introduction to Philosophy  |     |
| REL        | 1510      | Exploring Religion  | 3   |
| THEA       | 2400      | Theatre in Western Civilization   | 3   |
| Any Me     | odern (   | Foreign) Language:  |     |
| •          | FREN      | , GER, SPAN, CHIN   | 3   |
| Area D: Cı | ıltural   | Interaction - 3 credit hours  |     |
| Choose     | one co    | ourse from the following:   |     |
| AGRI       | 2130      | Global Agriculture  | 3   |
| ANTH       | 1820      | Cultural Anthropology   |     |
| EDCI       | 2110      | World Diversity and America   |     |
| GEOG       |           | The Cultural Landscape  |     |
| HIST       | 2402      | History of the Modern World   |     |
| HIST       | 2410      | Introduction to Africana Studies  |     |
| MUS        | 1225      | Music of World's Cultures   |     |
| POLS       | 3522      | Modern East Asia  |     |
| I OLD      |           | The second control of | _   |

2000 Race, Class, and Gender...... 3

WS

# **Additional Institutional Requirements -**

# Division III Personal Interaction ..... 3

| Choose three hours from the following: |       |                                     |   |  |
|--|-------|-------------------------------------|---|--|
| CFD                                    | 1010  | Individual and Family Relationships | 3 |  |
| COMM                                   | 13010 | Interpersonal Communication         | 3 |  |
| HED                                    | 1100  | Personal Health                     | 3 |  |
| PE                                     | 1203  | Aerobic Conditioning                | 1 |  |
| PE                                     | 1204  | Stress Management                   | 1 |  |
| PE                                     | 1206  | Lifetime Fitness                    | 3 |  |
| PE                                     | 2200  | Weight Training                     | 1 |  |
| PHIL                                   | 2300  | Ethics                              | 3 |  |
| PSY                                    | 1320  | Psychology of Personal Adjustment   | 3 |  |

# **Division IV** Integrative Studies..... 3

Each student must take a course in Integrative Studies which may be specified in major program or choose from Div. IV Area A. To enroll in a course for Div. IV Area A or B, a student will have successfully completed a minimum of 60 semester hours, all required Intellectual Skills courses, and at least 24 semester hours of General Eduction Core courses, including a course from each core area. Any additional prerequisites are listed per course.

#### Area A: General Integrative Studies Courses

| IGEN        | 3116   | Creative Problem Solving             | 3 |
|-------------|--------|--------------------------------------|---|
| <b>IGEN</b> | 3224   | Critical Thinking                    | 3 |
| <b>IGEN</b> | 3232   | Media Literacy                       | 3 |
| <b>IGEN</b> | 3468   | Community, School & Family           |   |
|             | Conne  | ections                              | 3 |
| IGEN        | 3472   | Sports in American Life              | 3 |
| <b>IGEN</b> | 3896   | Assessing Global Change for the      |   |
|             | Inform | nation Age                           | 3 |
| <b>IGEN</b> | 4224   | Communication, Science & Technology  | 3 |
| <b>IGEN</b> | 4231   | Myth, Memory & American Realities    | 3 |
| <b>IGEN</b> | 4235   | Cognitive Science                    | 3 |
| <b>IGEN</b> | 4236   | Science & Religion: From Conflict to |   |
|             | Dialo  | gue                                  | 3 |
| <b>IGEN</b> | 1211   | Comparative Cross-Cultural Cinema    | 2 |

# Area B: Capstone Integrative Studies Courses offered by student's major department

| ICAP        | 4101   | Agricultural Capstone Experience          | É |
|-------------|--------|---|---|
| <b>ICAP</b> | 4109   | Construction Operations                   | 3 |
| <b>ICAP</b> | 4110   | Industrial Problem Solving                | 3 |
| <b>ICAP</b> | 4111   | Socio-Economic Factors Impacting          |   |
|             | Health | n 3                                       |   |
| <b>ICAP</b> | 4112   | Automotive Systems for Contemporary       |   |
|             | Societ | y   | 3 |
| <b>ICAP</b> |        | Air Operations Management                 |   |
| <b>ICAP</b> | 4115   | Safety and Health Management              | 3 |
| <b>ICAP</b> | 4221   | Artists in Contemporary Society           | 3 |
| <b>ICAP</b> | 4222   | The Biology Perspective                   | 3 |
| <b>ICAP</b> | 4225   | Computer Science Capstone Experience      | 3 |
| <b>ICAP</b> | 4233   | The Scientific, Historical & Sociological |   |
|             | Impac  | t of Mathematics                          | 3 |
| <b>ICAP</b> | 4245   | Actuarial Science Capstone Experience     | 3 |
| <b>ICAP</b> | 4357   | Organizational Policy and Strategy        |   |
| <b>ICAP</b> | 4468   | Student Teaching Secondary II             | 4 |
| <b>ICAP</b> | 4478   | Integrative Social Work Practicum         |   |
|             | Semin  | ar  | 3 |

# THE HONORS COLLEGE

The Honors College offers an academic program specifically designed to enhance the educational experience of highly able and/or exceptionally motivated undergraduate students. The Honors College Program is flexibly structured to enable students to realize their full potential by providing them with opportunities for learning and development which may not be available otherwise. The College provides a stimulating academic environment within which gifted students can nurture their talents.

The Honors College will consider applications for admission to The Honors College from high school seniors, high school graduates, transfer students and Central Missouri students who have strong academic records.

For application material and information regarding admission requirements and benefits, interested students should contact the Dean of The Honors College, Library 1450, 660-543-4633.

Some of the present features of The Honors College include:

- Early enrollment
- · Research grants
- · Course overload privilege
- Transcript recognition.

# Division I Intellectual Skills ......12

#### 

Students in The Honors College take ENGL 1080 in place of ENGL 1020 and ENGL 1030. Completion of ENGL 1080 with a grade of C or above will result in 6 hours of credit – ENGL 1080 (3) and ENGL 1020 (3).

#### Area B: Oral Communication - 3 credit hours

| Choose one co | ourse from the following: |
|---------------|---------------------------|
| COMM 1000     | Public Speaking3          |
| THEA 1100     | Oral Interpretation3      |

# Area C: Mathematical Reasoning - 3 credit hours

| Choose one co | ourse from the following: |
|---------------|---------------------------|
| MATH 1111     | College Algebra3          |
| MATH 1150     | Pre-Calculus Mathematics4 |
| MATH 1620     | Contemporary Mathematics3 |

## **Division II Core ......30**

### Area A: Part I - Life and Physical Sciences - 7 credit hours

Students in The Honors College choose two courses with different prefixes one of which must have a laboratory component. Students may choose the courses listed in the regular General Education Program or may substitute higher level courses in the appropriate prefix categories to fulfill this requirement with approval of the Dean of The Honors College.

#### Area A: Part II - Technology - 2-3 credit hours

Are

| Choose one te   | chnology course from the following:  |  |  |  |  |
|---|--------------------------------------|--|--|--|--|
| BE&O 1210   | Essentials of Managing Information 2 |  |  |  |  |
| LIS 1600  | Information Resources2               |  |  |  |  |
| MMGT 1012   | Global Production Technology2        |  |  |  |  |
| T&OE 2000   | Technology and Change3               |  |  |  |  |
|   |                                      |  |  |  |  |
| ea B: Social and Behavioral Sciences - 9 credit hours |                                      |  |  |  |  |

#### 

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Students in The Honors College may choose two additional courses from the courses listed in the regular General Education Program or may substitute higher level courses in the appropriate prefix categories to fulfill this requirement with approval of the Dean of The Honors College.

#### Area C: Humanities and Fine Arts – 9 credit hours Literature – 3 credit hours

Students in The Honors College may choose one of the courses listed in the regular General Education Program or may substitute a higher level course to fulfill this requirement with the approval of the Dean of The Honors College.

#### Modern (Foreign) Language - 6 credit hours

Students in The Honors College are required to take two modern language courses of a single foreign language.

### Area D: Cultural Interaction - 3 credit hours

Students in The Honors College may choose one of the courses listed in the regular General Education Program or may substitute a higher level course in the appropriate prefix category to fulfill this requirement with approval of the Dean of The Honors College.

# **Additional Institutional Requirements**

# **Division III** Personal Interaction.....2

#### HONR 3000 Honors Colloquium.....2

A multi-dimensional course, the content of which may vary with each offering; required of and open only to members of The Honors College. May be repeated for a maximum of six semester hours. Prerequisite: Junior standing or approval by the Dean of The Honors College.

# **Division IV** Integrative Studies ...... 4

## HONR 4000 Honors Project\*.....4

A research study or creative project entailing independent work, which is required of and only open to members of The Honors College. Prerequisite: senior standing or approval by the Dean of the Honors College.

\* Not available for graduate credit

### **Policies Governing The Honors College Program**

- Each participant in The Honors College will be required to conform
  to the policy guidelines of The Honors College and the General
  Education Program. Suitable course electives consist of those courses
  permitted on the major/minor programs or in the General Education
  Program requirements. Any exceptions or departures will require the
  approval of the Dean of The Honors College.
- 2. Elementary education functional majors and elementary special education functional majors must include ENGL 1080, HIST 1350 or HIST 1351, Modern Languages, HONR 3000 and HONR 4000 in The Honors College Program. All other requirements of The Honors College Program are fulfilled by the requirements of those majors in conformity with the policies of the General Education Program.

For more information contact:

#### The Honors College

James C. Kirkpatrick Library 1450 Central Missouri State University Warrensburg, MO 64093 660-543-4633

# OTHER OPTIONS

### Pre-Professional Education

The Biology/Earth Science and Chemistry/Physics Departments take an active role in preparing Central students majoring in Biology† and Chemistry/Physics\* for admission to professional schools in the following areas:

- · Medicine\*†
- Dentistry†\*
- Veterinary†\*
- Physical Therapy†\*
- Optometry†\*
- Pharmacy†\*
- · Chiropractic Medicine†\*
- · Physician's Assistant†\*
- Engineering\*
- Molecular Biology/Molecular Technology†

All new freshmen Biology majors take Biology 1000. All new Chemistry majors take Chemistry 1131. Students wishing to pursue pre-professional programs are assigned to an appropriate faculty advisor whose job is to mentor the advisees:

- (i) by helping them plan and prepare a program of study,
- (ii) by assisting them to prepare for appropriate admissions tests administered by national agencies, e.g., MCAT, DAT, GRE, etc. The faculty advisor shares pertinent information and resources of such tests i.e. topics covered in the tests etc with the advisee. Many professional schools use the results of such tests as important criteria for admission,
- (iii) by emphasizing the importance of General Education in analytical & critical thinking, which is also evaluated in the written portions of some post-baccalaureate admission tests, e.g., MCAT,
- (iv) by communicating the competitive nature of admission to the professional schools and the necessity of an "achiever's attitude" in the classroom,
- (v) by providing student "handbooks" which summarize the entire admissions process to a professional school, e.g., "The Pre-Med Handbook,"
- (vi) by sponsoring student clubs in pre-professional fields (e.g., The Para-Medico Club, The Pre-Vet Club, The Tri-Beta Honor Society, etc.), and coordinating meetings between student organizations and professional school admissions officers,
- (vii) by encouraging hands-on student participation in profession-related work outside the clasZsroom (e.g., volunteering, or working in a health care facility for Pre-Meds or Pre-Dents),
- (viii) by polishing the communication skills of our student applicants for professional school interviews.

In addition, the departments offer courses and research opportunities in many contemporary branches of the sciences, e.g., molecular biology, physiology, microbiology, cell biology, and biochemistry. These courses and research experiences provide students with the necessary investigative and critical thinking skills to prepare them for advanced degree programs, or as entry-level scientists in the pharmaceutical and biotechnology industries.

#### Pre-Law

While the American Bar Association does not recommend any particular undergraduate major to prepare for law school, a student should major in an area that is both personally satisfying and that provides the basic skills necessary to be successful in law school.

Students interested in preparing for law school should consult a pre-law advisor. The Office of Undergraduate Studies (JCKL 1450) would be happy to provide students with information and to direct them to faculty members who serve as pre-law advisors in various academic departments. These advisors would be happy to assist students in choosing courses and/or professors that will assist in developing the following skills and values:

- Analytical and Problem Solving Skills
- Critical Reading Abilities
- · Writing Skills
- · Oral Communication and Listening Skills
- · Research Skills
- Organizational Abilities and Management Skills
- Valuing Service to Others and Promoting Justice

#### **Individualized Programs**

A student pursuing a baccalaureate degree may request an undergraduate major or minor concentration not listed in the Catalog, but consisting of courses offered herein. Such a major or minor may be across various disciplines; however, all General Education and other degree requirements must be met. Fifty-percent of the individualized major or minor must be completed through Central Missouri after approval. The student must select a faculty member to serve as an advisor. Together they will develop a proposed plan of study which must receive the written approval of the student, faculty advisor, appropriate department chair(s), dean(s) and the Assistant Provost for Undergraduate Studies. The student must include a signed statement indicating he/she accepts full responsibility for the proposal. Upon final approval of the individualized major or minor, the student is notified and a copy of the proposal is filed with the Registrar and the Office of Academic Advisement.

# INTERNATIONAL STUDY

Central Missouri State University believes strongly in the development of an international perspective among its students and faculty. One of the most exciting educational experiences available is the opportunity for students to spend a semester or year abroad. The following programs are some of the many available through the Office of International Programs in Ward Edwards 1200. For more information visit www.cmsu.edu/international or call 660-543-4195.

Buckinghamshire Chilterns University College, outside London, England. BCUC offers Central Missouri students an opportunity to study close to London and is particularly appropriate for students majoring in drama and theatre. A variety of other academic options are available.



International students who study at Central Missouri and American students who study abroad return to their home countries with a new appreciation of their place in the world.

**Budapest University, Budapest, Hungary**. CMSU students attend courses though the International Studies Center of Budapest University of Economic Sciences. Principal areas of study involve business and economics, but a variety of courses in social sciences and and languages are also available.

**Denmark International Study Program** is taught in English by Danish professors at the University of Copenhagen. Students in this program are given the option of living with a Danish family or with Danish students. A large selection of upper-division undergraduate courses are offered in liberal arts (arts, humanities, social sciences, international relations, education), international business and architecture and design.

**Eindhoven University of Technology, Eindhoven, The Netherlands.** One of Europe's outstanding universities,

Eindhoven University of Technology offers courses in English appropriate for students studying safety science, industrial hygiene, and industrial management.

#### **International Student Exchange Program (ISEP).**

This organization, of which Central Missouri is a member, allows its members to participate in balanced, one-to-one exchanges of students between institutions in the United States and those in other countries. Students pay fees and room and board at CMSU and attend the foreign university free of charge.

Kansai Gaidai University, Osaka, Japan. Programs offered include Asian studies, business, political science and art. The exchange is designed so that students pay room, board and tuition at Central Missouri without additional fees in Japan.

Maastricht Center for Transatlantic Studies, The Netherlands. This program provides a central meeting place for faculty, staff and students from Europe, the United States and Mexico. Courses from the social sciences, humanities and business are available and are taught by international faculty.

The Missouri Africa Program - Legon, Ghana. The Missouri Africa Program is a one-semester program at the University of Ghana, Legon. The program enables students to enroll in select courses for the greatest level of cultural immersion. Four universities in Missouri cooperate with the University of Ghana to provide students with unique learning opportunities in western Africa, including a diverse array of academic courses and field trip possibilities. All of the classes are taught in English and each group is accompanied by a Missouri professor. Students must attend during the fall semester.

Missouri London Program. Central Missouri participates with nine other Missouri universities in teaching an academic program in London, using their own faculty, curriculum, standards and style. Courses are structured so that academic credits earned are part of the regular authorized offerings which allow Central Missouri students to make normal progress toward their undergraduate degrees while utilizing London and other European resources and cross-cultural experiences.

Örebro University, Örebro, Sweden. This program is designed as an exchange for business, economics, communications, law and social work students.

Oslo University College, Oslo, Norway. This direct exchange program allows Central Missouri students in teacher education, business, and literature to attend one of the leading institutions in Norway. Additional courses taught in English are being added each year.

**Technológico de Monterrey, Monterrey, Mexico.** With 33 campuses located throughout Mexico, the Technológico de Monterrey provides a variety of academic opportunities

for CMSU students. Most exchange sites provide for language study plus courses in Mexican culture, business and tourism. Most courses are taught in Spanish..

**UNITEC, Auckland, New Zealand**. This university of about 16,000 students offers programs in architecture and design, arts and sciences, business, health and environmental sciences and applied technology. Students should be aware of the southern hemisphere academic schedule.

**Université d'Angers, Angers, France.** CMSU's link with Angers is designed to provide a direct exchange for French language students.

University of Alcalá, Alcalá Spain. The University of Alcalá offers classes in computer sciences, law, medicine, environmental studies and the humanities, including a Spanish language program with personalized courses for foreign students.

#### University of Central Lancashire, Preston, England.

The similarity of degree programs between our institutions provides a perfect framework for exchange activities. In addition to more traditional degree offerings, Central Lancashire offers unique programs in fire science, deaf studies, jewelry making and the sport sciences.

#### University of Debrecen, Debrecen, Hungary.

The University of Debrecen offers a variety of science and humanities classes in English to CMSU students.

University of Glamorgan, outside Cardiff, South Wales. Exchanges are primarily for communications, criminal justice, social sciences and humanities but are available for other academic areas, as well.

University of Helsinki, Helsinki, Finland. Central Missouri's Department of Speech Pathology and Audiology and the Department of Phonetics in Helsinki signed agreements to facilitate this exchange of students and faculty.

University of Lódź, Lódź, Poland. The University of Lódź is one of the most dynamic universities in Poland and offers a variety of classes in sciences and the humanities.

The University of the Sunshine Coast, Maroochydore, Australia. Central Missouri has established an exchange relationship with one of Australia's newest universities. Located just north of Brisbane, several of their programs provide unique opportunities that allow our students to take advantage of their location. Central Missouri students study tourism, environmental studies, business, sport, nursing, internships and a variety of computer-related classes.

Växjö University, Växjö, Sweden. Three basic programs are available in courses taught in English by Swedish professors. During the fall semester, social science options are available for upper-level students in economics, political science, or sociology. A spring semester course is available in intercultural studies which provides an opportunity to study cultural and international subjects through a mix of sociological, anthropological and communication theory. During the spring semester, Scandinavian business and international education are also offered.

**Summer Language Programs**. Summer study programs in French, Spanish and German are offered on a periodic basis by the Department of Modern Languages. Additional study tours are available each year.

Other International Study. In addition to the programs available at Central Missouri, it is possible to make other study arrangements in most European countries, Latin America and Japan.

**Financial Assistance**. An otherwise eligible student is normally permitted to use federal and state grant and loan aid to help pay the expenses of participating in an approved CMSU program of International Study. For more information, the student should contact the CMSU Office of Student Financial Assistance, Administration 104, several months in advance of the scheduled departure date.

# LIST OF AVAILABLE PROGRAMS

ACCOUNTING Functional Major, B.S.B.A. Degree ACTUARIAL SCIENCE AND MATHEMATICS Functional

Major, B.S. Degree

AGRICULTURE-BUSINESS Functional Major, B.S. Degree

AGRICULTURAL TECHNOLOGY Functional Major, B.S.

ART Functional Major, B.S.Ed. Degree

ATHLETIC TRAINING Functional Major, B.S. Degree

AUTOMOTIVE/POWER TECHNOLOGY Functional

Major, B.S. Degree

AVIATION TECHNOLOGY, Associate in Science Degree

AVIATION TECHNOLOGY Functional Major, B.S. Degree

BIOLOGY Functional Major, B.S.Ed. Degree

BIOLOGY Functional Major, B.S. Degree

BIOLOGY Major, B.A. Degree

BIOLOGY Major, B.S. Degree

BROADCAST MEDIA Major, B.S. Degree

BUSINESS EDUCATION Functional Major, B.S.Ed. Degree

BUSINESS EDUCATION Major, B.S.Ed. Degree

CHEMISTRY Functional Major, B.S.Ed. Degree

CHEMISTRY Functional Major, B.S. Degree

CHEMISTRY Major, B.A. Degree

CHILD AND FAMILY DEVELOPMENT Functional Major, B.S. Degree

COMMERCIAL ART Functional Major, B.F.A. Degree

COMMUNICATION Major, B.A. Degree

COMPUTER-AIDED DRAFTING AND DESIGN

TECHNOLOGY Functional Major, B.S. Degree

COMPUTER INFORMATION SYSTEMS Functional Major,

B.S.BA. Degree

COMPUTER SCIENCE AND MATHEMATICS Functional Major, B.S. Degree

CONSTRUCTION MANAGEMENT Functional Major, B.S. Degree

COOPERATIVE ENGINEERING 3-2 Functional Major, B.A. Degree

CORPORATE COMMUNICATION Major, B.S. Degree

CRIMINAL JUSTICE Major, B.S. Degree

CRISIS & DISASTER MANAGEMENT Major, B.S. Degree

DIETETICS Functional Major, B.S. Degree

EARTH SCIENCE Functional Major, B.S.Ed. Degree

EARTH SCIENCE Major, B.A. Degree

ECONOMICS Major, B.A. Degree

ECONOMICS Major, B.S. Degree

ELECTRONICS ENGINEERING TECHNOLOGY

Functional Major, B.S. Degree

ELECTRONICS TECHNOLOGY Functional Major,

B.S. Degree

ELEMENTARY EDUCATION Functional Major,

B.S.Ed. Degree

ENGLISH Functional Major, B.S.Ed. Degree

ENGLISH Major, B.A. Degree

ENGLISH Major, B.S.Ed. Degree

FASHION: TEXTILES AND CLOTHING IN BUSINESS

Functional Major, B.S. Degree

FINANCE Functional Major, B.S.B.A. Degree

FRENCH Major, B.A. Degree

FRENCH Major, B.S.Ed. Degree

FRENCH Major, B.S. Degree

GENERAL RECREATION Major, B.S. Degree

GEOGRAPHY Major, B.A. Degree

GEOGRAPHY Major, B.S. Degree

GEOLOGY Functional Major, B.S. Degree

GRAPHIC ARTS TECHNOLOGY MANAGEMENT

Functional Major, B.S. Degree

HISTORY Major, B.A. Degree

HISTORY Major, B.S. Degree

HOTEL AND RESTAURANT ADMINISTRATION

Functional Major, B.S. Degree

INDUSTRIAL TECHNOLOGY Functional Major, B.S. Degree

INDUSTRIAL TECHNOLOGY Major, B.S. Degree

INDUSTRIAL TECHNOLOGY-MANUFACTURING

MANAGEMENT Functional Major, B.S. Degree

INTERIOR DESIGN Functional Major, B.F.A. Degree

JOURNALISM Major, B.S. Degree

MANAGEMENT Functional Major, B.S.B.A. Degree

MARKETING Functional Major, B.S.B.A. Degree

MATHEMATICS Functional Major, B.S.Ed. Degree

MATHEMATICS Major, B.A. Degree

MATHEMATICS Major, B.S.Ed. Degree

MATHEMATICS Major, B.S. Degree

MEDICAL TECHNOLOGY Functional Major, B.S. Degree

MIDDLE SCHOOL-JUNIOR HIGH SCHOOL Major,

B.S.Ed. Degree

MUSIC EDUCATION Functional Major, B.M.E. Degree

MUSIC Functional Major, B.M. Degree

MUSIC Major, B.A. Degree

NURSING Functional Major, B.S. Degree

OCCUPATIONAL EDUCATION Functional Major, B.S.

OCCUPATIONAL SAFETY AND HEALTH Functional Major, B.S. Degree

PHOTOGRAPHY Major, B.S. Degree

PHYSICAL EDUCATION Functional Major, B.S. Degree

PHYSICS Functional Major, B.A. Degree

PHYSICS Functional Major, B.S. in Ed. Degree

PHYSICS Functional Major, B.S. Degree

POLITICAL SCIENCE Major, B.A. Degree

POLITICAL SCIENCE Major, B.S. Degree

PSYCHOLOGY Major, B.A. Degree

PSYCHOLOGY Major, B.S. Degree

PUBLIC RELATIONS Major, B.S. Degree

SAFETY MANAGEMENT Major, B.S. Degree SECONDARY EDUCATION B.M.E. Degrees SECONDARY EDUCATION B.S.Ed. Degrees SOCIAL STUDIES Functional Major, B.S.Ed. Degree SOCIAL WORK Functional Major, B.S.W. Degree SOCIOLOGY Major, B.A. Degree SOCIOLOGY Major, B.S. Degree SPANISH Major, B.S. Degree SPANISH Major, B.S.Ed. Degree SPANISH Major, B.S.Ed. Degree SPANISH Major, B.S. Degree SPANISH Major, B.S. Degree SPECIAL EDUCATION Functional Major, B.S.Ed. Degree SPECIAL COMMUNICATION AND THEATRE

SPEECH COMMUNICATION Major, B.A. Degree
SPEECH COMMUNICATION Major, B.S. Degree
SPEECH-LANGUAGE PATHOLOGY Functional Major,
B.S. Degree
STUDIO ART Functional Major, B.F.A. Degree
TECHNOLOGY EDUCATION Major, B.S.Ed. Degree
THEATRE Functional Major, B.F.A. Degree
THEATRE Major, B.A. Degree
TOURISM Major, B.S. Degree
VOCATIONAL AGRICULTURE EDUCATION Functional
Major, B.S.Ed. Degree
VOCATIONAL FAMILY AND CONSUMER SCIENCES
Functional Major, B.S.Ed. Degree

# PREFIXES FOR COURSES

**ACCT** - Accounting

AE - Academic Enrichment

Major, B.S.Ed. Degree

AERO - Aerospace

**AGRI** - Agriculture

**AMT** - Aerospace Manufacturing Technology

ANTH - Anthropology

ART - Art

A&S - Arts and Sciences

AVIA - Aviation

**BE&O** - Business Education & Office Information

**BIOL** - Biology

**BLAW** - Legal Studies

**CD** - Communication Disorders

**CDM** - Crisis and Disaster

Management

**CFD** - Child and Family

Development

**CHEM** - Chemistry

**CHIN** - Chinese

**CIS** - Computer Information Systems

CJ - Criminal Justice

CMGT - Construction

Management

**COMM** - Communication

**COUN** - Counselor Education

CS - Computer Science

D&N - Dietetics and Nutrition

**DRED** - Driver Education

EASC - Earth Science

**ECON** - Economics

EDCI - Curriculum and

Instruction

**EDSP** - Special Education

**EET** - Electronics Engineering Technology

ENGL - English

ET - Electronics Technology

FACS - Family and Consumer

Sciences

**FAME** - Fashion and Apparel

Merchandising

FIN - Finance

FOOD - Food

FREN - French

**GEOG** - Geography

GER - German

**GRAP** - Graphics

**HED** - Health Education

**HIST** - History

HM - Hospitality Management

**HONR** - Honors

HRM - Human Resource

Management

ICAP - Capstone Integrative

Studies

**IGEN** - General Integrative

Studies

**INDM** -Industrial Management

INDT - Industrial Technology

**INST** - Instructional Technology

ISP - International Studies

LIS - Library Science and

Information Services

**MATH** - Mathematics

MGT - Management

MKT - Marketing

ML - Modern Languages

MMGT - Manufacturing

Management

MS - Military Leadership

MUS - Music

**NET** - Network

**NUR** - Nursing

**PE** - Physical Education

PHIL - Philosophy

**PHOT** - Photography

PHYS - Physics

**POLS** - Political Science

PR&T - Power & Transportation

PSY - Psychology

**REC** - Recreation

**REL** - Religious Studies

SAFE - Safety Science

SOC - Sociology

SOSC - Social Science

**SOWK** - Social Work

SPAN - Spanish

THEA - Theatre

**T&OE** - Technology and

Occupational Education

**TOUR** - Tourism

TR - Therapeutic Recreation

WS - Women's Studies

# College of Applied Sciences and Technology

# **Agriculture**

In the Department of Agriculture, the second digit in the course number stands for the following: 0--General, 1--Agricultural Business and Economics, 2--Agricultural Mechanization, 3--Agronomy, 4-5--Animal Science, 6--Horticulture, 8-9--Professional and Agriculture Education.

#### AGRICULTURAL TECHNOLOGY Functional Major, B.S. Degree

 $(43\ 000209)$ 

The graduate with a Bachelor of Science degree in Agricultural Technology will use the knowledge and skills obtained in the program to:

- Use language and concepts of agriculture effectively in written and oral communications
- Demonstrate computer literacy
- Demonstrate an understanding of theories and principles of economics and agri-business appropriate to the agricultural firm
- Demonstrate an understanding of the basic practices and theory of agricultural production (agricultural literacy)
- Provide evidence of an international-global perspective of agriculture
- Demonstrate appropriate and effective social interactions
- Demonstrate ability to analyze situations and solve problems in an agricultural context

| notifate ab | mity to analyze oftaations and solve   | problemo in             | arr agriculture  | ii oontoxt   |   |                |
|-------------|--|-------------------------|--|--|---|----------------|
|             |  |                         |  |  |   | Sem. Hours     |
| onal Ma     | JOR REQUIREMENTS   |                         |  |  |   | 75             |
| 2010        | Computer Applications for  |                         | AGRI   | 3610   | Agricultural Insect Control   | 3              |
|             | Agriculturists   | 3                       | CHEM   | 2650   | Elem. Organic & Biochemistry  | 5              |
| 1100        | Introduction to Agriculture  | 1                       | ECON   | 1011   | Principles of Microeconomics  | 3              |
| 3140        | Agri. Analysis & Statistics  | 3                       | AGRI   | 1310   | Agronomy I: Row Crops, 2 or   |                |
| 1200        | Agriculture Mechanics  | 3                       | AGRI   | 2315   | Agronomy II: Forages, 2   | 2              |
| 1300        | Introductory Plant Science   | 1                       | AGRI   | 3110   | Agri-Business Management, 3   | or             |
| 2330        | Introduction to Soil Science   | 3                       | AGRI   | 3120   | Dist. & Mktg. Agri. Products, 3   | 3              |
| 4300        | Soil Fertility & Fertilizers   | 3                       | Departr  | nentally a   | approved electives from   |                |
| 4310        | Plant Improvement  | 3                       | one of t   | he follow  | ing areas   | 24             |
| 1420        | Animal Husbandry   | 3                       | Area 1   | Animal   | Technology  |                |
| 2425        | Livestock Evaluation   | 3                       | Area 2   | Agrono   | mic Technology  |                |
| 4410        | General Veterinary Science   | 3                       | Area 3   | Horticul   | Itural Technology   |                |
| 1600        | Introductory Horticulture Science  | 3                       | Area 4   | Agricult   | ural Mechanization  |                |
| 1610        | Establishment & Care of  |                         | List of ele  | ectives av   | vailable from Chair, Department of  | of             |
|             | Greenhouse Plants  | 3                       | Agricultu  | re.  |   |                |
| NOT REQ     | UIRED  |                         | •  |  |   |                |
| AL EDUCA    | ATION REQUIREMENTS (page 49  | )                       |  |  |   | 48             |
| 1000        | Div. I B (required)  | 3                       | AGRI   | 2130   | Div. II D (required)  | 3              |
| 1111        | Div. I C (required)  | 3                       | ICAP   | 4101   | Div. IV B (required)  | 3              |
| 1104        | Div. II A (required)   | 4                       |  |  |   |                |
| LECTIVES    |  |                         |  |  |   | 1              |
| M TOTAL     |  |                         |  |  |   | 124            |
|             | ONAL MA<br>2010<br>1100<br>3140<br>1200<br>1300<br>2330<br>4300<br>4310<br>1420<br>2425<br>4410<br>1600<br>1610<br>NOT REQ<br>AL EDUCA<br>1000<br>1111<br>1104<br>LECTIVES | ONAL MAJOR REQUIREMENTS | ONAL MAJOR REQUIREMENTS           2010         Computer Applications for Agriculturists         3           1100         Introduction to Agriculture         1           3140         Agri. Analysis & Statistics         3           1200         Agriculture Mechanics         3           1300         Introductory Plant Science         1           2330         Introduction to Soil Science         3           4300         Soil Fertility & Fertilizers         3           4310         Plant Improvement         3           1420         Animal Husbandry         3           2425         Livestock Evaluation         3           4410         General Veterinary Science         3           1600         Introductory Horticulture Science         3           1610         Establishment & Care of         Greenhouse Plants         3           NOT REQUIRED           AL EDUCATION REQUIREMENTS (page 49)         1000         Div. I B (required)         3           1111         Div. I C (required)         3           1104         Div. II A (required)         4 | ONAL MAJOR REQUIREMENTS         3         CHEM           2010 Computer Applications for Agriculturists         3         CHEM           1100 Introduction to Agriculture         1         ECON           3140 Agri. Analysis & Statistics         3         AGRI           1200 Agriculture Mechanics         3         AGRI           1300 Introductory Plant Science         1         AGRI           2330 Introduction to Soil Science         3         AGRI           4300 Soil Fertility & Fertilizers         3         Departr           4310 Plant Improvement         3         one of t           1420 Animal Husbandry         3         Area 1           2425 Livestock Evaluation         3         Area 2           4410 General Veterinary Science         3         Area 3           1600 Introductory Horticulture Science         3         Area 3           1610 Establishment & Care of Greenhouse Plants         3         Agricultu           NOT REQUIRED         4         Agricultured)         3         AGRI           AL EDUCATION REQUIREMENTS (page 49)         3         AGRI           1111 Div. I C (required)         3         ICAP           1104 Div. II A (required)         4         4 | ONAL MAJOR REQUIREMENTS           2010         Computer Applications for Agriculturists         3         CHEM 2650           1100         Introduction to Agriculture         1         ECON 1011           3140         Agri. Analysis & Statistics         3         AGRI 1310           1200         Agriculture Mechanics         3         AGRI 2315           1300         Introductory Plant Science         1         AGRI 3110           2330         Introduction to Soil Science         3         AGRI 3120           4300         Soil Fertility & Fertilizers         3         Departmentally a one of the follow           4310         Plant Improvement         3         one of the follow           1420         Animal Husbandry         3         Area 1 Animal           2425         Livestock Evaluation         3         Area 2 Agrono           4410         General Veterinary Science         3         Area 3 Horticu           1600         Introductory Horticulture Science         3         Area 4 Agricult           1610         Establishment & Care of         List of electives at           Greenhouse Plants         3         AGRI 2130           NOT REQUIRED         3         AGRI 2130           ALEDUCATION REQ | Agriculturists |

### **AGRICULTURE Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000110)

|             | (******) |                                    |    |    |      |   |
|-------------|----------|------------------------------------|----|----|------|---|
|             |          |                                    |    |    |      | Sem. Hours                              |
| MINOR I     | REQUIRE  | MENTS                              |    |    |      | 25                                      |
| AGRI        | 3120     | Dist. & Mkt. Agri. Products3       | EC | ON | 1011 | Principles of Microeconomics3           |
| <b>AGRI</b> | 1300     | Introductory Plant Science1        | AG | RI | 1200 | Agriculture Mechanics, 3 or             |
| <b>AGRI</b> | 1310     | Agronomy I: Row Crops2             | AG | RI | 3200 | Farm Power & Machinery, 33              |
| AGRI        | 2330     | Introduction to Soil Science3      | AG | RI | 1600 | Introductory Horticulture Science, 3 or |
| AGRI        | 1420     | Animal Husbandry3                  | AG | RI | 1610 | Establishment & Care of                 |
| CHEM        | 1104     | Intro. to the Sciences: Chemistry4 |    |    |      | Greenhouse Plants, 33                   |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, CHEM 1104 fulfills 4 s.h. of Div. II A)

Sem Hours

#### AGRICULTURE-BUSINESS Functional Major, B.S. Degree

(43 000111)

The graduate with a Bachelor of Science degree in Agriculture- Business will use the knowledge and skills obtained in the program to:

- Use language and concepts of agricultural business effectively in written and oral communications
- Demonstrate computer literacy
- Demonstrate an understanding of theories and principles of economics and agri-business appropriate to the agri-business firm
- Demonstrate an understanding of the basic practices and theory of agricultural production (agricultural literacy)
- Provide evidence of an international-global perspective of agriculture
- Demonstrate appropriate and effective social interactions
- Demonstrate ability to analyze situations and solve problems in an agri-business context
- Demonstrate a knowledge of how national and international policies impacting agriculture are developed.

|         |          |                              |   |             |      | Seili. 11                         |       |
|---------|----------|------------------------------|---|-------------|------|-----------------------------------|-------|
|         |          | JOR REQUIREMENTS             |   |             |      |                                   | 73    |
| AGRI    | 2010     | Computer Applications for    |   | AGRI        | 1600 | Introductory Horticulture Science | 3     |
|         |          | Agriculturists               | 3 | AGRI        | 4820 | Agricultural Safety               | 3     |
| AGRI    | 1100     | Introduction to Agriculture  |   | <b>ECON</b> | 1011 | Principles of Microeconomics      | 3     |
| AGRI    | 3110     | Agri-Business Management     | 3 | <b>ECON</b> | 3030 | Intermediate Microeconomics       | 3     |
| AGRI    | 3120     | Dist. & Mktg. Agri. Products | 3 | FIN         | 1820 | Personal Finance                  | .3    |
| AGRI    | 3140     | Agri. Analysis & Statistics  | 3 | MKT         | 3430 | Personal Selling                  | .3    |
| AGRI    | 4110     | Agricultural Futures Trading | 3 | BLAW        | 2720 | Legal Environment of Business     |       |
| AGRI    | 4120     | International Agriculture    | 3 | AGRI        | 1200 | Agriculture Mechanics, 3 or       |       |
| AGRI    | 4140     | Agricultural Policy          | 3 | AGRI        | 3200 | Farm Power & Machinery, 3         | 3     |
| AGRI    | 4150     | Natural Resource Economics   |   | AGRI        | 1310 | Agronomy I: Row Crops, 2 or       |       |
| AGRI    | 1300     | Introductory Plant Science   | 1 | AGRI        | 2315 | Agronomy II: Forages, 2           | 2     |
| AGRI    | 2330     | Introduction to Soil Science |   | AGRI        | 4340 | Agri. Sprays & Chemicals, 3 or    |       |
| AGRI    | 2331     | Soils                        | 3 | AGRI        | 3610 | Agricultural Insect Control, 3    | 3     |
| AGRI    | 1420     | Animal Husbandry             | 3 | ACCT        | 2100 | Survey of Accounting, 3 or        |       |
| AGRI    | 2425     | Livestock Evaluation         |   | ACCT        | 2101 | Principles of Financial Acct. 3,  | 3     |
| AGRI    | 3420     | Animal Nutrition             | 3 |             |      |                                   |       |
| MINOR I | NOT REQI | UIRED                        |   |             |      |                                   |       |
| GENERA  | AL EDUCA | TION REQUIREMENTS (page 49)  |   |             |      |                                   | 48    |
| COMM    |          | Div. I B (required)          |   |             |      | Div. II B (required)              |       |
| MATH    | 1111     | Div. I C (required)          |   | AGRI        | 2130 | Div. II D (required)              |       |
| CHEM    | 1104     | Div. II A (required)         | 4 | ICAP        | 4101 | Div. IV B (required)              |       |
| FREE EI | ECTIVES  |                              |   |             |      |                                   |       |
| MINIMUI | M TOTAL  |                              |   |             |      |                                   | . 124 |

#### VOCATIONAL AGRICULTURE EDUCATION Functional Major, B.S. in Ed. Degree

(Certification to teach vocational agriculture education in grades 9-12) (41 000112)

The graduate with a Bachelor of Science in Education degree in Vocational Agriculture Education will use the knowledge and skills obtained in the program to:

- Understand the components of a complete secondary agriculture program including the essentials of a successful FFA chapter and an adult agricultural education program
- Formulate strategies and tools to use in planning a local agricultural education program to address local, state, national, and international needs
- Apply the Missouri State Standards and Quality Indicators for agriculture program improvement
- Distinguish methods of developing successful partnerships using community resources and successfully marketing an agricultural education program
- Demonstrate computer literacy
- Provide evidence of an international-global perspective of agriculture
- Use language and concepts of agriculture effectively in written and oral communications
- Demonstrate ability to analyze situations and solve problems in an agricultural context
- Demonstrate an understanding of the basic practices and theory of agricultural production (agricultural literacy)
- Demonstrate appropriate and effective social interactions.

(Continued on next page)

(Continued from previous page)

| Sem. Ho   |          |                               |                |             |            |                                       |     |
|---|----------|-------------------------------|----------------|-------------|------------|---------------------------------------|-----|
| FUNCTION  | ONAL MA  | JOR REQUIREMENTS              |                |             |            |                                       | 53  |
| AGRI  | 2010     | Computer Applications for     |                | AGRI        | 3420       | Animal Nutrition                      | 3   |
|   |          | Agriculturists                | 3              | <b>AGRI</b> | 1600       | Introductory Horticulture Science     | 3   |
| AGRI  | 1100     | Introduction to Agriculture   | 1              | <b>AGRI</b> | 4820       | Agricultural Safety                   | 3   |
| AGRI  | 3110     | Agri-Business Management      | 3              | <b>AGRI</b> | 4900       | Planning & Conducting Programs        |     |
| AGRI  | 3120     | Dist. & Mktg. Agri. Products  | 3              |             |            | in Agricultural Education             | 3   |
| AGRI  | 1200     | Agriculture Mechanics         | 3              | <b>AGRI</b> | 4910       | Agri. Occupations Exper. Prog         | 2   |
| AGRI  | 3200     | Farm Power & Machinery        | 3              | AGRI        | 4920       | Agri. Mechanics in Agri. Ed           | 2   |
| AGRI  | 1300     | Introductory Plant Science    | 1              | <b>ECON</b> | 1011       | Principles of Microeconomics          | 3   |
| AGRI  | 1310     | Agronomy I: Row Crops         | 2              | BIOL        | 1004       | Intro. to the Sciences: Ecology       | 4   |
| AGRI  | 2315     | Agronomy II: Forages          | 2              | <b>AGRI</b> | 4430       | Animal Science: Beef, 3 or            |     |
| AGRI  | 2330     | Introduction to Soil Science  |                | <b>AGRI</b> | 4435       | Animal Science: Pork, 3               | 3   |
| AGRI  | 1420     | Animal Husbandry              | 3              |             |            |                                       |     |
| MINOR I   | NOT REQ  | UIRED                         |                |             |            |                                       |     |
| GENERA  | AL EDUCA | ATION REQUIREMENTS (page 49)4 | 8 s.h. (In the | functional  | major, BIG | OL 1004 fulfills 3 s.h. of Div. II A) | 45  |
| MATH  | 1111     | Div. I C (required)           | 3              | POLS        | 1510       | Div. II B (required)                  |     |
| CHEM  | 1104     | Div. II A (required)          | 4              | AGRI        | 2130       | Div. II E (required)                  | 3   |
| HIST  | 1350     | Div. II B or                  |                | PSY         | 4230       | Psy. of Adolescence                   | 3   |
| HIST  | 1351     | Div. II B (required)          | 3              | ICAP        | 4101       | Div. IV B (required)                  |     |
| Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. II B. |          |                               |                |             |            |                                       |     |
| PROFE:  | SSIONAL  | EDUCATION REQUIREMENTS (see   | page 205)      |             |            |                                       | 28  |
| AGRI  | 4930     | Methods of Teaching Voc. Agri | 3              | AGRI        | 4940       | Secondary Field Exp. II               | 2   |
| MINIMU  | M TOTAL  |                               |                |             |            |                                       | 126 |

#### General

# AGRI 1000 Exploratory Problems in Agriculture (1-3)

Individual or group work on introductory level technical problems in agriculture. Provide exploration of content not available through normal course offerings. Prerequisite: Departmental consent.

AGRI 2010 Computer Applications for Agriculturalists (3) Understanding and using computers to define, analyze, and solve agricultural problems. Topics include descriptive statistics, farm budgets, decision models, information retrieval and agri-marketing techniques.

**AGRI 4000 Special Projects in Agriculture (1-6)** Investigation of contemporary problems and issues in agriculture by selected individuals or groups. *May be repeated for a maximum of 9 semester hours.* 

#### Agricultural Business and Economics

AGRI 1100 Introduction to Agriculture (1) Orientation to the philosophy, development and current trends in the professional preparation for careers in agriculture. Prerequisite: must be taken during the first year of the agriculture program. Only offered Fall semester.

AGRI 2110 Agricultural Records (3) Fundamental principles and practices of record buyers as applied to the organization and operation of agricultural enterprises. Only offered Fall semester.

**AGRI 2120 Agricultural Cooperatives (1)** Environment, organization and business function of modern agricultural cooperatives. Prerequisite: ECON 1011.

**AGRI 2130 Global Agriculture (3)** Interaction of culture and farming/food systems worldwide emphasizing the interaction of cultures with agricultural production/food systems and the influence this has on social, economic, governmental, and environmental factors.

AGRI 3110 Agri-Business Management (3) Management functions and economics of agricultural organizations and operations, including input-output analysis, efficient allocations of resources, enterprise combinations, and budgeting analysis. Only offered Fall semester. Prerequisites: ECON 1011; AGRI 2010 or concurrently; MATH 1111 or concurrently.

**AGRI 3120 Distribution and Marketing Agriculture Products (3)** Principles governing the distribution, prices, and marketing of agriculture products. Only offered Fall semester. Prerequisite: ECON 1011.

AGRI 3140 Agricultural Analysis and Statistics (3) Statistical analysis and experimental designs as applied to agriculture. Only offered Fall semester. Prerequisite: MATH 1111 and AGRI 2010.

AGRI 4110 Agricultural Futures Trading (3) Examination of techniques used in pricing products in the agricultural commodities futures market. Emphasis on futures trading as a marketing tool with some consideration of alternative speculating techniques. Only offered Spring semester. Prerequisites: AGRI 2010 and AGRI 3120.

**AGRI 4120 International Agriculture (3)** Economic, cultural, governmental and environmental factors which influence agricultural production and trade among countries. Only offered Spring semester. Prerequisites: AGRI 2130 and AGRI 3120.

AGRI 4140 Agricultural Policy (3) History, principles, settings, objectives, and methods of policy development as applied to agriculture in our society. Only offered Spring semester. Prerequisites: AGRI 3110 and AGRI 3120. AGRI 4150 Natural Resource Economics (3) Nature of natural resources; economic efficiency as basis for natural resource use; externalities in natural resource use; factors influencing environmental quality; alternate public policy tools for influencing natural resource use. Only offered Spring semester. Prerequisite: ECON 1010 and ECON 1011.

### Agricultural Mechanization

**AGRI 1200 Agriculture Mechanics (3)** Selection and use of hand and power tools for the farm shop. Basic processes and procedures in hot metal work and elements of woodworking used in the repair and maintenance of the farm. An additional fee is associated with this course. Only offered Fall semester.

**AGRI 3200 Farm Power and Machinery (3)** Mechanical work on the farm, including selection, cost, and care of farm machinery. Includes laboratory practices on tractors, gas engines, plows, mowers, and other farm machinery. Only offered Spring semester.

AGRI 3210 Soil and Water Management (3) Soil and water conservation. Use of farm level, laying out and establishing terraces, water ways, diversion channels, and farm ponds. Prerequisite: AGRI 2330.

AGRI 4200 Advanced Agriculture Mechanics (3) Application of shop principles to the design and construction of farm mechanical projects. Prerequisite: AGRI 1200.

#### Agronomy

AGRI 1300 Introductory Plant Science (1) Emphasis on the structure/function relationships of anatomy, morphology, and physiology of horticultural and agronomic crops. AGRI 1310 Agronomy I: Row Crops (2) Principles and practices in cereal crop production. Only offered Fall

semester. Prerequisite: AGRI 1300.

AGRI 2315 Agronomy II: Forages (2) Principles and practices of forage crop production. Only offered Spring semester. Prerequisite: AGRI 1300

AGRI 2330 Introduction to Soil Science (3) Chemical and physical properties of soils. Prerequisite: CHEM 1104. An additional fee is associated with this course. Only offered Fall semester.

AGRI 2331 Soils (3) Emphasis on soil formation, classification, and fertility. Only offered Spring semester. Prerequisite: AGRI 2330.

AGRI 3320 Field Crop Management (3) Management of crops, crop rotation, and crop utilization. Prerequisites: AGRI 1310 or AGRI 2315, and AGRI 2330.

AGRI 4300 Soil Fertility and Fertilizers (3) Theory and practice of utilizing agricultural fertilizers to maximize soil productivity. Prerequisite: AGRI 2330.

AGRI 4310 Plant Improvement (3) The principles and practices involved in the selection and breeding of farm crops. Only offered Fall semester. Prerequisites: AGRI 1600; AGRI 1310 or AGRI 2315. An additional fee is associated with this course.

AGRI 4320 Agricultural Plant Diseases (3) Agricultural plant diseases with emphasis on recognition and control. Only offered Fall semester. Prerequisites: AGRI 1600; AGRI 1310 or AGRI 2315.

AGRI 4330 Soils Management (3) Principles of soils management as applied to physical improvement and fertility maintenance of soils. Prerequisite: AGRI 2330. AGRI 4340 Agricultural Sprays and Chemicals (3) Types of agricultural chemicals and their application in control of insects, parasites, and weeds. Only offered Fall semester. Prerequisite: AGRI 2330; AGRI 1310 or AGRI 2315.

#### **Animal Science**

AGRI 1420 Animal Husbandry (3) A comprehensive view of the industry and the science of biology as utilized in modern livestock management. Only offered Fall semester. AGRI 2425 Livestock Evaluation (3) An advanced study of livestock evaluation with emphasis in selection of breeding and market animals. The evaluation of beef cattle, dairy cattle, and swine will be emphasized. Only offered Spring semester. Prerequisite: AGRI 1420.

AGRI 3410 Animal Breeding (3) Breeding methods and principles of animal reproduction in the improvement of livestock. Prerequisite: AGRI 1420 or AGRI 1510 (from previous catalogs).

AGRI 3420 Animal Nutrition (3) Basic principles of animal nutrition--including classification and composition of feedstuffs, factors that affect feed utilization by animals, feed formulation and a study of the basic nutrients and their use in the body. Only offered Fall semester.

AGRI 4410 General Veterinary Science (3) Anatomy, physiology, disease control, parasitic control, and sanitation of farm animals. Only offered Spring semester.

AGRI 4415 Reproduction of Farm Animals (3)

Reproductive physiology of farm animals with practice in evaluation of semen, artificial insemination, and methods of pregnancy diagnosis. Only offered Fall semester. Prerequisites: AGRI 1420 and AGRI 3410.

AGRI 4430 Animal Science: Beef (3) Systems of beef production. Includes breeding, feeding, and management of commercial and purebred beef. Only offered Spring semester. Prerequisites: AGRI 1420.

AGRI 4435 Animal Science: Pork (3) Systems of pork production. Includes breeding, feeding, and management of commercial and purebred swine. Only offered Spring semester. Prerequisites: AGRI 1420.

#### Horticulture

AGRI 1600 Introductory Horticulture Science (3) A general survey dealing with the home garden and orchard; principles of landscape art and plant propagation. Only offered Spring semester. Prerequisite: AGRI 1300. An additional fee is associated with this course

**AGRI 1610 Establishment and Care of Greenhouse** Plants (3) Identifying, establishing, maintaining, harvesting and displaying greenhouse plants. An additional fee is associated with this course. Only offered Fall semester. AGRI 3610 Agricultural Insect Control (3) Insect control with emphasis on recognition of destructive forms, general principles of insect habits and classification. An additional fee is associated with this course.

AGRI 3620 Residential Landscape Design (3) Theory and practice of landscaping the home, farmstead, and small properties, including elementary design, soil preparation, selection of plant material, and cultural practices. Only offered Spring semester. An additional fee is associated with this course.

AGRI 3640 Horticultural Propagation Materials (3) Includes materials, types of plants, structure of plants, and methods used in propagation. Only offered Spring semester. Prerequisite: AGRI 1600.

AGRI 4600 Horticultural Plants (3) Identification, description, adaptation, and classification of horticultural species. Prerequisite: BIOL 1112. An additional fee is associated with this course.

AGRI 4610 Turfgrasses (3) Selection, identification, establishment and maintenance of turfgrasses. Prerequisites: BIOL 1112, AGRI 1600 and AGRI 2330. An additional fee is associated with this course.

### **Professional and Agriculture Education**

AGRI 3810 Internship in Agriculture (1-3) Provides experiences for students in cooperating agricultural businesses, agencies and other organizations. May be repeated for a maximum of 3 semester hours. Prerequisite: consent.

AGRI 4800 Topics in Agriculture (1-3) Individual investigation of a special problem in agriculture in the student's major field not available under regular classes. May be accomplished by reports, surveys, discussions, bibliographies, experiments, and library research. May be repeated for a maximum of 3 semester hours. Prerequisite:

AGRI 4820 Agricultural Safety (3) The history of and need for agricultural safety, operating guidelines for machines and chemical handling and application. A review of occupational health laws and how they relate to the agricultural

workforce. Only offered Fall semester. Prerequisites: junior standing and AGRI 1200 or AGRI 3200.

AGRI 4900 Planning and Conducting Programs in Agricultural Education (3) Development and organization of vocational agriculture programs at the secondary level to meet the needs of local schools and community. Only offered Fall semester.

AGRI 4910 Agricultural Occupations Experience Programs (2) Understandings and competencies required to establish, administer, and evaluate supervised agricultural occupational experience programs. Only offered Spring semester. Prerequisite: AGRI 4900.

AGRI 4920 Agricultural Mechanics in Agriculture Education (2) The selection and organization of teaching materials; planning shop facilities and selection of equipment, hand tools, and shop supplies essential in establishing and teaching the agricultural mechanics program. Only offered Spring semester. Prerequisite: AGRI 4900.

AGRI 4930 Methods of Teaching Vocational Agriculture\*
(2) Only offered Spring semester. Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with AGRI 4940 during the Professional Semester. \*Not available for graduate credit

AGRI 4940 Secondary Field Experience II\* (1)
Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Only offered Spring semester. Prerequisites: admission to Teacher Education Program; should be taken concurrently with AGRI 4930 during the Professional semester. \*Not available for graduate credit

#### **Integrative Studies Capstone**

ICAP 4101 Agricultural Capstone Experience\* (3) Integration of agricultural knowledge and problem solving skills using case studies in a seminar forum. Prerequisites: 24 semester hours of agriculture courses and senior standing. \*Not available for graduate credit.

# **Aviation**

In the Department of Aviation, the second digit in the course number stands for the following: 0--General and Professional, 1--Automotive, 2--Aviation Maintenance, 3--Aviation Flight, 4--Transportation, 5--Aviation Safety.

#### **Department of Aviation Statement of Policy**

Department of Aviation requires a 2.25 GPA for all AVIA prefixed courses in the Aviation Technology major..

### **AVIATION Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000157)

|       | (000.01) |                                |    |   |             |  |  |  |
|-------|----------|--------------------------------|----|---|-------------|--|--|--|
|       |          |                                |    |   | Sem. Hours  |  |  |  |
| MINOR | REQUIRE  | MENTS                          |    |   | 21          |  |  |  |
| AVIA  | 1020     | Aeronautics, 2 or              |    | ** Approved electives in aviation                 | 17-19       |  |  |  |
| AVIA  | 1310     | FAA Private Requirements, 4 2- | -4 | **Must include a minimum of 3SH of Upper Division | on courses. |  |  |  |

# **AVIATION TECHNOLOGY, Associate in Science Degree**

(22 000161)

|         |         | `                                   | ,     |      | Sem. Hours                           |
|---------|---------|-------------------------------------|-------|------|--------------------------------------|
| FIRST Y | EAR REQ | UIREMENTS                           |       |      | 35                                   |
| *AVIA   | 1200    | General Mechanics3                  | *ET   | 1010 | Applied Electricity3                 |
| *AVIA   | 1210    | Aircraft Recip. Power Plants3       | *GRAP | 1110 | Fundamentals of Drafting3            |
| *AVIA   | 1255    | Basic Airframe Maintenance3         | *MMgt | 1120 | Welding2                             |
| *AVIA   | 2230    | Aircraft Electrical Systems3        | ENGL  | 1020 | Composition I3                       |
| *AVIA   | 3220    | Aircraft Engine Testing3            | *AVIA | 4240 | Aircraft Engine Instr. & Syst., 3 or |
| *AVIA   | 3230    | Aircraft Ignition-Starting Systems3 | AVIA  | 4010 | Aerodynamics, 33                     |
| *AVIA   | 3255    | Metal Airframe Processing3          |       |      | -                                    |
| SECON   | YEAR R  | EQUIREMENTS                         |       |      | 35-37                                |
| *AVIA   | 2220    | Aircraft Carburetion &              | *AVIA | 4230 | Aircraft Instrument Systems3         |
|         |         | Lubrication Systems4                | *T&OE | 1040 | Technical Mathematics I3             |
| *AVIA   | 3210    | Aircraft Hydraulic Systems3         | T&OE  | 3060 | Technical Report Writing2            |
| *AVIA   | 3215    | Gas Turbine Engines3                | AVIA  | 4220 | Transport Aircraft Systems, 2 or     |
| *AVIA   | 3225    | Propellers & Components3            | *AVIA | 3250 | Complex Aircraft Systems, 3 2-3      |
| *AVIA   | 3240    | Aircraft Air Conditioning &         | *AVIA | 4080 | Nondestructive Insp. & Test., 3 or   |
|         |         | Pressurization Systems2             | MMGT  | 2040 | Engineering Material Sci., 4 3-4     |
| *AVIA   | 3260    | Aircraft Radio Installation & Oper1 | HIST  | 1350 | History of the U. S. to 1877, 3 or   |
| *AVIA   | 4210    | Aircraft Insp., Weight & Balancing3 | HIST  | 1351 | History of the U. S. from 1877, 33   |
| MINIMUI | M TOTAL |                                     |       |      | 70-72                                |
|         |         |                                     |       |      |                                      |

<sup>\*</sup>Courses comprise the FAA-certified Airframe and Powerplant (A&P) curriculum. Students electing to enroll in the A&P curriculum who also wish to complete the associate degree in two years should plan to enroll in the General Education courses during the summer sessions.

# **AVIATION TECHNOLOGY Functional Major, B.S. Degree**

(43 000159)

The graduate with a Bachelor of Science degree in Aviation Technology will use the knowledge and skills obtained in the program to:

- Research, prepare and present both oral and written reports on technical or management subjects related to his/her area of specialization
- Identify, analyze and solve technical or management problems related to his/her field of specialization
- Function effectively as a participating member of a work group to accomplish a particular goal
- Demonstrate desirable work habits and professional and conscientious attitudes in his/her particular areas of instruction through participation in professional activities and organizations, and leadership activities both in and out of the classroom
- Demonstrate a mastery of skill beyond the entry level related to one or more areas of technical, management or marketing specialities in the major area of study
- Demonstrate technical and general knowledge required in occupational work areas related to the major field of study.

| FUNCTION | ONAL MA. | JOR REQUIREMENTS                                  |        |             |                                | Sem. Hours70-77 |
|----------|----------|---|--------|-------------|--------------------------------|-----------------|
| AVIA     | 4010     | Aerodynamics3                                     |        |             | approved electives from one of |                 |
| AVIA     | 4040     | Aviation Management3                              |        | sted belo   | • •                            |                 |
| AVIA     | 4500     | Aviation Safety3                                  | Area 1 | Professi    | ional Pilot                    |                 |
| AVIA     | 4090     | Aviation Law3                                     | Area 2 | 2 Mainten   | ance Management B              |                 |
| AVIA     | 4420     | Air Transportation3                               | Area 3 | 3 Airport N | Management                     |                 |
| T&OE     | 3060     | Technical Report Writing2                         | Area 4 | Avionics    | Management                     |                 |
| AVIA     | 1020     | Aeronautics, 2 or                                 | Area 5 | Systems     | s Design Technology            |                 |
| AVIA     | 1310     | FAA Private Requirements, 4 2-4                   | Area 6 | Flight O    | perations Management           |                 |
| INDM     | 4210     | Industrial Management, 3 or                       |        |             |                                |                 |
| MGT      | 3310     | Principles of Management, 33                      |        |             |                                |                 |
| MATH     | 1131     | Calculus for Business & Econ3                     |        |             |                                |                 |
|          | NOT REQ  |   |        |             |                                |                 |
|          |          | TION REQUIREMENTS (page 49)                       |        |             |                                | 48              |
| MATH     | 1111     | Div. I C (required)3                              |        | 1010        |                                |                 |
| PHYS     | 1104     | Div. II A (required)4                             | ICAP   | 4113        | Div. IV B (required)           | 3               |
| BE&O     | 1210     | Div. II A (required), 2 or                        |        |             |                                |                 |
| LIS      | 1600     | Div. II A (required), 22                          |        |             |                                |                 |
|          | ECTIVES  |   |        |             |                                | 0-5             |
|          |          | ng Area 2 will not take FREE ELECTIVES of 0-5, b  |        |             |                                |                 |
|          |          | verplant certification. This brings the MINIMUM T |        | 6-138 ho    | urs.                           |                 |
| MINIMU   | M TOTAL  |   |        |             |                                | 124             |

## Air Force Reserve Officer Training Corps (AFROTC) Program

Central Missouri State University offers an Air Force Reserve Officer Training Corps (AFROTC) program in cooperation with the University of Missouri - Columbia. Students enroll in one course per semester at CMSU and participate in the program one day per week on the University of Missouri - Columbia campus. Credits earned in the program can count as elective credit toward any degree program at CMSU. Courses are taught by active duty Air Force officers assigned as ROTC faculty on the University of Missouri - Columbia campus. All undergraduate and graduate students are eligible to enroll in Air Force ROTC courses. For additional information contact the Department Chair of the Department of Aviation.

#### **General and Professional**

#### AERO 1010 Foundations of the US Air Force I (3)

Introduces the Air Force and Air Force ROTC focusing on professional appearance, military customs, courtesies, core values and officer opportunities.

## AERO 1020 Foundations of the US Air Force II (3)

Continues introduction of the Air Force and Air Force ROTC focusing on Air Force origins, organizations, major commands, installations and sister services. Prerequisite: AERO 1010.

#### AERO 2010 Evolution of USAF Air and Space Power I

(3) Explores Air Force heritage, leaders, air power doctrine, origins, organizations, major commands, installations and sister services. Facilitates ROTC Cadet transition to ROTC officer candidate. Prerequisite: AERO 1020.

**AERO 2020 Evolution of USAF Air and Space Power II**(3) Continues transition from Air Force ROTC Cadet to Air Force ROTC officer candidate. Expands leadership skills through use of group leadership problems. Prerequisite: AFRO 2010

**AERO 3010 Air Force Leadership Studies I (3)** Integrated leadership and management skills facilitate development of Air Force leaders. Prerequisite: AERO 2020.

**AERO 3020 Air Force Leadership Studies II (3)** Expand quality Air Force principles to include ethical decision making, personal core values and character development. Prerequisite: AERO 3010.

**AERO 4010 National Security Affairs I\* (3)** Examines the national security process, regional studies and Air Force and Joint Doctrine. \*Not available for graduate credit. Prerequisite: AERO 3020.

**AERO 4020 National Security Affairs II\* (3)** Examines civilian control of military, officership, military justice system and current issues affecting military professionalism. \*Not available for graduate credit. Prerequisite: AERO 4010.

#### **General and Professional**

**AVIA 1020 Aeronautics (2)** An overview of aviation and aerospace related industries. Consideration is given to the development of aviation and resulting social and economic

factors, theory of flight, problems of weather and navigation, occupational opportunities, and government interest, promotion and regulation.

AVIA 3020 Digital Control of Power Systems (3) The impact of digital technology on aircraft and automotive power systems. Emphasis will be placed on the methods of controlling these systems. Prerequisite: ET 1010 or ET

AVIA 4000 Special Projects in Aviation Technology (1-3) Investigation of contemporary problems and issues in power and transportation by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

AVIA 4010 Aerodynamics\* (3) Theories of flight and factors affecting aircraft in flight, including drag, velocity, lift, thrust and wing loading. Comparative analysis of design features in modern aircraft. \*Not available for graduate credit.

AVIA 4040 Aviation Management (3) Aviation/airport management and administrative functions, issues, and problems involving both large and small airports, heliports, sea plane bases and related fixed base operations.

AVIA 4045 Airport Management (3) Airport operations and management principles and applications. Personnel, security, budgeting, contracts, maintenance and public

AVIA 4060 Aerospace Education (2-3) Basic aerospace information dealing with the social, scientific, and technological importance of aviation and space with special applications for teachers who desire to utilize such information in the elementary and secondary school.

AVIA 4070 Aviation History (3) Major events, people, and changing technologies in the development of the present day air transportation system.

AVIA 4080 Nondestructive Inspection and Testing (3) Magnetic particle, eddy current, dye penetrant, ultrasonic vibration analysis, acoustics, radiographic, infrared, and liquid crystal methods of nondestructive inspection. Prerequisites: PHYS 1104 or PR&T 1010 or AVIA 1200 (for A&P students).

AVIA 4090 Aviation Law (3) Legal foundations and the federal and state regulatory functions which influence aviation and those who work in the industry.

AVIA 4095 International Aviation (3) Aviation issues in international aviation including ICAO regulations and other factors related to the operation of airplanes in a global environment.

#### **Aviation Maintenance**

AVIA 1200 General Mechanics (3) Power mechanics, measurement and transmission. Theory of internal combustion engines. Principles of simple machines, sound, fluid and heat dynamics. Fabrication of fluid lines and fittings. Disassembly, repair and reassembly of a small reciprocating engine.

**AVIA 1210 Aircraft Reciprocating Power Plants (3)** Aircraft reciprocating power plants, construction, operation, overhaul, and engine logs. Laboratory experience in disassembling, cleaning, inspection, and assembling. AVIA 1215 General A&P Applications (3) General A&P related course and laboratory material necessary to transition from military to civilian applications. Prerequisite: Release from the Federal Aviation Administration (FAA signoff) for General, Airframe, and Powerplant or permission of instructor

AVIA 1216 Airframe Applications (3) Airframe related course and laboratory material necessary to transition from military to civilian applications. Prerequisite: Release from the Federal Aviation Administration (FAA sign-off) for General, Airframe, and Powerplant or permission of instructor.

AVIA 1217 Powerplant Applications (3) Powerplant related course and laboratory material necessary to transition from military to civilian applications. Prerequisite: Release from the Federal Aviation Administration (FAA signoff) for General, Airframe, and Powerplant or permission of

**AVIA 1218 Federal Aviation Regulations & Records** Keeping Applications (3) Federal aviation regulations and records keeping related course and laboratory material necessary to transition from military to civilian applications. Prerequisite: Release from the Federal Aviation Administration (FAA sign-off) for General, Airframe, and Powerplant or permission of instructor.

AVIA 1255 Basic Airframe Maintenance (3) Selecting airframe materials, repairing, rigging, and caring for fabric covered airframes. Prerequisite: MMGT 1120.

**AVIA 2220 Aircraft Carburetion and Lubrication Systems** (4) Operation of fuel, induction and lubrication systems. Type, composition and characteristics of various fuels and oils. Inspection, maintenance, and overhaul of fuel, induction and lubrication systems' components.

AVIA 2230 Aircraft Electrical Systems (3) The theory, operation, and repair of aircraft electrical systems and components.

AVIA 3210 Aircraft Hydraulic Systems (3) Theory and practice in the operation, maintenance, and overhaul of hydraulic systems and components.

AVIA 3215 Gas Turbine Engines (3) Application, design, construction, operation, and overhaul of gas turbine power plants. Laboratory experiences in disassembling, inspection and assembling.

AVIA 3220 Aircraft Engine Testing (3) Theory and practice in installing, trouble shooting, testing, and repairing of aircraft engines.

AVIA 3225 Propellers and Components (3) Propellers, governors, and de-icing systems. Inspection, servicing, and overhaul of propellers.

AVIA 3230 Aircraft Ignition-Starting Systems (3) Theory and practice in the operation, maintenance, and overhaul of ignition and starting systems and their components.

**AVIA 3240 Aircraft Air Conditioning and Pressurization** Systems (2) Theory and practice with pneumatic, anti-icing, cabin pressurization, and air conditioning systems. AVIA 3250 Complex Aircraft Systems (3) Theory, operation and repair of complex aircraft fuel systems, position and warning systems, ice and rain protection systems. Prerequisite: AVIA 2230.

AVIA 3255 Metal Airframe Processing (3) Theory and practice in the construction and repair of metal airframes. AVIA 3260 Aircraft Radio Installation and Operation (1) Theory and practice with communication and navigation radio equipment. Prerequisite: AVIA 2230.

**AVIA 3262 Aircraft Communication/Navigation Systems** (4) Theory, operation, maintenance and repair of aircraft communication and navigation systems. Course includes lectures, demonstrations, and mandatory laboratory activities. Prerequisites: ET 2060, ET 2058, and ET 3014.

AVIA 3264 Aircraft Pulse and Related Systems (4) Theory, operation, maintenance and repair of aircraft pulse and related systems. Course includes lectures, demonstrations, and mandatory laboratory activities. Prerequisites: ET 2060, ET 2058, and ET 3014.

AVIA 4210 Aircraft Inspection, Weight and Balancing\* (3) Theory and practice of repairing, maintaining, ground handling, jacking, weighing aircraft, and performing inspection. Prerequisite: 10 semester hours of aircraft maintenance or flight courses. \*Not available for graduate

AVIA 4220 Transport Aircraft Systems\* (2) Comparison studies of systems on major types of transport category

aircraft and the in-flight management of those systems. Field trips to major airlines are included in the instructional sequence of the course. Prerequisite: AVIA 3340. \*Not available for graduate credit.

**AVIA 4230 Aircraft Instrument Systems\* (3)** Theory and practice of installing, operating, marking, adjusting, and interpreting aircraft instruments. \*Not available for graduate credit.

**AVIA 4240 Aircraft Engine Instruments and Systems\* (3)** Theory and practice in the operation and repair of aircraft engine instruments, fire detection and extinguishing systems, engine cooling systems and exhaust systems. \*Not available for graduate credit.

#### **Aviation Flight**

Aircraft user charges are based on flying time and vary with the type of aircraft. Advance deposits of \$500 or more for each course are required. Contact the Department of Power and Transportation or Chief Flight Instructor for current hourly flight fee rates. Additional federal financial aid may be received by students who incur documented costs for aviation flight training.

AVIA 1310 FAA Private Requirements (4) Basic ground school in support of flight training to prepare for the FAA examination for the Private Pilot Certificate. A fee is charged for pilot supplies and ground school materials. AVIA 1320 Private Flight A (1) Increase student's knowledge and experience to operate aircraft in solo flight and night conditions. Third class medical required before class begins. Approximately 20 flight hours required. AVIA 1321 Private Flight B (1) Increase the student's knowledge and aeronautical experience to operate an airplane on dual and solo cross-country flights. Third class medical required. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 1320.

**AVIA 2310 Propulsion Systems (3)** Operation and theory of aircraft propellers and both reciprocating and gas turbine engines. Laboratory activity includes testing and troubleshooting major functional components and systems. Prerequisite: PR&T 1010.

AVIA 3305 FAA Commercial Requirements (3)
Commercial ground school subjects in support of flight training to prepare for FAA examination for Commercial Pilot Certificate. Prerequisite: AVIA 3314.

**AVIA 3310 Commercial Flight A (1)** Increase the student's knowledge and aeronautical experience in dual and solo cross country flying in both day and night conditions. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 1321 or Private Pilot Certificate.

**AVIA 3311 Commercial Flight B (1)** Increase the student's knowledge and aeronautical experience in solo and cross country flying. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 3310.

**AVIA 3312 Commercial Flight C (1)**CIncrease the student's knowledge and aeronautical experience in solo cross country flying. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 3311.

**AVIA 3313 Instrument Flight A (1)** Increase the student's knowledge and aeronautical experience in maneuvering the aircraft solely by reference to the flight instruments. Includes the use of full and partial panel reference. The student should plan to fly approximately 20 hours. Prerequisite: AVIA 3312.

AVIA 3314 Instrument Flight B (1) Increase the student's knowledge and aeronautical experience in IFR cross-country and emergency procedures. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 3313.

AVIA 3315 Commercial Flight D (1) Increase the student's knowledge and the skill necessary to safely fly a complex

aircraft. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 3314.

AVIA 3316 Commercial Flight E (1) Increase the student's knowledge and provide the skill necessary to safely fly a complex aircraft. Additionally, the commercial flight maneuvers are introduced. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 3315.

AVIA 3317 Commercial Flight F (1)CIncrease the student's

**AVIA 3317 Commercial Flight F (1)**CIncrease the student's knowledge and provide the aeronautical skill necessary for the issuance of the Commercial Pilot Certificate. Student should plan to fly approximately 20 hours. Prerequisite: AVIA 3316.

**AVIA 3325 FAA Instrument Requirements (4)** Instrument ground school subjects in support of flight training to prepare for FAA examination for instrument rating. Prerequisite: AVIA 1321.

**AVIA 3330 Multi-Engine Certification (1)** Classroom and laboratory instruction to provide aeronautical knowledge and skills for multi-engine pilot certification. Prerequisite: AVIA 3314

**AVIA 3340 Aircraft Systems and Components (3)** Design, construction and operation of aircraft mechanical, electrical hydraulic, and pneumatic systems with emphasis on trouble analysis, servicing methods, and safety precautions. Prerequisite: AVIA 2310.

**AVIA 3360 Flight Instructor--Airplane (3)** Combines classroom and flight laboratory experience to prepare for FAA written examination and flight test for flight instructor rating. Prerequisite: AVIA 3317.

**AVIA 3362 Flight Instructor - Instrument (1)** Instruction, flight training and practice teaching to obtain the aeronautical skills and knowledge necessary for FAA Certified Flight Instructor, Instruments. Prerequisite: AVIA 3360.

AVIA 3364 Flight Instructor - Multi-Engine (1) Instruction, flight training and practice teaching to obtain the aeronautical skills and knowledge necessary for FAA Certified Flight Instructor, Multi-Engine. Prerequisites: AVIA 3330 and AVIA 3360.

AVIA 3390 Turboprop Familiarization (2) Systems operation and flying procedures for multi-engine turboprop aircraft with particular emphasis on current complex aircraft. Class will involve both ground school and flying a minimum of five hours. Prerequisites: AVIA 3317 and AVIA 3330. AVIA 4310 Air Traffic Control (2) Purposes, activities and operational procedures of air traffic control centers, towers and flight service stations. Study will include both standard and emergency services available from ATC/FSS systems. AVIA 4320 Physiology and Flying (2) Physiological factors related to flying, including those related to changes in pressure, supply of oxygen, spatial disorientation, and both positive and negative effects of chemicals in the body. An additional fee is assessed for this course.

AVIA 4330 Sport Aviation (2) Sailplanes, hot air balloons, and related sport aircraft. Students will have flying experience in either sailplanes or hot air balloons. Flight fees are required to cover expenses of flight instruction. Principles of organizing fly-ins, air shows, and contests. AVIA 4350 Aviation Weather (3) Meteorology for pilots with information for understanding and interpreting aviation weather reports and forecasts, weather hazards including windshear, turbulence, icing and visibility restrictions. Prerequisite: AVIA 1310

AVIA 4370 Advanced Flight Crew Management (3)
Advanced flight crew operations with emphasis on
the transition of the professionally qualified pilot into a
highly skilled member of a flight management team with
knowledge of cockpit resource management, high speed
and high altitude flight techniques, turbine-powered
operations and advanced avionics systems. Prerequisite:
AVIA 3317.

AVIA 4380 Flight Operations Management (3) Airline flight operations management principles and applications.

AVIA 4390 Part 135 Flight Operations (3) Emphasis is placed on the operating systems of a Beechcraft King Air A90 along with the knowledge required to operate in a Part 135 Flight Operation as Second-In-Command. Prerequisites: PR&T 3330, PR&T 3317, and PR&T 3314.

#### **Transportation**

**AVIA 4420 Air Transportation (3)** Organization and administration of the air transportation industry with attention to airline regulations, rate and route structures, air cargo and freight, scheduled and nonscheduled operations, and contract air transport.

**AVIA 4430 Corporate Aviation Management (3)** Role, scope and purpose of business aviation. Managerial, administrative and financial business functions related to the use of business aviation aircraft.

#### **Aviation Safety**

**AVIA 4500 Aviation Safety (3)** To develop a knowledge of contributing factors affecting aviation safety and fostering control methods and techniques to reduce accidents related to aircraft and the aviation field.

### **Integrative Studies Capstone**

**ICAP 4113 Air Operations Management\* (3)** Challenges the student to perform as an effective member of an air operations management team using critical thinking, decision making and ethics. Prerequisite: senior standing in aviation technology. \*Not available for graduate credit.

# Military Leadership

In the Department of Military Leadership, the second digit in the course number stands for the following: 1--Freshman year, 2--Sophomore year, 3--Junior year, 4--Senior year, 5--Summer Camp.

#### **Department of Military Leadership Statement of Policy**

The Army Reserve Officers' Training Corps (ROTC) develops college-educated officers for the active Army and reserve components. It provides young men and women the opportunity to earn commissions as Army officers and at the same time work toward an academic degree.

There are two programs available, a four-year program and a two-year program, both culminating in a United States Army commission.

The **four-year program** is divided into two phases, Basic Military Science and Advanced Military Science. Basic Military Science is normally taken by students in their freshman and sophomore years. It provides instruction in the basic subject areas needed to establish a firm foundation in military skills. This foundation provides for continued professional development in the areas of leadership and management.

Advanced Military Science is normally taken during the junior and senior years. The program develops the student's ability to express himself/herself clearly and accurately. It teaches leadership by both classroom theory and the practical application of directing individuals and small units in the execution of simulated tactical missions. While enrolled in Advanced Military Science, the student is paid a monthly financial allowance by the U.S. Army.

Freshmen and sophomores who are veterans with a minimum of four months active service, or reserve/national guard personnel who have completed basic training in any of the armed services, may be granted advanced ROTC placement, not to exceed two years, at the discretion of the Professor of Military Leadership.

The **two-year program** is offered for students who have completed two years of college but have not completed a basic military science program or served on active duty with any of the armed services. Students attend a basic five-week summer training program at the end of their sophomore year. After successful completion of the basic camp, students will start Advanced Military Science with all the pay and entitlements of the four-year program cadet.

The **U.S. Army Scholarship program** provides an excellent way for young men and women to obtain assistance in financing a college education. All scholarships cover the cost of tuition, books, certain fees and educational supplies, as well as a monthly financial allowance. Additional scholarship information is available from the Department of Military Leadership.

To qualify for a commission as a Second Lieutenant, a student must comply with all terms of his/her contract; successfully complete Basic Military Science or equivalent; successfully complete MS 3310, MS 3320, MS 3330, MS 3340, MS 4410, MS 4420, MS 4430, MS 4440 and MS 4510; complete all University requirements for a bachelor's degree; meet the physical standards of current U.S. Army regulations and agree to accept an Active Army, Army National Guard or Army Reserve duty assignment. Additionally, candidates for a commission must complete at least one course from each of the following Professional Education subject areas: Written Communications, Computer Literacy and Military History. A list of approved courses for each of the Professional Education subject areas may be obtained from the Department of Military Leadership.

#### **MILITARY SCIENCE Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000201)

| MINIOR | PEOLIDE | MENTS                                | ,  | Sem. Hours 29-31 |
|--------|---------|--------------------------------------|--|------------------|
| MS     | 3310    | Officership As a Profession3         | Electives from the following                 |                  |
|        |         | •                                    | · · · · · · · · · · · · · · · · · · ·        |                  |
| MS     | 3320    | Military Operations & Techniques3    | MS 1110 Intro. to Military Science           | 2                |
| MS     | 3330    | Intro. to the Army Physical Fitness  | MS 1120 Basic Military Skills                | 2                |
|        |         | Program2                             | MS 2210 Basic Mil. Skills & Leadership.      | 2                |
| MS     | 3340    | Concepts in Fitness Training Dev2    | MS 2220 Basic Military                       |                  |
| MS     | 4410    | Adv. Military Management Systems I3  | Tactics & Leadership                         | 2                |
| MS     | 4420    | Adv. Military Management Systems II3 | or   |                  |
| MS     | 4430    | Mgt. of the Unit Fitness Program2    | MS 2510 Basic Summer Camp                    | 3                |
| MS     | 4440    | The Army Master Fitness              | Departmentally approved elective             | 3                |
|        |         | Training Program2                    | or   |                  |
| MS     | 4510    | Advanced Summer Camp3                | Active duty or reserve forces basic training | 3                |
|        |         | ·                                    | Departmentally approved elective             | 3                |

#### Freshman Year

MS 1110 Introduction to Military Science (2) An introduction to military mountaineering, basic first aid and fundamentals of leadership. Only offered Fall semester.

MS 1120 Basic Military Skills (2) An introduction to basic rifle marksmanship, land navigation skills, use of a compass, orienteering, and an overview of the organization of the Armed Forces which includes military traditions and courtesy. Laboratory is required. Only offered

Spring semester. Prerequisites: MS 1110 or consent of Department Chair.

#### Sophomore Year

MS 2210 Basic Military Skills and Leadership (2) Branches of the Army, customs and traditions, intermediate first aid and basic pistol marksmanship. Laboratory

is required. Prerequisite: MS 1120 or equivalent or permission of the Professor of Military Science.

# 64 Military Leadership

MS 2220 Basic Military Tactics and Leadership (2) A continuation of MS 2210 with emphasis on small unit tactics and small unit management skills. An introduction to military operations, squad tactics and survival training. Laboratory is required. Only offered Spring semester. Prerequisite: MS 2210 or equivalent or permission of the Professor of Military Science.

#### **Junior Year**

MS 3310 Officership as a Profession (3) Professionalism and the military with emphasis on the role and responsibilities of the officer corps and leadership development. Prerequisite: MS 2220 or equivalent and must be taken concurrently with MS 3330.

MS 3320 Military Operations and Techniques (3)
Designed to give experience in basic military skills common to new lieutenants, regardless of specialty. Emphasis on tactics and techniques. Only offered Spring semester. Prerequisite: MS 3310 and MS 3330 and must be taken concurrently with MS 3340.

MS 3330 Introduction to the Army Physical Fitness Program (2) Basic components of fitness and an overview of the principles of exercise.

MS 3340 Concepts in Fitness Training Development (2) Development of the unit physical fitness program with an indepth analysis of the principles of fitness and exercise. Only offered Spring semester. Prerequisite: MS 3330.

#### **Senior Year**

#### MS 4410 Advanced Military Management Systems I\*

(3) Principles of management and applications in a military organizational environment. Functional processes within resource systems. Interpersonal relationships and small group dynamics. Prerequisite: MS 3320 and MS 3340 and must be taken concurrently with MS 4430. \*Not available for graduate credit.

MS 4420 Advanced Military Management Systems II\* (3) In-depth study of principles and law of warfare with emphasis on the Military Justice System (process of the Uniform Code of Military Justice), personnel and organizational support systems. Only offered Spring semester. Prerequisite: MS 4410 and MS 4430 and must be taken concurrently with MS 4440. \*Not available for graduate credit.

MS 4430 Management of the Unit Fitness Program\* (2)
Alternate athletic activities and risk assessment planning.
Prerequisite: MS 3340. \*Not available for graduate credit.
MS 4440 The Army Master Fitness Training Program\*
(2) Administration of the unit fitness program with emphasis on the regulatory requirements governing the unit fitness program. Only offered Spring semester. Prerequisite: MS 4430. \*Not available for graduate credit.

#### **Summer Camp**

MS 2510 Basic Summer Camp (3) Substitutes for the first two years of military science courses. Course is conducted during the summer for a period of five weeks. Transportation, room, board, military clothing and a salary are provided. Interested students should contact the Professor of Military Science between January and March of their sophomore year. Prerequisite: departmental consent. MS 4510 Advanced Summer Camp\* (3) Five weeks of advanced summer camp experience for advanced military science students. Required for completion of military science program and commissioning. Students receive financial assistance. Prerequisite: MS 3320 and departmental consent. \*Not available for graduate credit.

# Nursing

In the Department of Nursing, the second digit in the course number stands for the following: 0--General Theory, 1--Fundamentals of Nursing, 2--Maternal and Child Health, 3--Medical-Surgical Nursing, 4--Community and Mental Health Nursing, 6--Professional Theory.

#### **Department of Nursing Statement of Policy**

#### **Program**

CMSU's Department of Nursing offers a bachelors of science in nursing. The program is accredited by the Commission on Collegiate Nursing Education, One Dupont Circle NW, Suite 530, Washington, DC 20036-1120, and approved by the Missouri State Board of Nursing.

#### Accreditation

The nursing program is accredited by the Missouri State Board of Nursing and the Commission on Collegiate Nursing Education. Contact numbers for the Nursing Department's accrediting agencies are: Missouri State Board (573) 751-0681; Commission on Collegiate Nursing Education (202) 887-6791. The Commission on Collegiate Nursing Education is located at One Dupont Circle, NW, Suite 530, Washington, DC 20036.

#### **Student Learning Outcomes**

The graduate with a Bachelor of Science degree in Nursing will use the knowledge, skills and attitudes obtained in the program to:

- Communicate in a manner that reflects that communication is a reciprocal process utilizing multiple modes in adapting language and communication strategies appropriate to professional role and setting
- Demonstrate intellectual skill based on the use of theories and principles guided by logic and sound judgment to allow for the provision of safe quality nursing care. Using reasoning, the student will be able to assess, plan, intervene and evaluate while providing holistic care in diverse environments utilizing pertinent resources.
- Actively engage in interaction based on mutual respect with collaboration toward goal achievement
- Internalize and demonstrate ethically grounded behaviors reflective of the ANA <u>Nursing: Scope and Standards of</u> <u>Practice</u> (2003) and ANA <u>Code of Ethics for Nurses</u> (2001)
- Organize, store, retrieve, evaluate, synthesize and annotate professionally related information from print, electronic and other sources to make clinical judgements and solve problems

#### Admission

Students entering CMSU as freshmen or by transfer should indicate a pre-nursing major. Admission to the nursing program is conditional upon completion of a minimum of sixty semester hours, completion of all prerequisites necessary for admission to the first semester in the nursing program and the requirements for admission listed below. Admission to the nursing program involves competition between all eligible candidates. The Department of Nursing reserves the right to select among all qualified candidates. Students are admitted in March for Fall semester nursing classes and in October for Spring. The necessary application and forms are available after meeting with an advisor in the Department of Nursing.

Admission Criteria to the Undergraduate Nursing Program

1. Evidence of good moral character as determined by the

- Missouri State Board of Nursing in the Nurse Practice Act (1999) and by the American Nurses' Association Code of Ethics for Nurses (2001).
- All nursing prerequisites must be completed at the time of admission. Computer literacy is required to be admitted to the nursing program.
- 3. A minimum of a 2.5 cumulative grade-point average is required at the time of application.
- Minimum grade of C in all nursing prerequisites and nursing courses. A student receiving a grade lower than C in any nursing prerequisite may repeat that course only one time.
- A student receiving more than one D and/or F in a course or courses with a nursing prefix will not be eligible for admission into the program.
- Students will not be permitted to withdraw more than one time from a nursing prerequisite course without permission of the Department of Nursing.
- Science prerequisites, as identified in NURSING Functional Major, B.S. Degree, must have been taken within 10 years of requested semester admission.
- 8. Applicants for the nursing program must complete the College-BASE Examination with: [either 1) a 235 or better on all 4 subject areas (English, Mathematics, Science and Social Studies) OR 2) obtain a 235 or better on 3 subject areas AND earn a grade of AC@ or better in courses related to the subject area in which the student does not achieve a score of 235] and a minimum grade level equivalent of 12 on the Nelson-Denny Reading Test to be eligible for consideration before the Admissions and Progression Committee of the Department of Nursing.
- Completion of additional requirements such as speech and hearing exam, assessment(s), etc. at the time of application. Check with the nursing department for these requirements.
- 10. Completed application and examination forms are to be in the office of the Department of Nursing by January 1 for admission to Fall semester nursing classes and July 1 for admission to Spring semester nursing classes.
- 11. Official transcripts-it is the students responsibility to request ALL official transcripts from other universities and colleges be submitted to the Admissions Department of the University to be posted as part of the student's official transcript by 5 p.m., December 31 for Fall admission and June 30 for Spring admission.
- 12. A physical exam, required immunizations, and a satisfactory criminal history background check must be complete and validated before the first day of clinical.
- 13. English as second language students (any student whose primary and secondary education was in a country where the native and official language was not English excluding native American citizens who attended American high schools in another country) must successfully complete the University requirements:
- TOEFL A score of 600 with a minimum of 55 on each sub-score
- b. Test of Spoken English A minimum score of 250.

- Test of Written English A minimum score of 5.
   Any student not obtaining these scores can receive assistance in the English Department through the English Language Institute.
- 14. Two letters of reference.

Additional considerations given to the following:

- Academic history with patterns and trends indicating potential for academic success.
- The functional abilities required to be successful in the nursing program, with reasonable accommodation. See **Core Performance Standards**.
- Eligibility for licensure. Completion of the nursing program does not guarantee eligibility to take licensure examination. Refer to the Nurse Practice Act in the state in which you anticipate licensure. In Missouri refer to Sections 335.046 and 335.066 at www.ecodev.state.mo.us/pr/nursing.
- Number of credit hours taken at Central Missouri State University.

Students will be categorized in two classifications for consideration for admission to the nursing program:

- Students who have taken all nursing prerequisite courses at CMSU; and
- Students who have transferred credit for one or more nursing prerequisite course(s) from another institution.

Nursing prerequisite courses are CHEM 1104, BIOL 2401, BIOL 2402, BIOL 3611, PSY 1100, SOC 1800, D&N 3340, NUR 1700, NUR 2000, NUR 3312. Grade point averages are a determining factor in selection.

#### **Direct Admission Policy:**

Upon admission to the University, a student who meets the following criteria may be guaranteed direct admission to the nursing program:

- Admitted to CMSU as freshmen with ACT 22 or higher and a high school CGPA of 3.0.
- 2. Declared nursing as a major.
- Maintains a 3.0 GPA at CMSU at the end of sophomore year
- Meet criteria published in the CMSU undergraduate catalog and Department of Nursing Undergraduate Handbook as of the date of formal application.
- Direct admission is limited to 30 students per semester based on admission date to CMSU.
- Students who are directly admitted have the same period of time to complete their degree program as other CMSU students.
- Direct Admission nursing students complete the nursing application by the set deadlines like all other nursing students.
- A direct Admission nursing student may lose his/her guaranteed place in the nursing program if he/she falls below the specified standards.

# Core Performance Standards for Admission and Progression

# FUNCTIONAL ABILITY: STANDARD: SOME EXAMPLES OF NECESSARY ACTIVITIES (Not Inclusive)

**Critical thinking**: Critical thinking ability sufficient for clinical judgment.: Identify cause-effect relationships in clinical situations, develop nursing care plans. Interpret variations in vital signs, lab values, etc.

Interaction: Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of socioeconomic and cultural backgrounds. : Establish rapport with patients/clients and colleagues. Works as a team member. Communication: Communication abilities sufficient for interaction with others in verbal and written form. : Explain treatment procedures, initiate health teaching, document and interpret nursing actions and patient/client responses. Motor skills: Gross and fine motor abilities sufficient to provide safe and effective nursing care. Move around work area and within confined spaces. Calibrate and use equipment, position clients, insert catheters, injections. Sensory/Perceptual: Auditory/visual and tactile ability sufficient to monitor and assess health needs. : Hear monitor alarm, (IV alarm, etc.), emergency signals, auscultatory sounds, cries for help.

#### **Re-Application for Admission**

A student re-applying for admission to the nursing program within 6 months to a year of the initial application is not required to obtain a new physical exam or speech/hearing

A student re-applying for admission to the nursing program over a year's time, but within 18 months of the initial application, <u>is required</u> to obtain a repeat physical exam with only those tests being repeated that are deemed necessary by the physician or nurse practitioner. Students need not repeat speech/hearing exam.

A student re-applying for admission to the nursing program over 18 months from the initial application <u>is required</u> to obtain a repeat physical exam and a repeat speech/hearing exam.

Students in non-compliance with these requirements will be referred to the Health Committee.

It is the responsibility of the applying student to provide documentation of compliance with these health requirements by the time of admission. Students not in compliance with these requirements will be referred to the Health Committee.

The Health Committee recommends that each student assume responsibility for personal health maintenance. An annual health assessment is strongly encouraged. Students are required to maintain insurance coverage for illness and accidents throughout their time in the program.

### Requirements for Progression in the Nursing Program

- A student must make a minimum gade of C in all nursing courses to progress in the nursing program. A student receiving a grade lower that C in any nursing course may repeat that course only one time.
- 2. A student who receives a D or F in a nursing course will be suspended from the program and is required to seek readmission in order to repeat the course. The readmission process is initiated by the student with the instructor whose course was failed. Completion and filing of the Request for Readmission Form is the responsibility of the student. If a student is not readmitted within a year, that student may be required to repeat all courses within the major.
- A student receiving more than one D and/or F in a same course with a nursing prefix will not be allowed to reapply.
- Students who withdraw from the nursing program must follow the Nursing Department's <u>Withdrawal Policy</u> contained herein and compete with other students for readmission into the program. Students may be

- readmitted only once into the nursing program based on the decision of the Admission and Progression Committee.
- 5. Requirements for readmission to the program are all those set forth in this policy as well as those contained in the current Student Handbook for the Department of
- 6. Students must be successful in passing each course in a particular semester in the program to progress to the next

#### Withdrawal Policy

Students within the program who withdraw from any nursing course are automatically suspended from the program and must follow the Nursing Department's Readmission Policy in order to be readmitted. Students who withdraw from a nursing course and do not follow the requirements of the Nursing Department Withdrawal Policy as stated below will not be considered for readmission.

Students who withdraw from any nursing course must compete with other students for readmission to the program. Students may be readmitted only once to the nursing program based on the decision of the Admissions and Progression Committee.

Students who have been attending meetings of a nursing course and wish to withdraw should:

#### Clinical/practicum courses

- 1. Notify their instructor in writing of their desire to withdraw and their reason for this decision.
- 2. Meet with the chair.
- 3. Follow the University process for withdrawal (See CMSU's University Calendar and Handbook or Catalog for information).

#### Theory courses

- 1. Notify their instructor in writing of their desire to withdraw and their reason for this decision.
- 2. Follow the university policy for withdrawal (See CMSU's University Calendar and Handbook or Catalog for information).

Students are not eligible to withdraw from a nursing clinical/ practicum course when they have received their final grade from the instructor. Students who receive a final grade of D or F from the instructor and withdraw from the course will have their erroneous "W" changed to the appropriate failing grade by the Department of Nursing.

Students who have not attended classes in the semester they wish to withdraw may withdraw from nursing courses by following the University Withdrawal Policy.

#### Transfer into the Nursing Major

Transfer of upper-level nursing credit will be considered according to the following procedure:

- 1. Students will meet the General Education requirements as listed in the current University Catalog.
- 2. Only students in good standing at a nationally accredited baccalaureate nursing program are eligible for transfer. Credits will be evaluated and allowed in accordance with current CMSU and Department of Nursing policy.
- 3. Evaluation of each transfer student will be made within the Department of Nursing on an individual basis.
- 4. Students will take a minimum of 40 semester hours of upper-level courses, with a minimum of 30 semester hours in the nursing major at CMSU. Those courses required to be taken through CMSU in the nursing major

- are NUR 4420. NUR 4421. NUR 4620. NUR 4621.
- 5. Students will apply for admission to the Department of Nursing and be subject to the regular program admission policy. In addition, the following evaluation process will be followed:
  - a) Credit for nursing courses will be based on a review of content, course description, syllabi, and catalog description,
    - (1) If content is basically the same, the Nursing Department Transfer Committee may approve the course for nursing credit. The credit hours approved may be at the maximum credit hour allocation for the CMSU nursing course.
    - (2) If the content is fairly similar, the Nursing Department Transfer Committee may approve credit and in addition require NUR 4000, Special Projects (2-6 credits).
    - (3) Only discrete courses in the content areas of research and ethics, pharmacology and observation and assessment will be considered for transfer as meeting the departmental required courses in these areas.
- 6. The student will have the chair or dean from the nursing school they are transferring from write a letter to the chair of CMSU's Department of Nursing stating they are a student in good standing.
- 7. All prospective transfer students will be interviewed by the department Chairperson.

#### Degree Program for Students Holding the R.N.

- 1. Credits from accredited nursing programs will be evaluated and allowed in accordance with current CMSU
- 2. Students will meet the General Education requirements as listed in the current University Catalog for nursing
- 3. Evaluation of each R.N. student will be made within the Department of Nursing to determine placement in the program.
- Students will take a minimum of 40 semester hours of upper-level courses, with a minimum of 30 semester hours in the nursing major through CMSU. Those required are NUR 3312, NUR 4010, NUR 4011, NUR 4050, NUR 4420, NUR 4421, NUR 4620, NUR 4621, ICAP 4111, nursing electives, and service learning.
- 5. Students will apply for admission to the Department of Nursing and be subject to the regular program admission policy. In addition, the following criteria will be followed:
  - a. Applicants must have a current license to practice nursing in Missouri.
  - Credit for non-college nursing courses may be applied to the nursing major upon successful performance on challenge examinations. A maximum of 30 semester hours of special credit may be awarded by challenge.

#### **Special Expenses**

- 1. Additional expenses for nursing majors include: uniforms, caps, shoes, name pin, watch with second hand, stethoscope, sphygmomanometer, health insurance, background check, hepatitis B vaccination and other vaccinations and blood tests, selected books and testing expenses.
- 2. Nursing students must have access to transportation upon admission to the nursing program and be certified in 2-person cardiopulmonary resuscitation for health care providers according to CNE orientation manual.
- 3. During the semester of anticipated graduation, the nursing school pin, graduation pictures and invitations are additional expenses.

#### Kansas City Experience

Theory and clinical learning occur in Kansas City during the last year. These experiences make possible exposure to nursing practice in both rural and urban settings.

#### **NURSING Functional Major, B.S. Degree**

(43 000133)

|              |                 | \  | /             |            |   |               |
|--------------|-----------------|--|---------------|------------|---|---------------|
| ELINCTI      | ONIAL MA        | JOR REQUIREMENTS                           |               |            |   | . Hours<br>80 |
| NUR          | 1700            | Intro. to Professional Nursing2            | NUR           | 4311       |   |               |
| NUR          | 2000            | Nursing Concepts for Health                | NUK           | 4311       | Advanced Concepts of Adult  Nursing Practicum | 2             |
| NUK          | 2000            | Promotion & Maintenance                    | NILID         | 4420       |   |               |
| NUR          | 3010            |  | NUR           | 4420       | Advanced Concepts of Community/               |               |
|              |                 | Pharmacology                               | NILID         | 4404       | Mental Health Nursing                         |               |
| NUR          | 4010            | Research in Nursing2                       | NUR           | 4421       | Advanced Concepts of Community/               |               |
| NUR          | 4011            | Professional Issues                        | NILID         | 4000       | Mental Health Nursing Pract                   |               |
| A 11 11 15   | 0440            | & Ethics in Nursing2                       | NUR           | 4620       | Nursing Management                            |               |
| NUR          | 3110            | Concepts of Nursing I5                     | NUR           | 4621       | Nursing Management Practicum                  |               |
| NUR          | 3111            | Concepts of Nursing I Practicum2           | BIOL          | 2401       | Anatomy & Physiology I                        |               |
| NUR          | 3300            | Concepts of Altered Health5                | BIOL          | 2402       | Anatomy & Physiology II                       |               |
| NUR          | 3312            | Observ. & Assess. in Nursing3              | BIOL          | 3611       | Microbiology                                  |               |
| NUR          | 3320            | Concepts of Nursing II4                    | D&N           | 3340       | Nutrition                                     |               |
| NUR          | 3321            | Concepts of Nursing II Practicum4          |               | es from th | 0   |               |
| NUR          | 3322            | Technology Applications in Nursing2        | NUR           | 2020       | Health: Women's Perspective2                  |               |
| NUR          | 4210            | Advanced Concepts of Nursing               | NUR           | 4020       | Grief & Loss2                                 |               |
|              |                 | in Family Health3                          | NUR           | 4030       | Human Sexuality2                              |               |
| NUR          | 4211            | Advanced Concepts of Nursing               | NUR           | 4040       | Nursing Informatics2                          |               |
|              |                 | in Family Health Practicum2                | NUR           | 4405       | Aging of Self & Others2                       |               |
| NUR          | 4310            | Adv. Concepts of Adult Nursing2            |               |            |   |               |
| MINOR        | NOT REQ         | UIRED                                      |               |            |   |               |
| <b>GENER</b> | AL EDUC         | ATION REQUIREMENTS (page 49)48 s.h. (In tl | he functional | major, BI  | OL 2401 and BIOL 2402 are allowed             |               |
| to fulfill   | 4 s.h. of [     | Div. II A)                                 |               |            |   | 44            |
| CHEM         | 1104            | Div. II A (required)4                      | SOC           | 1800       | Div. II B (required)                          | 3             |
| PSY          | 1100            | Div. II B (required)3                      | ICAP          | 4111       | Div. IV (required)                            |               |
|              | M TOTAL         | ,  |               |            | , , ,   | 124           |
| BALLETINAL I | n/ι 1 ( ) 1 Δ ( |  |               |            |   | 1.77          |

#### **General Theory**

NUR 2000 Nursing Concepts for Health Promotion and Maintenance (3) Overview of nursing concepts essential for promoting and maintaining health from birth to death. Physiological and psychosocial changes necessary for the promotion and maintenance of health will be explored and observed. Open to nonnursing majors. Prerequisites: PSY 1100, BIOL 2402 and D&N 3340.

**NUR 2020 Health: The Women's Perspective (2)** An introduction to the physiological, psychosocial, and economic factors that historically have impacted upon the health of women from selected cultural backgrounds with emphasis upon major health care issues currently affecting women. Open to nursing and nonnursing majors.

NUR 3010 Pharmacology (3) Effect of chemicals used in the prevention, diagnosis and treatment of disease along with an introduction to concepts of calculation of pharmacological agents. Prerequisites: CHEM 1104, NUR 3300, and admission to the Nursing Program for majors. Registered Nurses returning for their baccalaureate degree and Athletic Training majors are exempt from the NUR 3300 prerequisite. Athletic Training majors are exempt from the pharmacotherapeutics calculation exam.

**NUR 4000 Special Projects in Nursing (1-3)** Investigation of contemporary problems and issues in nursing by selected individuals or groups.

NUR 4010 Research in Nursing\* (2) An overview of the

research process designed to introduce the student to the intellectual skills needed to identify, conduct, report, and critique nursing research studies. Basic statistical processes are included. Prerequisite: Admission to the Nursing Program or RN standing. \*Not available for graduate credit.

NUR 4011 Professional Issues and Ethics in Nursing\*

(2) An overview of professional issues and ethics in nursing. Special emphasis on trends in health related legislation, credentialing, and economics and their impact on the nursing profession. Prerequisite: Admission to the Nursing Program or RN standing. \*Not available for graduate credit.

**NUR 4020 Grief and Loss (2)** A seminar designed to assist various pre-professionals to understand and deal with loss and death either in a professional capacity or on a personal basis. Open to nursing and nonnursing majors.

**NUR 4030 Human Sexuality (2)** Current theory regarding the biological, cultural, and behavioral parameters of human sexuality. Open to nursing and nonnursing majors.

**NUR 4040 Nursing Informatics (2)** Introduces the student to the synergistic use of nursing, information and computer sciences unique to nursing informatics. Explores impact on nursing practice roles and quality of patient care. Prerequisite: meeting general education requirement for technology.

**NUR 4050 Concepts and Theories for Role Transition\* (6)** Nursing concepts and theories for role transition and outcomes-based learning for the returning registered nurse. Prerequisite: Registered Nurse License. \*Not available for

graduate credit.

#### Maternal and Child Health

NUR 4210 Advanced Concepts of Nursing in Family Health\* (3) Application of nursing process with emphasis on nursing science applicable to the family, including women's and children's health care issues. Prerequisites: NUR 3321 and NUR 3322; may be taken concurrently with NUR 4211, NUR 4310 and NUR 4311. \*Not available for graduate credit. An additional fee is associated with this course.

NUR 4211 Advanced Concepts of Nursing in Family.

NUR 4211 Advanced Concepts of Nursing in Family Health Practicum\* (2) Application of nursing process with emphasis on nursing science applicable to the family, including women's and children's health care issues. Prerequisite: NUR 4210 or concurrently. \*Not available for graduate credit.

#### **Fundamentals of Nursing**

**NUR 3110 Concepts of Nursing I (5)** An introduction to the basic concepts and principles of nursing with emphasis on nursing process and communication. Prerequisite: admission into the nursing program; may be taken concurrently with **NUR 3312 and NUR 3111**.

NUR 3111 Concepts of Nursing I Practicum (2) Application of the basic concepts and principles of nursing with emphasis on the nursing process and communication in health care settings. Prerequisite: NUR 3110 and NUR 3312 or concurrently. An additional fee may be associated with this course.

#### Medical-Surgical Nursing

**NUR 3300 Concepts of Altered Health (5)** An examination of common pathophysiological alterations in human structure and function across the lifespan. Prerequisites: BIOL 2402, BIOL 3611.

NUR 3312 Observation and Assessment in Nursing (3) Professional nursing observation and physical assessment of the individual in the health care delivery system. Concurrent arranged lab is required. Prerequisite: NUR 3111 or concurrently. An additional fee is associated with this course.

**NUR 3320 Concepts of Nursing II (4)** Continuation of nursing process with emphasis on nursing science applicable to individuals experiencing chronic alterations in health. Prerequisite: NUR 3300.

**NUR 3321 Concepts of Nursing II Practicum (4)** Continued application of nursing process with emphasis on nursing science applicable to individuals experiencing chronic alterations in health. Prerequisite: NUR 3300.

**NUR 3322 Technology Applications in Nursing (2)** A performance based course focusing upon current clinical technology applications and their theoretical rationales in nursing. Prerequisite: NUR 3320 or concurrently; must be taken concurrently with NUR 3321. An additional fee is associated with this course.

NUR 4310 Advanced Concepts of Adult Nursing\* (2)
Continuation of nursing process with emphasis on nursing science applicable to acutely and critically ill adults.
Prerequisites: NUR 3321 and NUR 3322; may be taken concurrently with NUR 4210, NUR 4211 and NUR 4311. \*Not available for graduate credit.

**NUR 4311 Advanced Concepts of Adult Nursing** 

**Practicum\* (3)** Continued application of nursing process with emphasis on nursing science applicable to acutely and critically ill adults. Prerequisite NUR 4310 or concurrently; may be taken concurrently with NUR 4210 and NUR 4211. An additional fee may be associated with this course. \*Not available for graduate credit.

#### **Community and Mental Health Nursing**

**NUR 4405 Aging of Self and Others (2)** Seminar concerning an individual's aging in our society. Focus is on how one perceives and adapts to the aging of self and others. Open to nursing and nonnursing majors.

NUR 4420 Advanced Concepts of Community/Mental Health Nursing\* (5) Continuation of nursing process with emphasis on nursing science applicable to individuals, families, groups, and communities experiencing physical and psychosocial alterations or potential alterations in health. Prerequisites: SOC 1800 and NUR 4311 or NUR 4050 or concurrently. \*Not available for graduate credit.

NUR 4421 Advanced Concepts of Community/Mental Health Nursing Practicum\* (4) Continued application of nursing process with emphasis on nursing science applicable to individuals, families, groups, and communities experiencing physical and psychosocial alterations or potential alterations in health. Prerequisites: NUR 4420 or concurrently; may be taken concurrently with NUR 4620 and NUR 4621. An additional fee may be associated with this course. \*Not available for graduate credit.

#### **Professional Theory**

NUR 4620 Nursing Management\* (3) Overview of the functions of management necessary for assuming management roles in health care settings. Prerequisites: NUR 4311 or NUR 4050 or concurrently. \*Not available for graduate credit.

NUR 4621 Nursing Management Practicum\* (3) Application of the management process to groups of clients and health care providers with integration of the nursing process.

Prerequisite: NUR 4620 or concurrently. \*Not available for graduate credit.

NUR 1700 Introduction to Professional Nursing (2) Introduces the learner to the outcomes assessment curriculum utilized by the Department of Nursing.

#### **Integrative Studies Capstone**

ICAP 4111 Socio-Economic Factors Impacting Health\* (3) Examines selected socio-economic issues and their impact on health. \*Not available for graduate credit.

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# **Safety Sciences**

In the Department of Safety Sciences, the second digit in the course number stands for the following: 0--General Safety, 1--Industrial Hygiene, 2--Transportation Safety, 3--Systems Safety, 4--Industrial Safety, 5--Loss Control, 7--Security, 8--Fire Science, 9--Individual Study and Research.

### SAFETY MANAGEMENT Major, B.S. Degree

(43 000243)

The graduate with a Bachelor of Science degree in Safety Management will use the knowledge and skills obtained in the programs to:

- Demonstrate an awareness of legal, professional and ethical responsibilities
- Understand the importance of continuous professional development
- Possess knowledge of contemporary Safety Science and Technology issues faced in local, national and global contexts
- Identify managerial solutions using business principle models
- Identify behavioral solutions to occupational safety and health problems.

Admission Statement: Students seeking admission to this program must have a minimum 2.20 cumulative grade-point average and have completed a semester each of college algebra (or higher math), chemistry with lab, and physics, and achieve a grade-point of 2.00 averaged over the three courses. These courses meet basic program assessment outcomes in science and math.

Application should be made when the student has completed more than 30 semester hours and has at least 30 semester hours remaining. An assessment examination must be completed during the last semester of course work. Students may apply to the program by obtaining a degree audit from the Office of Academic Advisement and submitting it to the department for approval.

|                |           |                                     |      |      | Sem. Hours                         |  |
|----------------|-----------|-------------------------------------|------|------|------------------------------------|--|
| MAJOR          | REQUIRE   | MENTS                               |      |      | 54                                 |  |
| SAFE           | 3000      | Prin. of Accident Causation & Prev3 | SAFE | 3430 | Industrial Hazard Control3         |  |
| SAFE           | 3070      | Psychology & Philosophy of Safety3  | SAFE | 4425 | Safety & Health Legislation        |  |
| SAFE           | 4000      | Ergonomics in Safety & Health3      |      |      | & Standards3                       |  |
| SAFE           | 4010      | Accident Investigation3             | SAFE | 4430 | Workers Compensation Legislation3  |  |
| SAFE           | 4020      | Legal Aspects of Safety & Health3   | SAFE | 4435 | Environmental Compliance3          |  |
| SAFE           | 4035      | Safety Program Management3          | SAFE | 4510 | Loss Control3                      |  |
| SAFE           | 3120      | Introduction to Industrial Hygiene3 | SAFE | 4520 | Safety & Risk Analysis3            |  |
| SAFE           | 4140      | Safety & Health Laboratory3         | SAFE | 4940 | Introductory Quantitative Methods3 |  |
| SAFE           | 4215      | Transportation & Storage of         | SAFE | 4990 | Intern. in Safety Sciences, 3 or   |  |
|                |           | Hazardous Materials3                | SAFE | 4910 | Spec. Proj. in Safety Sciences, 33 |  |
| SAFE           | 4360      | Introduction to Systems Safety3     |      |      |                                    |  |
| MINOR F        | REQUIRE   | MENTS                               |      |      | 18-22                              |  |
| GENER/         | AL EDUCA  | TION REQUIREMENTS (page 49)         |      |      | 48                                 |  |
| MATH           | 1111      | Div. I C (required)3                | PSY  | 1100 | Div. II B (required)3              |  |
| PHYS           | 1103      | Div. II A (required)3               | ICAP | 4115 | Div. IV B (required)3              |  |
| CHEM           | 1104      | Div. II A (required)4               |      |      |                                    |  |
| FREE ELECTIVES |           |                                     |      |      |                                    |  |
| MINIMUI        | M TOTAL . |                                     |      |      | 124                                |  |

#### **SAFETY Minor for a Bachelors Degree**

(CMSU does not confer teacher certification for this minor)

Students seeking a Safety Management Major, B.S. Degree are restricted from pursuing a Safety Minor. (000193)

| MINOR F | REQUIRE | MENTS                               |      |      | Sem. F                           |   |
|---------|---------|-------------------------------------|------|------|----------------------------------|---|
| SAFE    | 3000    | Prin. of Accident Causation & Prev3 | SAFE | 4425 | Safety & Health Legislation      |   |
| SAFE    | 3015    | Emergency Preparedness3             |      |      | & Standards                      | 3 |
| SAFE    | 4010    | Accident Investigation3             | SAFE | 4430 | Workers Compensation Legislation | 3 |
| SAFE    | 4035    | Safety Program Management3          | SAFE | 1800 | Introduction to Fire Science     | 3 |
| SAFE    | 3120    | Introduction to Industrial Hygiene3 |      |      |                                  |   |

#### FIRE SCIENCE Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000177)

|       |         |                                     |      |      |                            | Sem. Hours |
|-------|---------|-------------------------------------|------|------|----------------------------|------------|
| MINOR | REQUIRE | MENTS                               |      |      |                            | 24         |
| SAFE  | 4020    | Legal Aspects of Safety & Health3   | SAFE | 4830 | Fire Investigation         | 3          |
| SAFE  | 1800    | Introduction to Fire Science3       | SAFE | 4850 | Industrial Fire Protection | 3          |
| SAFE  | 2800    | Fire Prevention & Protection3       | CMGT | 3330 | Bldg. Codes & Code Adm     | 3          |
| SAFE  | 4800    | Water & Sprinkler Systems Analysis3 |      |      | -                          |            |
| SAFE  | 4810    | Fire Extinguishing & Alarm Sys 3    |      |      |                            |            |

# **SECURITY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000185)

|         |         |                             | (000100) |      |                                |  |
|---------|---------|-----------------------------|----------|------|--------------------------------|--|
|         |         |                             |          |      | Sem. Hours                     |  |
| MINOR F | REQUIRE | MENTS                       |          |      | 21                             |  |
| SAFE    | 1700    | Introduction to Security3   | ACCT     | 2101 | Principles of Financial Acct3  |  |
| SAFE    | 3700    | Security Org. & Management3 | MGT      | 1300 | Introduction to Business3      |  |
| SAFE    | 4710    | Security Technology3        | BLAW     | 2720 | Legal Environment of Business3 |  |
| SAFF    | 4830    | Fire Investigation 3        |          |      |                                |  |

# OCCUPATIONAL SAFETY AND HEALTH Functional Major, B.S. Degree (43 000226)

The graduate with a Bachelor of Science degree in Occupational Safety and Health will use the knowledge and skills obtained in the programs to:

- Demonstrate an awareness of legal, professional and ethical responsibilities
- Understand the importance of continuous professional development
- Possess knowledge of contemporary Safety Science and Technology issues faced in local, national and global contexts
- Identify technical solutions to occupational safety and health problems
- Identify scientific solutions to the mitigation of hazardous exposures.

Admission Statement: Students seeking admission to this program must have a minimum 2.20 cumulative grade-point average and have completed a course in college algebra (or higher math), CHEM 2650, and PHYS 1101, with a minimum 2.00 grade-point average for the three courses combined. These three courses meet basic program assessment outcomes in science and math. Application should be made when the student has completed more than 30 semester hours and has at least 30 semester hours of course work remaining. An assessment examination must

be completed during the last semester of course work. Students may apply upon completion of the above requirements to the program by obtaining a degree audit from the Office of Academic Advisement and submitting it to the department for approval.

#### Accreditation:

The Occupational Safety and Health program is accredited by the Applied Science Accreditation Commission of ABET located at 111 market Place, Suite 1050, Baltimore, MD 21202-4012; phone 410-347-7700.

|         |              |   |              |           | Sem. Hours                         |
|---------|--------------|---|--------------|-----------|------------------------------------|
| FUNCTI  | ONAL MA      | JOR REQUIREMENTS                            |              |           | 68                                 |
| SAFE    | 3000         | Prin. of Accident Causation & Prev3         | SAFE         | 4430      | Workers Compensation Legislation3  |
| SAFE    | 4000         | Ergonomics in Safety & Health3              | SAFE         | 4435      | Environmental Compliance3          |
| SAFE    | 4010         | Accident Investigation3                     | SAFE         | 4850      | Industrial Fire Protection3        |
| SAFE    | 4020         | Legal Aspects of Safety and Health3         | SAFE         | 4940      | Introductory Quantitative Methods3 |
| SAFE    | 4035         | Safety Program Management3                  | SAFE         | 4990      | Intern. in Safety Sciences6        |
| SAFE    | 3120         | Introduction to Industrial Hygiene3         | BIOL         | 2401      | Anatomy & Physiology I4            |
| SAFE    | 4140         | Safety & Health Laboratory3                 | CHEM         | 2650      | Elem. Organic & Biochemistry5      |
| SAFE    | 4360         | Introduction to Systems Safety3             | PHYS         | 1101      | College Physics I4                 |
| SAFE    | 3430         | Industrial Hazard Control3                  | PHYS         | 1102      | College Physics II4                |
| SAFE    | 4425         | Safety & Health Legislation                 | MATH         | 1131      | Calculus for Business & Econ3      |
|         |              | & Standards3                                |              |           |                                    |
| *MINOR  | NOT REC      | QUIRED                                      |              |           |                                    |
| GENER/  | AL EDUC      | ATION REQUIREMENTS (page 49)48 s.h. (In the | e functional | major, Pl | HYS 1101 and PHYS 1102 are         |
| allowed | to fulfill 3 | s.h. of Div. II A)                          |              |           | 45                                 |
| MATH    | 1111         | Div. I C (required)3                        | PSY          | 1100      | Div. II B (required)3              |
| CHEM    | 1104         | Div. II A (required)4                       | ICAP         | 4115      | Div. IV B (required)3              |
| EDEE E  | LECTIVES     |   |              |           | 11                                 |
|         |              |   |              |           | II                                 |
| MINIMU  | M TOTAL      |   |              |           | 124                                |

<sup>\*</sup>Students wishing to pursue the masters program in Industrial Hygiene should minor in Chemistry. The requirement for CHEM 2650 and CHEM 1104 will be met by the Chemistry Minor.

# **CRISIS & DISASTER MANAGEMENT Major, B.S. Degree**

The graduate with a Bachelor of Science degree in Crisis and Disaster Management will use the knowledge and skills obtained in the programs to:

- Demonstrate an awareness of legal, professional and ethical responsibilities
- Understand the importance of continuous professional development
- Possess knowledge of contemporary Safety Science and Technology issues faced in local, national and global contexts
- Describe the four phases of emergency management: preparedness, mitigation, response, and recovery
- Outline the roles and responsibilities of the private sector, public sector, and non-governmental organizations in the state and local emergency response plans
- Use technological tools to organize information, communicate, and respond to crisis and disaster events.

|              |          | ASTER MANAGEMENT, B.S. Degree         | Sem. Hours<br>45                                   |
|--------------|----------|---------------------------------------|--|
| CDM          | 3000     | Crisis & Disaster Management3         | CDM 4900 Directed Studies: Technology App3         |
| CDM          | 3400     | Community Mitigation and Recovery 3   | CDM 4910 Special Projects: Field Exercises3        |
| CDM          | 4200     | Disaster Management Technology 3      | CDM 4990 Internship in Crisis & Disaster Mgmt. 3-6 |
| CDM          | 4800     | Integrated Emergency Management3      | Departmentally approved management electives6      |
| CDM          | 4400     | Research Issues in C&DM3              |  |
|              |          |                                       |  |
| <b>EMERG</b> | ENCY MA  | NAGEMENT OPTION, (000248)             |  |
| SAFE         | 3015     | Emergency Preparedness3               | Departmentally approved communication elective3    |
| CDM          | 3035     | Emergency Response3                   | Departmentally approved technical elective3        |
| CDM          | 4035     | Disaster and Society3                 |  |
| HAZARI       | DOUS MA  | TERIALS OPTION, B.S. Degree (000250)  |  |
| CDM          | 3225     | Hazardous Materials Emer. Response .3 | Departmentally approved communication elective3    |
| CDM          | 4245     | Managerial Issues in Haz. Materials3  | Departmentally approved technical elective3        |
| SAFE         | 4215     | Trans. and Storage of Haz. Materials3 |  |
| BUSINE       | SS CONT  | INUITY OPTION, B.S. Degree (000251)   |  |
| CDM          | 3715     | Business Continuity Planning3         | Departmentally approved communication elective3    |
| SAFE         | 4720     | Personnel and Information Security3   | Departmentally approved technical elective3        |
| CDM          | 4745     | Crisis Management3                    |  |
| MINOR I      | REQUIRE  | MENTS                                 | 18-25  |
| GENER/       | AL EDUC  | ATION REQUIREMENTS (page 49)          | 48   |
| FREE EI      | LECTIVES | 3                                     | 6-13   |
| MINIMU       | M TOTAL  |                                       |  |
|              |          |                                       |  |

# **DRIVER EDUCATION**

(Endorsement to teach driver education in grades 9-12. Teacher must be certificated in another elementary, middle school or secondary teaching field.)

|          |                 | •                                 |            | •        | Sem. Hours                      |  |
|----------|-----------------|-----------------------------------|------------|----------|---------------------------------|--|
| MINOR RI | <b>EQUIRE</b> I | MENTS                             |            |          | 12                              |  |
| DrEd     | 2010            | Introduction to Safety Education3 | Skills & C | Competer | ncies3                          |  |
| DrEd     | 2020            | Driver Task Analysis3             | DrEd       | 2040     | Developing Classroom Knowledge3 |  |
| DrEd     | 2030            | Dev. Vehicle Operation            |            |          |                                 |  |

## **General Safety**

SAFE 2010 Safety: A Personal and Societal Focus (3) A critical examination of the role of safety in today's world.

Enhances the student's critical thinking processes so the learner can analyze variables influencing risks associated with life's activities.

SAFE 3000 Principles of Accident Causation and **Prevention (3)** Traces the development of the safety movement, provides a background useful in handling problems and procedures of typical school, industrial, transportation, civil defense, and emergency safety

SAFE 3015 Emergency Preparedness (3) Legal responsibilities of environmental and human protection. An examination of staff functions and responsibilities during major emergencies, resulting from human errors and natural disasters, as they influence human and environmental loss potentials.

SAFE 3070 Psychology and Philosophy of Safety (3) Problems of behavior, causes of accidents, and the application of principles of psychology, philosophy, and

ethics in the development and management of safe behavior on and off the job.

**SAFE 4000 Ergonomics in Safety and Health (3)** An introduction into the role and application of ergonomics in a comprehensive safety program. Prerequisite: SAFE 3000 or equivalent.

**SAFE 4010 Accident Investigation (3)** Fundamentals and techniques of investigating accidents. Prerequisite: SAFE 3000 or SAFE 3120.

SAFE 4015 School Safety, Security and Crisis Management (3) Provides school personnel with current information addressing school safety and security needs, including an analysis of threat identification, violence prevention, safety plans, and crisis response.

**SAFE 4020 Legal Aspects of Safety and Health (3)** An investigation of the legal problems confronting the safety and health specialist. Prerequisite: SAFE 3000.

**SAFE 4035 Safety Program Management (3)** Examination of theory and practices of safety and health management. Includes planning programs, contemporary safety and health management practices, and programmatic impact of organizational theory. Prerequisite: 21 semester hours of SAFE courses.

# Industrial Hygiene

SAFE 3120 Introduction to Industrial Hygiene (3) The recognition, evaluation and control of workplace health hazards

SAFE 4140 Safety and Health Laboratory (3) A lab course using instrumentation commonly used in the evaluation of the workroom environment and equipment for safety. Prerequisites: SAFE 3120 and SAFE 3430, or equivalent. An additional fee is associated with this course.

SAFE 4150 Noise Measurements (2) Physics of sound, measurement and control of noise. Laboratory required. Prerequisite: one year of college physics or equivalent. SAFE 4160 Industrial Ventilation for Environmental Safety and Health (3) Industrial ventilation systems designed

Safety and Health (3) Industrial ventilation systems designed to control health and safety hazards in the work environment with emphasis given to the design of local exhaust systems. Prerequisite: SAFE 3120 or equivalent.

# **Transportation Safety**

SAFE 4215 Transportation and Storage of Hazardous Materials (3) A study of the state-of-the-art of safe methods for the transportation and storage of hazardous materials. Prerequisite: SAFE 3000 or CDM 3000 or equivalent. SAFE 4250 Traffic Engineering (3) Planning, design and operation of effective and efficient traffic movement systems. Various types of traffic studies, traffic control techniques and devices, traffic flow patterns, street lighting and street and parking are presented and discussed. Students participate in field studies.

**SAFE 4260 Management of Fleet Safety Programs (3)** The role and responsibilities transportation officials have in the administration and operation of a motor fleet safety program; the study of U.S. Department of Transportation Regulations.

## **Systems Safety**

SAFE 4360 Introduction to System Safety (3) Techniques and concepts of hazard control within the constraints of operational effectiveness, time, and cost attained through the specific application of management and scientific principles throughout all phases of a system life cycle. Prerequisite: SAFE 3000 or equivalent.

## **Industrial Safety**

**SAFE 3430 Industrial Hazard Control (3)** The techniques for the control of mechanical, electrical and chemical hazards. The Occupational Safety and Health Standards

which interface with these areas will also be included. Prerequisite: SAFE 3000 or SAFE 3120.

SAFE 4425 Safety and Health Legislation and Standards (3) A comprehensive study of legislation and standards designed to protect the worker. Prerequisite: SAFE 3000. SAFE 4430 Workers Compensation Legislation (3) An overview of the principles and statutes that govern workers compensation as they apply to the industrial setting. Prerequisite: SAFE 3000.

**SAFE 4435 Environmental Compliance (3)** Comprehensive study of federal and state environmental legislation and standards to protect the health and safety of citizens. Prerequisite: SAFE 3000.

## **Loss Control**

SAFE 4510 Loss Control (3) Provides a background in loss control by investigating professional safety management. Emphasis is placed on incident recall, management's role in loss control, total job observation, total job analysis, and supervisory training. Techniques of implementing a total loss control program are explored. Prerequisite: SAFE 3000. SAFE 4520 Safety and Risk Analysis (3) Identification of safety risks and analytical treatment of those risks in various work settings. Prerequisites: SAFE 3000 or equivalent.

#### Security

**SAFE 1700 Introduction to Security (3)** A survey of the role of security in society with emphasis on industrial and government security.

**SAFE 2700 Physical Security Systems (3)** Physical security hardware as applied in business, industry, and government.

**SAFE 3700 Security Organization and Management** (3) Organization and management of security programs in business, industry, and government.

**SAFE 4700 Special Security Problems (3)** An overview of security as applied to contemporary situations in business, industry, and government.

**SAFE 4710 Security Technology (3)** A survey of security detection, including electromechanical and electronic systems. Future applications of technology are discussed. Prerequisite: college level math course.

SAFE 4720 Personnel and Information Security (3) Methods used in screening personnel and safeguarding information.

#### Fire Science

**SAFE 1800 Introduction to Fire Science (3)** An overview of the principles of fire protection and fire prevention as they apply to the industrial setting. Emphasis on the chemistry of fire, classification of fires, factors contributing to fires, identification of hazardous materials, techniques of fire prevention, and considerations in fire protection.

**SAFE 2800 Fire Prevention and Protection (3)** Provide a background in fire related codes, laws, and ordinances. Emphasis on the implementation of prevention, protection, investigation, and inspection programs. Prerequisite: SAFE 1800

SAFE 4800 Water and Sprinkler Systems Analysis (3) Water supply, how to determine quantity, and basic fire service water requirements. An in-depth study of the design, installation, operations and maintenance of sprinkler systems that use water. Prerequisite: MATH 1111 or equivalent. SAFE 4810 Fire Extinguishing and Alarm Systems (3) Basic types of extinguishing systems, other than sprinkler systems, and their use. Fire alarm systems, their use, installation and components.

**SAFE 4830 Fire Investigation (3)** Fire investigation techniques with emphasis on fire causation, equipment, evidence, and reporting. Prerequisite: SAFE 1800 or equivalent.

# 74 Safety Sciences

**SAFE 4850 Industrial Fire Protection (3)** The recognition, control or elimination of fire hazards in industrial settings. Prerequisites: CHEM 1104 or MATH 1111, or consent of instructor.

#### Individual Study and Research

**SAFE 4900 Directed Studies (1-6)** Individual or group study of problems in special areas of interest. *May be repeated for a maximum of 6 semester hours.* 

SAFE 4910 Special Projects in Safety Sciences (1-3) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours

SAFE 4940 Introductory Quantitative Methods (3) Mathematical and statistical methods designed for the efficient collection and rational interpretation of data by individuals responsible for analysis in a variety of settings. Prerequisite: high school algebra or equivalent.

**SAFE 4990 Internship in Safety Sciences\* (1-6)** Internships are based upon student preparation and interest. Actual work experiences in education, institutions, government, industry, or business are provided. *May be repeated for a maximum of 6 semester hours*. Prerequisite: departmental approval and must have completed one-half of major/minor courses in area of study. \*Not available for graduate credit.

#### **Integrative Studies Capstone**

ICAP 4115 Safety and Health Management\* (3) Integration of safety information using conceptual and technical data to resolve safety and health issues. The case study approach will be emphasized. Prerequisites: admission to program, 27 semester hours of SAFE courses and senior standing. \*Not available for graduate credit.

#### **Driver Education**

DrEd 2010 Introduction to Safety Education (3) Provides a background in safety that will give insight to the possible accident situations present in various school situations. DrEd 2020 Driver Task Analysis (3) Curriculum content overview for driver and traffic safety education in secondary schools; classroom instruction and laboratory experience; driving skills and abilities of future teachers are evaluated. Prerequisite: DrEd 2010.

**DrEd 2030 Developing Vehicle Operation Skills and Competencies (3)** A methods and materials course for driver education in the secondary schools. Techniques of teaching beginning drivers in both classroom and laboratory settings. Practicum arranged as a portion of the course. Prerequisite: DrEd 2020.

**DrEd 2040 Developing Classroom Knowledge (3)**Operation, maintenance, and techniques of teaching with driving simulators and multiple-car driving ranges. Practicum arranged as a portion of the course. Prerequisite: DrEd 2030.

## **Crisis and Disaster Management**

# CDM 3000 Introduction to Crisis and Disaster

Management (3) Natural, technological, and man-caused crises and disasters. All-hazards mitigation, preparedness, response, and recovery systems. Roles and responsibilities of government, non-governmental organizations, business, and industry.

**CDM 3035** Emergency Response (3) Management of resources during operations. Emphasis on warning systems, emergency operations centers, and incident command systems. Topics include human behavior, public health and safety. Prerequisites: CDM 3000 or permission.

CDM 3225 Hazardous Materials Emergency Response
(3) Properties of hazardous materials. Development and

(3) Properties of hazardous materials. Development and implementation of plans/programs required for safe response. Utilization of tools and techniques during response to spills and releases. Prerequisites: CDM 3000 or permission.

CDM 3400 Community Mitigation and Recovery (3)
Concept and meaning of risk. Integration of mitigation
during development, post-disaster redevelopment, and
maintenance; formation of disaster-resistance communities,
including sociological and political considerations.
Prerequisites: CDM 3000 or permission.

**CDM 3715 Business Continuity Planning (3)** Planning methodologies utilized by business and industry. Risk identification, business impact analysis, and the adoption of alternative recovery methods for critical processes. Prerequisites: CDM 3000 or permission.

**CDM 4035 Disaster and Society\* (3)** Impact of disasters on social systems. Disaster mythology; individual and community response. Communications within affected groups and organizations. Prerequisite: CDM 3000 or permission. \*Not available for graduate credit.

CDM 4200 Disaster Management Technology\* (3)

Technologies used in support of disaster operations. Tools and techniques to collect, analyze, and manage information. Including communication systems, modeling, mapping, and emergent technologies. \*Not available for graduate credit. CDM 4245 Managerial Issues in Hazardous Materials\* (3) Addresses managerial concerns of the Incident Commander at the community/organization level. Emphasis is placed on

Addresses managerial concerns of the Incident Commander at the community/organization level. Emphasis is placed on strategic goals and decision-making. Other subjects covered include response planning, personnel and training, operation of command posts, and use of the Incident Command System. Prerequisites: CDM 3000 or permission. \*Not available for graduate credit.

CDM 4400 Research Issues in Crisis and Disaster Management\* (3) Introduces the research process, ethics, methodology, and data analysis. Preparation of academic papers, written reports, and proposals. Prerequisites: CDM 3000 or consent. \*Not available for graduate credit. CDM 4745 Crisis Management\* (3) Systematic study of crisis in business and industry; vulnerability analysis, disaster-resistant companies, crisis communications strategies, employee support services, and public relations. Prerequisites: CDM 3000 or permission. \*Not available for

graduate credit.

CDM 4800 Integrated Emergency Management\* (3)

Factors influencing multi-agency coordination during phases of disaster management. Explores relationships between public and private sector institutions and collaboration during emergency incidents. Prerequisites: CDM 3000 or permission, and senior status. \*Not available for graduate

credit.

CDM 4900 Directed Studies: Technology Application\* (3) Individual or group study of emerging technology applications related to crisis and disaster management. May be repeated for a maximum of 6 hours. Prerequisite: departmental approval. \*Not available for graduate credit.

CDM 4910 Special Projects: Field Exercises\* (1-3)
Individual or group participation in approved community, institutional, or agency emergency exercises or disaster drills. May be repeated for a maximum of 3 hours. Prerequisite: departmental approval. \*Not available for graduate credit. CDM 4990 Internship in Crisis and Disaster Management\* (3-6) Practicum experiences are based upon student preparation and interest. Actual work experience in government, non-governmental organizations, business, and industry. May be repeated for a maximum of 6 hours. Prerequisite: departmental approval and junior status. \*Not available for graduate credit.

# **School of Technology**

# **Career and Technology Education**

# **Business Education**

# **BUSINESS EDUCATION Major, B.S. in Ed. Degree**

(Certification to teach business education subjects in grades 9-12) (41 000524)

The graduate with a Bachelor of Science in Education degree with a functional major in Business Education will:

- Meet all Missouri Standards for Teacher Educators (MoSTEP).
- Meet all competencies set by the Missouri Department of Elementary and Secondary Education for Business Education (MoSTEP Standard 1.1 A. . .knows the discipline.@) which includes the following areas: business interrelationships, accounting/finance, business communications, business and personal law, economics, information systems, keyboarding, marketing, and management.
- Pass the PRAXIS II subject area exam at the level set by the Missouri Department of Elementary and Secondary Education.

|          |              |   |                 |           | Sem. Hours                                |
|----------|--------------|---|-----------------|-----------|---|
| MAJOR    | REQUIRE      | MENTS   |                 |           | 33  |
| BE&O     | 1510         | Foundations of Administrative                       | BE&O            | 4210      | Methods of Teaching Business Ed3          |
|          |              | Management & Business Education3                    | BE&O            | 4550      | Admin. Support Management3                |
| BE&O     | 1535         | Word Processing I3                                  | ACCT            | 2101      | Principles of Financial Acct3             |
| BE&O     | 1536         | Word Processing II3                                 | MGT             | 3325      | Business Communications3                  |
| BE&O     | 3501         | Business and Education Technology3                  | MKT             | 3400      | Principles of Marketing3                  |
| BE&O     | 3510         | Desktop Publishing for Bus3                         | BLAW            | 2720      | Legal Environment of Business3            |
|          | REQUIRE      |   |                 |           | 18-25                                     |
| GENERA   | AL EDUCA     | ATION REQUIREMENTS (page 49)48 s.h. (In the         | e profession    | al educa  | tion requirements, ICAP 4468 fulfills     |
| 3 s.h. o | f Div. III B | )   |                 |           | 45  |
| Second   | lary Educa   | ation students must have one course in a physical   | or earth sci    | ence and  | one in a biological science in Div. II A. |
| COMM     | 1000         | Div. I B (required)3                                | HIST            | 1350      | Div. II B or                              |
| MATH     | 1111         | Div. I C or   | HIST            | 1351      | Div. II B (required)3                     |
| MATH     | 1620         | Div. I C (required)3                                | ECON            | 1010      | Div. II B (required)3                     |
| BE&O     | 1210         | Div. II A (required)2                               | POLS            | 1510      | Div. II B (required)3                     |
|          |              |   | PSY             | 4230      | Psy. of Adolescence3                      |
| Second   | lary Educa   | ation students will be allowed to substitute PSY 42 | 30 to fulfill 3 | s.h. of D | iv. III.                                  |
|          |              | EDUCATION REQUIREMENTS (see page 205)               |                 |           |   |
| MINIMUI  | M TOTAL      |   |                 |           | 124                                       |

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# **BUSINESS EDUCATION Functional Major, B.S. in Ed. Degree**

(Certification to teach business education subjects in grades 9-12) (41 000525)

The graduate with a Bachelor of Science in Education degree with a functional major in Business Education, will use the knowledge and skills obtained in the program to:

- Meet all Missouri Standards for Teacher Educators (MoSTEP).
- Meet all competencies set by the Missouri Department of Elementary and Secondary Education for Business Education (MoSTEP Standard 1.1 A. . .knows the discipline. (a) which includes the following areas: business interrelationships, accounting/finance, business communications, business and personal law, economics, information systems, keyboarding, marketing, and management.
- Pass the PRAXIS II subject area exam at the level set by the Missouri Department of Elementary and Secondary Education.

|          |            |   |              |          |                                    | Sem. Hours |
|----------|------------|---|--------------|----------|------------------------------------|------------|
| FUNCTION | ONAL MA    | JOR REQUIREMENTS                                    |              |          |                                    | 41         |
| BE&O     | 1510       | Foundations of Administrative                       | BE&O         | 4560     | Infor. Design & Presentation .     | 3          |
|          |            | Management & Business Education3                    | ACCT         | 2101     | Principles of Financial Acct       | 3          |
| BE&O     | 1535       | Word Processing I3                                  | MGT          | 3325     | Business Communications            | 3          |
| BE&O     | 1536       | Word Processing II3                                 | MKT          | 3400     | Principles of Marketing            | 3          |
| BE&O     | 3501       | Business and Education Technology3                  | BLAW         | 2720     | Legal Environment of Busines       | s3         |
| BE&O     | 3510       | Desktop Publishing for Bus3                         | FIN          | 1820     | Personal Finance                   | 3          |
| BE&O     | 4210       | Methods of Teaching Business Ed3                    | INST         | 4330     | Technology Troubleshooting         |            |
| BE&O     | 4550       | Administrative Support Management3                  |              |          | for Educators                      | 2          |
| MINOR I  | NOT REQ    | UIRED   |              |          |                                    |            |
| GENER/   | AL EDUC    | ATION REQUIREMENTS (page 49)48 s.h. (In th          | e profession | al educa | tion requirements, ICAP 4468 full  | ills       |
|          |            | )   |              |          |                                    | 45         |
| Second   | lary Educa | ation students must have one course in a physical   | or earth sci | ence and | one in a biological science in Div | /. II A.   |
| COMM     | 1000       | Div. I B (required)3                                | HIST         | 1350     | Div. II B or                       |            |
| MATH     | 1111       | Div. I C or   | HIST         | 1351     | Div. II B (required)               | 3          |
| MATH     | 1620       | Div. I C (required)3                                | ECON         | 1010     | Div. II B (required)               |            |
| BE&O     | 1210       | Div. II A (required)2                               | POLS         | 1510     | Div. II B (required)               |            |
|          |            |   | PSY          | 4230     | Psy. of Adolescence                | 3          |
|          |            | ation students will be allowed to substitute PSY 42 |              |          |                                    |            |
|          |            | EDUCATION REQUIREMENTS (see page 205)               |              |          |                                    |            |
|          |            | 3   |              |          |                                    |            |
| MINIMUI  | M TOTAL    |   |              |          |                                    | 124        |

## **BUSINESS EDUCATION Minor for a Bachelor's Degree**

(Certification to teach Business Education in grades 5-9 with a middle school-junior high school major. NOTE: See Director of Clinical Services and Certification.)

(000517)

| MINOR REQU | JIREMENTS                                  |             |            | Sem. Hours                       |
|------------|--|-------------|------------|----------------------------------|
| BE&O 121   |  | BE&O        |            | Business & Education Technology3 |
| BE&O 151   | 0 Foundations of Administrative            | BE&O        | 3510       | Desktop Publishing for Bus3      |
|            | Management & Business Education3           | BE&O        | 4560       | Infor. Design & Presentation3    |
| BE&O 153   | 5 Word Processing I3                       | ECON        | 1010       | Principles of Macroeconomics3    |
| BE&O 153   | 6 Word Processing II3                      |             |            |                                  |
| CENEDAL EL | NICATION DECLUDEMENTS (page 40) (In the mi | DE 0 0 1010 | fulfille 0 | a b of Div II A: ECON 1010       |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, BE&O 1210 fulfills 2 s.h. of Div. II A; ECON 1010 fulfills 3 s.h. of Div. II B)

## ADMINISTRATIVE SUPPORT Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000548)

| MINOR REQUIRE | MENTS.  |                        | Sem. Hours                       |
|---------------|---|------------------------|----------------------------------|
| BE&O 1210     | Essentials of Managing Information2           | BE&O 3501              | Business & Education Technology3 |
| BE&O 1510     | Foundations of Administrative                 | ACCT 2101              | Principles of Financial Acct3    |
|               | Management & Business Education3              | Electives from the     | following 3                      |
| BE&O 1535     | Word Processing I3                            | BE&O 3510              | Desktop Publishing for Bus 3     |
| BE&O 1536     | Word Processing II3                           | BE&O 4560              | Infor. Design & Presentation 3-9 |
| GENERAL EDUCA | ATION REQUIREMENTS (page 49) (In the minor, I | BE&O 1210 fulfills 2 s | i.h. of Div. II A)               |

#### **Business Education**

## BE&O 1210 Essentials of Managing Information (2)

Prepare students to be active computer users. Includes evaluating computers. Internet use as a student and consumer, and skills in word processing, spreadsheet and presentation software.

BE&O 3241 Principles of Distributive Education (3) An introduction to the basic principles of distributive education. BE&O 4210 Methods of Teaching Business Education (3) Prepares student as teachers of business education by

assisting in the development of instructional methods and techniques for student-oriented classroom instruction.

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# BE&O 4220 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the

teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with BE&O 4230 during the Professional Semester. \*Not available for graduate credit.

BE&O 4230 Methods of Teaching BusinessBGeneral\*

(2) Prerequisites: admission to Teacher Education Program;

double majors must take a methods course for each major; methods should be taken concurrently with BE&O 4220 during the Professional Semester. \*Not available for graduate credit.

BE&O 4241 Coordination of Career and Technical Education Programs (2) Organizing and implementing cooperative career and technical education programs.
BE&O 4242 Philosophy of Vocational Business
Education (2) Past and current philosophy of vocational

**Education (2)** Past and current philosophy of vocational education. Majors in business and office education are not to take the course BE&O 4242 except as part of their graduate program.

BE&O 4243 Curriculum Construction for Business and Distributive Education (2) Development of vocational curriculum and teaching materials. Majors in business and office education are not to take the course BE&O 4243 except as part of their graduate program.

BE&O 4250 Business/Distributive Education Practicum (1-3) May be repeated for a maximum of 6 semester hours. BE&O 4260 Special Topics in Business Education and Office Administration (1-3) Topics will be listed in appropriate course schedules. May be used to teach specific microcomputer software or to cover other critical topics in business education and office administration as new technologies develop. Prerequisite: senior or graduate status.

**BE&O 4280 Implementing Vocational Business Education** (3) Required for Missouri vocational business education certification. Covers information needed to plan, implement, and maintain vocational business education programs.

#### Office Administration

**BE&O 1510 Foundations of Administrative Management and Business Education (3)** An overview of Business Education and Office Administration programs and course requirements. Exploration of careers. Emphasis on skills, abilities, and aptitudes (language mechanics, personality inventories, and learning styles).

**BE&O 1530 Keyboarding (2)** Touch operation of alphabetic, numeric, and symbol keys found on most computer keyboards, word processors, and typewriters; introduction to document formatting.

**BE&O 1532 Intermediate Keyboarding (3)** Emphasis on building speed and accuracy. Includes document formatting. Prerequisite: Prior instruction in touch keyboarding.

**BE&O 1535 Word Processing I (3)** Continuing emphasis on improving keyboarding skills and document formatting using word processing software. Prerequisite Keyboarding speed of 35 wam with 95 percent or higher accuracy on a 5-minute timed writing.

**BE&O 1536 Word Processing II (3)** Advanced word processing concepts and applications. Prerequisite: BE&O 1535 with a grade of C or higher.

BE&O 3501 Business and Education Technology (3)
Advanced work with current office technology software, electronic media management, business mathematics applications using the electronic calculator, and presentation graphics. Prerequisites: BE&O 1210 and keyboarding ability.
BE&O 3510 Desktop Publishing for Business (3) Desktop publishing concepts and applications. Prerequisite: BE&O 1536.

**BE&O 4550 Administrative Support Management (3)**Office problems from the administrative point of view, with an emphasis on a systems approach to office automation, using lecture, case studies, current literature, and management decision making software.

**BE&O 4560 Information Design and Presentation\***(3) Study and application of information design and professional presentation for business and education using microcomputer software. Prerequisites: keyboarding ability

and microcomputer proficiency (prior experience with word processing, database, and spreadsheet software). \*Not available for graduate credit.

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# FAMILY AND CONSUMER SCIENCES

In the section of Family and Consumer Sciences, the second digit in a course number with a FACS prefix stands for the following: 0--General, 1--Family Economics and Management, 7--Professional.

## VOCATIONAL FAMILY AND CONSUMER SCIENCES Functional Major, B.S. in Ed. Degree

(Certification to teach vocational family and consumer sciences from birth to grade 12) (41 000849)

The graduate with a Bachelor of Science in Education degree in Vocational Family and Consumer Sciences will:

- Gain subject matter/content area knowledge needed for certification in Vocational Family and Consumer Sciences.
- Meet Professional Education requirements for certification.
- Interact with diverse and global environments.
- Gain knowledge and skills in order to teach today's high school and middle school students.
- Use technology, research skills, problem solving, communication and critical thinking to the teaching profession.
- Gain experience working with diverse groups.

|          |              |   |                |             | Sem.                                 | Hours |
|----------|--------------|---|----------------|-------------|--------------------------------------|-------|
| FUNCTION | ONAL MA      | JOR REQUIREMENTS                                      |                |             |                                      | 37    |
| FACS     | 2110         | Consumer Problems3                                    | D&N            | 3340        | Nutrition                            | 3     |
| FACS     | 3120         | Family Resource Management3                           | FACS           | 3710        | Organization of Vocational Family    |       |
| CFD      | 1220         | Child Development3                                    |                |             | & Consumer Sciences Ed               | 3     |
| CFD      | 2230         | Practicum in Child Development1                       | HED            | 4320        | Teaching Sex. Ed. in the School      | 3     |
| CFD      | 3230         | Family Systems & Lifespan Dev3                        | FAME           | 1450        | Textile & Apparel Fabrication I      | 3     |
| CFD      | 3240         | Parent-Child Interaction3                             | FAME           | 2442        | Textiles                             | 3     |
| FOOD     | 2322         | Food Preparation3                                     | FAME           | 4410        | Architectural Interiors              | 3     |
| MINOR I  | NOT REQ      | UIRED   |                |             |                                      |       |
| GENER/   | AL EDUCA     | ATION REQUIREMENTS (page 49)48 s.h. (In the           | profession     | al educat   | ion requirements, ICAP 4468 fulfills |       |
| 3 s.h. o | f Div. III B |   |                |             |                                      | 45    |
| CHEM     | 1104         | Div. II A (required)4                                 | HIST           | 1351        | Div. II B (required)                 | 3     |
| BIOL     | 1003         | Div. II A (required)3                                 | PSY            | 4230        | Psy. of Adolescence                  |       |
| POLS     | 1510         | Div. II B (required)3                                 | CFD            | 1010        | Div. III (required)                  | 3     |
| HIST     | 1350         | Div. II B or  |                |             |                                      |       |
| Seconda  | ry Educat    | ion students will be allowed to substitute PSY 423    | 0 to fulfill 3 | s.h. in Div | ı. II B.                             |       |
| PROFES   | SIONALI      | EDUCATION REQUIREMENTS (see page205)                  |                |             |                                      | 29    |
| This inc | ludes 3 s.   | h. of "special methods in major field" required for o | certification. |             |                                      |       |
| FREE EI  | LECTIVES     | )   |                |             |                                      | 13    |
| MINIMUI  | M TOTAL      |   |                |             |                                      | 124   |

# FAMILY AND CONSUMER SCIENCES Minor for a Bachelor's Degree

(Certification to teach general family and consumer sciences in grades 5-9 available with middle school-junior high school major; elementary education functional majors may use this as an area of concentration.)

|         |         |                                 |      |      | Selli. Hours                      |
|---------|---------|---------------------------------|------|------|-----------------------------------|
| MINOR F | REQUIRE | MENTS                           |      |      | 22                                |
| FACS    | 2110    | Consumer Problems3              | CFD  | 3230 | Family Sys. & Lifespan Dev3       |
| FACS    | 3120    | Family Resource Management3     | FOOD | 2322 | Food Preparation3                 |
| CFD     | 1220    | Child Development3              | D&N  | 3340 | Nutrition3                        |
| CFD     | 2230    | Practicum in Child Development1 | FAME | 1450 | Textile & Apparel Fabrications I3 |

### General

FACS 4000 Special Projects in Family and Consumer Sciences (1-3) Investigation of contemporary problems and issues in family and consumer services. May be repeated for a maximum of 6 semester hours.

#### **Family Economics and Management**

**FACS 2110 Consumer Problems (3)** Assists students in becoming aware of the rights and responsibilities of the consumer in the economy and the resulting relationship to market operations.

**FACS 3120 Family Resource Management (3)** Effective and efficient management of family resources to maximize personal and family satisfactions. Only offered Spring semester. Prerequisite: FACS 2110.

FACS 4150 Special Problems in Family Economics and Management (2-3) Recent trends. Group and individual problems which will include reports, discussions, bibliographies, research, and experiments. Prerequisite: FACS 3120.

# Professional

FACS 3710 Organization of Vocational Family and Consumer Sciences Education (3) The philosophy of vocational family and consumer sciences education, curriculum development and implementation, department management, career development, and student organization management. Prerequisites: EDCI 2100 and 10 semester hours of courses required in the functional major.

FACS 4725 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with FACS 4740 during the Professional Semester. \*Not available for graduate credit.

FACS 4740 Methods of Teaching Vocational Family and Consumer Sciences\* (3) Prerequisites: 15 semester hours of family and consumer sciences with 5 semester hours of foods and nutrition, 5 semester hours of textiles and clothing, and 5 semester hours in related subjects; EDSP 2100; EDCI 4300 or concurrently; and admission to Teacher Education Program; double majors must take a methods course for

Sem Hours

each major; methods should be taken concurrently with FACS 4725 during the Professional Semester. \*Not available for graduate credit.

FACS 4750 Curriculum in Family and Consumer Sciences Education (2) Design of programs and courses for consumer homemaking or occupational family and consumer sciences education including theory, principles, development and implementation, federal and state guidelines, trends and issues. Prerequisite: FACS 4740 or equivalent.

# **Technology and Occupational Education**

In Technology and Occupational Education, the second digit in the course number stands for the following: 0-General, 1-Professional.

# **TECHNOLOGY EDUCATION Major, B.S. in Ed. Degree**

(Certification to teach technology education in grades 9-12) (41 000229)

The graduate with a Bachelor of Science in Education degree in Technology Education will use the knowledge and skills obtained in the program to:

- Be capable of implementing a contemporary technology education program based on the Standards for Technological Literacy
- Possess a conceptual understanding of 1) the nature and history of technology and, 2) the influence of technology on society and the environment
- Demonstrate competence with various technologies including design, communication, manufacturing, construction, transportation, energy, and computer technology
- Employ and teach problem solving methods to solve technical problems
- Demonstrate the ability to operate lab equipment in an efficient and safe manner, and teach accordingly
- Demonstrate the ability to operate, schedule and control labs for technology education programs
- Display professional habits including involvement in professional associations related to Technology Education, continuous learning, and collegiality

| MAJOR I      | REOURE       | MENTS   |           |            | Sem. Hours                              |
|--------------|--------------|---|-----------|------------|---|
| 1017 10 01 1 |              | Communication Technology                            |           |            | erials and Processes Technology         |
| GRAP         | 1010         | Introduction to Desktop                             | MMGT      | 1010       | Mat. for Mfg. & Construction3           |
|              |              | Publishing & Printing3                              | CMGT      | 2310       | Construction Techniques3                |
| GRAP         | 1110         | Fundamentals of Drafting3                           | MMGT      | 3550       | Principles of Numerical Control, 3 or   |
| GRAP         | 4570         | Computer Graphics3                                  | MMGT      | 4520       | Robotics and Automation, 33             |
|              | Е            | nergy and Power Technology                          |           | 0          | rganization and Administration          |
| ET           | 1020         | General Electronics3                                | T&OE      | 4145       | Selection & Org. of Subject             |
| ET           | 1010         | Applied Electricity, 3 or                           |           |            | Matter for Ind. Voc. Tech. Ed3          |
| ET           | 2020         | Industrial Electricity, 33                          |           |            |   |
| PR&T         | 1010         | Power Mechanics3                                    |           |            | Foundation                              |
|              |              |   | T&OE      | 2000       | Technology & Change3                    |
|              |              |   | IGEN      | 3116       | Creative Problem Solving3               |
|              |              |   | Departn   | nentally a | approved elective. A listing of courses |
|              |              |   | is availa | able from  | the Chair of the Department3            |
|              |              | MENTS   |           |            | 18-24                                   |
|              |              | TION REQUIREMENTS (page 49)48 s.h. (In the          |           |            |   |
| IGEN 3       | 116 fulfills | 3 s.h. in Div. IV A)                                |           |            | 43                                      |
|              |              | Div. II A (required)3                               |           |            |   |
| PHYS         | 1104         | Div. II A (required)4                               | PSY       | 4230       | Psy. of Adolescence3                    |
| HIST         | 1350         | Div. II B or  | GEOG      | 3201       | Div. II D (required)3                   |
| HIST         | 1351         | Div. II B (required)3                               |           | 5          | : U.D.                                  |
|              |              | tion students will be allowed to substitute PSY 423 |           |            |   |
|              |              | EDUCATION REQUIREMENTS (see page 205)               |           |            |   |
| MINIMUN      | M TOTAL      |   |           |            | 128                                     |

## OCCUPATIONAL EDUCATION Functional Major, B.S. Degree

(This A2+2@ program is designed to build upon an Associate Degree and may complete Missouri Vocational Teaching Certification requirements for Trade, Industrial and Health Sciences Instructors) (43 000249)

|           |             |  |            |               |                                     | Sem. Hours |
|-----------|-------------|--|------------|---------------|-------------------------------------|------------|
| FUNCTI    | ONAL MA     | JOR REQUIREMENTS                                   |            |               |                                     | 82         |
| Complet   | ed at CMS   | U  | Courses    | transferri    | ng from AAS degree                  |            |
| EDCI      | 3500        | Secondary Teaching &                               | EDCI       | 2240          | Educational Psychology              | 3          |
|           |             | Behavioral Mgt3                                    | T&OE       | 4145          | Sel. & Org of Subject Matter        |            |
| GRAP      | 4570        | Computer Graphics3                                 |            |               | for Ind. Voc. Tech. Ed              | 3          |
| IGEN      | 3116        | Creative Problem Solving3                          | T&OE       | 4110          | Philosophy of Occupational          |            |
| T&OE      | 2000        | Technology and Change3                             |            |               | Education and Training              | 3          |
| T&OE      | 3060        | Technical Report Writing2                          | T&OE       | 4140          | New Teacher Institute               |            |
| T&OE      | 4022        | Occupational Administration/                       | T&OE       | 4150          | Vocational Guidance                 | 3          |
|           |             | Teaching Internship3                               | T&OE       | 4160          | Principles of Tchg. Ind. Ed         | 2          |
| T&OE      |             | Adult Programs3                                    | Teachir    | ng Special    | ty Area:                            | 24         |
| Teachir   | ng Specialt | y Area:21  |            |               |                                     |            |
| Teachin   | g Specialty | Area: Trade/Technical, Health Occupations or Tec   | hnical Ele | ctives (pri   | mary or support area; any approp    | riate      |
|           |             | ). EDCI 2240 must be taught by a state-approved to |            |               |                                     |            |
| T&OE 4    | 140, T&OE   | E 4150, and T&OE 4160 must be taught by a state-   | approved   | four-year     | institution.                        |            |
| MINOR I   | NOT REQI    | JIRED  |            | -             |                                     |            |
| GENER/    | AL EDUCA    | TION REQUIREMENTS - 48 s.h. (In the major, T&      | OE 2000 f  | ulfills 3 s.l | n. in Div. II A; IGEN 3116 fulfills |            |
| 3 s.h. ir | Div. IV A)  |  |            |               |                                     | 42         |
| From th   | e AAS Deg   | ree, 21 semester hours apply to General Educatio   | n; balance | (27 seme      | ester hours to include T&OE 2000    |            |
| and IGE   | N 3116) ta  | ken at CMSU.                                       |            |               |                                     |            |
| MINIMU    | M TOTAL     |  |            |               |                                     | 124        |
|           |             |  |            |               |                                     |            |

## TECHNOLOGY EDUCATION Minor, B.S. in Ed. Degree

(Certification to teach technology education in grades 5-9 available only with a major in middle school-junior high school) (000241)

|         |         |                                |           |            | Com: Hour                              |
|---------|---------|--------------------------------|-----------|------------|--|
| MINOR I | REQUIRE | MENTS                          |           |            | 21                                     |
| T&OE    | 2000    | Technology & Change3           | GRAP      | 1110       | Fundamentals of Drafting3              |
| T&OE    | 4145    | Selection & Org. of Subject    | MMGT      | 1010       | Mat. for Mfg. & Construction3          |
|         |         | Matter for Ind. Voc. Tech. Ed3 | PR&T      | 1010       | Power Mechanics3                       |
| ET      | 1010    | Applied Electricity3           | Departm   | nentally a | pproved elective. A listing of courses |
|         |         |                                | is availa | ble from   | the Chair of the Department 3          |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, T&OE 2000 fulfills 2 s.h. of Div. II A)

#### General

**T&OE 1040 Technical Mathematics I (3)** Application of the principles of algebra, geometry, and the fundamental concepts of trigonometry to technical work. Designed for associate degree technical programs. Prerequisite: AE 1030 or one unit of high school algebra.

**T&OE 1042 Technical Mathematics II (3)** Application of the principles of numerical and analytical trigonometry, complex numbers, vector algebra and oblique triangle, logarithms, basic analytic geometry and probability theory. Prerequisite: MATH 1111 or concurrently; or T&OE 1040.

**T&OE 1090 Exploratory Problems in T&OE (1-3)** Individual or group work on introductory level technical problems in technology and occupational education. Provide exploration of content not available through normal course offerings. May be repeated for a maximum of 6 hours. Prerequisites: written contract/proposal with objectives and departmental consent.

**T&OE 2000 Technology and Change (3)** Explores the nature of technology, technological systems found in all cultures, the control of technology, and implications for change.

**T&OE 2040 Calculus for Technology (3)** Application of the fundamental concepts of differential and integral calculus to technology. Prerequisites: MATH 1111; and T&OE 1042 or MATH 1112.

**T&OE 3022 Internship in Technology (1-9)** Provides practical application and experience in cooperating industry and business. Students submit written reports. Evaluation by on-job supervisor and internship coordinator. *May be repeated for a maximum of 12 semester hours.* Prerequisites: 20 semester hours of program offerings,

minimum undergraduate GPA 2.00 and permission of department chair.

**T&OE 3060 Technical Report Writing (2)** Techniques of collecting and presenting scientific data for formal and informal reports and technical papers.

T&OE 4000 Special Projects in Technology and Occupational Education (1-3) Investigation of contemporary problems and issues in technology and occupational education by selected individuals or groups. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

Sem Hours

**T&OE 4020 Technology Education for Elementary Schools (3)** Students will design, construct, and finish inexpensive three-dimensional projects for the purpose of developing skills and understandings in the use of tools, materials and processes as they relate to the integration of constructional activities in the elementary school.

**T&OE 4022 Occupational Administration/Teaching Internship (1-3)** Provides a mentored administration/
teaching experience at the secondary/post-secondary level.
Evaluation by on-site mentor and Coordinator of Technology
and Occupational Education. May be repeated for a
maximum of 6 semester hours. Prerequisites: T&OE 4145,
T&OE 4160, and permission of the Coordinator of T&OE.

**T&OE 4090 Special Problems in Technology and Occupational Education (1-3)** Meets student needs for additional research and/or laboratory experience in the development of technical knowledge and skills in the areas of technology and occupational education. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

#### **Professional**

**T&OE 4110 Philosophy of Occupational Education** and Training (3) Study of social, economic, and political structures which form the philosophical basis for occupational education and training programs.

T&OE 4120 Secondary Field Experience II\* (1)

Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with T&OE 4160 during the Professional Semester. \*Not available for graduate credit.

**T&OE 4140 New Teacher Institute (3)** Develop teaching/instructional management skills needed to perform effectively in classrooms/laboratories. Includes structured activities designed to assist beginning vocational-technical teachers during their first teaching years.

**T&OE** 4145 Selection and Organization of Subject Matter for Industrial Vocational Technical Education (3) Selecting and organizing subject matter for teaching industrial and technical education. Prerequisite: For BS degree, T&OE 4140. For BSE degree Admission to Teacher Education Program or instructor approval.

**T&OE 4150 Vocational Guidance (3)** Facilitate awareness and ability in vocational guidance. Includes problems, methods, and procedures for assisting individuals in choosing, preparing for, entering, and progressing in their vocation.

**T&OE 4160 Principles of Teaching Industrial Education** (2) Prerequisite: For BS degree , T&OE 4145. For BSE degree, admission to Teacher Education Program or instructor approval.

**T&OE 4180 Adult Programs in Occupational Education** (3) Principles, objectives, philosophies, organization, administration, and supervision of adult health, agricultural, industrial, and homemaking occupations.

# Graphic Imaging and Design Technology

In the Department of Graphic Imaging and Design Technology, the second digit in the GRAP prefix courses stands for the following: 0--Graphic Arts Technology Management, 1BComputer-Aided Drafting and Design Technology, 5--General, 6--Multimedia.

# Computer Aided Drafting and Design

# COMPUTER-AIDED DRAFTING AND DESIGN TECHNOLOGY Functional Major, B.S. Degree

(43 000231)

The graduate with a Bachelor of Science Degree in Computer-Aided Drafting and Design Technology will use the knowledge and skills obtained in the program to:

- Apply current computer-aided drafting and design concepts and technical knowledge to interpret and develop orthographic, pictorial, and schematic drawings
- Develop sketching, manual drafting, and computer aided drafting skills to create orthographic, pictorial, and schematic drawings
- Integrate related technical and scientific support skills and concepts into computer-aided drafting and design technology applications
- Demonstrate oral, written, graphic and numerical communication skills applicable to individual and group activities utilized in computeraided drafting and design and related technologies
- Apply critical and creative thinking as needed for problem solving applicable to computer-aided drafting and design and related technologies
- Apply principles of management of personnel, equipment, materials, and processes applicable to computer-aided drafting and design and related technologies
- Display a value system based on personal characteristics and ethical behavior appropriate for professions in computer-aided drafting and design and related technologies.

|          |                 |                                    | Sem. Hours                                  |
|----------|-----------------|------------------------------------|---|
| FUNCTIO  | ONAL MA         |                                    | 65  |
| GRAP     | 1100            | Orientation to Drafting1           | Electives from the following6               |
| GRAP     | 1110            | Fundamentals of Drafting3          | MGT 3310 Prin. of Management3               |
| GRAP     | 1120            | Machine Drafting3                  | HRM 3920 Human Resource Mgt., 3 or          |
| GRAP     | 2130            | Technical Illustration3            | INDM 4210 Industrial Management, 33         |
| GRAP     | 2150            | Descriptive Geometry for           | INDM 4260 Organizational Dynamics3          |
|          |                 | Engineering Technology3            | Electives from one of the following areas15 |
| GRAP     | 2160            | Structural Drafting3               | Area 1 CAD/CAM                              |
| GRAP     | 2170            | Intro. to Computer-Aided Drafting3 | Area 2 Multimedia                           |
| GRAP     | 3150            | Civil Drafting3                    | Area 3 Graphic Design                       |
| GRAP     | 3170            | Computer Drafting Systems3         | Area 4 Mechanical                           |
| GRAP     | 3175            | Managing Computer                  | Area 5 Architectural                        |
|          |                 | Applications for Drafting3         | Area 6 Electricity/Electronics              |
| GRAP     | 4170            | CADD for Engineering Technology3   | Area 7 Civil/Cartographic                   |
| GRAP     | 4180            | Industrial Design3                 | Area 8 Structural/Construction              |
| T&OE     | 3060            | Technical Report Writing2          | Area 9 Aerospace                            |
| CMGT     | 2020            | Mechanics of Materials3            | Area 10 Management & Supervision            |
| MMGT     | 2530            | Machine Tool Technology3           | Area 11 Industrial Training                 |
| MATH     | 1112            | College Trigonometry2              | Area 12 Technical Sales                     |
| MINOR N  | NOT REQU        | JIRED                              |   |
| GENERA A | AL EDUCA        |                                    | 48  |
| MATH     | 1111            | Div. I C (required)3               | IGEN 3116 Div. IV A (required)3             |
| PHYS     | 1104            | Div. II A (required)4              |   |
| FREE EL  | <b>LECTIVES</b> |                                    |   |
| MINIMUN  | M TOTAL         |                                    |   |

Sem Hours

# **Graphic Arts Technology Management**

# GRAPHIC ARTS TECHNOLOGY MANAGEMENT Functional Major, B.S. Degree (43 000146)

The graduate with a Bachelor of Science Degree with a Functional Major in Graphic Arts Technology Management will use the knowledge and skills in the program to:

- Utilize terminology appropriate to graphic arts
- Analyze graphic production systems and solve problems associated with these systems
- Demonstrate knowledge of current trends and innovations in graphic arts
- Discuss the role of team dynamics in the work environment
- Explain the industry structure and career opportunities in graphic arts
- Demonstrate effective written and oral communication skills
- Appreciate the societal significance of graphic arts
- Exhibit professional ethics, environmental responsibility and safety
- Perform basic production processes which illustrate conceptual understanding of the printing production cycle.

| FUNCTIO | ONAL MAJ  | OR REQUIREMENTS                   |            |            |                                 | 68            |
|---------|-----------|-----------------------------------|------------|------------|---------------------------------|---------------|
| GRAP    | 1000      | Orientation to Graphic Arts1      | GRAP       | 3016       | Graphic Arts Practicum, 3 or    |               |
| GRAP    | 1010      | Introduction to Desktop           | T&OE       | 3022       | Internship in Technology, 3     | 3             |
|         |           | Publishing & Printing3            | INDM       | 4210       | Industrial Management, 3 or     |               |
| GRAP    | 2030      | Desktop Publishing for            | MGT        | 3310       | Principles of Management, 3     | 3             |
|         |           | Printing Applications3            | Elective   | s from the | following                       |               |
| GRAP    | 2031      | Electronic Publishing Systems3    | GRAP       | 2610       | Principles of Multimedia        | 3             |
| GRAP    | 2032      | Imaging Technology for            | GRAP       | 3024       | Flexographic Technology         | 3             |
|         |           | the Graphic Arts3                 | GRAP       | 3040       | Screen Printing                 | 3             |
| GRAP    | 2035      | Image Assembly3                   | GRAP       | 3043       | Finishing Operations            | 3             |
| GRAP    | 3034      | Offset Press Technology3          | GRAP       | 4045       | Color Electronic Prepress       |               |
| GRAP    | 3045      | Substrates & Inks3                |            |            | Systems                         | 3             |
| GRAP    | 3051      | Graphic Arts Management3          | GRAP       | 4051       | Print Production                | 3             |
| GRAP    | 3057      | Graphic Arts Quality Assurance3   | Elective   | s from one | e of the following areas        | 12            |
| GRAP    | 4038      | Principles of Color Reproduction3 | Area 1     | Custome    | er Service & Sales              |               |
| GRAP    | 4053      | Graphic Arts Production Analysis3 | Area 2     | Graphic    | Design                          |               |
| GRAP    | 4055      | Printing Estimating & Costing3    | Area 3     | Multimed   | dia Imaging                     |               |
| GRAP    | 4095      | Senior Seminar in Graphic Arts1   | Area 4     | Producti   | on Management & Supervision     |               |
| ACCT    | 2100      | Survey of Accounting3             | Area 5     | Technica   | al Applications                 |               |
| MGT     | 3325      | Business Communications3          | List of co | urses avai | lable from Department of Graphi | c Imaging and |
|         |           |                                   | Design Te  | echnology. |                                 |               |
|         | NOT REQU  |                                   |            |            |                                 |               |
| GENERA  |           | TION REQUIREMENTS (page 49)       |            |            |                                 | 48            |
| CHEM    | 1104      |                                   | IGEN       | 3116       | Div. IV A (required)            | 3             |
| PHYS    | 1104      | Div. II A (required)4             |            |            |                                 |               |
|         | ECTIVES.  |                                   |            |            |                                 |               |
| MINIMUN | И TOTAL . |                                   |            |            |                                 | 124           |

## **GRAPHICS Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000147)

| MINOR REQUIREM     | MENTS                     | ,      |             |                              | Sem. Hours |
|--------------------|---------------------------|--------|-------------|------------------------------|------------|
| Electives from the | following 6-7             | Phot   | 1210        | Elementary Photography       | 3          |
| GRAP 1010          | Introduction to Desktop   | Phot   | 1211        | Elementary Technique &       |            |
|                    | Publishing & Printing3    |        |             | Critique                     | 1          |
| GRAP 1110          | Fundamentals of Drafting3 | Depart | mentally ap | proved electives in graphics | 3 13-14    |

## **Graphic Arts Technology Management**

GRAP 1000 Orientation to Graphic Arts (1) Orientation

to the philosophy, development, and current trends in the professional preparation for careers in graphic arts.

GRAP 1010 Introduction to Desktop Publishing and Printing (3) Desktop publishing and graphic arts printing production processes, materials, and equipment. Laboratory experiences support lecture/theory content.

GRAP 2030 Desktop Publishing for Printing Applications (3) Electronic page layout methods and image generation using current desktop software. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 1010.

GRAP 2031 Electronic Publishing Systems (3) Electronic publishing systems as applied to both print and digital distribution. Typography as related to digital image

generation. Laboratory experiences support lecture/theory

## content. Prerequisite: GRAP 2030.

## **GRAP 2032 Imaging Technology for the Graphic Arts**

(3) Investigation of photographic and electronic technology used to produce line, halftone and color separated images for printing processes. Laboratory experiences support lecture/ theory content. Prerequisite: GRAP 1010.

**GRAP 2035 Image Assembly (3)** Manual and electronic imposition methods, prepress proofing, conventional lithographic platemaking, computer to plate techniques, and direct digital printing. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 1010.

**GRAP 3016 Graphic Arts Practicum (3)** Supervised work on selected aspects of producing the printed product and/or managing a printing plant. *May be repeated for a maximum of 6 semester hours*. Prerequisite: 2.00 grade-point average overall; application approved by the Chair of the Department of Graphic Imaging and Design Technology.

GRAP 3024 Flexographic Technology (3) Flexographic printing technology from prepress through postpress operations for both wide and narrow web applications. Instruction on rotary letterpress will also be included. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 1010.

GRAP 3034 Offset Press Technology (3) Lithographic sheet fed and web press operation and maintenance with emphasis on sources of image problems. Solutions for interrelated substrate, ink, and plate problems. In-line finishing and image carrier technology as they relate to quality image transfer. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 1010.

GRAP 3036 Offset Lithography (3) General photo-offset lithography from copy preparation through post-press operations. Laboratory experiences support lecture/theory content. Prerequisites: GRAP 2030, GRAP 2031, GRAP 2032, GRAP 2035 and GRAP 3034.

GRAP 3040 Screen Printing (3) Computer image preparation, screen tensioning, mesh selection, photo stencils, squeegees, markets, principles and applications for industrial screen printing. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 1010.

GRAP 3043 Finishing Operations (3) Equipment, operations, and principles relative to trimming, binding, folding, shipping/mailing and specialized finishing operations. including scoring, perforating, die-cutting, embossing and foil stamping. Prerequisite: GRAP 1010.

GRAP 3045 Substrates and Inks (3) Properties, specification, pricing and procurement of ink and printing substrates (especially paper) relative to commercial printing with emphasis on offset lithography. Prerequisite: GRAP

GRAP 3051 Graphic Arts Management (3) Principles and practical application of management functions as related to the production of printed materials. Instruction includes classroom simulation of management roles. Prerequisites: GRAP 2031 and GRAP 2035.

GRAP 3057 Graphic Arts Quality Assurance (3) Statistical quality control for graphic arts production; includes data analysis, product acceptance, process control, and problem solving techniques used in the management of quality. Only offered Fall semester. Prerequisites: GRAP 2032 or GRAP 3034 or GRAP 3045

GRAP 4014 Advanced Technical Problems in Graphic Arts (1-3) Individual/group work on recent developments and advanced technical concepts. Experimentation and technical exploration of content not available through formal course offerings in the department. By arrangement for qualified students. May be repeated for a maximum of 6 semester hours. Prerequisite: written contract/proposal with objectives and written department consent.

GRAP 4038 Principles of Color Reproduction (3)

Technical aspects of process color reproduction; includes color theory, ink evaluation, densitometry, tone reproduction, printing characteristics, color correction, gray balance, color separation, and proofing. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 2032.

GRAP 4045 Color Electronic Prepress Systems (3) Study of color electronic prepress systems used in the graphic arts to manipulate and modify images for graphic design, photographic illustration, page layout, prepress assembly, and printing. Activities using computer application software are included. Laboratory experiences support lecture/theory content. Prerequisite: GRAP 2031 and GRAP 2032.

GRAP 4051 Print Production (3) Applied experiences in management and technological applications in the production of printed material including prepress, press, and post press operations. Prerequisites: GRAP 2032, GRAP 2035, and

GRAP 4053 Graphic Arts Production Analysis (3) A variety of printing requests are analyzed to determine printing specifications, production sequence, cost factors, material

ordering, and technical problems that may arise during the actual printing. Course emphasis utilizes this analysis into a planning sequence of communications, scheduling, routing, dispatching, and work and material flow required for printing production. Prerequisites: GRAP 2035, GRAP 3034 and GRAP 3045

GRAP 4055 Printing Estimating and Costing (3)

Identification of costs relative to materials, operations, and labor utilized in the production of printed matter. Budgeting, forecasting, cost accounting, and budgeted hourly rates. Prerequisites: GRAP 3051 and GRAP 4053.

GRAP 4095 Senior Seminar in Graphic Arts (1) Professional preparation integrating team building skills, problem solving, and analysis of current trends specific to graphic arts. Prerequisite: 90 semester hours.

# Computer-Aided Drafting and Design Technology

GRAP 1100 Orientation to Drafting (1) Orientation to the philosophy, development, and current trends in the professional preparation for careers in drafting. Only offered Fall semester.

GRAP 1110 Fundamentals of Drafting (3) Multiview and pictorial technical drawing using freehand, manual and computer-aided drafting techniques. Drafting majors should take GRAP 1100 concurrently.

GRAP 1120 Machine Drafting (3) Working drawings of machine parts, using tables, tolerancing, sheet metal and welding drawings. Prerequisite: GRAP 1110.

GRAP 2130 Technical Illustration (3) Pictorial representation using various illustrative media. Prerequisite: **GRAP 1110.** 

**GRAP 2150 Descriptive Geometry for Engineering** Technology (3) A basic course in graphic science for engineers, drafters or drafting teachers. Prerequisite: GRAP 1110

GRAP 2160 Structural Drafting (3) A study of structural systems utilizing metal, concrete, masonry and wood, and including the development of appropriate engineering calculations and working drawings. Prerequisite: GRAP

GRAP 2170 Introduction to Computer-Aided Drafting (3) Fundamental applications of computer-aided drafting to the solution of two-dimensional drawing problems for industry. GRAP 3124 Production Design Drafting (3) Tool and die, jig and fixture, casting, weldment, and hydraulic/pneumatic plumbing design problems are studied and drawings are developed using manual and computer-aided drafting techniques. Prerequisite: GRAP 1120.

GRAP 3126 Machine Design (3) Drafting problems involving the elements of the designing and/or redesigning of mechanisms and machines. Prerequisites: GRAP 1120 and GRAP 2150.

GRAP 3140 Seminar in Drafting (1) Seminar for study of current topics in drafting through discussions, activities and outside speakers. May be repeated for a maximum of 3 semester hours. Prerequisites: GRAP 1100 and GRAP 1110.

GRAP 3145 Seminar in Drafting/Design Engineering Technology (0.5) Seminar for study of current topics in Drafting/Design Engineering Technology through discussions, activities, and outside speakers. May be repeated for a maximum of 2 semester hours.

GRAP 3150 Civil Drafting (3) Civil drafting problems using survey data applicable to grading cuts and fills, drainage systems, municipal utilities, plotting and zoning are studied. Drawings are developed using manual and computer-aided drafting techniques. Prerequisite: GRAP 1110.

**GRAP 3160 Residential Architectural Drawing (3)** Principles of planning residential structures including selection of materials, methods of construction, and development of detailed working drawings. Prerequisite: GRAP 1110.

GRAP 3170 Computer Drafting Systems (3) Computer-

aided drafting involving operating systems, programming languages, macros, networks, and customization of software. Prerequisite: GRAP 2170.

**GRAP 3175 Managing Computer Applications for Drafting** (3) Management of computer-aided drafting and design hardware, applications software, laboratories, and the media and methods of reproducing engineering documents. Prerequisite: GRAP 2170.

**GRAP 4114 Advanced Technical Problems in Drafting (1-3)** Individual or group work on advanced technical problems in drafting. Provide exploration of content not available through normal course offerings. *May be repeated for a maximum of 6 semester hours*. Prerequisites: 2.5 GPA, written contract/proposal with objectives and written department consent.

GRAP 4124 Geometric Dimensioning and Tolerancing Principles for Engineering Technology (2) Basic theory and application of geometric dimensioning and tolerancing practices applicable to working drawings of machine parts. Prerequisite: GRAP 1120.

**GRAP 4162 Commercial Architectural Drawing\* (3)** Light commercial architectural plans and problems are studied and drawings are developed using manual and computeraided drafting techniques. Prerequisite: GRAP 3160. \*Not available for graduate credit.

GRAP 4170 Computer-Aided Drafting and Design for Engineering Technology (3) Advanced industrial applications of computer-aided drafting systems. Three dimensional modeling and design using interactive graphics techniques and standard design elements. Prerequisite: GRAP 2170.

**GRAP 4175 Advanced 3D Analysis and Rapid Prototyping** (3) Advanced course which surveys the application of computer drafting and design systems and how they relate to 3D analysis and rapid prototyping. Prerequisites: GRAP 1110, GRAP 2170, GRAP 4170, CMGT 2020.

**GRAP 4180 Industrial Design (3)** Study and application of the design process and design principles related to industrial products. Prerequisite: GRAP 1110.

# General

GRAP 1500 Technical Problems in Graphics (1-3) Individual or group work on introductory level technical problems in graphics. Provide exploration of content not available through normal course offerings. May be repeated for a maximum of 6 hours. Prerequisite: written contract/proposal with objectives and departmental consent. GRAP 4500 Special Projects in Graphics (1-3)

Investigation of contemporary problems and issues in graphics by selected individuals or groups. *May be repeated for a maximum of 6 semester hours*. Prerequisites: written contract/proposal with objectives and written department consent.

**GRAP 4570 Computer Graphics (3)** Computer generated presentation graphics utilizing a variety of software programs on numerous hardware configurations. Experiences will include production of laser prints, ink-jet prints, transparencies, color slides, and plots.

## Multimedia

GRAP 2610 Principles of Multimedia (3) Selection, organization, and production of materials for multimedia. Introductory experiences creating web pages and interactive presentations for business, industry, and education. GRAP 2620 Multimedia Applications I (3) Multimedia experiences including implementation of visual and sound applied to the www and other technologies. These applications include still and motion imaging and animation. Hands-on experiences supplement lecture. Prerequisite: GRAP 2610.

# **Graphic Imaging and Design Technology**

**GRAP 2670 Multimedia Animation (3)** Fundamentals of animation theories and practices specializing in digital applications. Planning and storyboarding for types of animation. Hands-on experiences will supplement lecture. Prerequisite: GRAP 2610.

## Integrative Studies General

**IGEN 3116 Creative Problem Solving (3)** A broad approach to formal techniques in creative problem solving applicable to any field of endeavor and interest.

Sem Hours

# Fashion and Apparel Merchandising

# FASHION: TEXTILES AND CLOTHING IN BUSINESS Functional Major, B.S. Degree

(43 000118)

The graduate with a Bachelor of Science degree with a functional major in Fashion: Textiles and Clothing in Business will use the knowledge and skills obtained in the program to:

- Demonstrate an understanding of fashion terminology as related to the apparel industry
- Recognize the significance of practical reasoning to decision making
- Develop verbal and nonverbal communication skills
- Demonstrate a positive relationship with employers, employees, and the public served
- Demonstrate professional qualities which show value systems that enable actions that are socially ethical and responsible
- Demonstrate the ability to apply job related techniques through the psychomotor domain.

|                |                  |                                   |      |      | Sei                          | II. Hours |  |
|----------------|------------------|-----------------------------------|------|------|------------------------------|-----------|--|
| FUNCTION       | ONAL MA          | JOR REQUIREMENTS                  |      |      |                              |           |  |
| FAME           | 1400             | Intro. to Fashion Merchandising3  | FAME | 4434 | Fashion History              | 3         |  |
| FAME           | 1420             | Applied Design in Fashion &       | FAME | 4442 | Advanced Textiles            | 3         |  |
|                |                  | Apparel Merchandising3            | FAME | 4444 | Fashion Merchandising        | 3         |  |
| FAME           | 1450             | Textile & Apparel Fabrications I3 | FAME | 4445 | Senior Seminar in Fashion    |           |  |
| FAME           | 2430             | Image Management for Fashion3     |      |      | & Apparel Merchandising      | 3         |  |
| FAME           | 2440             | Fashion Merchandising Practicum3  | FAME | 4490 | Internship in Fashion        |           |  |
| FAME           | 2442             | Textiles3                         |      |      | & Apparel Merchandising      | 3         |  |
| FAME           | 3425             | Apparel Performance Evaluation3   | ACCT | 2101 | Principles of Financial Acct | 3         |  |
| FAME           | 3440             | Fashion Promotion3                | MGT  | 3310 | Principles of Management     | 3         |  |
| FAME           | 3444             | Fashion Products3                 | MKT  | 3400 | Principles of Marketing      | 3         |  |
| FAME           | 4410             | Architectural Interiors3          | MKT  | 3410 | Retail Management            | 3         |  |
| FAME           | 4430             | Merchandising Applications3       | MKT  | 3420 | Principles of Advertising    | 3         |  |
| FAME           | 4433             | International Apparel Technology3 | MKT  | 3430 | Personal Selling             | 3         |  |
|                |                  |                                   | MKT  | 3480 | Consumer Behavior            | 3         |  |
| MINOR          | NOT REC          | UIRED                             |      |      |                              |           |  |
| GENERA         | AL EDUC <i>A</i> | ATION REQUIREMENTS (page 49)      |      |      |                              | 48        |  |
| CHEM           | 1104             | Div. II A (required)4             | AGRI | 2130 | Div. II D (required)         | 3         |  |
| <b>ECON</b>    | 1010             | Div. II B (required)3             | IGEN | 3116 | Div. IV A (required)         |           |  |
| FREE ELECTIVES |                  |                                   |      |      |                              |           |  |
| MINIMUM TOTAL  |                  |                                   |      |      |                              |           |  |

## **CLOTHING Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000123)

|         |         |                               |                                   | Sem. Hours |
|---------|---------|-------------------------------|-----------------------------------|------------|
| MINOR F | REQUIRE | MENTS                         |                                   | 21         |
| FAME    | 1420    | Applied Design in Fashion &   | FAME 2442 Textiles                | 3          |
|         |         | Apparel Merchandising3        | Departmentally approved electives | 12         |
| FAME    | 2430    | Image Management for Fashion3 |                                   |            |

FAME 1400 Introduction to Fashion Merchandising (3)
Survey of the field of fashion merchandising. Emphasis on trends and developments of fashion marketing operations.
FAME 1420 Applied Design in Fashion and Apparel
Merchandising (3) Application of the elements and principles of design to planning apparel and home or commercial interiors.

**FAME 1450 Textile and Apparel Fabrications I (3)** An introductory course with an emphasis on textiles and apparel goods as they relate to computerized equipment and software.

**FAME 2430 Image Management for Fashion (3)** Wardrobe planning from aesthetic, social, psychological, and economic viewpoints.

FAME 2440 Fashion Merchandising Practicum (2-3)

Supervised fashion merchandising--training and experience in an approved retail establishment with emphasis on apparel selection, merchandise sales, and floor management. *May be repeated for a maximum of 12 semester hours*.

**FAME 2442 Textiles (3)** Characteristics of fibers, yarns, finishes and consideration of fabric construction, color application. Textile behavior, performance, maintenance and legislative developments pertaining to textiles. Prerequisite: sophomore standing.

FAME 2450 Textile and Apparel Fabrications II (3)
Application of technological skills, problem solving techniques

and creativity through the use of computerized equipment and software as it relates to apparel production and merchandising. Prerequisites: FAME 1420 and FAME 1450. FAME 3425 Apparel Performance Evaluation (3) Principles and techniques of fitting and evaluating material, construction, finishes, and quality of ready-to-wear garments. Only offered Fall semester. Prerequisites: FAME 2442.

**FAME 3440 Fashion Promotion (3)** Researching, planning, and presenting fashion promotion activities appropriate for the apparel and textile industries, including fashion show production.

**FAME 3444 Fashion Products (3)** Production and merchandising of fashion products, their relationship to industrial trends and the economy. Prerequisites: 3 semester hours of clothing construction, FAME 2442 and ECON 1010.

**FAME 4410 Architectural Interiors (3)** The application of architectural designs, materials, and furnishings in the interior environment. A concentration of textile products for residential and nonresidential settings that reflect today's lifestyle. Only offered Fall semester. Prerequisites: FAME 1420 or equivalent and FAME 2442.

**FAME 4414 Advanced Technical Problems in Fashion** (1-3) Individual or group work on advanced technical problems in Fashion/Apparel Merchandising. Provide exploration of content not available through normal course

offerings. May be repeated for a maximum of 6 semester hours. Prerequisites: minimum 2.5 Cumulative GPA, written contract/proposal with objectives/learning competency and written department consent.

**FAME 4424 Pattern Design (3)** The design and construction of garments from a basic pattern, using the principles of art as applied to dress design. Prerequisites: FAME 2430 and 3 semester hours of clothing construction

**FAME 4430 Merchandising Applications (3)** Builds upon the necessary understanding, knowledge, and working applications of the basics for profitable fashion merchandising. Only offered Fall semester. Prerequisites: ACCT 2101 and must be taken concurrently with FAME 4444.

**FAME 4433 International Apparel Technology (3)** An analysis of economic, political, and cultural systems affecting the importing and exporting of textiles and apparel. Technology affecting the global fashion marketplace will be emphasized.

**FAME 4434 Fashion History (3)** Analysis of the evolution of fashion in Western civilization. Only offered Fall semester. Prerequisite: FAME 2430.

**FAME 4442 Advanced Textiles (3)** Comparative study of factors influencing the properties of fibers and fabrics as well as the performance of textile and apparel products. Lab period is used to test textile performance with standardized test procedures. Prerequisites: CHEM 1104 or equivalent and FAME 2442.

**FAME 4444 Fashion Merchandising (3)** Principles and practices of fashion manufacturing and merchandising. Only offered Fall semester. Prerequisites: FAME 3444, MKT 3410 and must be taken concurrently with FAME 4430.

FAME 4445 Senior Seminar in Fashion and Apparel Merchandising (3) Philosophy, current issues and trends in fashion and apparel merchandising will be covered. Focus on problem-solving styles leading to group and individual research problems. Prerequisites: senior standing.

**FAME 4450 Special Problems in Textiles and Clothing (2-3)** Recent trends. Group and individual problems which will include reports, discussions, bibliographies, research, and experiments. *May be repeated for a maximum of 6 semester hours.* Prerequisite: FAME 2442.

FAME 4490 Internship in Fashion and Apparel Merchandising (2-3) Provides experience for students in cooperating businesses. May be repeated for a maximum of 12 semester hours with no more than 6 semester hours graduate credit.

# Photography

# PHOTOGRAPHY Major, B.S. Degree

 $(43\ 000228)$ 

- The graduate with a Bachelor of Science degree in Photography will use the knowledge and skills obtained in the program to:
- Produce a portfolio appropriate to career goals.
- Prepare for employment in photographic occupations.
- Possess the flexibility to accommodate technological change.
- Interpret the attributes of a photograph.
- Demonstrate a functional understanding of selected photographic materials and processes.
- Enjoy life more as a result of having developed skills in photography.
- Recognize and acquire professional and visual ethics pertaining to photography.
- Possess a sense of personal creativity.
- Possess confidence in the skills and technology of professional imagery.
- Establish the attitude and skills for self-motivated learning.

|  | Sem. Hours                                  |  |  |  |  |
|--|---|--|--|--|--|
| MAJOR REQUIREMENTS                         | 46  |  |  |  |  |
| PHOT 1210 Elementary Photography3          | PHOT 3250 Portrait Photography3             |  |  |  |  |
| PHOT 1211 Elementary Technique & Critique1 | PHOT 4200 Color Imaging3                    |  |  |  |  |
| PHOT 1215 Photographer's Forum3            | PHOT 4252 Portfolio Photography3            |  |  |  |  |
| PHOT 2200 Color Transparency Photography3  | Electives from one of the following areas15 |  |  |  |  |
| PHOT 2210 Intro. Studio Techniques3        | Area 1 Commercial                           |  |  |  |  |
| PHOT 2220 Photographic Materials & Proc3   | Area 2 Media                                |  |  |  |  |
| PHOT 2270 Zone System of Photography3      | Area 3 Digital Imaging                      |  |  |  |  |
| PHOT 3230 Electronic Imaging3              | Area 4 Portrait                             |  |  |  |  |
|  | Area 5 Technical                            |  |  |  |  |
| MINOR REQUIREMENTS                         | 18-25                                       |  |  |  |  |
| GENERAL EDUCATION REQUIREMENTS (page 49)   | 48  |  |  |  |  |
| IGEN 3116 Div. IV A (required)3            |   |  |  |  |  |
| FREE ELECTIVES                             |   |  |  |  |  |
| MINIMUM TOTAL                              | 124   |  |  |  |  |

## **PHOTOGRAPHY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000148)

| MINOR F | REQUIRE | MENTS                            |                                | 20-21 |
|---------|---------|----------------------------------|--------------------------------|-------|
| PHOT    | 1210    | Elementary Photography3          | PHOT 3250 Portrait Photography | 3     |
| PHOT    | 1211    | Elementary Technique & Critique1 | Electives in photography       |       |
| PHOT    | 2210    | Intro. Studio Techniques3        |                                |       |

## PHOT 1203 Amateur Photography (3) Course

encompasses exposing, and printing photographs including darkroom experiences. Color and digital imaging are introduced. Not for Photo majors or minors.

PHOT 1210 Elementary Photography (3) Composing, exposing, processing, and printing of photographs. Must furnish focusing camera with adjustable f-stops, shutter speeds, and light meter. Prerequisite: PHOT 1211 must be taken concurrently.

PHOT 1211 Elementary Technique and Critique (1) Explanation, demonstrations, and critique of Elementary Photography assignments. Prerequisite: must be taken concurrently with PHOT 1210.

**PHOT 1215 Photographer's Forum (0.5)** Seminar for student portfolio presentation and for study of current events in photography through open discussions, activities, and outside speakers. *May be repeated for a maximum of 3 semester hours.* 

**PHOT 2200 Color Transparency Photography (3)** In-depth experience in exposing and processing color transparency materials. Prerequisite: PHOT 1210.

PHOT 2210 Introduction to Studio Techniques (3) Theory and laboratory experiences involving problems associated with a variety of photographic situations applicable to commercial photography. Prerequisite: PHOT 1210.

## PHOT 2220 Photographic Materials and Processes (3)

Sem Hours

Properties of photographic materials, processes and systems will be studied. Laboratory experiences include process control, masking, copying, duplicating, and processing positive and negative photographic materials. Prerequisite: PHOT 1210.

PHOT 2270 Zone System of Photography (3) Techniques for controlling tonal values in the black and white photographic process. Emphasis is on production and enhancement of photographic control through the acquisition and refinement of personal technique. Prerequisite: PHOT 1210

**PHOT 2280 Creative Photography (3)** Analysis of a variety of processes and influences upon which the student can draw to develop their photographic sensibilities of creative self-expression. Prerequisite: PHOT 1210.

**PHOT 3210 Investigative Photography (3)** Exploratory experiences in the accepted photographic techniques for civil and criminal photographic documentation. Prerequisite: PHOT 1210.

**PHOT 3215 Origins of Photography (3)** A survey of the people, styles, inventions, and processes in photography from early developments to present day.

**PHOT 3230 Electronic Imaging (3)** Applications-oriented introduction to electronic imaging. Provides knowledge and develops skill in image digitizing, output options, image enhancement and manipulation. Prerequisites: PHOT 1210.

## PHOT 3240 Nature and Scenic Photography (3)

Photographic techniques used to illustrate the natural features of plants, animals, and the landscape. The student must furnish a focusing 35mm or larger format camera with adjustable f-stops and shutter speeds and a macro lens, diopters, or other close-up equipment. Prerequisite: PHOT 1210.

**PHOT 3250 Portrait Photography (3)** Experiences in portrait photography with an emphasis on professional techniques, and the operation of specialized equipment utilized in the field. Prerequisite: PHOT 1210.

**PHOT 3260 Multi-Image Presentation (3)** Provide knowledge and develop skill in planning, researching, photographing, sequencing, and producing multi-image presentations.

**PHOT 4200 Color Imaging (3)** In-depth experience in exposing, manipulating and printing color images. Prerequisite: PHOT 2210, PHOT 2200, PHOT 3230.

PHOT 4214 Advanced Technical Problems in Photography (1-3) Individual or group work on advanced technical problems in photography. Provide exploration of content not available through normal course offerings. May be repeated for a maximum of 6 semester hours. Prerequisites: minimum 2.5 GPA, written contract/proposal with objectives and written department consent.

**PHOT 4230 Business Management for Photographers** (3) Exploratory experiences, information and techniques concerning the use of computer hardware and software use for photographic business management. Prerequisite: PHOT 3250.

PHOT 4250 Advanced Color Portraiture (3) Commercial photography providing experiences in posing, exposure, and composition for a color portrait. Precise camera room techniques will be emphasized to ensure the most salable product from machine proofing. Prerequisites: PHOT 1210 and PHOT 3250.

**PHOT 4252 Portfolio Photography (3)** Culminating experience in photography providing for the creation of a successful interview strategy and the production of a portfolio to reflect personal career goals. Prerequisite: 9 semester hours of photography.

**PHOT 4260 Advertising Photography (3)** Theories and practices of advertising photography as a marketing medium with in-depth experience in procedures and techniques. Prerequisite: PHOT 2210.

# Industrial Technology

In the area of Industrial Technology, the second digit in the course number stands for the following: 0--General, 1BMetals, 2BWoods, 3BConstruction, 4BPlastics, 5--Manufacturing.

# **CONSTRUCTION MANAGEMENT Functional Major, B.S. Degree**

 $(43\ 000239)$ 

The graduate with a Bachelor of Science degree with a functional major in Construction Management will use the knowledge and skills obtained in the program to:

- Apply oral, written, graphic and listening skills as each enhances the behavioral principles or attitude and effective communications.
- Apply scientific knowledge of the mathematical, physical, and construction sciences to the economic utilization of materials and forces
  of nature affecting construction practice. To implement the various forms of technology necessary to complete the task of construction
  management, utilizing the computer and electronic data processing through complete word-processing, data bases, spreadsheets,
  applications, and the information highway.
- Apply the principles and philosophy of management systems, cost accounting, and economics to the construction industry, including the
  interpretation of contracts, the values of team building, and the Construction Code of Conduct established by the industry through the
  assistance of the American Institute of Constructors.
- To identify the appropriate construction management principles necessary to complete the site plans, evaluating vendors and subcontractors, writing field purchase orders, change orders, subcontract agreements, shop drawings, as built drawings daily logs and job diaries, construction reports and progress payment requests.
- To execute construction safety standards including the ability to interpret the OSHA construction standards, establish safety and health procedures on the job site, and perform hazard material and process analysis.
- Understand the science of materials and methods of construction as they apply to the sixteen Construction Specifications Institute (CSI) Divisions designated for the construction industry. Including terminology, standard designations, sizes, and quality testing.
- Complete the estimating, cost accounting, and bidding sequence necessary for construction job acquisition and completion. To prepare
  and complete cost control processes including the ability to establish a budget, prepare cost reports, and forecast expenditures.
- Perform quantity take-off, interpret construction specification, identify appropriate codes, identify site conditions, apply value
  engineering, and develop detailed project proposals. To prepare a complete construction project schedule, develop a procurement time
  table, establish a project manual and plan showing the logical sequence of activities and time duration in order to monitor progress and
  update schedules.

|               |          |                                    |             |      | Sem. Hours                      |
|---------------|----------|------------------------------------|-------------|------|---------------------------------|
| FUNCTION      | ONAL MA  | JOR REQUIREMENTS                   |             |      | 84                              |
| CMGT          | 1300     | Intro. to Construction Management2 | T&OE        | 3022 | Internship in Technology1       |
| CMGT          | 1301     | Sem. in Construction Mgt2          | INDM        | 4210 | Industrial Management3          |
| CMGT          | 2020     | Mechanics of Materials3            | INDM        | 4260 | Organizational Dynamics3        |
| CMGT          | 2310     | Construction Techniques3           | EASC        | 2100 | Engineering Geology4            |
| CMGT          | 2325     | Project Cost Estimating3           | MATH        | 1112 | College Trigonometry2           |
| CMGT          | 2340     | Surveying & Construction Layout3   | MATH        | 1131 | Calculus for Business & Econ3   |
| CMGT          | 3020     | Applied Strength of Materials3     | ACCT        | 2101 | Principles of Financial Acct3   |
| CMGT          | 3320     | Prin. of Construction Mgt3         | FIN         | 2801 | Business Statistics I3          |
| CMGT          | 3330     | Building Codes & Code Adm3         | HRM         | 3920 | Human Resource Mgt3             |
| CMGT          | 3350     | Building Structures3               | MGT         | 3310 | Principles of Management3       |
| CMGT          | 3355     | Scheduling for Mfg. & Const3       | GRAP        | 2160 | Structural Drafting, 3 or       |
| CMGT          | 4310     | Construction Safety3               | GRAP        | 3150 | Civil Drafting, 3 or            |
| CMGT          | 4330     | Mechanical Systems for Buildings3  | GRAP        | 3160 | Residential Arch. Drawing, 33   |
| CMGT          | 4355     | Computer-Based Project Control3    | ACCT        | 2102 | Prin. of Managerial Acct., 3 or |
| CMGT          | 4380     | Heavy Equipment3                   | BLAW        | 2720 | Legal Env. of Business, 3 or    |
| MMGT          | 2040     | Engineering Material Science4      | MKT         | 3400 | Principles of Marketing, 33     |
| GRAP          | 1110     | Fundamentals of Drafting3          |             |      |                                 |
|               | NOT REQ  |                                    |             |      |                                 |
| <b>GENERA</b> | AL EDUCA | TION REQUIREMENTS (page 49)        |             |      | 48                              |
| MATH          | 1111     | Div. I C (required)3               | BE&O        | 1210 | Div. II A (required)2           |
| PHYS          | 1103     | Div. II A (required)3              | <b>ECON</b> | 1010 | Div. II B (required)3           |
| EASC          | 1004     | Div. II A (required)4              | ICAP        | 4109 | Div. IV B (required)3           |
| MINIMUN       | M TOTAL  |                                    |             |      | 132                             |

# INDUSTRIAL TECHNOLOGY Major, B.S. Degree

(43 000210)

| MA IOR I | REOLURE        | MENTS                              |                    |             |                                 | Sem. Hours |
|----------|----------------|------------------------------------|--------------------|-------------|---------------------------------|------------|
| ET       | 1020           | General Electronics3               |                    |             | Principles of Numerical Control |            |
| GRAP     | 1010           | Introduction to Desktop            | INDM               | 4210        | Industrial Management           | 3          |
|          |                | Publishing & Printing3             | ICAP               | 4110        | Industrial Problem Solving      | 3          |
| GRAP     | 1110           | Fundamentals of Drafting3          | PR&T               | 1010        | Power Mechanics                 | 3          |
| GRAP     | 1120           | Machine Drafting3                  | ET                 | 1010        | Applied Electricity, 3 or       |            |
| GRAP     | 2170           | Intro. to Computer-Aided Drafting3 | ET                 | 2020        | Industrial Electricity, 3       | 3          |
| MMGT     | 1010           | Mat. for Mfg. & Construction3      | Elective           | es in MAT   | H and/or PHYS                   | 6          |
| MMGT     | 1510           | Intro. to Manufacturing Processes3 | Upper-             | level elect | ives in ET, GRAP, CMGT, MMGT,   |            |
| MMGT     | 2515           | Applied Manufacturing Processes3   | INDT, I            | NDM, PR     | &T, or T&OE                     | 4          |
| MMGT     |                | Machine Tool Technology3           |                    |             |                                 |            |
| MINOR F  | REQUIRE        | MENTS                              |                    |             |                                 | 18-25      |
| GENERA   | AL EDUCA       | TION REQUIREMENTS (page 49)48 s.h. | (In the major, IC/ | AP 4110 fu  | ılfills 3 s.h. of Div. IV B)    | 45         |
| FREE EL  | <b>ECTIVES</b> |                                    |                    |             |                                 | 2-9        |
| MINIMUN  | M TOTAL        |                                    |                    |             |                                 | 124        |

# INDUSTRIAL TECHNOLOGY Functional Major, B.S. Degree

(This "2+2" program is designed to build upon an Associate Degree) (43 000211)

The graduate with a Bachelor of Science Degree in Industrial Technology 2+2 functional major transfer program will use the knowledge and skills obtained in the program to:

- Apply mathematical, statistical and scientific principles to industrial situations to maintain and enhance the work within industry
- Use the computer proficiently as an essential tool in planning, monitoring, and controlling of work within industry
- Understand management concepts of cost estimating, quality improvement, scheduling, production planning and control, industrial supervision, work design and ergonomics and plant layout and materials handling
- Communicate effectively in both individual and team situations using both oral and written communications
- Utilize critical thinking skills to solve industrial problems in both individual and team situations.

| Otilizo  | orniour un      | mining online to conve induction problems in both inc | arriadar arra todiri | · ortuation | 0.                             | Sem. Hours |
|----------|-----------------|---|----------------------|-------------|--------------------------------|------------|
| FUNCTION | ONAL MA         | JOR REQUIREMENTS                                      |                      |             |                                | 76-82      |
| Associa  | te Degree       | ÷42   | Departmenta          | lly approv  | ed upper-level electives from  | m one of   |
|          |                 | y related Associate in Science Degree from an         |                      |             | pelow. A listing of courses is |            |
| aco      | credited co     | ommunity college or technical institute in a field    | from the Cha         | ir of the D | epartment                      | 13         |
| of s     | study relat     | ted to Industrial Technology will be accepted.        |                      |             |                                |            |
|          |                 | mester hours of the degee transferred should          | A list of require    | ed backgr   | ound courses follow each a     | rea.       |
|          |                 | s the majjor and the remainder towards General        |                      |             |                                |            |
|          |                 | ne General Education requirements transferred         | Area 1 Aeros         |             |                                |            |
|          |                 | ivalent to CMSU's requirements.                       | PR&T 1200            |             |                                |            |
| INDM     | 4210            | Industrial Managment3                                 |                      |             | frame Maintenance              |            |
| INDM     | 4260            | Organizational Dynamics3                              | MMGT 1120            | ) Welding   |                                |            |
| INDM     | 4015            | Legal Aspects of Industry3                            |                      |             |                                |            |
| MMGT     |                 | Quality Systems3                                      |                      |             | Management                     |            |
| CMGT     | 4355            | CompBased Proj. Control, 3 or                         |                      |             | ction Techniques               |            |
| INDM     | 4240            | Facilities Engineering, 33                            |                      | •           | Cost Estimating                |            |
| CMGT     | 3320            | Prin. of Construction Mgt., 3 or                      | MMGT 2040            | ) Enginee   | ring Material Science          |            |
| MMGT     |                 | Engineering Economy, 33                               |                      |             |                                |            |
| CMGT     | 3355            | Sched. for Mfg. & Const., 3 or                        |                      |             | Managment                      |            |
| MMGT     |                 | Eng. Planning & Control, 33                           |                      |             | entals of Drafting             |            |
| CMGT     | 4310            | Construction Safety, 3 or                             | GRAP 1120            | Machine     | Drafting                       |            |
| AMT      | 4060<br>NOT REQ | Aerospace Manufact. Safety, 33                        |                      |             |                                |            |
|          | -               |   |                      |             |                                | 10         |
| MATH     | 1111            | ATION REQUIREMENTS (page 49)3                         | ICAP                 | 4109        |                                | 40         |
| PHYS     | 1104            | Div. If A (required)4                                 | ICAP                 | 4110        | Div. IV B (Area 1 & 3) or      |            |
| BE&O     | 1210            | Div. II A (required)2                                 | IGEN                 | 3116        | Div. IV A (Area 1)             | 3          |
| ECON     | 1010            | Div. II B (required)3                                 | IOLIV                | 3110        | 211. 17 / (/ 11 Ca 1/          |            |
|          |                 |   |                      |             |                                | 127        |
|          |                 |   |                      |             |                                |            |

# INDUSTRIAL TECHNOLOGY-MANUFACTURING MANAGEMENT Functional Major, B.S. Degree

(43 000240)

The graduate with a Bachelor of Science degree with a functional major in Industrial Technology-Manufacturing Management will use the knowledge and skills obtained in the program to:

- Apply mathematical, statistical and scientific principles to manufacturing situations to maintain and enhance production and product quality.
- Understand the properties, characteristics, and appropriate use of manufacturing materials, standards, specifications and manufacturing processes.
- Use the computer proficiently as an essential tool: to plan, monitor and control production; to collect and analyze data; and to prepare, present and communicate professional reports.
- Understand business, costs, economic justification, manufacturing economy, decision-making, quality improvement, production planning, production control techniques and manufacturing information systems.
- Use appropriate communication skills to interpret, convey, and articulate reports, problems and proposed solutions in the group or team environment.
- Use critical thinking, observation, questioning, analyzing techniques to solve manufacturing related problems systematically in both an independent and a team environment.
- Utilize effective leadership and supervisory skills with a concern for diversity, the global environment and professional ethics.

|          |          |                                    |         |            | Sem. Hours                         |
|----------|----------|------------------------------------|---------|------------|------------------------------------|
| FUNCTION | AM JANC  | JOR REQUIREMENTS                   |         |            | 82                                 |
| CMGT     | 2020     | Mechanics of Materials3            | INDM    | 4220       | Human Factors Engineering3         |
| MMGT     | 2040     | Engineering Material Science4      | INDM    | 4240       | Facilities Engineering3            |
| MMGT     | 1501     | Seminar in Manufacturing2          | INDM    | 4260       | Organizational Dynamics3           |
| MMGT     | 1510     | Intro. to Manufacturing Processes3 | GRAP    | 1110       | Fundamentals of Drafting3          |
| MMGT     | 2515     | Applied Manufacturing Processes3   | GRAP    | 1120       | Machine Drafting3                  |
| MMGT     | 2530     | Machine Tool Technology3           | GRAP    | 2170       | Intro. to Computer-Aided Drafting3 |
| MMGT     | 3510     | Eng. Planning & Control3           | GRAP    | 4124       | GD&T Principles for Eng. Tech2     |
| MMGT     | 3520     | Engineering Economy3               | PR&T    | 4032       | Hydraulics & Pneumatics3           |
| MMGT     | 3530     | Inspection & Quality Control3      | SAFE    | 3120       | Intro. to Industrial Hygiene, 3 or |
| MMGT     | 3550     | Principles of Numerical Control3   | SAFE    | 3430       | Industrial Hazard Control, 33      |
| MMGT     | 3562     | Computer Numerical Control3        | T&OE    | 3022       | Internship in Technology3          |
| MMGT     | 4520     | Robotics & Automation3             | MATH    | 1112       | College Trigonometry2              |
| MMGT     | 4580     | Quality Systems3                   | Departn | nentally a | pproved electives12                |
| MINOR N  | NOT REQ  | JIRED                              |         |            |                                    |
| GENER/   | AL EDUCA | TION REQUIREMENTS (page 49)        |         |            | 48                                 |
| MATH     | 1111     | Div. I C (required)3               | BE&O    | 1210       | Div. II A (required)2              |
| PHYS     | 1104     | Div. II A (required)4              | ECON    | 1010       | Div. II B (required)3              |
| CHEM     | 1103     | Div. II A (required)3              | ICAP    | 4110       | Div. IV B (required)3              |
| MINIMUN  | M TOTAL  |                                    |         |            | 130                                |

# MANUFACTURING AND CONSTRUCTION Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000153)

| MINOR REQUIREMENTS                      | ,         | Sem. Hours                       |
|---|-----------|----------------------------------|
| CMGT 2325 Project Cost Estimating3      | CMGT 3355 | Scheduling for Mfg. & Const3     |
| MMGT 1010 Mat. for Mfg. & Construction3 | MMGT 1510 | Intro. to Manufac. Processes3    |
| MMGT 2040 Engineering Material Science4 | MMGT 2515 | Applied Manufac. Processes3      |
| GRAP 1110 Fundamentals of Drafting3     | MMGT 2530 | Machine Tool Technology3         |
| Electives from the following9           | MMGT 3510 | Eng. Planning & Control3         |
| CMGT 2310 Construction Techniques3      | MMGT 3550 | Principles of Numerical Control3 |
| CMGT 3320 Prin. of Construction Mgt3    | GRAP 2170 | Intro. to Computer-Aided         |
| CMGT 3350 Building Structures3          |           | Drafting3                        |
| CMGT 4380 Heavy Equipment3              |           |                                  |

**CMGT 2020 Mechanics of Materials (3)** An introduction to the basic concepts of strengths of materials, statics and dynamics as they relate to the design and analysis of materials, machines, and structures. Prerequisite: MATH 1112.

CMGT 3010 Man and Construction (2) A look at the construction industry as it relates to the consumer.

CMGT 3020 Applied Strength of Materials (3) Selection and application of sizes, shapes, and materials required for the construction of a member of a machine or structure in order to resist an applied load in a safe and economical manner. Prerequisites: CMGT 2020 and MMGT 2040.

CMGT 1300 Introduction to Construction Management (2) General survey of the organization and functioning of the construction industry: legal, ethical, business, and management aspects.

## CMGT 1301 Seminar in Construction Management (0.5)

Forum to provide students an opportunity to learn about current events in the construction industry through the use of guest speakers, open discussions and informative field trips. Students should expect to share cost of field trips and professional materials. May be repeated.

CMGT 2310 Construction Techniques (3) An introductory course to construction management which provides a survey of light, civil, heavy highway and utility construction practices. CMGT 2325 Project Cost Estimating (3) A quantitative takeoff and survey of materials and productivity standards for industrial projects. Prerequisite: CMGT 2310 or GRAP 1110. CMGT 2340 Surveying and Construction Layout (3) Theory and practice of plane, topographic, and construction surveying and layout including care and use of instruments, note taking and computations. Prerequisite: MATH 1112.

CMGT 3320 Principles of Construction Management (3)

Principles of construction contracting with related information on forms of business ownership, management, land development, labor relations, and project safety.

**CMGT 3330 Building Codes and Code Administration** (3) In-depth study of national, state, and local regulations applicable to specification and performance of building construction standards. Prerequisites: CMGT 2310 and MMGT 2040, or consent of instructor.

**CMGT 3350 Building Structures (3)** The types and nature of structural systems including the materials basic to the system: wood, steel, and concrete. Prerequisites: MMGT 2040 and CMGT 2310.

CMGT 3355 Scheduling for Manufacturing and Construction (3) Theory and use of construction and production scheduling to control the acquisition, movement, storage, and utilization of workers and/or material with emphasis given to the Critical Path Method (CPM). Computer programming background recommended. Prerequisite: GRAP 1110 or CMGT 2310.

**CMGT 4310 Construction Safety (3)** Construction safety and health conditions on the job as they relate to workers, supervisors, inspectors, and the public. Prerequisites: CMGT 2310 or junior standing, or consent of instructor.

CMGT 4325 Computer Estimating and Cost Analysis (3) An advanced course in construction cost estimating utilizing the computer and associated professional software to assist the estimator. Prerequisites: CMGT 2310 and CMGT 2325. CMGT 4330 Mechanical Systems for Buildings (3)

Mechanical systems for Buildings (3)
Mechanical systems integrated with buildings and other equipment. Prerequisites: CMGT 2310 or junior standing.

CMGT 4340 Solar Energy for Building Construction (3)
An analysis of solar energy systems and components as they apply to types of structure, sites, and climate regions.

CMGT 4355 Computer-Based Project Control (3) An advanced course in construction project scheduling utilizing the computer and associated professional software to assist the project scheduler. Prerequisites: CMGT 3355.

**CMGT 4380 Heavy Equipment (3)** Survey of the types, uses, and economics of heavy equipment utilized in the construction industry. Prerequisites: CMGT 2310, MATH 1111.

**INDT 3050 Technical Career Subjects (1-3)** In-depth competency, skill development, and advanced concepts taught in formal course offerings through explorations of innovative techniques and procedures used in business and industry. *May be repeated for a maximum of 12 semester hours.* Prerequisite: consent of a review committee of three faculty members in the department.

INDT 4000 Special Projects in Industrial Technology (1-3) Investigation of contemporary problems and issues in manufacturing and construction by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

INDT 4020 Industrial Energy Management (3) Energy efficient techniques in a variety of industrial settings. INDT 4050 Equipment Installation and Maintenance (2) Technical problems in the installation of power equipment; care and maintenance of tools and machines; servicing school equipment; safety.

#### MMGT 1010 Materials for Manufacturing and

**Construction (3)** Construction materials, including sources, characteristics, uses, and standard sizes and packaging, with relative values of different grades.

**MMGT 1012 Global Production Technology (2)** Study of production technology along with the problems, successes and challenges of the application of technology globally.

MMGT 2040 Engineering Material Science (4: 3 lecture, 1 lab) Study of materials and their testing for construction, engineering and manufacturing: sources, characteristics, applications, standard sizes, packaging, testing theory, inspection and testing per ASTM standards.

MMGT 1120 Welding (2) Study and practice of four basic welding processes: oxyacetylene, metallic arc, MIG and TIG. MMGT 2210 Finishing and Upholstering (3) Finishing materials, their application and treatment on various woods and metals; refinishing and upholstering.

MMGT 1501 Seminar in Manufacturing (0.5) Forum to provide students an opportunity to learn about current events in the manufacturing industry through the use of guest speakers, open discussions, and informative field trips. Students should expect to share cost of field trips and professional materials. May be repeated for a maximum of 2 semester hours.

**MMGT 1510 Introduction to Manufacturing Processes (3)** An overview of the primary processes and a basic knowledge of secondary manufacturing processes which are classified as separating, casting, forming, conditioning, assembling, and finishing.

**MMGT 2500 Applied Computer Technology (2)** Develops computer literacy through a study of microcomputers, peripherals and applications, and software.

MMGT 2515 Applied Manufacturing Processes (3) The manufacturing processes used to fabricate and form engineering materials into useful products. Includes laboratory experiences using the common materials and basic processes. Prerequisite: MMGT 1510.

MMGT 2530 Machine Tool Technology (3) An introduction to machine tools with experiences in turning, drilling, milling, grinding, and related bench work. Assigned projects.

**MMGT 3501 Computer Programming for Manufacturing** (3) Students will study control logic, data acquisition, data storage and computer programming as they relate to manufacturing. Prerequisite: BE&O 1210 or equivalent.

**MMGT 3510 Engineering Planning and Control (3)** Planning and controlling the manufacturing process including materials, machines, people, and suppliers.

MMGT 3520 Engineering Economy (3) Elements that influence the cost of manufactured products, the process of determining manufacturing costs, cost justification, value analysis and cost reduction analysis. Prerequisites: MMGT 2515 and MMGT 2530 or junior class standing.

**MMGT 3530 Inspection and Quality Control (3)** Principles and methods of controlling the quality of manufactured products. Emphasis will be on gauging and inspection.

MMGT 3550 Principles of Numerical Control (3) Introduction to N/C Machining Operations. Includes laboratory work in writing and executing manual program on N/C Machine Tools.

**MMGT 3562 Computer Numerical Control (3)** 

Computerized numerical control programming of machine tools. Writing, debugging, and verifying part programs using the UNIAPT part programming language will be an integral part of the course. Prerequisite: MMGT 3550.

MMGT 4520 Robotics and Automation (3) Automated manufacturing equipment, computer integrated manufacturing systems, and the use of industrial robots. Computer programming background recommended.

MMgt 4550 Simulation in Engineering Technology (3)
Collection of methods and applications to simulate the behavior of manufacturing and service systems. Emphasis on hands-on time with Software utilizing case studies, and lab exercises. Prerequisite: Senior standing or Graduate status.

MMGT 4580 Quality Systems (3) The principles and practices of Tetal Orgality Managements and the decision.

**MMGT 4580 Quality Systems (3)** The principles and practices of Total Quality Managements and the decision making tools and techniques utilized by professionals in today's successful industries.

# **Electronics Technology**

## **Integrative Studies Capstone**

ICAP 4109 Construction Operations\* (3) A detailed study of the knowledge, processes and operational procedures involved in a commercial construction project. Prerequisites: CMGT 2310, CMGT 2325, CMGT 3320 and CMGT 3355 and senior standing. \*Not available for graduate credit. ICAP 4110 Industrial Problem Solving\* (3) Designed for students preparing for careers in manufacturing management. Student teams will analyze manufacturing problems, propose solutions, and present recommendations. Prerequisite: senior standing. \*Not available for graduate credit.

# **Electronics Technology**

The second digit of each course number stands for the following: 0-Electronics Technology, 3-Electronics Engineering Technology.

# ELECTRONICS ENGINEERING TECHNOLOGY Functional Major, B.S. Degree (43 000227)

|           |           | •  | ŕ            |          | Sem. Hours                         |
|-----------|-----------|--|--------------|----------|------------------------------------|
| FUNCTI    | ONAL MA   | JOR REQUIREMENTS                           |              |          | 79                                 |
| ET        | 1026      | DC Circuit Analysis4                       | EET          | 3320     | Intro. to Data Communications3     |
| ET        | 1027      | AC Circuit Analysis4                       | EET          | 3330     | Intro. to Communication Systems3   |
| ET        | 1050      | Digital Principles & Applications4         | EET          | 3340     | Control Systems Design3            |
| ET        | 2048      | Active Electronic Devices4                 | EET          | 4310     | Fuzzy Logic Systems Design3        |
| ET        | 2058      | Operational AmplifiersTheory               | EET          | 4320     | Adv. Control Systems Design3       |
|           |           | & Applications4                            | EET          | 4330     | Digital Signal Processing          |
| ET        | 2060      | Microprocessors: Theory & Appl4            |              |          | Systems Design3                    |
| ET        | 2065      | Computer Programming for                   | EET          | 4340     | Neural Network Systems Design3     |
|           |           | Electronics Technology4                    | MMGT         | 2500     | Applied Computer Technology2       |
| EET       | 2300      | Calculus for Electronics                   | T&OE         | 1042     | Technical Mathematics II3          |
|           |           | Engineering Technology3                    | T&OE         | 2040     | Calculus for Technology3           |
| EET       | 2320      | Advanced Digital Circuitry3                | T&OE         | 3060     | Technical Report Writing2          |
| EET       | 2330      | Transform Analysis3                        | PHYS         | 1101     | College Physics I4                 |
| EET       | 3310      | Microprocessor Systems Design3             | PHYS         | 1102     | College Physics II4                |
| MINOR     | NOT REQ   | UIRED                                      |              |          |                                    |
|           |           | ATION REQUIREMENTS (page 49)48 s.h. (In th | e functional | maior PH | IYS 1101 and PHYS 1102 are allowed |
|           |           | Div. II A)                                 |              |          |                                    |
| COMM      |           | Div. I B (required)3                       | CHEM         | 1104     | Div. II A (required)4              |
| MATH      |           | Div. I C (required)3                       | ECON         | 1010     | Div. II C (required)3              |
|           |           | 511. 1 G (10quilou)                        | _50.1        |          | 124                                |
| IVITIVITU | IVI IOTAL |  |              |          | 124                                |

# **ELECTRONICS TECHNOLOGY Functional Major, B.S. Degree**

(43 000221)

The graduate with a Bachelor of Science degree in Electronics Technology will use the knowledge and skills obtained in the program to:

- Research, prepare and present both oral and written reports on technical or management subjects related to his/her area of specialization
- Identify, analyze and solve technical or management problems related to his/her field of specialization
- Function effectively as a participating member of a work group to accomplish a particular goal
- Demonstrate desirable work habits and professional and conscientious attitudes in his/her particular areas of instruction through participation in professional activities and organizations, and leadership activities both in and out of the classroom
- Demonstrate a mastery of skill beyond the entry level related to one or more areas of technical, management or marketing specialities in the major area of study
- Demonstrate technical and general knowledge required in occupational work areas related to the major field of study.

(Program on next page)

Sam Hours

|        |          |                                    |          |            |                               | Seill. Hours |
|--------|----------|------------------------------------|----------|------------|-------------------------------|--------------|
| FUNCT  | IONAL MA | JOR REQUIREMENTS                   |          |            |                               | 69           |
| ET     | 1026     | DC Circuit Analysis4               | ET       | 3041       | Communication Systems         | 4            |
| ET     | 1027     | AC Circuit Analysis4               | T&OE     | 1042       | Technical Mathematics II      | 3            |
| ET     | 1050     | Digital Principles & Applications4 | T&OE     | 2040       | Calculus for Technology       | 3            |
| ET     | 2048     | Active Electronic Devices4         | T&OE     | 3060       | Technical Report Writing      | 2            |
| ET     | 2060     | Microprocessors: Theory & Appl4    | MGT      | 3310       | Principles of Management, 3 o | r            |
| ET     | 2065     | Computer Programming for           | INDM     | 4210       | Industrial Management, 3      | 3            |
|        |          | Electronics Technology4            | Elective | es in man  | agement                       | 6            |
| ET     | 3014     | Analog-Digital Circuitry4          | Departr  | mentally a | pproved electives             | 20           |
| MINOR  | NOT REQ  | UIRED                              |          | •          |                               |              |
| GENER  | AL EDUC  | ATION REQUIREMENTS (page 49)48 s.h |          |            |                               | 48           |
| COMN   | 1 1000   | Div. I B (required)3               | ECON     | 1010       | Div. II B (required)          | 3            |
| MATH   | 1111     | Div. I C (required)3               | IGEN     | 3116       | Div. IV A (required) 3, or    |              |
| CHEM   | 1104     | Div. II A (required)4              | ICAP     | 4110       | Div. IV B (required) 3,       | 3            |
| PHYS   | 1104     | Div. II A (required)4              |          |            |                               |              |
| FREE E | LECTIVES | S (see statement of policy)        |          |            |                               | 7            |
| MINIMU | IM TOTAL |                                    |          |            |                               | 124          |

# **ELECTRONICS TECHNOLOGY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000220)

|       |         |                                    |         |           | Se                              | em. Hours |
|-------|---------|------------------------------------|---------|-----------|---------------------------------|-----------|
| MINOR | REQUIRE | MENTS                              |         |           |                                 | 22-23     |
| ET    | 1026    | DC Circuit Analysis4               | MATH    | 1112      | College Trigonometry ,2 or      |           |
| ET    | 1027    | AC Circuit Analysis4               | T&OE    | 1042      | Technical Mathematics, 3        | 2-3       |
| ET    | 1050    | Digital Principles & Applications4 | Upper-l | evel elec | tives in electronics technology | 4         |
| ET    | 2048    | Active Electronic Devices4         |         |           | 0,                              |           |

UNIVERSITIES STUDIES REQUIREMENTS (MATH 1111 Div I C is required)

## **Electronics Technology**

Some ET and EET courses have a zero-credit laboratory requirement. Labs are <u>scheduled</u> for ET 1026, ET 1027, ET 1050, ET 2048, ET 2058, ET 2060, ET 2065, ET 3014, and ET 3041. The majority of the remaining ET and/or EET courses utilize an <u>open</u> lab system (where the student is expected to complete laboratory work by the instructor's due date on his/her own time, as class schedules and lab equipment availability permit).

ET 1010 Applied Electricity (3) Provides basic theory

together with appropriate shop experiences for introductory technical training in electrical principles. Includes basic circuits, Ohm's Law, A.C. and D.C. theory, as well as generation and application of electrical energy.

ET 1020 General Electronics (3) A general overview of several areas of electronics including the study of electronic measurements, active and passive devices, receiver and transmitter theory, basic digital theory, and electronic controls. Prerequisite: Not open to electronics majors or minors.

ET 1026 DC Circuit Analysis (4: 3 lecture, 1 lab) Analysis and application of D.C. principles to passive networks. Laboratory experience in the use of basic test instruments. Prerequisite: T&OE 1040 or MATH 1111 may be taken

concurrently. ET 1027 AC Circuit Analysis (4: 3 lecture, 1 lab)
Application of alternating current principles to resistive, capacitive, and inductive circuits. Phasor analysis of series-parallel impedance. Resonance and filters are covered. Laboratory experiments using typical test instruments. Prerequisites: MATH 1112 or T&OE 1042 or either concurrently and ET 1026.

ET 1050 Digital Principles and Applications (4: 3 lecture, 1 lab) Binary numbers, logic gates, Boolean algebra, parity generation and detection, arithmetic circuits, flip-flops and latches, and troubleshooting digital circuits using current industry standard techniques.

ET 2020 Industrial Electricity (3) Electrical practices as applied to modern industrial applications with an emphasis on the National Electrical Code, wiring diagrams, electrical distribution, and electrical/electronic control devices. Prerequisite: ET 1010 or ET 1027 or prior experience and consent of the instructor.

## ET 2048 Active Electronic Devices (4: 3 lecture, 1 lab)

Theory, operation, and analysis of Integrated Active Devices and Discrete Semiconductor Active Devices. Basic digital and common analog circuit configurations. Prerequisite: ET 1027 or concurrently.

ET 2058 Operational Amplifiers--Theory and Applications (4: 3 lecture, 1 lab) A study of integrated circuit operational amplifiers, their characteristics and a wide range of applications. Construction and testing of numerous circuits. Prerequisite: ET 2048.

ET 2060 Microprocessors: Theory and Application (4: 3 lecture, 1 lab) The fundamental concepts of microprocessors including software development and hardware design. Design of input/output interface circuits together with numerous applications to industrial controls. Prerequisite: ET 1050 or concurrently.

ET 2065 Computer Programming for Electronics
Technology (4: 3 lecture, 1 lab) Contemporary computer
programming languages for electronics technology.
Programming techniques and skills as applied to
troubleshooting industry standard computer hardware. May
be repeated. If repeated, a different programming language
must be studied. Prerequisite: ET 1050 or concurrently.
ET 3014 Analog-Digital Circuitry (4: 3 lecture, 1 lab)
Counters, shift registers, monostable multivibrators,
memories, A/D and D/A converters, phase-locked loops,
digital simulation software, and troubleshooting digital circuits
using current industry standard techniques. Prerequisite: ET
1050.

ET 3017 Industrial Electronics (4: 3 lecture, 1 lab) Analysis of selected industrial controls and components to include transducers, sensors, time delay circuits, motor controls, and thyristors. Emphasis on commercial programmable logic controller installation and programming. Practical applications of industrial electronic devices and systems and further development of troubleshooting skills. Prerequisite: ET 1010 or ET 1026 or consent.

ET 3022 AC and DC Machines (4: 3 lecture, 1 lab) Basic principles of alternating and direct current motors and generators including construction, theory of operation, industrial uses and maintenance considerations.

Prerequisite: ET 2020 or consent of instructor.

ET 3034 Electronic Instruments and Measurements (3) Design, operation and calibration of a variety of

# **Electronics Technology**

test instruments. Emphasis will be upon measurement procedures not normally practiced in introductory electronics courses. Prerequisite: ET 1050 or ET 2058 or concurrently. ET 3038 Audio Systems (4: 3 lecture, 1 lab) Principles of sound and acoustics: audio amplifiers, microphones, speakers, mixers, and equalizers; magnetic tape and disc recording; audio measurement techniques. Prerequisite: ET 2058 or concurrently.

ET 3041 Communication Systems (4: 3 lecture, 1 lab)
A study of receiver and transmitter circuits and systems.
Modulation methods, signal propagation, and antenna
design. Practical alignment methods, measurement
techniques, and troubleshooting procedures. Preparation
for the F.C.C. commercial license. Prerequisite: ET 2058 or
concurrently.

ET 4000 Special Projects in Electronics Technology (1-3) Investigation of contemporary problems and issues in electronics technology by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

ET 4014 Advanced Technical Problems in Electronics (1-4) Individual/group work on recent developments and advanced technical concepts. Experimentation and technical exploration of content not available though formal course offerings. May be repeated for a maximum of 8 semester hours

ET 4031 Introduction to Process Control\* (4: 3 lecture, 1 lab) Implementation, evaluation, tuning and troubleshooting of process control systems. Selection of sensing devices and final control elements. Emphasis on laboratory activities. Application of microprocessor-based systems including programmable controllers. Prerequisites: ET 2020 or consent of instructor. \*Not available for graduate credit. ET 4044 Video Systems\* (4: 3 lecture, 1 lab) Television cameras and the composite video signal. VHF, UHF, cable, and satellite TV distribution systems. Television receiver and monitor circuitry and troubleshooting techniques. Prerequisite: ET 2058. \*Not available for graduate credit. ET 4048 Advanced Communication Systems\* (4: 3 lecture, 1 lab) Mobile radio repeater systems and signaling modes; spread spectrum communications; commercial broadcast installations; microwave signal sources; amplifiers; waveguides and cavities; antennas and radar systems. Prerequisite: ET 3041. \*Not available for graduate credit.

#### **Electronics Engineering Technology**

## **EET 2300 Calculus for Electronics Engineering**

**Technology (3)** Methods of integration, partial derivatives, double integrals, derivatives and integrals in polar coordinates; empirical curve fitting, power series expansions, first and second-order differential equations; and use of software. Prerequisite: T&OE 2040.

**EET 2320 Advanced Digital Circuitry (3)** Design of sequential networks, iterative networks, sequential networks with MSI integrated circuits, sequential networks using PLDs, state machines, asynchronous sequential networks, use of software for design analysis. Prerequisite: ET 1050.

**EET 2330 Transform Analysis (3)** Waveform analysis, Laplace transforms and their application to circuit analysis; Fourier analysis, use of z-transforms in discrete-time systems, and analysis software. Prerequisites: T&OE 2040 and ET 2048.

**EET 3048 Control of Electrical Machinery (4:3 lecture, 1 lab)** Analysis and application of electrical and electronic controls for industrial equipment. Programmable Logic Controllers are emphasized as well as techniques in engineering design. Prerequisite: ET 1010 or ET 1027 or consent of instructor.

EET 3310 Microprocessor Systems Design (3)

Microprocessor/microcontroller internal architectures and timing; single and multiprocessor bus structures; memory subsystem design, designing polled I/O hardware/firmware, interrupt driven I/O hardware/firmware design, DMA, design of multiprocessor systems, segmentation

and memory management, bit-sliced architectures, and use of manufacturer data sheets and application notes. Prerequisites: T&OE 2040 and ET 2060.

**EET 3320 Introduction to Data Communications (3)** Fundamentals of data transmission, data encoding, multiplexing techniques, circuit and packet switching; local area networking, ISDN, frame relay, ATM, local area networking, and protocol analysis. Prerequisites: ET 2060, EET 2330 or concurrently.

**EET 3330 Introduction to Communication Systems (3)** Signal spectra, noise, AM transmitters, AM superheterodyne receivers, sideband systems, frequency modulation, phase modulation, phase-locked loops, FM transceivers, transmission lines, waveguides, radiowave propagation, antennas, and use of CAE software. Prerequisites: EET 2330 and EET 3310.

**EET 3340 Control Systems Design (3)** Introduction to analog control systems analysis and design including control system components, models of physical systems, state-variable models, system responses, control system characteristics, stability analysis, and use of CAE software. Prerequisites: ET 2058, EET 2300 or concurrently, and EET 2330.

**EET 4300 Special Projects in Electronics Engineering Technology\* (1-3)** Investigation of contemporary problems and issues in electronics engineering technology by selected individuals or groups. *May be repeated for a maximum of 6 semester hours.* \*Not available for graduate credit. **EET 4310 Fuzzy Logic Systems Design\* (3)** Fuzziness and uncertainty; fuzzy sets, fuzzy set operators, fuzzy set hedges, fuzzy reasoning, fuzzy models, building fuzzy systems, neurofuzzy technologies, and current applications of fuzzy systems. Prerequisites: ET 2065, EET 2320, and EET 3310. \*Not available for graduate credit.

**EET 4320 Advanced Control Systems Design\* (3)** Root-locus analysis and design; frequency response, modern control design, discrete-time systems, sampled-data systems, analysis and design of digital control systems; an introduction to nonlinear system analysis, and use of CAE software for the design, analysis, design, and simulation of control systems. Prerequisite: EET 3310 and EET 3340. \*Not available for graduate credit.

EET 4330 Digital Signal Processing Systems Design\* (3) An introduction to the engineering fundamentals of digital signal processing. Emphasis is placed on the design, implementation, and testing of finite impulse response filters, infinite impulse response filters, adaptive digital filters, and sampling rate converter-decimators using DSP software design packages. Prerequisites: ET 2065, EET 2320, EET 2330, and EET 3310. \*Not available for graduate credit. EET 4340 Neural Network Systems Design\* (3) A study of key artificial neural network architectures, operation, applications, and design. Use of pc-based simulators for analysis and design of neural networks with emphasis on the design of neural networks to solve engineering problems. Prerequisites: ET 2065, EET 2320, and EET 3310. \*Not available for graduate credit.

## Networking

**NET 1060 Introduction to Networking Basics (3: 2 lecture, 1 lab)** Fundamentals including networking and Ethernet fundamentals, media, IP Addressing, routing fundamentals and troubleshooting. Hands-on experiences involving cabling, routers and router configuration.

NET 1061 Routers and Routing Basics (3: 2 lecture 1 lab)
Router and routing configuration fundamentals and protocols,
access control lists and basic router troubleshooting, handson experiences with routers. Prerequisite: NET 1060.
NET 2058 Computer Technologies (3) Introduction to
computer architectures and operating systems. Includes PC
hardware and DOS/Windows module over basic operating
system fundamentals.

**NET 2060 Switching Basics and Intermediate Routing** (3: 2 lecture, 1 lab) Advanced IP addressing, intermediate routing protocols, switches, Virtual LANs, Spanning Tree and VLAN Trunking Protocols. Prerequisite: NET 1061.

**NET 2061 WAN Technologies (3: 2 lecture, 1 lab)**Advanced IP addressing, Port address Translation, WAN technology and terminology, management, and introduction

to optical networking. Prerequisite: NET 2060. **NET 3062 Network Design (3)** Preparation for the Cisco Certified Design Associate (CCDA) certification test.

Prerequisite: NET 1061 or CCNA certification.

**NET 3068 Network Security I (4: 3 lecture 1 lab)** Operating system security concepts and techniques. Examines theoretical concepts of security and adopts a practical handson approach when examining operating system security techniques. Prerequisite: NET 2058.

**NET 3088 Linux Operating Systems (4: 3 lecture, 1 lab)** Linux and Open Source Software, as an operating system technology. Installing, configuring, maintaining, and regularly use a distribution of the Linux operating system. Prerequisite: NET 2058.

NET 4040 Fundamentals of Network Operating Systems (3) Installing, configuring, and administering Network Operating Systems. Prerequisite: NET 2058 or instructor consent

**NET 4042 Network Servers and Services (3)** Implementing and Administering of Network Infrastructure and Directory Services Infrastructure. Prerequisite: NET 4040 or instructor consent

**NET 4043 Network Services and Infrastructure (3)** Advanced Implementing and Administering of Network Infrastructure and Directory Services Infrastructure. Prerequisite: NET 4042 or instructor consent.

**NET 4060 Advanced Routing\* (3)** Topics in VLSMs, OSPF, environments, EIGRP, BGP, optimizing routing, and scalability. Hands-on experiences with emphasis on Cisco's CCNP 640-503 certification test. Prerequisite: NET 2061 or CCNA certification or instructor consent. \*Not available for graduate credit.

NET 4061 Remote Access\* (3) Remote access topics in WAN protocols, WAN design, network management and security. Hands-on experiences with emphasis on Cisco's CCNP 640-505 certification test. Prerequisite: NET 4060 or instructor consent. \*Not available for graduate credit. NET 4062 Advanced Switching\* (3) Advanced Switching topics. Hands-on experiences with emphasis on Cisco's CCNP 640-504 certification test. Prerequisite: NET 4061 or instructor consent. \*Not available for graduate credit. NET 4063 Network Support\* (3) Local and Wide Area Network troubleshooting. Hands-on experiences with emphasis on Cisco's CCNP 640-506 certification test. Prerequisite: NET 4062 or instructor consent. \*Not available for graduate credit.

**NET 4064 Advanced Network Design\* (3)** Hands-on experiences with emphasis on Cisco Certified Design Professional. Prerequisite: NET 2061 or instructor consent. \*Not available for graduate credit.

# **Industrial Management**

**INDM 4010 Current Issues in Industry (3)** Identify, discuss, and research current issues, trends, and technological changes affecting industry as related to corporate planning, decision making, and managing for the future. Prerequisites: junior or senior standing for undergraduate credit.

**INDM 4015 Legal Aspects of Industry (3)** Coverage of legal aspects of industry. Focus on the legal system, sources of law, and types of law affecting the manufacturing and/or construction industry.

**INDM 4210 Industrial Management (3)** A survey of operations management in industry today. Industrial management principles and applications, management science, operations analysis and design, manufacturing processes, process life cycle, production inventory, and quality control are emphasized.

INDM 4220 Human Factors Engineering (3) Integration of concepts involved in providing safe and comfortable work places (Ergonomics) with concepts directed toward increased

productivity and profitability (Work Design). INDM 4230 Quality Control Management (3) Overall approach to quality and the control activities of management. Technical aspects of management control systems, statistical analysis, statistical quality control, and management concepts are emphasized. Prerequisite: background statistics course.

INDM 4240 Facilities Engineering (3) Provides students and practitioners with the practical resources that describe the techniques and procedures for developing an efficient facility layout and an introduction to computer simulations. INDM 4260 Organizational Dynamics (3) Various types and styles of supervisory leadership in the industrial setting. Emphasis is placed on human relations aspects of leadership in the line and staff organizational structure.

# Aerospace Manufacturing Technology

**AMT 4060 Aerospace Manufacturing Safety (3)** Safety, health and environmental issues in aerospace manufacturing with an emphasis on the management of safety programs in manufacturing industries.

**AMT 3130 Composite Technology I (3)** Fundamental principles of materials, basic design theory, manufacturing processes, inspection and repair concepts.

AMT 3210 Manufacturing in the Aerospace Industry (3) Manufacturing activities required in order to plan, organize, schedule, control and direct manufacturing activities in the environment of an aerospace industry.

**AMT 4221 Manufacturing Problem Solving (3)** A microlevel look at issues that directly affect processes, procedures, and management within the manufacturing industry.

AMT 4250 Project Management in Aerospace Manufacturing (3) Managing aerospace manufacturing projects. Students deal with decision making, organizing, planning, and controlling manufacturing projects in the aerospace industry. Prerequisite: MMGT 3510.

Com Hours

# Automotive Technology

In the area of Automotive Technology, the second digit in the course number stands for the following: 0--General and Professional, 1--Automotive, 2--Aviation Maintenance, 3--Aviation Flight, 4--Transportation, 5--Aviation Safety.

## **POWER AND TRANSPORTATION Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000162)

| MINOR REQUIRE      | MENTS                    |    |      |      | 22                            |
|--------------------|--------------------------|----|------|------|-------------------------------|
| MINORTEGOINE       | IVILIVIO                 |    |      |      |                               |
| PR&T 1010          | Power Mechanics          | 3  |      |      | Automotive                    |
| PR&T 4032          | Hydraulics & Pneumatics  | 3  | PR&T | 2110 | Eng. Theory & Maintenance4    |
| Elect one of the f | following groups         | 16 | PR&T | 2130 | Auto. Electrical Systems4     |
|                    | General                  |    | PR&T | 2132 | Fuel Sys. & Emission Control4 |
| AVIA 1020          | Aeronautics              | 2  | PR&T | 3120 | Steering & Susp. Systems4     |
| PR&T 4410          | Intermodal Surface Trans | 3  |      |      |                               |
| Departmentally     | approved electives in    |    |      |      |                               |
| Power & Transp     | ortation                 | 11 |      |      |                               |

Sem. Hours

# **AUTOMOTIVE TECHNOLOGY MANAGEMENT Functional Major, B.S. Degree**

(43000838)

The graduate with a Bachelor of Science degree in Automotive and Power Technology will use the knowledge and skills obtained in the program to:

- Research, prepare and present both oral and written reports on technical or management subjects related to his/her area of specialization
- Identify, analyze and solve technical or management problems related to his/her field of specialization
- Function effectively as a participating member of a work group to accomplish a particular goal
- Demonstrate desirable work habits and professional and conscientious attitudes in his/her particular areas of instruction through participation in professional activities and organizations, and leadership activities both in and out of the classroom
- Demonstrate a mastery of skill beyond the entry level related to one or more areas of technical, management or marketing specialities in the major area of study
- Demonstrate technical and general knowledge required in occupational work areas related to the major field of study.

|        |          |                                    |   |           |             | OCI                              | II. I louis |
|--------|----------|------------------------------------|---|-----------|-------------|----------------------------------|-------------|
| FUNCTI | ONAL MA  | JOR REQUIREMENTS                   |   |           |             |                                  |             |
| PR&T   | 1010     | Power Mechanics                    | 3 | MMGT      | 2530        | Machine Tool Technology          | 3           |
| PR&T   | 2110     | Engine Theory & Maintenance        | 4 | T&OE      | 3060        | Technical Report Writing         | 2           |
| PR&T   | 2130     | Auto. Electrical Systems           | 4 | BLAW      | 2720        | Legal Environment of Business    | 3           |
| PR&T   | 2132     | Fuel Systems & Emission Controls . | 4 | MATH      | 1112        | College Trigonometry             | 2           |
| PR&T   | 3120     | Steering & Suspension Systems      | 4 | INDM      | 4210        | Industrial Management, 3 or      |             |
| PR&T   | 3124     | Automotive Braking Systems         | 4 | MGT       | 3310        | Prin. of Management, 3           | 3           |
| PR&T   | 3130     | Computerized Engine Diagnostics    | 4 | MKT       | 3400        | Principles of Marketing, 3 or    |             |
| PR&T   | 3134     | Advanced Engine Performance        |   | HRM       | 3920        | Human Resource Mgt, 3            | 3           |
| PR&T   | 3150     | Diesel Technology                  | 3 | Departr   | nentally a  | pproved electives from one of    |             |
| PR&T   | 4032     | Hydraulics & Pneumatics            | 3 | the thre  | e areas lis | sted below. A listing of courses |             |
| T&OE   | 3022     | Internship in Technology           | 3 | is availa | able from t | the Chair of the Department      | 9           |
| ET     | 1026     | DC Circuit Analysis                | 4 | Area      | 1 Automo    | tive Technology                  |             |
| GRAP   | 1110     | Fundamentals of Drafting           | 3 | Area      | 2 Design    | Technology                       |             |
| ACCT   | 2100     | Survey of Accounting               | 3 | Area      | 3 Service   | Management                       |             |
|        | NOT REQ  |                                    |   |           |             |                                  |             |
| GENER/ | AL EDUCA | ATION REQUIREMENTS (page 49)       |   |           |             |                                  | 48          |
| MATH   | 1111     | Div. I C (required)                | 3 | ECON      | 1010        | Div. II B (required)             | 3           |
| CHEM   | 1103     | Div. II A (required)               | 3 | PSY       | 1100        | Div. II C (required)             | 3           |
| PHYS   | 1104     | Div. II A (required)               | 4 | ICAP      | 4112        | Div. IV B (required)             | 3           |
| BE&O   | 1210     | Div. II A (required), 2 or         |   |           |             |                                  |             |
| LIS    | 1600     | Div. II A (required), 2            | 2 |           |             |                                  |             |
| UPPER- | LEVEL EL | ECTIVES`                           |   |           |             |                                  | 3           |
| MINIMU | M TOTAL  |                                    |   |           |             |                                  | 126         |

#### **General and Professional**

**PR&T 1010 Power Mechanics (3: 2 lecture, 1 lab)** Power sources and methods of transferring power. Theory of internal combustion engines. Laboratory experiences with emphasis on small gasoline engines. Each student must disassemble and overhaul at least one engine.

PR&T 3010 Transportation Systems (3) Characteristics and significance of transportation technology as applied to people, their society and economic systems, analyzed through a review of water, highway, rail, air and pipeline transport.

PR&T 4025 Motorcycle Systems Maintenance (3:

**2 lecture, 1 lab)** Theory, maintenance and repair of motorcycles and systems. Special emphasis on diagnostics, repair, and adjustment procedures. Students will need to provide a motorcycle.

PR&T 4032 Hydraulics and Pneumatics (3: 2 lecture, 1 lab) Fluid power principles with practical application of hydraulics, pneumatics, and fluidics. Prerequisites: MATH 1111 or T&OE 1040.

**PR&T 4038 Advanced Hydraulics (3)** Hydraulic system analysis and troubleshooting along with servo and electronic control theory and application. Prerequisite: 4032.

#### **Automotive**

Each student enrolled in an automotive course is expected to pay a shop fee to cover the cost of consumable supplies which cannot be conveniently charged to a particular project. In addition, each student will provide appropriate vehicle(s) with necessary materials and replacement parts for assigned laboratory experiences.

#### PR&T 2110 Engine Theory and Maintenance (4: 3 lecture,

1 lab) Examines through practical application the theories of operation, construction, maintenance, disassembly, and assembly of motor vehicle engines and their supporting systems. Emphasis on operating principles and maintenance procedures. Prerequisite: PR&T 1010 or background experience.

PR&T 2130 Automotive Electrical Systems (4: 2 lecture, 2 lab) Procedures for testing, adjusting, repairing, and servicing of electrical components in automotive charging, starting, ignition, and accessory systems. Prerequisite: PR&T 1010 or concurrently.

PR&T 2132 Fuel Systems and Emission Controls (4: 2 lecture, 2 lab) Fuel and related emission control systems. Basic carburetion, fuel injection, and emission control devices. Prerequisite: PR&T 2130.

PR&T 2150 Mobile Heating, Ventilating, Air-Conditioning (Mobile HVAC) (3: 2 lecture, 1 lab) Designed to introduce technicians to mobile heating, ventilation, and air-conditioning systems.

PR&T 3110 Automotive Engine Overhaul (4: 3 lecture, 1 lab) Theory and practice of disassembling, cleaning, inspecting, and repairing automotive engines. Removal and overhaul of engine according to accepted industry practice is a required activity for each student in the course. Prerequisite: PR&T 2110 or AGRI 3200.

PR&T 3120 Steering and Suspension Systems (4: 2 lecture, 2 lab) Classroom and laboratory activity in the diagnosis, service and repair of automotive steering and suspension systems. Prerequisite: PR&T 1010 or background experience.

PR&T 3124 Automotive Braking Systems (4: 2 lecture, 2 lab) Classroom and laboratory activity in the diagnosis, service and repair of automotive braking, anti-lock braking,

traction control and stability control systems. Prerequisite: PR&T 1010.

PR&T 3130 Computerized Engine Diagnostics (4: 2 lecture, 2 lab) Utilization of computerized diagnostic methods and equipment in testing and servicing computerized engines in conjunction with automotive tune-up. Prerequisite: PR&T 2132

PR&T 3134 Advanced Engine Performance (4: 3 lecture, 1 lab) Engine Performance testing as it relates to the automobile. Includes the study of advanced equipment used to test systems and advanced diagnostic testing procedures. Prerequisite: PR&T 3130.

**PR&T 3140 Transmissions and Drivelines (4: 2 lecture, 2 lab)** In-depth classroom and laboratory experiences in the diagnosis, service and repair of transmissions and drivelines. Prerequisite: PR&T 1010 or AGRI 3200.

PR&T 3150 Diesel Technology (3: 2 lecture, 1 lab) Survey of diesel engine theory, diagnosis, service and maintenance with emphasis in diesel fuel systems, injection pump designs, construction, operation, and maintenance. Prerequisite: PR&T 2110 or AGRI 3200.

## **Transportation**

## PR&T 4410 Intermodal Surface Transportation (3)

Surface transportation (motor vehicle, pipeline, rail, and water) in the United States as seen from an integrated, intermodal viewpoint. Major aspects include systems analysis, organization, operations, financing, research and development, training, and regulation. Economic, social, and political factors are considered.

#### **Integrative Studies Capstone**

## ICAP 4112 Automotive Systems for Contemporary

Society\* (3) Integration of communication, technology, sociology, economics, and ecology with automotive engineering, management and service, emphasizing their reciprocal effects on each other. Prerequisite: senior standing in automotive technology. \*Not available for graduate credit.

# College of Arts and Sciences

## **Pre-Professional Programs**

Students interested in the premedical, pre-osteopathy, and pre-veterinary medicine program should plan to attend the University for four years and graduate with a B.S. degree. The student should major in biology and minor in chemistry or major in chemistry and minor in biology. Additional electives are required depending upon the student's needs and interest area.

Students interested in pre-dental, pre-optometry, and pre-physical therapy should plan to attend the University two or more years to meet the minimum requirements in biology, chemistry, mathematics, and physics required by the professional school. Additional electives are required depending upon the student's needs and interest area.

Students interested in the pre-pharmacy program should consult the Chair of the Chemistry and Physics Department for suggested curriculum.

### Arts and Sciences

A&S 1244 Special Topics (1-3) Individual or group work in the arts and sciences.

#### **Integrative Studies General**

**IGEN 4244 Comparative Cross-Cultural Cinema\* (3)** Comparison of films with various sub-themes relating to cross-cultural topics such as internationalism, racism and gender. \*Not available for graduate credit.

## Art

In the Department of Art, the second digit in the course number stands for the following: 0--Art Problems, 1--Drawing, 2--Figure Drawing and Life Drawing, 3--Design, 4--Sculpture and Ceramics, 5--Painting, 6--Commercial Art, 7--Printmaking, 8--Art History, 9--Art Education.

**NOTE:** Central Missouri State University is an accredited institutional member of the National Association of Schools of Art and Design, 11250 Roger Bacon Dr., Suite 21, Reston, VA, 20190-5248; phone 703-437-0700.

#### **Department of Art Statement of Policy**

Students in studio courses in art are required to furnish their own materials except certain studio equipment and some highly specialized materials provided by the Department. All work when completed is under the control of the Department until the end of the academic year. The student is expected to have a representative portfolio of his/her work available for presentation at any time prior to graduation.

Each candidate for a degree may be required to leave with the Department of Art one or more pieces of original work. These are added to the collection of the work of graduates and will form a permanent University collection.

During the sophomore year or during the first semester after transferring from another institution, all candidates for degrees will present a portfolio of work to be reviewed by the faculty for the purpose of acceptance into the B.F.A. program.

During the senior year, all candidates for degrees will present an exhibition of representative work to be reviewed by the faculty as partial graduation approval. Specific information about reviews and exhibitions may be obtained in the Department of Art Office.

ART

1315

Design I ......3

# ART Functional Major, B.S. in Ed. Degree

(Certification to teach art in grades K-12) (41 000375)

The graduate with a Bachelor of Science in Education degree in Art will use the knowledge and skills obtained in these programs to:

- Demonstrate critical and creative thinking by incorporating theories and practices in art and design production adequate for innovative expression in the visual arts.
- Communicate and support informed and artistically sensitive interpretations and judgments about his/her own work as well as visual forms made by others by using perceptual, critical and aesthetic concepts that underlie the disciplines of art and design.
- Recognize and describe major periods, styles and artists in art history, as well as the historical forces that influence aesthetics, creativity and critical theory.
- Facilitate a culturally rich and visually sensitive society by recognizing and utilizing the unique and important artistic contributions made by women and men from diverse racial, geographical and cultural groups.
- Use technology in creative, critical and teaching processes as well as a resource for producing art and gathering information about art, art history, aesthetics and art criticism.

|  |   |  |  |   | Sem. Hou   |
|--|---|--|--|---|--|
|  |   |  |  |   |  |
| ART 1110   | Drawing I   | 3  | ART  | 1825  | Art History Survey II3   |
| ART 1120   | Drawing II  | 3  | ART  | 3915  | Prob. in Elementary Art Education3   |
| ART 3209   | Figure Construction   | 3  | ART  | 3920  | Prob. in Secondary Art Education3  |
| ART 1315   | Design I  | 3  | ART  | 1815  | Art History Survey I, 3 or   |
| ART 1325   | Design II   |  | ART  | 1835  | Survey of Non-Western Art  |
| ART 3314   | Fibers  |  |  |   | History, 33  |
| ART 2412   | Ceramics I  | •  | ART  | 4850  | 20th Century Art & Architecture, 3 or  |
| ART 2420   | Sculpture I   |  | ART  | 4860  | Contemporary Art & Design, 33  |
| ART 2511   | Painting I  |  | ICAP                                       | 4221  | Artists in Contemporary Society3   |
| ART 2710   | Introduction to Printmakin  |  |  |   | entration in studio art in one of  |
| ART 1800   | Ideas & the Visual Arts   | 3  |  |   | s: drawing, painting, watercolor,  |
|  |   |  | sculptur                                   | e, fibers, p  | orintmaking, ceramics6   |
| MINOR NOT RI   |   |  |  |   |  |
|  |   |  |  |   | RT 1800 fulfills 3 s.h. of Div. II C;  |
|  |   |  |  |   |  |
|  |   | ie course in a physica   |  |   | one in a biological science in Div. II A.  |
| HIST 1350  | Div. II B or  |  | POLS                                       |   | Div. II B (required)3  |
| HIST 1351  | Div. II B (required)  | 3  | PSY  | 4230  | Psy. of Adolescence3   |
| Secondary Ed   | ication students will be allowe   | d to substitute PSY 4  | 230 to fulfill                             | 3 s.h. of D   | Div. III.  |
| PROFESSIONA  | L EDUCATION REQUIREME   | NTS (see page 205)   |  |   |  |
| MINIMUM TOTA   | ۱L  |  |  |   |  |
|  |   |  |  |   |  |
|  | (Certification to teach a   | ART Minor, B<br>art in grades K-9. Sec<br>Services and Ce  | .S. in Ed.                                 | <b>Degree</b> ors should  | see the Director of Clinical   |
| ANOD DECL  | ·   | ort in grades K-9. Sec<br>Services and Ce  | .S. in Ed.<br>ondary majo<br>rtification.) | Degree<br>ors should<br>(000369)  | see the Director of Clinical Sem. Hou  |
|  | REMENTS   | rt in grades K-9. Sec<br>Services and Ce   | .S. in Ed.<br>ondary majortification.)     | Degree<br>ors should<br>(000369)  | see the Director of Clinical  Sem. Hou   |
| ART 1110   | REMENTS<br>Drawing I  | rt in grades K-9. Sec<br>Services and Ce   | S. in Ed. ondary majortification.)         | Degree<br>ors should<br>(000369)  | see the Director of Clinical  Sem. Hou   |
| ART 1110<br>ART 1315   | REMENTS<br>Drawing I<br>Design I  | rt in grades K-9. Sec<br>Services and Ce<br>3<br>3   | .S. in Ed.<br>ondary majortification.) (   | <b>Degree</b> ors should (000369)  3915 2511  | Sem. Hou<br>Prob. in Elementary Art Ed3<br>Painting I, 3 or  |
| ART 1110<br>ART 1315<br>ART 3314   | REMENTS  Drawing I  Design I  Fibers  | rt in grades K-9. Sec<br>Services and Ce<br>3<br>3   | ART ART ART                                | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510  | Sem. Hou<br>Prob. in Elementary Art Ed   |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  | nt in grades K-9. Sec<br>Services and Ce<br>3<br>3<br>3  | ART ART ART ART ART ART ART                | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815                                    | Sem. Hou Sem |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I                             | rt in grades K-9. Sec<br>Services and Ce<br>3<br>3<br>3<br>3   | ART ART ART                                | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510  | Sem. Hou<br>Prob. in Elementary Art Ed   |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  | rt in grades K-9. Sec<br>Services and Ce<br>3<br>3<br>3<br>3   | ART ART ART ART ART ART ART                | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815                                    | Sem. Hou Sem |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin |  | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825                            | Sem. Hou Sem |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin |  | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree              | Sem. Hou Hou Hou Sem. |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin |  | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree              | Sem. Hou Hou Hou Sem. Hou               |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420<br>ART 2710   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin |  | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree<br>e) (00048 | Sem. House Prob. in Elementary Art Ed  |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420<br>ART 2710   | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin | art in grades K-9. Sec Services and Ce Service | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree<br>e) (00048 | Sem. Hou   |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420<br>ART 2710<br>MINOR REQUIL<br>ART 1110             | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin | art in grades K-9. Sec Services and Ce Service | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree) (00048      | Sem. Hou Design II Sem. Hou Se |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420<br>ART 2710<br>MINOR REQUIL<br>ART 1110<br>ART 1120 | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin | art in grades K-9. Sec Services and Ce Service | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree) (00048      | Sem. Hou Sem |
| ART 1110<br>ART 1315<br>ART 3314<br>ART 2412<br>ART 2420<br>ART 2710<br>MINOR REQUIL<br>ART 1110             | REMENTS  Drawing I  Design I  Fibers  Ceramics I  Sculpture I  Introduction to Printmakin | art in grades K-9. Sec Services and Ce Service | ART    | Degree<br>ors should<br>(000369)<br>3915<br>2511<br>3510<br>1815<br>1825<br>r's Degree) (00048      | Sem. Hou Design II Sem. Hou Se |

Elective in ART

......3

# **COMMERCIAL ART Functional Major, B.F.A. Degree**

(47 000372)

The graduate with a Bachelor of Fine Arts degree in Art will use the knowledge and skills obtained in these programs to:

- Demonstrate critical and creative thinking by incorporating theories and practices in art and design production adequate for innovative expression in the visual arts.
- Communicate and support informed and artistically sensitive interpretations and judgments about his/her own work as well as visual forms made by others by using perceptual, critical and aesthetic concepts that underlie the disciplines of art and design.
- Recognize and describe major periods, styles and artists in art history, as well as the historical forces that influence aesthetics, creativity and critical theory.
- Facilitate a culturally rich and visually sensitive society by recognizing and utilizing the unique and important artistic contributions made by women and men from diverse racial, geographical and cultural groups.

-Use technology in creative, critical and teaching processes as well as a resource for producing art and gathering information about art, art history, aesthetics and art criticism.

| FUNCTION | ONAL MA | AJOR REQUIREMENTS                           |            |              |                                       | 87  |
|----------|---------|---|------------|--------------|---------------------------------------|-----|
| ART      | 4020    | Studio Seminar (Portfolio)3                 | ART        | 2412         | Ceramics I, 3 or                      |     |
| ART      | 1110    | Drawing I3                                  | ART        | 2420         | Sculpture I, 3                        | 3   |
| ART      | 1120    | Drawing II3                                 | ART        | 1815         | Art History Survey I, 3 or            |     |
| ART      | 1315    | Design I3                                   | ART        | 1835         | Survey of Non-Western Art             |     |
| ART      | 1325    | Design II3                                  | History, 3 | 3            |                                       |     |
| ART      | 2335    | Design III3                                 | ART        | 4850         | 20th Century Art & Architecture, 3 or |     |
| ART      | 2511    | Painting I3                                 | ART        | 4860         | Contemporary Art & Design, 3          | 3   |
| ART      | 3510    | Watercolor3                                 | Elective   | in art       |                                       | 3   |
| ART      | 2610    | Introduction to Commercial Art3             | Departr    | nentally a   | pproved electives from one of the     |     |
| ART      | 2710    | Introduction to Printmaking3                | followin   | g areas      |                                       | 36  |
| ART      | 1800    | Ideas & the Visual Arts3                    | Area 1     | Graphic      | Design                                |     |
| ART      | 1825    | Art History Survey II3                      | Area 2     | : Illustrati | on                                    |     |
| ICAP     | 4221    | Artists in Contemporary                     | (List ava  | ailable fro  | m the Chair of the Art Department.)   |     |
|          |         | Society3                                    |            |              |                                       |     |
| MINOR N  | -       |   |            |              |                                       |     |
|          |         | ATION REQUIREMENTS (page 49)48 s.h. (In the |            |              |                                       |     |
|          |         | 3 s.h. of Div. IV B)                        |            |              |                                       | 42  |
| MINIMUN  | M TOTAL |   |            |              |                                       | 129 |

# INTERIOR DESIGN Functional Major, B.F.A. Degree

(47 000374)

The graduate with a Bachelor of Fine Arts degree in Art will use the knowledge and skills obtained in these programs to:

- Demonstrate critical and creative thinking by incorporating theories and practices in art and design production adequate for innovative expression in the visual arts.
- Communicate and support informed and artistically sensitive interpretations and judgments about his/her own work as well as visual forms made by others by using perceptual, critical and aesthetic concepts that underlie the disciplines of art and design.
- Recognize and describe major periods, styles and artists in art history, as well as the historical forces that influence aesthetics, creativity and critical theory.
- Facilitate a culturally rich and visually sensitive society by recognizing and utilizing the unique and important artistic contributions made by women and men from diverse racial, geographical and cultural groups.

-Use technology in creative, critical and teaching processes as well as a resource for producing art and gathering information about art, art history, aesthetics and art criticism.

| FUNCTIO    | NAL MAJ     | OR REQUIREMENTS                        |                  |           |                                       |    |
|------------|-------------|--|------------------|-----------|---------------------------------------|----|
| ART        | 4020        | Studio Seminar3                        | GRAP             | 3160      | Residential Arch. Drawing             | 3  |
| ART        | 1110        | Drawing I3                             | ICAP             | 4221      | Artists in Contemporary Society       | 3  |
| ART        | 1120        | Drawing II3                            | ART              | 2412      | Ceramics I, 3 or                      |    |
| ART        | 1315        | Design I3                              | ART              | 2420      | Sculpture I, 3                        | 3  |
| ART        | 1325        | Design II3                             | ART              | 2511      | Painting I, 3 or                      |    |
| ART        | 2310        | Introduction to Interior Design3       | ART              | 3510      | Watercolor, 3                         | 3  |
| ART        | 2320        | Residential Interior Design3           | ART              | 1815      | Art History Survey I, 3 or            |    |
| ART        | 2335        | Design III3                            | ART              | 1835      | Survey of Non-Western Art             |    |
| ART        | 3305        | Interior Design Presentation Tech3     |                  |           | History, 3                            | 3  |
| ART        | 3310        | Traditional Interiors3                 | ART              | 4850      | 20th Century Art & Architecture, 3 or |    |
| ART        | 3320        | Prof. Practice for Interior Designers3 | ART              | 4860      | Contemporary Art & Design, 3          |    |
| ART        | 3330        | Restaurant & Store Planning3           | Elective         | s from th | ne following                          | 6  |
| ART        | 3340        | Interior Detailing & Furniture Design3 | ART              | 2610      | Intro. to Commercial Art3             |    |
| ART        | 4340        | Corporate & Institutional Design3      | ART              | 2710      | Introduction to Printmaking3          |    |
| ART        | 1800        | Ideas & the Visual Arts3               | ART              | 3314      | Fibers3                               |    |
| ART        | 1825        | Art History Survey II3                 | ART              | 4310      | Design Internship3                    |    |
| ART        | 3800        | History of Furniture & Interiors3      | GRAP             | 4162      | Commercial Arch. Drawing3             |    |
| FAME       | 2442        | Textiles3                              | GRAP             | 4170      | CADD for Eng. Tech3                   |    |
| FAME       | 4410        | Architectural Interiors3               | THEA             | 1600      | Stagecraft3                           |    |
| GRAP       | 1110        | Fundamentals of Drafting3              |                  |           |                                       |    |
| GRAP       | 2170        | Intro. to Computer-Aided Drafting3     |                  |           |                                       |    |
| MINOR N    | IOT REQU    | JIRED                                  |                  |           |                                       |    |
| GENERA     | L EDUCA     | TION REQUIREMENTS (page 49)48 s.h. (Ir | the functional i | major, Al | RT 1800 fulfills 3 s.h. of Div. II C; |    |
| ICAP 42    | 21 fulfills | 3 s.h. of Div. IV B)                   |                  |           | 4                                     | 12 |
| MINNINALIN | 4 TOTAL     |  |                  |           | 10                                    | O. |

Som Hours

# STUDIO ART Functional Major, B.F.A. Degree

(47 000378)

The graduate with a Bachelor of Fine Arts degree in Art will use the knowledge and skills obtained in these programs to:

- Demonstrate critical and creative thinking by incorporating theories and practices in art and design production adequate for innovative expression in the visual arts.
- Communicate and support informed and artistically sensitive interpretations and judgments about his/her own work as well as visual forms made by others by using perceptual, critical and aesthetic concepts that underlie the disciplines of art and design.
- Recognize and describe major periods, styles and artists in art history, as well as the historical forces that influence aesthetics, creativity and critical theory.
- Facilitate a culturally rich and visually sensitive society by recognizing and utilizing the unique and important artistic contributions made by women and men from diverse racial, geographical and cultural groups.
- Use technology in creative, critical and teaching processes as well as a resource for producing art and gathering information about art, art history, aesthetics and art criticism.

| ELINCT  | IONAL MA     | JOR REQUIREMENTS                      |                |           |             |                                     | Sem. Hours<br>86 |
|---------|--------------|---------------------------------------|----------------|-----------|-------------|-------------------------------------|------------------|
| ART     | 1110         | Drawing I                             |                |           |             | ollowing areas of specialization    |                  |
| ART     | 1120         | Drawing II                            |                |           |             | Area 1 - Sculpture                  |                  |
| ART     | 3110         | Drawing III                           | .3             | ART       | 4020        | Studio Seminar                      | 3                |
| ART     | 3209         | Figure Construction                   | .3             | ART       | 3420        | Sculpture II                        | 9                |
| ART     | 1315         | Design I                              | .3             | ART       | 4420        | Sculpture III                       |                  |
| ART     | 1325         | Design II                             | .3             |           |             | Area 2 - Painting                   |                  |
| ART     | 2335         | Design III                            | .3             | ART       | 3510        | Watercolor                          | 3                |
| ART     | 2412         | Ceramics I                            | .3             | ART       | 3511        | Painting II                         | 9                |
| ART     | 2420         | Sculpture I                           | .3             | ART       | 4511        | Painting III                        | 9                |
| ART     | 2511         | Painting I                            |                |           |             | Area 3 - Ceramics                   |                  |
| ART     | 2710         | Introduction to Printmaking           | .3             | ART       | 4020        | Studio Seminar                      | 3                |
| ART     | 1800         | Ideas & the Visual Arts               |                | ART       | 3412        | Ceramics II                         | 9                |
| ART     | 1825         | Art History Survey II                 | .3             | ART       | 4412        | Ceramics III                        | 9                |
| ICAP    | 4221         | Artists in Contemporary Society       | .3             |           |             | Area 4 - Printmaking                |                  |
| ART     | 1815         | Art History Survey I, 3 or            |                | ART       | 3710        | Intaglio                            | 3                |
| ART     | 1835         | Survey of Non-Western Art             |                | ART       | 3720        | Lithography                         |                  |
|         |              | History, 3                            | .3             | ART       | 3730        | Serigraphy                          | 3                |
| ART     | 4850         | 20th Century Art & Architecture, 3 or |                | ART       | 3740        | Relief Printmaking                  | 3                |
| ART     | 4860         | Contemporary Art & Design, 3          | .3             | Electiv   | ves in Prin | tmaking                             | 9                |
| Electiv | es in art    |                                       | 17             |           |             |                                     |                  |
| MINOR   | NOT REQ      | UIRED                                 |                |           |             |                                     |                  |
| GENER   | AL EDUC      | ATION REQUIREMENTS (page 49)48 s      | s.h. (In the f | unctional | major, AR   | T 1800 fulfills 3 s.h. of Div. II D | );               |
| ICAP 4  | 221 fulfills | 3 s.h. of Div. IV B)                  |                |           |             |                                     | 42               |
| MINIMU  | IM TOTAL     |                                       |                |           |             |                                     | 128              |

## **Art Problems**

ART 4010 Special Projects in Art (1-3) May be repeated for a maximum of 6 semester hours.

**ART 4020 Studio Seminar (3)** By arrangement, with consent of the instructor involved, and through individual directed study. *May be repeated for a maximum of 6 semester hours*. Prerequisite: senior year with consent

## Drawing

**ART 1110 Drawing I (3)** Basic principles of perspective and composition through problems in landscape and still life. **ART 1120 Drawing II (3)** Compositional drawing in various media including ink wash and pen and ink. Prerequisite: ART 1110.

**ART 3110 Drawing III (3)** The application of fundamentals of drawing to creative problems in figure, still life, and landscape composition. *May be repeated for a maximum of 9 semester hours.* Prerequisites: ART 1120 and ART 3209.

## Figure Drawing and Life Drawing

**ART 3209 Figure Construction (3)** The skeletal and muscular construction of the human figure as it relates to the action and proportions of the figure. Drawing from life. Prerequisite: ART 1110. An additional fee is associated with this course

**ART 3210 Life Drawing (3)** Drawing from a live model with the emphasis on techniques. *May be repeated for a maximum of 6 semester hours.* Prerequisite: ART 3209. An additional fee is associated with this course.

## Interior Design

ART 1315 Design I (3) Introduces the use of the visual elements within the context of the principles of design.
ART 1325 Design II (3) The study of color, its application within the design process and its use as an integral component in design. Prerequisite: ART 1315.

**ART 2310 Introduction to Interior Design (3)** A practical guide to the fundamentals of interior design and an overview of the interior design profession. Prerequisites: ART 1110 and ART 1315.

ART 2320 Residential Interior Design (3) The design process as it is applied to interior design problems. An emphasis on the elements of residential design. Prerequisites: ART 1120, ART 1325 and ART 2310 for art majors; GRAP 1110 or consent of instructor for nonmajors. ART 2335 Design III (3) Creative applications of color and design theory in a variety of design situations. Prerequisite: ART 1325.

ART 3305 Interior Design Presentation Techniques (3) The techniques necessary for the presentation of interior design solutions. Both traditional media and computer-aided technology will be implemented. Prerequisites: ART 1325 and ART 2310.

**ART 3310 Traditional Interiors (3)** A study of traditional interior design problems. An emphasis in architectural interior elements, interior surfaces, finishes, and application. Prerequisites: ART 2320 and GRAP 3160 for art majors; GRAP 1110 or consent of instructor for nonmajors.

**ART 3314 Fibers (3)** Basic course in the fundamentals and techniques of creating on and off loom structures and fabrics. *May be repeated for a maximum of 9 semester hours.* An additional fee is associated with this course.

**ART 3320 Professional Practice for Interior Designers** (3) The study of interior design business practices. The history of the profession and considerations required when organizing and managing a business. Prerequisite: ART 2310

ART 3330 Restaurant and Store Planning (3) Intermediate work in interior design, studio problems, lighting, and full presentation techniques with emphasis on store and restaurant planning. Prerequisite: ART 3310 for art majors; GRAP 1110 or consent of instructor for nonmajors.

ART 3340 Interior Detailing and Furniture Design (3) The detailing of interior environments and furniture design to include casework and furnishings through a coordinated study of structure, style, and materials. Prerequisite: ART 2320

ART 4310 Design Internship (2-3) An elective course for interior design and commercial art majors operated in conjunction with various business firms, wherein students are afforded the opportunity of working alongside professional designers in the field. May be repeated for a maximum of 6 semester hours. Prerequisite: a major on the undergraduate level of either interior design or commercial art and with approval of departmental committee.

**ART 4324 Creative Craft Studio (3)** Introduces and allows the student to explore a variety of three-dimensional mediums while creating mixed-media projects. A broad range of materials and techniques will be utilized. *May be repeated for a maximum of 9 semester hours*. Prerequisite: 20 semester hours of art.

ART 4340 Corporate and Institutional Design (3) Increasing emphasis on space arrangement for commercial and institutional use; introduction to specifications of materials and specification writing; emphasis in office design. May be repeated for a maximum of 6 semester hours. Prerequisite: ART 3330 for art majors; GRAP 3160 or consent of instructor for nonmajors.

#### **Sculpture and Ceramics**

**ART 2412 Ceramics I (3)** Basic skills on the three pottery making methods: e.g., slab, coil, and pottery wheel with emphasis on aesthetic qualities. Wheel throwing will be accented. Basic experiences in kiln stacking and firing. An additional fee is associated with this course.

**ART 2420 Sculpture I (3)** Fundamentals in sculpture including additive, subtractive, and construction techniques. An additional fee is associated with this course.

**ART 3412 Ceramics II (3)** Extended studio research in pottery design and forming. Technical methods in the preparation of clay bodies, glazes, and kiln firing and maintenance. *May be repeated for a maximum of 9 semester hours*. Prerequisite: ART 2412. An additional fee is associated with this course.

**ART 3420 Sculpture II (3)** Individual problems in techniques of sculpture utilizing a variety of media. *May be repeated for a maximum of 9 semester hours.* Prerequisite: ART 2420. An additional fee is associated with this course.

ART 4412 Ceramics III (3) Production of advanced ceramics projects with emphasis on the search for individual styles and choices of forming methods. Advanced study of glaze chemistry, clay body formulation, and kiln construction. May be repeated for a maximum of 9 semester hours. Prerequisite: ART 3412 or consent of instructor. An additional fee is associated with this course.

**ART 4420 Sculpture III (3)** Advanced individual problems in techniques of sculpture utilizing a variety of media. *May be repeated for a maximum of 9 semester hours*. Prerequisite: ART 3420. An additional fee is associated with this course.

#### Painting

**ART 2511 Painting I (3)** The creative art process with emphasis on the basic visual concepts and styles, ranging from the care and use of painting tools to the execution of paintings, and including some painting history. Prerequisites: ART 1110 and ART 1315.

**ART 3510 Watercolor (3)** Application of principles of composition in the medium of transparent watercolor. *May be repeated for a maximum of 9 semester hours.* Prerequisites: ART 1110 and ART 1315.

**ART 3511 Painting II (3)** Study and practice in basic painting techniques. *May be repeated for a maximum of 9 semester hours.* 

**ART 4511 Painting III (3)** Application of principles of composition in the medium of oil or acrylic paint. *May be repeated for a maximum of 9 semester hours.* 

#### Commercial Art

ART 2610 Introduction to Commercial Art (3) Basic orientation to the field of commercial art. Presentation skills, use of tools and materials. Creative problem solving in the areas of advertising, publication, graphic design, and illustration. Usually offered each semester. Prerequisites: ART 1110 and ART 1315. Graphic arts majors--Grap 2030 and GRAP 2031. An additional fee is associated with this course.

ART 3610 Typography (3) Principles of design and usage of letter forms and alphabet styles provide the basis for experiments in spacing, arrangement, and integration of typographic and other graphic elements on the printed page. Usually offered each semester. Prerequisites: ART 1110 and ART 1315. Graphic arts majors--Grap 2030 and GRAP 2031. An additional fee is associated with this course.

ART 3620 Logo/Trademark Design (3) The design of symbolic and lettergraphic identifiers, practical application of symbols, signs, and visual metaphors from simple logotypes to sophisticated corporate identity programs. Only offered Spring semester. Prerequisites: ART 2610 and ART 3610. An additional fee is associated with this course.

**ART 3625 Illustration Techniques (3)** The application of wet and dry media with various surfaces to achieve a range of visual effects with an emphasis on exploration and experimentation. Nineteenth and twentieth century illustrators' works are studied as a means of understanding visual possibilities and styles. Prerequisite: ART 2610. An additional fee is associated with this course.

ART 3630 Design for Advertising (3) Advertising concepts, layout, client presentation for print application. Developing, visualizing, and communicating effective advertising for magazines, newspapers, and outdoor posters. Only offered Fall semester. Prerequisites: ART 2610 and ART 3610. An additional fee is associated with this course.

ART 3635 Illustration Concepts (3) The interpretation of written and verbal information resulting in appropriate and successful visual solutions. Concept and visual vocabulary are stressed as a means of satisfying client needs. Students will begin to identify and build a personal illustrative style. Prerequisite: ART 3625. An additional fee is associated with this course.

**ART 3640 Package Design (3)** Packaging and point-of-sale graphics from concept to client presentation. Only offered Spring semester. Prerequisite: ART 3620. An additional fee is associated with this course.

**ART 3660 Publication Design (3)** Publications as design problems. The design of folders, brochures and soft- bound print pieces through the manipulation of type, photos, art, paper and grid systems. Only offered Fall semester.

Prerequisites: ART 3620. An additional fee is associated with this course.

**ART 4610 Interactive Design (3)** An introduction to the field of digital visual communication. Integration of new technologies, concepts and methods will be explored. Prerequisites: ART 3660 and consent of instructor or department advisor.

ART 4625 Advanced Illustration I\* (3) The application of illustration techniques and concepts to advertising and editorial assignments in a simulated professional setting. Projects will stress the research and generation of visual references, working with art directors and editors, meeting tight deadlines. Prerequisite: ART 3635. An additional fee is associated with this course. \*Not available for graduate credit.

ART 4635 Advanced Illustration II\* (3) A continuation of ART 4625 with an emphasis on the business aspects of free-lance illustration. Prerequisite: ART 4625. An additional fee is associated with this course. \*Not available for graduate credit

#### **Printmaking**

ART 2710 Introduction to Printmaking (3) This course is designed to acquaint the student with the basics of various printmaking processes. Prerequisites: ART 1110 and ART 1315. An additional fee is associated with this course.

ART 3710 Intaglio (3) Intaglio printmaking methods and

production. May be repeated for a maximum of 12 semester hours. Prerequisite: ART 2710. An additional fee is associated with this course.

**ART 3720 Lithography (3)** Printmaking techniques in traditional stone lithography. *May be repeated for a maximum of 12 semester hours*. Prerequisite: ART 2710. An additional fee is associated with this course.

**ART 3730 Serigraphy (3)** Application of traditional and photographic silk screen processes of reproduction to commercial and fine arts problems. *May be repeated for a maximum of 12 semester hours.* Prerequisite: ART 2710. An additional fee is associated with this course.

ART 3740 Relief Printmaking (3) The development of the print through the raised surface process. The student will engage in the technique through both traditional and contemporary materials. Single color and multicolor printing will be explored. May be repeated for a maximum of 12 semester hours. Prerequisite: ART 2710. An additional fee is associated with this course.

## **Art History**

**ART 1800 Ideas and the Visual Arts (3)** Explores the idea and practice of the visual arts in modern society. A study of style, form, content, and aesthetic judgment emphasizing the visual arts as a means of communicating ideas.

**ART 1815 Art History Survey I (3)** Prehistoric to the fourteenth century.

ART 1825 Art History Survey II (3) Art history from 1400 to the present.

ART 1835 Survey of Non-Western Art History (3) The survey of the aesthetic and stylistic development of the traditional arts and architecture of non-western culture.

ART 3800 History of Furniture and Interiors (3) The survey of the furniture and interiors from ancient to modern times. Emphasis is given to the styles from the Renaissance to the nineteenth century.

ART 4820 Italian Renaissance Art and Architecture (3) A history of the visual arts in Italy from 1400 to 1700.

**ART 4850 Twentieth Century Art and Architecture (3)** A history of the visual arts of the world in the twentieth century.

**ART 4860 Contemporary Art & Design (3)** The exploration of contemporary art and design in a context of art historical style by utilizing specialized information networks which chart and chronicle its development.

#### Art Education

**ART 3910 Art for Elementary Schools (2)** Elements of art structure and the principles of composition and their application in creative visual art experiences, especially adapted for children ages 4 through 12. An additional fee is associated with this course.

ART 3915 Problems in Elementary Art Education (3) The art teacher's role in teaching art history, art criticism and aesthetics, along with the production of artwork for children ages 4 through 12, will be explored. Prerequisites: ART 1110 and ART 1315. An additional fee is associated with this course.

ART 3920 Problems in Secondary Art Education (3) Topics to be explored include: purposes of art education, art curriculum considerations, safety in the art classroom, and supplies and materials. Prerequisite: ART 3915. An additional fee is associated with this course.

**ART 4920 Methods of Teaching Art\* (2)** Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with ART 4930 during the Professional Semester. \*Not available for graduate credit.

ART 4930 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with ART 4920 during the Professional Semester. \*Not available for graduate credit.

#### **Integrative Studies Capstone**

ICAP 4221 Artists in Contemporary Society\* (3) Artists examine diverse theories of art and ethics as it impacts their careers in a global society. Prerequisite: Consent to enroll, based on the following conditions: all general studies completed; art major; scheduled for graduation the semester enrolled (or the following semester if an art education major). \*Not available for graduate credit.

Sem Hours

# **Biology and Earth Science**

# Biology

NOTE: Careers in professional specialties in biology generally require preparation through at least the masters degree. The biology programs at CMSU provide preparation for students who plan professional work in the following biological specialties:

Fisheries and Estuarine Ecology **Environmental Biology** Marine Biological Sciences Entomology Wildlife Conservation Forest Biology Oceanography Plant Science Systematic Botany

**Biomedical Sciences** 

### **BIOLOGY Major, B.A. Degree**

(42000379)

The graduate with a Bachelor of Arts degree in Biology will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information)
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety. (technology)
- Develop demonstrations and experiments that illustrate biological concepts or develop new concepts. Think logically within the scientific parameters of professional biologists. (higher-order thinking)
- Use the language and concepts of Biology to communicate effectively in oral and written form; to follow instructions precisely and to function in independent and collaborative settings. (communicating and interacting)
- Read scientific texts in a language other than English (communicating)
- Exhibit the ethical use of knowledge, materials and procedures that demonstrates an impact on society. (valuing)
- Be eligible to apply for jobs in many commercial laboratories, quality control positions, and related. (technology, interacting)
- Be eligible to apply for graduate programs in the area of biology represented by the student's major interest and coursework (technology, interacting)
- Be eligible to apply for entry into professional schools in medicine, dentistry, veterinary medicine and related paramedical professions. (technology, interacting)

|              |               |                                   |                      |               |            | 9                                   | onn. Houro |
|--------------|---------------|-----------------------------------|----------------------|---------------|------------|-------------------------------------|------------|
| <b>MAJOR</b> | <b>REQUIR</b> | EMENTS                            |                      |               |            |                                     | 39         |
| BIOL         | 1000          | The Discipline of Biology         | 1                    | BIOL          | 2511       | Genetics                            | 4          |
| BIOL         | 4000          | Biology Colloquium                | 1                    | BIOL          | 2512       | Cell Biology                        | 3          |
| BIOL         | 2020          | General Ecology                   | 3                    | ICAP          | 4222       | The Biological Perspective          | 3          |
| BIOL         | 1111          | Biology I                         | 4                    | Upper-        | level elec | tives in biology                    | 16         |
| BIOL         | 1112          | Biology II                        | 4                    |               |            |                                     |            |
| MINOR        | REQUIR        | EMENTS                            |                      |               |            |                                     | 20-25      |
| <b>GENER</b> | AL EDUC       | CATION REQUIREMENTS (page         | 49)48 s.h. (In tl    | he major, BIG | DL 1111 a  | nd BIOL 1112 are allowed to fulfill |            |
| 4 s.h. c     | of Div. II A  | ; the Modern Language Require     | ment fulfills 3 s.h. | of Div. II C; | ICAP 422   | 2 fulfills 3 s.h. of Div. IV B)     | 38         |
| MODER        | N LANG        | JAGE REQUIREMENT                  |                      |               |            |                                     | 3-9        |
|              |               | lor's Degree Requirements section |                      |               |            |                                     |            |
| FREE E       | LECTIVE       | :S                                |                      | ·             |            |                                     | 13-24      |
| MINIMU       | IM TOTAL      | _                                 |                      |               |            |                                     | 124        |

# **BIOLOGY Major, B.S. Degree**

(43 000380)

The graduate with a Bachelor of Science degree in Biology will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information)
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety. (technology)
- Develop demonstrations and experiments that illustrate biological concepts or develop new concepts. Think logically within the scientific parameters of professional biologists. (higher-order thinking)
- Use the language and concepts of Biology to communicate effectively in oral and written form; to follow instructions precisely and to function in independent and collaborative settings. (communicating and interacting)
- Exhibit the ethical use of knowledge, materials and procedures that demonstrates an impact on society. (valuing)
- Be eligible to apply for jobs in many commercial laboratories, quality control positions, and related. (technology, interacting)
- Be eligible to apply for graduate programs in the area of biology represented by the student's major interest and coursework (technology, interacting)
- Be eligible to apply for entry into professional schools in medicine, dentistry, veterinary medicine and related paramedical professions. (technology, interacting)

(Program on next page)

|              |             |  |                  |              |            |                                  | Sem. Hours |
|--------------|-------------|--|------------------|--------------|------------|----------------------------------|------------|
| MAJOR        | REQUIRE     | EMENTS                                 |                  |              |            |                                  | 45         |
| BIOL         | 1000        | The Discipline of Biology              | 1                | BIOL         | 2511       | Genetics                         | 4          |
| BIOL         | 4000        | Biology Colloquium                     | 1                | BIOL         | 2512       | Cell Biology                     | 3          |
| BIOL         | 2020        | General Ecology                        | 3                | ICAP         | 4222       | The Biological Perspective       | 3          |
| BIOL         | 1111        | Biology I                              | 4                | Departr      | mentally a | pproved electives in biology (S  | ee         |
| BIOL         | 1112        | Biology II                             | 4                | Departr      | ment Chai  | r for assignment to faculty advi | sor) 22    |
| MINOR        | REQUIRE     | MENTS                                  |                  |              |            |                                  | 20-25      |
| <b>GENER</b> | AL EDUC     | ATION REQUIREMENTS (page 4             | 49)48 s.h. (In t | he major, Bl | OL 1111 a  | nd BIOL 1112 are allowed to      |            |
| fulfill 4    | s.h. of Div | . II A; ICAP 4222 fulfills 3 s.h. of I | Div. IV B)       | -<br>        |            |                                  | 41         |
|              |             | S                                      |                  |              |            |                                  |            |
| MINIMU       | M TOTAL     |  |                  |              |            |                                  | 124        |
|              |             |  |                  |              |            |                                  |            |

# **BIOLOGY Functional Major, B.S. in Ed. Degree**

[Unified science certification to teach any of the beginning sciences (i.e., Physics I, Chemistry I, etc.) and all levels of biology, grades 9-12] (41 000487)

The graduate with a Biology Functional Major, Bachelor of Science in Education Degree will use the knowledge and skills obtained in the

| IN IOTI           |              | apply for graduate programs in education.               |                  |              | Sem. Hours  |
|-------------------|--------------|---|------------------|--------------|---|
|                   |              | AJOR REQUIREMENTS                                       |                  |              |   |
| SIOL              | 1000         | The Discipline of Biology1                              |                  |              | certification in biology - certification to teach |
| BIOL<br>BIOL      | 1111<br>1112 | Biology I4  |                  |              | sciences (i.e., Chemistry I, Physics I, etc.) a   |
| BIOL              | 2020         | Biology II  | PSY              |              | grades 9-12.                                      |
| IOL               | 2511         | General Ecology3 Genetics4                              | *CHEM            |              | Stat. for Behavioral Sciences                     |
| IOL               | 2511         | Cell Biology3   | CHEM             |              | Elem. Org. & Biochemistry                         |
| IOL               | 3611         | Microbiology4   | CHEM             |              | Quantitative Analysis                             |
| IOL               | 3431         | Animal Physiology, 4 or                                 | CHEM             |              | Organic Chemistry I4                              |
| IOL               | 4411         | Plant Physiology, 44                                    | CHEM             |              | Organic Chemistry II4                             |
| IOL               | 3712         | Field Natural History4                                  | CHEM             |              | Biochemistry4                                     |
| IOL               | 4810         | Curriculum Dev. in Biological Sci2                      | EASC             |              | Environmental Geology                             |
| IOL               | 4811         | Investigative Laboratory2                               | EASC             |              | Astronomy   |
| ASC               | 1004         | Intro. to the Sciences: Geology4                        | *EASC            |              | Meteorology                                       |
| HEM               | 1131         | General Chemistry I5                                    | EASC             |              | Mineralogy4                                       |
| HYS               | 1101         | College Physics I, 4 or                                 | *EASC            |              | Special Problems in Geology1                      |
| HYS               | 1104         | Intro. to Sciences (Physics), 4 or                      | *PHYS            |              | College Physics II, 4 or                          |
| HYS               | 2121         | University Physics I, 5 or 4-5                          | PHYS             |              | University Physics II, 54-5                       |
| OE                | 2000         | Technology & Change3                                    | PHYS             |              | Modern Physics I                                  |
|                   |              | approved electives (selected from                       | PHYS             |              | Optics  |
|                   |              | elow). Hours of electives taken                         | PHYS             |              | Electricity & Magnetism                           |
|                   |              | otal in the major to 64.5 hours                         | PHYS             |              | Adv. Physics Laboratory 1-2                       |
|                   |              | CE CERTIFICATION - The starred (*) courses              |                  |              | approved electives in Biology                     |
|                   |              | part of the elective credits for                        | Берап            | incinally    | approved electives in biology                     |
|                   | NOT REC      |   |                  |              |   |
|                   |              | ATION REQUIREMENTS (page 49)48 s.h. (In t               | he functional    | major, E     | ASC 1004 fulfills 4 s.h. of Div. II A;            |
|                   |              | iology are allowed to fulfill 3 s.h. of Div. II A; T&OI |                  |              |   |
|                   |              | ements, ICAP 4468 fulfills 3 s.h. of Div. IV B)         |                  |              |   |
| IST               | 1350         | Div. II B or  | POLS             | 1510         |   |
| ST                | 1351         | Div. II B (required)3                                   | PSY              | 4230         | Psychology of Adolescence                         |
| econo             | dary Educ    | cation students will be allowed to substitute PSY 4     | 230 to fulfill 3 | s.h. of E    | Div. III.   |
| OFES              | SSIONAL      | EDUCATION REQUIREMENTS (see page 205)                   |                  |              | 28  |
| UMI               | m total      |   |                  |              | 124   |
|                   |              |   |                  |              |   |
|                   |              | BIOLOGY Minor fo  | or a Bache       | lor's D      | egree   |
|                   |              | (CMSU does not confer tea                               |                  |              |   |
|                   |              | ·   | 00476)           |              |   |
|                   |              | (0  |                  |              | Sem. Ho   |
|                   | RFQUIRF      | EMENTS  |                  |              |   |
| NOR I             |              | General Ecology3  | BIOL             | 2511         |   |
|                   | 2020         |   | DIOL             | <b>4</b> 011 | OUTION  |
| NOR I<br>OL<br>OL | 2020<br>1111 | Biology I   | BIOL             | 2512         | Cell Biology3                                     |

# **BIOLOGY Functional Major, B.S. Degree**

(43 000400)

The graduate with a Biology Functional Major, Bachelor of Science Degree will use the knowledge and skills obtained in the program to achieve various student learning outcomes depending upon the options selected in this program. There are three emphasis areas B Biomedical emphasis, Ecology/Environment emphasis and Conservation Enforcement emphasis. Students in this program will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information)
- Use various field and laboratory techniques and/or instruments with understanding, accuracy, precision and safety. (technology)
- Develop demonstrations and experiments, and plan and lead field trips that illustrate biological concepts or develop new concepts. Think logically within the scientific parameters of professional biologists. (higher-order thinking)
- Use the language and concepts of Biology to communicate effectively in oral and written form; to follow instructions precisely and to function in independent and collaborative settings. (communicating and interacting)
- Exhibit the ethical use of knowledge, materials and procedures that demonstrates an impact on society. (valuing)
- Students emphasizing the Biomedical option will be eligible to apply for entry into professional schools in medicine, dentistry, veterinary medicine and related paramedical professions. (technology, interacting)
- Students emphasizing the Ecology/Environment option will be eligible to apply to advanced degree programs in environmental, ecological and related programs, and to apply for positions in the EPA, Mo. Dept of Conservation, Department of Natural Resources, and other such agencies. There are also many private businesses and testing laboratories working on ecological/environmental projects to which our graduates may apply. (technology, communicating)
- Students emphasizing the Conservation Enforcement option will be eligible for internships and positions with the Missouri Department of Conservation, Department of Natural Resources and be eligible to apply for jobs in federal and state environmental agencies. They will also be eligible for positions in businesses interacting with these environmental agencies. (technology, communicating, interacting) Sem. Hours

| FUNCTION | ONAL MA      | JOR REQUIREMENTS                                  |                               |                                    | 69-70 |
|----------|--------------|---|-------------------------------|------------------------------------|-------|
| CORE     |              | 37-38   |                               | olecular Studies                   |       |
| BIOL     | 1000         | The Discipline of Biology1                        | BIOL 3611                     | Microbiology4                      |       |
| BIOL     | 1111         | Biology I4  | PHYS 1101                     | College Physics I4                 |       |
| BIOL     | 1112         | Biology II4                                       | BIOL 3431                     | Animal Physiology 4, OR            |       |
| BIOL     | 2020         | General Ecology3                                  | BIOL 4411                     | Plant Physiology 4,4               |       |
| BIOL     | 2511         | Genetics4   | Elective from the             | ne following4                      |       |
| BIOL     | 2512         | Cell Biology3                                     | BIOL4403                      | Environmental Physiology4          |       |
| BIOL     | 4000         | Biology Colloquium1                               | BIOL4311                      | Parasitology4                      |       |
| ICAP     | 4222         | The Biological Perspective3                       | BIOL4511                      | Cytogenetics4                      |       |
| CHEM     | 1131         | General Chemistry I5                              | Departmentally                | approved electives                 |       |
| CHEM     | 1132         | General Chemistry II5                             |                               | (see Chair or advisor)16           | i     |
| Elective | from the     | following 4-5                                     | C. Conservation               | Enforcement Studies                | .32   |
| CHEM     | 2650         | Elem. Organic & Biochemistry5                     | COMM2620                      | Public Relations3                  | }     |
| CHEM     | 3341         | Organic Chemistry4                                | CJ 1000                       | Introduction to Criminal Justice3  | }     |
| BIOL     | 4514         | Molecular Biology, 3 and                          | CJ 2300                       | Criminal Law3                      | }     |
| BIOL     | 4515         | Molecular Biology Lab, 25                         | CJ 3303                       | Criminal Procedure3                | }     |
| Elect or | ne of the tl | nree areas (A, B, or C)32                         | CJ 4302                       | Criminal Evidence3                 | }     |
| A. Ecol  | logical Stu  | dies40  | Elective from the             | ne following3                      | }     |
| BIOL     | 3711         | Plant Identification4                             | COMM1520                      | Elements of News Reporting3        |       |
| BIOL     | 4711         | Animal Ecology4                                   | COMM4415                      | Screenplay Writing3                |       |
| EASC     | 3010         | Environmental Geology3                            | Elective from the             | ne following4                      |       |
| GEO(     | G4220        | Geographic Info. Systems I3                       | BIOL4210                      | Ichthyology4                       |       |
|          | G4291        | Conservation of Nat. Resources3                   | BIOL4221                      | Mammalogy4                         |       |
| Electi   | ve from th   | e following4                                      | BIOL4223                      | Ornithology4                       |       |
| BIO      | L4210        | Ichthyology4                                      | BIOL4232                      | Herpetology4                       |       |
| BIO      | L4221        | Mammalogy4  | BIOL4312                      | Entomology4                        |       |
| BIO      | L4223        | Ornithology4                                      | Departmentally                | approved electives                 |       |
| BIO      | L4232        | Herpetology4                                      |                               | (see Chair or Advisor)             | 10    |
| BIO      | L4312        | Entomology4                                       |                               |                                    |       |
| Depai    | rtmentally   | Approved Electives                                |                               |                                    |       |
|          |              | (see Chair or advisor)11                          |                               |                                    |       |
| MINOR N  | NOT REQ      | JIRED   |                               |                                    |       |
| GENERA   | L EDUCA      | TION REQUIREMENTS (page 49)48 s.h.                | (In the functional major, BIG | OL 1111, BIOL 1112, CHEM 1131, and |       |
|          |              | illowed to fulfill 7 s.h. of Div. II A; ICAP 4222 |                               |                                    | 38    |
|          |              |   |                               |                                    | 16-17 |
| MINIMUN  | A TOTAL      |   |                               |                                    | 124   |

# MEDICAL TECHNOLOGY Functional Major, B.S. Degree

(43000384)

The graduate with a Medical Technology Functional Major, Bachelor of Science Degree will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information)
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety. (technology)
- Think logically within the scientific parameters of professional biologists. (higher-order thinking)
- Use the language and concepts of Biology to communicate effectively in oral and written form; to follow instructions precisely and to function in independent and collaborative settings. (communicating and interacting)
- Exhibit the ethical use of knowledge, materials and procedures that demonstrates an impact on society. (valuing)
- Challenge the licensure exam of the National Accrediting Agency for Clinical Laboratory Scientists (NAACLS) to become a certified Medical Technologist(ASCP) or Clinical Laboratory Scientist (ASCP) after completing a 12-month clinical rotation at an affiliated
- Be eligible to apply for graduate/professional training in nearly all medical fields.

|         |            |                                       |              |             |             | Sem. Hours                             |
|---------|------------|---------------------------------------|--------------|-------------|-------------|--|
| FUNCTI  | ONAL MA    |                                       |              |             |             | 65-66                                  |
| BIOL    | 1000       | The Discipline of Biology             | 1            | CHEM        | 1131        | General Chemistry I5                   |
| BIOL    | 1111       | Biology I                             | 4            | CHEM        | 1132        | General Chemistry II5                  |
| BIOL    | 2401       | Anatomy & Physiology I                | 4            | CHEM        | 3212        | Quantitative Analysis3                 |
| BIOL    | 2402       | Anatomy & Physiology II               | 4            | CHEM        | 3341        | Organic Chemistry I4                   |
| BIOL    | 2511       | Genetics                              | 4            | MATH        | 1111        | College Algebra3                       |
| BIOL    | 2512       | Cell Biology                          | 3            | MATH        | 1112        | College Trigonometry, 2 or             |
| BIOL    | 3413       | Immunology                            | 3            | PSY         | 4520        | Stat. for Behavioral Sciences, 3 2-3   |
| BIOL    | 3611       | Microbiology                          | 4            | ET          | 1020        | General Electronics3                   |
| BIOL    | 4000       | Biology Colloquium                    | 1            | ICAP        | 4222        | The Biological Perspectives3           |
| BIOL    | 4311       | Parasitology                          |              |             |             |  |
| BIOL    | 4514       | Molecular Biology                     | 3            |             |             |  |
| BIOL    | 4515       | Molecular Biology Lab                 | 2            |             |             |  |
| MEDICA  | L TECHN    | IOLOGY CREDIT                         |              |             |             | 30                                     |
| Course  | s in vario | us accredited medical technology prog | grams may va | ry from hos | spital to h | ospital. All courses are recorded      |
| as BIO  | L 4012. C  | Courses usually offered are:          |              |             |             |  |
| Clinica | Biochem    | istry                                 | . 6-10       | Clinical    | Immunoh     | nematology 3-4                         |
|         | Urinalysi  |                                       |              | Clinical    | Immunol     | ogy2-6                                 |
| Clinica | Hematol    | ogy                                   | 4-7          |             |             | logy 6-8                               |
|         |            |                                       |              | Special     | Topics      | 0-4                                    |
|         |            |                                       |              |             |             | n agreement for this program. They are |

not offered on campus or open to students in other programs. Credit for these courses is allowed for work taken at one of our affiliated hospitals in Kansas City (Menorah Medical Center, North Kansas City Memorial, St. Luke's Hospital, Trinity Lutheran Hospital, Research Medical Center) and in Springfield (St. John's Hospital, Lester E. Cox Medical Center) or any fully accredited hospital medical technology training program which must be accredited by the American Medical Association Council on Medical Education. Admission and fees for the hospital portions of this program are the prerogative of the hospital and thus cannot be guaranteed by the University. Licensure to practice is dependent upon state regulations and professional examinations and thus cannot be guaranteed by the University or hospital. For additional information on this program and for entry into clinical programs, students are urged to see the program adviser at their earliest convenience. Because of complexities of affiliation agreements and variations in clinical programs, all pertinent information cannot be presented in this catalog. MINOR NOT REQUIRED

GENERAL EDUCATION REQUIREMENTS (page 49)--48 s.h. (In the functional major, MATH 1111 fulfills 3 s.h. of Div. I C; BIOL 1111, BIOL 2511, CHEM 1131, and CHEM 1132 are allowed to fulfill 7 s.h. of Div. II A; 

# FORENSIC SCIENCE Minor for a Bachelor's Degree

(000491)

|           |             |                               |                    |             | Sem. Hours                       |
|-----------|-------------|-------------------------------|--------------------|-------------|----------------------------------|
| MINOR I   | REQUIRE     | MENTS                         |                    |             | 24-27                            |
| Biology I | Major Tracl | k 26-27                       | BIOL               | 3410        | Forensic Science4                |
| BIOL      | 2010        | Human Biology, 3 or           | CJ                 | 1000        | Intro. To Criminal Justice3      |
| BIOL      | 2401        | Anatomy & Physiology I, 4 3-4 | CJ                 | 3400        | Criminal Investigation3          |
| BIOL      | 3410        | Forensic Science4             | CJ                 | 4302        | Criminal Evidence3               |
| CHEM      | 1131        | Chemistry I5                  | Criminal           | Justice M   | lajor Track25-26                 |
| CHEM      | 1132        | Chemistry II5                 | BIOL               | 1111        | Biology I4                       |
| CJ        | 1000        | Intro. To Criminal Justice3   | BIOL               | 2010        | Human Biology, 3 or              |
| CJ        | 3400        | Criminal Investigation3       | BIOL               | 2401        | Anatomy & Physiology I, 4 3-4    |
| CJ        | 4302        | Criminal Evidence3            | BIOL               | 2511        | Genetics4                        |
| Chemisti  | ry Major Tr | ack 24-25                     | BIOL               | 3410        | Forensic Science4                |
| BIOL      | 1111        | Biology I4                    | CHEM               | 1131        | Chemistry I5                     |
| BIOL      | 2010        | Human Biology, 3 or           | CHEM               | 1132        | Chemistry II5                    |
| BIOL      | 2401        | Anatomy & Physiology I, 4 3-4 | Crimina            | I Justice i | majors must take CJ 3400 and     |
| BIOL      | 2511        | Genetics4                     | CJ 4302<br>the maj |             | rtmentally approved electives in |

BIOL 1000 The Discipline of Biology (1) An introduction to biology as an academic endeavor including consideration of the subdisciplines of biology, requirements of students, and professional opportunities. Only offered Fall semester. Prerequisite: declaration of major in biology.

BIOL 1003 Introduction to the Sciences: Ecology (3) Introduction to biological science with emphasis on scientific methodology, ecological concepts regarding populations, communities and ecosystems and the impact of humans on the natural world. No laboratory included. Not available to those with credit in BIOL 1004.

BIOL 1004 Introduction to the Sciences: Ecology (4) Introduction to biological science with emphasis on scientific methodology, ecological concepts regarding populations, communities and ecosystems and the impact of humans on the natural world. Laboratory included. Not available to those with credit in BIOL 1003.

**BIOL 1005 Introduction to Environmental Science (3)** Environmental science as an integrative study of human interaction with the environment that seeks to meet the needs of students with little background in science.

BIOL 1111 Biology I (4) Examination of basic biological principles including the scientific method; macromolecules of life; cellular structure, function, and replication; and plant form, function and diversity. Laboratory included. Only offered Fall semester. An additional fee is associated with this course.

BIOL 1112 Biology II (4) Introduction to the evolution and classification of the metazoa with emphasis on the form and function of selected invertebrate and vertebrate animals. Prerequisites: Biology 1000, Biology 1111. An additional fee is associated with this course.

BIOL 2010 Human Biology (3) An overview of human biology, emphasizing physiology, development, health, interpersonal and environmental interactions. Not open to Biology majors or minors.

BIOL 2020 General Ecology (3) An introduction to the major concepts of ecology in the context of evolution and the ecology of populations, communities, and ecosystems. Prerequisite: BIOL 1112.

BIOL 2401 Anatomy and Physiology I (4) A functional study of cellular and metabolic processes and cardiovascular, lymphatic, respiratory and digestive systems integrated with a study of pertinent structures. Prerequisite: CHEM 1103 or CHEM 1104 or CHEM 1131. An additional fee is associated with this course.

BIOL 2402 Anatomy and Physiology II (4) A functional study of temperature, water and electrolyte balances and skeletal, muscular, neural, endocrine and reproductive systems integrated with a study of pertinent structures. Prerequisite: BIOL 2401. An additional fee is associated with this course.

BIOL 2511 Genetics (4) Hereditary principles and their application to classical and molecular genetics. Laboratories emphasize inquiry-based learning applied to exercises using Mendelian genetics and DNA technology. Prerequisites: MATH 1111, BIOL 1111 and CHEM 1131. BIOL 1112 may be substituted for CHEM 1131 but CHEM 1131 is highly recommended. An additional fee is associated with this

BIOL 2512 Cell Biology (3) A study of cellular macromolecules, DNA replication, transcription, and translation; cellular organelles, cytoskeleton, energetics, division; and the biology of the cancer cell. Prerequisite:

BIOL 3102 Evolution (3) Lecture and discussion of current and historical evolutionary theory. The process of scientific investigation will be contrasted with non-scientific methods. Prerequisites: BIOL 1111, BIOL 1112, BIOL 2020, and BIOL

BIOL 3211 Comparative Anatomy (4) Comparative morphology of the early development and evolution of the organ systems of vertebrates. Laboratory study of representative vertebrates. Only offered Fall semester. Prerequisites: BIOL 1111, BIOL 1112 and BIOL 2020. An additional fee is associated with this course.

BIOL 3213 Embryology of Vertebrates (3) Germ cells, fertilization, and development of systems, organs, and tissues of vertebrate embryos. Only offered Fall semester. Prerequisites: BIOL 1111 and BIOL 1112 or BIOL 2402; and CHEM 1104 or CHEM 1131. An additional fee is associated with this course.

BIOL 3215 Medical Terminology (2, 3) The language of medical and paramedical practices. Terminology related to organ systems of the body is presented with emphasis on Latin and Greek roots. May not be repeated for credit. Prerequisites: One biology course.

BIOL 3410 Forensic Science (4) Theoretical and hands-on applications of forensic science including types of deaths, taphonomy, toxicology, body fluid and blood analysis, ballistics and trace evidence determinations. Prerequisites: Biol 2010 or 2401, and Chem 1132.

BIOL 3413 Immunology (3) A survey of the field of immunology including the types of immune responses, antibody synthesis, antigen-antibody interactions, hypersensitivity, immunity to infection, and the design of laboratory techniques for immunological screening. Only offered Spring semester. Prerequisites: BIOL 2401 or BIOL 3431 and concurrent enrollment in BIOL 4517, unless previously taken (Medical Technology Functional Majors do not need concurrent enrollment in BIOL 4517).

BIOL 3414 Histology (3) The functional morphology of selected tissues at the light microscopic level. Laboratory involves practice in slide reading. Only offered Fall semester.

# 112 Biology and Earth Science

Prerequisite: BIOL 3211 or BIOL 2402 or BIOL 3431. An additional fee is associated with this course.

BIOL 3431 Animal Physiology (4) Animal functions in terms of their needs for oxygen, food, energy, temperature, water, movement, information, and integration. Prerequisites: BIOL 1111 and 1112 or AGRI 3410; and CHEM 1104 or CHEM 1131. An additional fee is associated with this course.

BIOL 3611 Microbiology (4) An introduction to the major groups of microorganisms including their cell structure, metabolism, genetics, and ecology. Emphasis is placed upon the bacteria and viruses. Prerequisites: BIOL 1112 or BIOL 2402; and CHEM 1104 or CHEM 1131. An additional fee is associated with this course.

**BIOL 3711 Plant Identification (4)** A basic course in plant identification, using classification, nomenclature, collection and preservation techniques. Involves much field and lab work. Prerequisites: BIOL 1111 and BIOL 1112.

BIOL 3712 Field Natural History (4) Provides basic experience in field and laboratory identification of local plants and animals and an introduction to environmental awareness. This is a background course for all courses in field biology and is especially useful to teachers and pre-professional students. Only offered Fall semester. Prerequisites: BIOL 1111 and BIOL 1112. An additional fee is associated with this course.

**BIOL 3721 Wildlife Conservation (3)** Wildlife resources of North America and their importance in our economic and cultural life; biological methods of preservation, restoration and management. Only offered Fall semester. Prerequisites: BIOL 1111 and BIOL 1112.

BIOL 4000 Biology Colloquium\* (1) Investigation of professional opportunities in biology. Evaluation of the program by students and assessment of student progress in biology. Prerequisite: 24 semester hours of biology or consent of department chair. \*Not available for graduate credit

BIOL 4011 Special Problems in Biology (1-4) Individual work under supervision of a staff member. Problems may be undertaken in any field of biology. May be repeated for a maximum of 4 semester hours. Prerequisite: consent of instructor

BIOL 4012 Special Projects in Biology (1-8) May be repeated for a maximum of 9 semester hours. With permission of the Department Chair, functional majors in medical technology may repeat for a maximum of 30 semester hours. Prerequisite: consent of instructor. An additional fee is associated with this course.

BIOL 4013 Introduction to Experimental Design and Analysis (3) This course covers the conceptualization, implementation, analysis, and communication of research in biology. Prerequisites: BIOL 1111 or BIOL 1112 and College Algebra or Pre Calculus or consent of instructor.

**BIOL 4014 Internship in Biology (1- 9)** Practical experience working within the various components of the Biology discipline. Only 4 credit hours total may be used to satisfy Approved Biology Electives. Prerequisite: must be a major in the Department of Biological Sciences with at least 60 hours of credit.

BIOL 4210 Ichthyology (4) A thorough examination of the biology of the fish with special emphasis on the fish of Missouri. Students will be expected to develop a detailed knowledge of the literature on ichthyology. Field trips at additional expense to the student are part of this course. An additional fee is associated with this course. Prerequisites: CHEM 1131 and 14 hours of biology including BIOL 1112. BIOL 4221 Mammalogy (4) A thorough examination of the Class Mammalia. Students will be expected to develop a detailed knowledge of the literature on mammalogy. Only offered Fall semester. Prerequisites: BIOL 1111 and BIOL 1112. An additional fee is associated with this course. BIOL 4223 Ornithology (4) An examination of the biology of birds with special emphasis on the field study of locally occurring species. Prerequisites: BIOL 1111 and BIOL 1112.

An additional fee is associated with this course.

BIOL 4232 Herpetology (4) A thorough examination of the classes Amphibia and Reptilia, including systematics, evolution and ecology of these groups with special attention to identification of local forms. Prerequisite: BIOL 2512.

BIOL 4311 Parasitology (4) Animal parasites, with emphasis on identification, morphology, biology, life histories, and host-parasite relationships. Only offered Fall semester. Prerequisite: BIOL 2512. An additional fee is associated with this course.

BIOL 4312 Entomology (4) An introduction to the systematics, morphology, physiology, evolution, and ecology of insects. Only offered Fall semester. Prerequisites: BIOL 1111 and BIOL 1112. An additional fee is associated with this course.

**BIOL 4400 Endocrinology (2)** Examination of the physiology of endocrine glands and the roles of each hormone in the regulation of growth, metabolism, and reproduction. Examples will be selected from humans and domestic species. Prerequisite: BIOL 3431.

BIOL 4403 Environmental Physiology (4) Physiological responses and adaptations to alterations in natural and man-generated environmental factors such as temperature, light cycles, pressure, water, ions, radiation, vibration, chemicals, microorganisms, and exercise. Prerequisite: BIOL 2402 or BIOL 3431. An additional fee is associated with this course.

BIOL 4411 Plant Physiology (4) Life processes occurring in plants, the factors affecting these processes, their measurement, and the significance of these processes to the growth of the plant. Only offered Fall semester. Prerequisites: BIOL 2512; and CHEM 1104 or CHEM 1131. An additional fee is associated with this course.

BIOL 4511 Cytogenetics (4) Examination of cellular and molecular mechanisms in cell division and their role in evolution and human health. Laboratory exercises include techniques for experimentally manipulating chromosomes and use of computer and video techniques. Prerequisites: BIOL 2512; and CHEM 1104 or CHEM 1131. An additional fee is associated with this course.

**BIOL 4514 Molecular Biology (3)** This course emphasizes how biological molecules interact to express cellular phenotypes. Transcriptional and translational controls of gene expression and the latest biotechnological advances are discussed. Prerequisite: BIOL 2511.

BIOL 4515 Molecular Technology Laboratory (2) This course emphasizes the proper use of laboratory equipment, molecular techniques, experimental design, and data analysis. Questions and experiments encountered in molecular biology are addressed. Prerequisite: BIOL 4514 with a grade of C or better or concurrent enrollment with consent of instructor. An additional fee is associated with this course.

BIOL 4516 Hematology/Virology (3) The study of blood and viruses. Topics include hematopoiesis, coagulation, viral replication, host responses to viruses, and normal and diseased host responses. Prerequisites: BIOL 2511 and BIOL 2512.

BIOL 4517 Serology Laboratory (1) A combined immunology, hematology, and virology laboratory emphasizing cellular components and identification and differentiation by technological methodologies. Prerequisites: Concurrent enrollment in either BIOL 3413 or BIOL 4516.

BIOL 4520 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with BIOL 4794 during the Professional Semester. \*Not available for graduate credit.

BIOL 4709 Plant Ecology (4) Concepts and methods pertaining to the collection and analysis of ecological data. Fundamental principles of interactions between plants and their environment will be addressed. Prerequisites: BIOL 1111; BIOL 1112; BIOL 2020; BIOL 3711 or equivalent; or

instructor's consent.

BIOL 4711 Animal Ecology (4) Ecological principles and concepts pertaining to populations, communities, and ecosystems with special emphasis on animals. Both field work with local examples and laboratory work are part of this course. Prerequisites: CHEM 1131 and 20 semester hours of biology including BIOL 1111 and 1112. An additional fee is associated with this course.

BIOL 4722 Conservation Biology (4) This is a synthetic course applying the multidisciplinary approaches of ecology, biogeography, evolution, genetics and economics to the global biodiversity crisis. Prerequisites: BIOL 1111, BIOL 1112, BIOL 2020, BIOL 2511.

#### BIOL 4794 Methods of Teaching Science\* (2)

Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with BIOL 4520 during the Professional Semester. \*Not available for graduate credit.

**BIOL 4810 Curriculum Development in Biological Science** (2) Classroom techniques for teaching life science to junior and senior high school students. Historical development and changes to current programs of life science discussed. Only offered Fall semester. Prerequisites: Admission to Teacher Education Program and concurrent enrollment in BIOL 4811. BIOL 4811 Investigative Laboratory (2) Investigative laboratory activities related to life science teaching in junior and senior high school. Problem in investigative biology to be conducted and a paper written. Only offered Fall semester. Prerequisites: Admission to Teacher Education Program and concurrent enrollment in BIOL 4810. BIOL 4953 Ecology Field Course (1-6)\* Advanced field methods and analysis of the physical, chemical, and ecological aspects of diverse marine ecosystems. On a rotating basis, the field course may focus on marine, northern temperate woods, and alpine systems. May be repeated for credit as topics vary. Prerequisite: consent of instructor. \*Not available for graduate credit.

# **Integrative Studies Capstone**

ICAP 4222 The Biological Perspective\* (3) An examination of current issues from a biological perspective including the impact of biology on history and culture. For biology majors. Prerequisite: 22 semester hours of biology. \*Not available for graduate credit.

# Earth Science

# **EARTH SCIENCE Major, B.A. Degree**

(42000386)

The graduate with a Bachelor of Arts degree in Earth Science will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information)
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety. (technology)
- Think logically within an earth science framework and be receptive to new ideas and concepts. (higher-order thinking)
- Use the language and concepts of earth science to communicate effectively in oral and written form, to follow instructions precisely and to function in independent and collaborative settings. (communicating and interacting)
- Exhibit the ethical use of knowledge, materials and procedures that demonstrates an impact on society. (valuing)

| MAJOR REQUIREMENTS   |                    |                            | Sem. Hours |
|--|--------------------|----------------------------|------------|
| EASC 1004 Intro. to the Sciences: Geology4                       |                    | following                  | 3          |
| EASC 3010 Environmental Geology3                                 | GEOG 4210          | Remote Sensing and         |            |
| EASC 3110 Structural Geology4                                    |                    | Image Interpretation       | 3          |
| EASC 2200 Historical Geology4                                    | GEOG 4220          | Geographic Info. Systems I | 3          |
| EASC 3501 Invertebrate Paleontology4                             | *AGRI 2330         | Intro. to Soil Science     | 3          |
| Elective from the following4                                     | Electives in Earth | Science                    | 13         |
| EASC 3320 Mineralogy4  |                    |                            |            |
| EASC 4301 Minerals & Rocks4                                      |                    |                            |            |
| MINOR REQUIREMENTS   |                    |                            | 18-25      |
| GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. (In the          |                    |                            |            |
| Language Requirement fulfills 3 s.h. of Div. II C)               |                    |                            | 41         |
| MODERN LANGUAGE REQUIREMENT                                      |                    |                            | 3-9        |
| (Refer to Bachelor's Degree Requirements section for fulfillment | options.)          |                            |            |
| FREE ELECTIVES   |                    |                            | 10-23      |
| MINIMUM TOTAL  |                    |                            | 124        |

<sup>\*</sup>Course has prerequisite(s) not listed in the program.

### **EARTH SCIENCE Functional Major, B.S. in Ed. Degree**

[Unified science certification to teach any of the beginning sciences (i.e., Biology I, Chemistry I, etc.) and all levels of earth science, grades 9-12] (41 000488)

The graduate with a Earth Science Functional Major, Bachelor of Science in Education Degree will use the knowledge and skills obtained in the program to:

- Challenge the Praxis and C-BASE exams allowing them to be licensed as teachers upon successful completion of these exams.
- Be qualified for teacher certification in the state of Missouri.
- Be qualified to apply for graduate programs in education.

| FUNCTIO   | ΔΝΑΙ ΜΑ   | IOR REQUIREMENTS                      |       |      | Sem. Hours  |
|-----------|-----------|---------------------------------------|-------|------|---|
| EASC      | 1004      | Intro. to the Sciences: Geology4      |       |      | E CERTIFICATION - The starred (*) courses           |
| EASC      | 2200      | Historical Geology4                   |       |      | art of the elective credits for Unified Science     |
| EASC      | 3010      | Environmental Geology3                |       |      | n science - certification to teach any of the       |
| EASC      | 3111      | Geomorphology3                        |       |      | (i.e., Chemistry I, Physics I, etc.) and all levels |
| EASC      | 3112      | Astronomy3                            |       | •    | rades 9-12.   |
| EASC      | 3114      | Meteorology3                          | *CHEM |      | General Chemistry II5                               |
| EASC      | 3501      | Invertebrate Paleontology4            | CHEM  | 2650 | Elem. Organic & Biochemistry5                       |
| EASC      | 3320      | Mineralogy, 4 or                      | CHEM  | 3111 | Interm. Inorganic Chemistry4                        |
| EASC      | 4301      | Minerals & Rocks, 44                  | CHEM  | 4910 | Research in Chemistry 1-2                           |
| BIOL      | 1004      | Intro. to the Sciences: Ecology4      | *BIOL | 1112 | Biology II4   |
| BIOL      | 1111      | Biology I4                            | BIOL  | 2511 | Genetics4   |
| CHEM      | 1131      | General Chemistry I5                  | BIOL  | 2512 | Cell Biology3                                       |
| PHYS      | 1101      | College Physics I, 4 or               | BIOL  | 3712 | Field Natural History4                              |
| PHYS      | 1104      | Intro. to the Sciences: Physics, 4 or | EASC  | 3110 | Structural Geology4                                 |
| PHYS      | 2121      | University Physics I, 5 4-5           | EASC  | 3115 | Oceanography3                                       |
| T&OE      | 2000      | Technology & Change3                  | EASC  | 2100 | Engineering Geology, 4 or                           |
|           |           | d from courses listed below. Hours    | EASC  | 3400 | Groundwater Geology, 3 3-4                          |
| of electi | ves taken | must bring the total in the major     | EASC  | 4010 | Special Problems in Geology 1-2                     |
| to 56 ho  | ours      |                                       | *PHYS | 1102 | College Physics II, 4 or                            |
|           |           |                                       | *PHYS | 2122 | University Physics II, 5 4-5                        |
|           |           |                                       | PHYS  | 3511 | Modern Physics I3                                   |
| (Program  | continue  | d on next page)                       | PHYS  | 3611 | Optics3   |
|           |           |                                       | PHYS  | 4312 | Electricity & Magnetism3                            |
|           |           |                                       | PHYS  | 3080 | Adv. Physics Laboratory 1-2                         |

#### MINOR NOT REQUIRED GENERAL EDUCATION REQUIREMENTS (page 49)--48 s.h. (In the functional major, EASC 1004 fulfills 4 s.h. of Div. II A; two courses in biology are allowed to fulfill 3 s.h. of Div. II A; T&OE 2000 fulfills 2 s.h. of Div. II A; in the professional Div. II B or POLS 1510 PSY 4230 HIST Div. II B (required) ......3 Div. II B (required) ......3 HIST 1351 Psy. of Adolescence ......3 Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. III. **EARTH SCIENCE Minor for a Bachelor's Degree** (CMSU does not confer teacher certification for this minor.) (000477)Sem. Hours MINOR REQUIREMENTS ..... EASC 1004 Electives in earth science ......12 Intro. to the Science: Geology ......4 **EASC** Historical Geology ......4 GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, EASC 1004 fulfills 4 s.h. of Div. II A)

# **GEOLOGY Functional Major, B.S. Degree**

(43000388)

The graduate with a Functional Major Bachelor of Science degree in Geology will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems. (managing information)
- Use various field and laboratory techniques and/or instruments with understanding, accuracy, precision and safety. (technology)
- Think logically and apply knowledge within a geological framework to develop maps and cross-sections of the Earth. Be receptive to new ideas and concepts. (higher-order thinking)
- Use the language and concepts of geology to communicate effectively in oral and written form, to follow detailed instructions and to function in independent and collaborative settings. (communicating and interacting)
- Exhibit the ethical use of knowledge, materials and procedures that demonstrates an impact on society. (valuing)

| ELINOTIC  | AM IAIAC    | JOR REQUIREMENTS                                     |                   |                                    | Sem. Hours<br>68-75 |
|-----------|-------------|--|-------------------|------------------------------------|---------------------|
| EASC      | 1004        | Intro. to the Sciences: Geology4                     |                   | ne following                       |                     |
| EASC      | 2200        | Historical Geology4                                  | PHYS 1101         | College Physics I                  |                     |
| EASC      | 3110        | Structural Geology4                                  | PHYS 1102         | College Physics II                 |                     |
| EASC      | 3320        | Mineralogy4  |                   | or                                 |                     |
| EASC      | 4325        | Petrology4   | PHYS 2121         | University Physics I               | 5                   |
| EASC      | 4420        | Sedimentary Petrology & Stratigraphy .5              | PHYS 2122         | University Physics II              | 5                   |
| GEOG      | 4220        | Geographic Information Systems I3                    | Electives from th | e following choices                | 7-10                |
| CHEM      | 1131        | General Chemistry I5                                 |                   | Choice 1                           |                     |
| CHEM      | 1132        | General Chemistry II5                                | (recommended      | for those students planning to     |                     |
| Summe     | r field cou | rse at an approved university6                       | attend graduat    | e school):                         |                     |
| Elect thi | ree cours   | es from the following9-11                            | MATH 1151         | Calc. & Analytical Geometry        | I5                  |
| EASC      | 2100        | Engineering Geology4                                 | MATH 1152         | Calc. & Analytical Geometry        | / II5               |
| EASC      | 3010        | Environmental Geology3                               |                   | Choice 2                           |                     |
| EASC      | 3111        | Geomorphology3                                       | MATH 1111         | College Algebra                    |                     |
| EASC      | 3400        | Groundwater Geology3                                 | MATH 1112         | College Trigonometry               | 2                   |
| EASC      | 3501        | Invertebrate Paleontology4                           | MATH 1101         | Intermediate Algebra               | 2                   |
|           |             |  |                   | ОГ                                 |                     |
|           |             |  | MATH 1150         | Pre-calculus Mathematics           | 4                   |
| MINOR N   | NOT REQ     | UIRED  |                   |                                    |                     |
|           |             | ATION REQUIREMENTS (page 49)48 s.h. (In the          |                   |                                    |                     |
|           |             | EASC 1004 fulfills 4 s.h. of Div. II A; two chemistr |                   |                                    | 38                  |
|           |             | S  |                   |                                    | 11-18               |
| MINIMUN   | M TOTAL     |  | waata diana       | sal, slope stability, engineering  | 124                 |
|           |             |  | wasie dispo       | isai, siope stability, engineening | properties or       |

#### EASC 1004 Introduction to the Sciences: Geology (4)

Fundamental principles of the natural sciences as applied to the Earth. Topics covered include volcanoes, earthquakes, plate tectonics, landscape formation by streams, glaciers, and underground water. Laboratory included. An additional fee is associated with this course.

EASC 2100 Engineering Geology (4) The study of physical geology as applied in engineering practice. Emphasis is on surficial geology and soils, employing both field and laboratory investigation methods. Topics include refraction, seismic and electrical resistivity surveys, hydrogeology,

soil and rock, mapping, site characterization, and report writing. Prerequisite: EASC 1004 or equivalent or consent of instructor. An additional fee is associated with this course. EASC 2200 Historical Geology (4) The history of the earth will be studied in light of shifting continents, advances and retreats of seas, periods of mountain building and the evolution of life through the great expanse of geologic time. Laboratory will include local and regional field trips. Prerequisite: EASC 1004. An additional fee is associated with this course.

EASC 3010 Environmental Geology (3) The relationships

#### 116 Biology and Earth Science

between humans and their geological surroundings with an emphasis on environmental problems. The main topics are mineral and energy resources, population, earthquake and volcanic hazards, medical problems related to the environment, floods, and coastal processes.

**EASC 3110 Structural Geology (4)** Structures of the Earth on maps, cross-sections, and aerial photographs and in field exercises. Folding and faulting are emphasized. Also discussed are plate tectonic mechanisms that are responsible for Earth structures. Prerequisite: EASC 1004. An additional fee is associated with this course.

**EASC 3111 Geomorphology (3)** The processes which shape the Earth's surface and form surficial deposits. The interaction of people with their environment is emphasized. Topics include soil formation, engineering properties of soil and rock, surface water, ground water, and environmental planning. Prerequisite: EASC 1004 or EASC 3010.

**EASC 3112 Astronomy (3)** The fundamental principles and theories pertaining to planetary astronomy, stellar evolution, and origin of the galaxies. Observational techniques are discussed and night-time viewing sessions are held using departmental telescopes.

**EASC 3114 Meteorology (3)** Principles and theories of weather, climate, and other atmospheric phenomena. Included is the study of energy exchanges, winds, cloud types, precipitation forms, severe weather, and the generation and movement of tornadoes and other cyclonic storms

**EASC 3115 Oceanography (3)** Beginning course intended for students with a limited science background. Relationship of continents and ocean basins, sea floor spreading, waves, tides, currents, circulation of the atmosphere and ocean, marine biology and geology, and global environmental implications.

EASC 3213 Quaternary and Glacial Geology (3) Glacier formation and movement, glacial erosion and deposition, changes in sea level and in river channels, climate change and the causes of the ice ages, and changes in northern hemisphere animal and plant populations during the past two million years. Prerequisite: EASC 1004.

**EASC 3320 Mineralogy (4)** An introduction to crystallography and a systematic study of the mineral groups including the native elements, sulfides, sulfates, oxides, halides, carbonates, and silicates. Laboratory work stresses identification by physical and chemical properties. Prerequisite: EASC 1004. An additional fee is associated with this course.

**EASC 3400 Groundwater Geology (3)** Principles of how fluids move within the crust of the Earth. Groundwater concepts are reviewed and applied to modern day resource and conservation problems. Prerequisites: EASC 1004, PHYS 1101 and MATH 1111.

**EASC 3501 Invertebrate Paleontology (4)** Principles and methods used in collecting, identifying, and utilizing fossils to determine the distribution and environment of ancient lands and seas. Further, fossils will be studied as tools of geologic time determination. Laboratory will include local and regional field trips. Prerequisite: EASC 2200 or consent of instructor. An additional fee is associated with this course.

**EASC 4010 Special Problems in Geology (1-3)** Individual work under supervision of a staff member. Problems may be undertaken in any area of geology. *May be repeated for a maximum of 9 semester hours*. Prerequisite: adequate preparation in that field and consent.

**EASC 4301 Minerals and Rocks (4)** The origin and classification of minerals and rocks in a course designed primarily for teachers of earth science. Methods and techniques of identification are stressed. Prerequisite: EASC 1004. An additional fee is associated with this course.

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**EASC 4320 Geochemistry (3)** Application of chemical principles to the study of earth and environmental systems. Topics include origin and distribution of elements, stable and radiogenic isotopes, thermodynamics, aqueous and environmental geochemistry, and geochemical cycles. Prerequisites: EASC 1004 and EASC 3320.

**EASC 4325 Petrology (4)** Igneous and metamorphic rocks. Includes consideration of processes of formation and identification of rock types. Prerequisite: EASC 3320. An additional fee is associated with this course.

EASC 4420 Sedimentary Petrology and Stratigraphy (5)
The description and classification of sedimentary rocks and
the principles of stratigraphy. Laboratory exercises will focus
on hand specimen petrology and subsurface stratigraphic
analysis. Field work will deal with measured stratigraphic
sections. Prerequisite: EASC 3320. An additional fee is
associated with this course.

**EASC 4500 Fossils of Missouri (3)** Emphasis on collecting and identifying fossils in order to prepare teachers for teaching the fundamental aspects of common fossils from Missouri. Prerequisite: EASC 1004.

# **Chemistry and Physics**

# Chemistry

In the section of Chemistry, the second digit in the course number stands for the following: 0--Unclassified, 1--Inorganic, 2--Analytical, 3--Organic, 4--Biochemistry, 5--Physical, 6--Organic and Biochemistry, 9--Research and Special Problems.

#### **Chemistry Statement of Policy**

All junior and senior chemistry majors are required to attend oral presentations by students who are enrolled in CHEM 4900 and CHEM 4910.

Prior to student teaching, all B.S. in Ed. Chemistry Functional majors are required to serve as a lab assistant or lab preparation assistant for one semester in partial fulfillment of CHEM 4900.

#### Accreditation

The Chemistry programs are accredited by the American Chemical Society. The American Chemical Society is located at 1155 Sixteenth St, N.W., Washington, DC 20036; phone 800-227-5558; webpage http://www.chemistry.org.

# CHEMISTRY Major, B.A. Degree

(42000391)

The graduate with a Bachelor of Arts degree in Chemistry will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information & higher-order thinking).
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety (technology).
- Think logically within a chemistry framework and be receptive to new ideas and concepts (higher-order thinking).
- Use the language and concepts of chemistry to communicate effectively in oral and written form, to follow detailed instructions, and to function in independent and collaborative settings (communicating and interacting).
- Exhibit the ethical use of knowledge, materials and procedures that demonstrate an impact on society (valuing).

|                |         |   |            |            | Sem. Hours                                     |
|----------------|---------|---|------------|------------|--|
| MAJOR REC      | QUIREN  | MENTS   |            |            |  |
| CHEM 11        | 131     | General Chemistry I5                                  | CHEM       | 3920       | Communication Skills in Chem2                  |
| CHEM 11        | 132     | General Chemistry II5                                 | CHEM       |            | Biochemistry4                                  |
| CHEM 31        | 111     | Intermediate Inorganic Chemistry4                     | Elective   | from the f | following 3-4                                  |
| CHEM 32        | 212     | Quantitative Analysis3                                | *CHEM      |            | Advanced Inorganic Chemistry4                  |
| CHEM 33        | 341     | Organic Chemistry I4                                  | *CHEM      | 4231       | Instrumental Analysis4                         |
| CHEM 33        | 342     | Organic Chemistry II4                                 | *CHEM      | 4313       | Modern Organic Analysis4                       |
| CHEM 35        | 500     | Elements of Physical Chemistry4                       | CHEM       | 4910       | Research in Chemistry 3-4                      |
| MINOR REC      | QUIREM  | IENTS   |            |            | 18-25  |
| GENERAL E      | EDUCAT  | FION REQUIREMENTS (page 49)48 s.h. (In the m          | najor, CHE | EM 1131 a  | and CHEM 1132 are allowed to fulfill 4 s.h. of |
| Div. II A; the | e Modei | rn Language Requirement fulfills 3 s.h. of Div. II C) |            |            | 41   |
| MODERN LA      | ANGUA   | GE REQUIREMENT  |            |            | 3-9  |
| (Refer to Ba   | achelor | 's Degree Requirements section for fulfillment optio  | ns.)       |            |  |
| FREE ELEC      | CTIVES  |   |            |            | 10-24  |
| MINIMUM TO     | OTAL    |   |            |            | 124  |

<sup>\*</sup>Course has prerequisite(s) not listed in the program.

# CHEMISTRY Functional Major, B.S. Degree

 $(43\ 000393)$ 

The graduate with a Bachelor of Science degree in Chemistry will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information & higher-order thinking).
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety (technology).
- Think logically within a chemistry framework and be receptive to new ideas and concepts (higher-order thinking).
- Use the language and concepts of chemistry to communicate effectively in oral and written form, to follow detailed instructions, and to function in independent and collaborative settings (communicating and interacting).
- Exhibit the ethical use of knowledge, materials and procedures that demonstrate an impact on society (valuing).

|         |          | a. acc or incomongo, materials and procedures and |                |             | Sem. Hours                       |
|---------|----------|---|----------------|-------------|----------------------------------|
| FUNCTI  | ONAL MA  | JOR REQUIREMENTS                                  |                |             | 65-69                            |
| CHEM    | 1131     | General Chemistry I5                              | CHEM           | 4531        | Physical Chemistry I4            |
| CHEM    | 1132     | General Chemistry II5                             | CHEM           | 4532        | Physical Chemistry II4           |
| CHEM    | 3111     | Intermediate Inorganic Chemistry4                 | CHEM           | 4910        | Research in Chemistry4           |
| CHEM    | 3212     | Quantitative Analysis3                            | PHYS           | 1101        | College Physics I4               |
| CHEM    | 3341     | Organic Chemistry I4                              | PHYS           | 1102        | College Physics II4              |
| CHEM    | 3342     | Organic Chemistry II4                             | MATH           | 1151        | Calculus & Analytic Geometry I5  |
| CHEM    | 3920     | Communication Skills in Chemistry2                | MATH           | 1152        | Calculus & Analytic Geometry II5 |
| CHEM    | 4231     | Instrumental Analysis4                            | *Elective      | e from the  | following 0-4                    |
| CHEM    | 4421     | Biochemistry4                                     | CHEM           | 1 4111      | Advanced Inorganic Chemistry4    |
|         |          |   | CHEM           | 1 4313      | Modern Organic Analysis4         |
|         |          | ours required for ACS-CPT approved degree.        |                |             |                                  |
|         | NOT REQ  |   |                |             |                                  |
|         |          | ATION REQUIREMENTS (page 49)48 s.h. (In the       |                |             |                                  |
|         |          | EM 1132, PHYS 1101 and PHYS 1102 are allowed      | to fulfill 7 s | .h. of Div. | II A)38                          |
| FREE EI | LECTIVES | 3   |                |             | 17-21                            |
| MINIMU  | M TOTAL  |   |                |             |                                  |

#### **CHEMISTRY Functional Major, B.S. in Ed. Degree**

[Certification to teach chemistry in grades 9-12] (41 000485)

The graduate with a Bachelor of Science in Education degree in Chemistry will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information & higher-order thinking).
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety (technology).
- Think logically within a chemistry framework and be receptive to new ideas and concepts (higher-order thinking).
- Use the language and concepts of chemistry to communicate effectively in oral and written form, to follow detailed instructions, and to function in independent and collaborative settings (communicating and interacting).
- Exhibit the ethical use of knowledge, materials and procedures that demonstrate an impact on society (valuing).
- Manage a secondary education program in chemistry that has a laboratory emphasis, with confidence, enthusiasm, efficiency, and

| FUNCTIONAL MAJOR REQUIREMENTS   | Sem. Hour.   |
|---|--|
| CHEM         1131         General Chemistry I         .5           CHEM         1132         General Chemistry II         .5           CHEM         3111         Intermediate Inorganic Chemistry         .4           CHEM         3212         Quantitative Analysis         .3           CHEM         3341         Organic Chemistry I         .4           CHEM         3500         Elements of Physical Chemistry         .4           CHEM         4421         Biochemistry         .4           CHEM         4900         Chem. Research for Teachers         .1-2 | teach any of the beginning sciences (i.e., Biology I, Physics I, e and all levels of chemistry, grades 9-12.  CHEM 3342 Organic Chemistry II |
| BIOL         1003         Intro. to the Sciences: Ecology   | BIOL 2512         Cell Biology   |
| T&OE       2000       Technology & Change   | EASC 3112       Astronomy       3         *EASC 3114       Meteorology       3         EASC 3320       Mineralogy       4                    |
| Electives in science from following list. Hours of electives must bring the total in the major  | *EASC 4010 Special Problems in Geology1 *PHYS 1102 College Physics, 4 or   |
| to 60 hours. 10-12 UNIFIED SCIENCE CERTIFICATION - The starred (*) courses must be taken as part of the elective credits for Unified Science  | *PHYS 2122 University Physics II, 5  |
| certification in chemistry - certification to   | PHYS 3611         Optics         3           PHYS 4312         Electricity & Magnetism         3   |

#### MINOR NOT REQUIRED GENERAL EDUCATION REQUIREMENTS (page 49)--48 s.h. (In the functional major, EASC 1004 fulfills 4 s.h. of Div. II A; BIOL 1003 fulfills 3 s.h. of Div. II A; T&OE 2000 fulfills 2 s.h. of Div. II A; in the professional POLS 1510 1350 HIST Div. II B or Div. II B (required) ......3 Div. II B (required) ......3 HIST 1351 PSY 4230 Psy. of Adolescence ......3 Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. of Div. III. PROFESSIONAL EDUCATION REQUIREMENTS (see page 205; CHEM 4011 (3 s.h.) fulfills 2 s.h. of Special Methods in **CHEMISTRY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor.) (000478)

|         |         |                       | • | ,    |      | Sem. Hours            |
|---------|---------|-----------------------|---|------|------|-----------------------|
| MINOR F | REQUIRE | MENTS                 |   |      |      | 21                    |
| CHEM    | 1131    | General Chemistry I   | 5 | CHEM | 3341 | Organic Chemistry I4  |
| CHEM    | 1132    | General Chemistry II5 | 5 | CHEM | 3342 | Organic Chemistry II4 |
| CHEM    | 3212    | Quantitative Analysis | 3 |      |      |                       |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, CHEM 1131 and CHEM 1132 are allowed to fulfill 4 s.h. of Div. II A)

#### FORENSIC SCIENCE Minor for a Bachelor's Degree

See requirements as outlined in the Department of Biology and Earth Science.

#### CHEM 1103 Introduction to the Sciences: Chemistry

(3) Beginning course emphasizing properties of inorganic materials, for those needing no additional chemical training. Laboratory not included. Not available to those with credit in CHFM 1104

#### CHEM 1104 Introduction to the Sciences: Chemistry

(4) Beginning course emphasizing properties of inorganic materials, for those needing no chemical training beyond CHEM 2650. Laboratory included. Not available to those with credit in CHEM 1103. An additional fee is associated with this course.

# CHEM 1130 Preparatory General Chemistry (3, 4)

Preparatory course to enhance success in General Chemistry by exploring concepts of chemistry and further developing algebraic and logic skills to solve applied chemical problems. CHEM 1131 General Chemistry I (5) A first course in chemistry for those expecting to major or minor in chemistry, teach chemistry, or take pre-professional curricula. Includes laboratory experience. Prerequisite: a score of 17 on the mathematics section of the ACT, or 550 on the mathematics section of the SAT, or a passing score on a mathematics examination approved by the Department of Chemistry and Physics or a grade of C or better in MATH 1101. An additional fee is associated with this course.

CHEM 1132 General Chemistry II (5) A continuation of CHEM 1131. Includes laboratory experience. Prerequisite: CHEM 1131. An additional fee is associated with this course.

#### **CHEM 2650 Elementary Organic and Biochemistry**

(5) A brief introductory course in organic chemistry and fundamental concepts of biochemistry with emphasis on physiological, nutritional, and comparative aspects. Includes laboratory experience. May not be used for credit in chemistry major and minor programs on the B.A. and B.S. degrees. Prerequisite: CHEM 1104 or CHEM 1132. An additional fee is associated with this course

CHEM 3111 Intermediate Inorganic Chemistry (4) An intermediate level inorganic course with emphasis on main group and organometallic chemistry. Laboratory included. Prerequisites: CHEM 1132 and CHEM 2650, or CHEM 3342. An additional fee is associated with this course.

CHEM 3212 Quantitative Analysis (3) Application of chemical principles to the separation and determination of elements and compounds. Laboratory practice in basic

techniques of gravimetric, volumetric, and instrumental analysis. Prerequisite: CHEM 1132. An additional fee is associated with this course.

CHEM 3341 Organic Chemistry I (4) A lecture and laboratory course in the chemistry of carbon compounds. Prerequisite: CHEM 1132 or concurrently. An additional fee is associated with this course.

CHEM 3342 Organic Chemistry II (4) A continuation of CHEM 3341. Prerequisite: CHEM 3341. An additional fee is associated with this course.

### CHEM 3500 Elements of Physical Chemistry (4)

Development of principles and conceptual models of physical chemistry with minimal mathematical rigor with emphasis on practical applications and laboratory experience. Prerequisites: MATH 1111 or MATH 1150 or MATH 1151; CHEM 2650 or CHEM 3341 or concurrently; and CHEM 3212.

#### CHEM 3920 Communication Skills in Chemistry (2)

Techniques for searching the chemical literature, writing scientific reports and papers, and making effective oral presentations using audiovisual aids to effectively convey technical ideas and information. Prerequisite: a minimum of 17 semester hours of chemistry. Students are encouraged to enroll during their junior year.

CHEM 4010 Special Topics in Chemistry (1-3) Topics of contemporary significance not given in-depth coverage in regularly offered courses. May be repeated as the topic is changed. Prerequisite: CHEM 3500 or CHEM 4531 or consent of instructor.

# CHEM 4011 Methods of Teaching Physical Science\* (3)

Provides the teacher education candidate with skills and resources for the teaching of science. Students will learn a variety of strategies for both laboratory and classroom instruction. Prerequisite: Admission to Teacher Education Program. \*Not available for graduate credit.

CHEM 4111 Advanced Inorganic Chemistry (4) An advanced study of inorganic compounds with a focus on the transition elements, current issues and modern laboratory techniques. Prerequisites: CHEM 3111; CHEM 4532 or concurrently. An additional fee is associated with this course. CHEM 4231 Instrumental Analysis\* (4) A study, including applications, of instrumental methods of chemical analysis. Prerequisites: PHYS 1102 or concurrently, CHEM 3111 and

CHEM 3212. An additional fee is associated with this course. \*Not available for graduate credit.

CHEM 4313 Modern Organic Analysis\* (4) A lecture and laboratory course emphasizing the instrumentation used for physical organic measurements and the identification of organic compounds. Prerequisites: CHEM 4532 or concurrently and CHEM 3342. An additional fee is associated with this course. \*Not available for graduate credit.

CHEM 4421 Biochemistry\* (4) A study, including laboratory experience, of the chemical composition of living matter and the chemistry of life processes. Topics include proteins, carbohydrates, lipids, nucleic acids, and metabolism. Prerequisite: CHEM 3342. An additional fee is associated with this course. \*Not available for graduate credit. CHEM 4531 Physical Chemistry I\* (4) The kinetic-molecular theory of gases, thermodynamics, thermochemistry, free energy, chemical equilibria, and phase relationships. Laboratory investigations include the topics of gas thermometry, critical phenomena, enthalpy, reaction energy, free energy, and phase relationships. Prerequisites: CHEM 3212, PHYS 1102 and MATH 1152. An additional fee is associated with this course. \*Not available for graduate credit.

CHEM 4532 Physical Chemistry II\* (4) Quantum mechanics, atomic and molecular structure, spectroscopy, electrical and magnetic properties of molecules, electromotive force, and chemical kinetics. Laboratory investigations include the topics of atomic and molecular spectroscopy, x-ray diffraction, magnetic susceptibility, electromotive force in chemical cells, and chemical kinetics. Prerequisite: CHEM 4531. \*Not available for graduate credit.

CHEM 4900 Chemical Research for Teachers\* (1-2) Faculty supervised project terminating in a written and oral report. One semester assisting in or preparing materials for a chemistry laboratory course, prior to student teaching, also recommended. Prerequisites: CHEM 2650, CHEM 3212, and consent. \*Not available for graduate credit.

**CHEM 4910 Research in Chemistry\* (1-5)** Individual work on a chemical research project under supervision of a staff member. Project will terminate in a written and oral presentation. *May be repeated for a maximum of 10 semester hours.* Prerequisites: CHEM 3212, CHEM 3342 and consent. \*Not available for graduate credit.

CHEM 4911 Special Problems in Chemistry (1-3) Individual work under supervision of a staff member. May be repeated for a maximum of 3 semester hours. Prerequisite: consent.

Sem Hours

# **Physics**

In the section of Physics, the second digit in the course number stands for the following: 0--Laboratory and Unclassified, 1--General, 2--Mechanics, 3--Electricity, 4--Thermodynamics, 5--Modern Physics, 6--Light and Sound, 7--Particle, 8--Electronics, 9--Research and Special Problems.

# PHYSICS Functional Major, B.A. Degree

 $(42\ 000396)$ 

The graduate with a Bachelor of Arts degree in Physics will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information & higher-order thinking).
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety (technology).
- Think logically within a physics framework and be receptive to new ideas and concepts (higher-order thinking).
- Use the language and concepts of physics to communicate effectively in oral and written form, to follow detailed instructions, and to function in independent and collaborative settings (communicating and interacting).
- Exhibit the ethical use of knowledge, materials and procedures that demonstrate an impact on society (valuing).

| FUNCTION   | IAL MAJ      | OR REQUIREMENTS                                 |                   |            |  |
|------------|--------------|---|-------------------|------------|--|
| PHYS 2     | 121          | OR REQUIREMENTS5                                | MATH              | 1152       | Calculus & Analytic Geometry II5       |
| PHYS 2     | 122          | University Physics II5                          | MATH              | 2153       | Calculus & Analytic Geometry III3      |
| PHYS 30    | 012          | Elec. Measurements Laboratory2                  | MATH              | 3151       | Differential Equations3                |
| PHYS 30    | 080          | Advanced Physics Lab 2-3                        | CS                | 1100       | Intro. to Computing I3                 |
| PHYS 3     | 3211         | Analytical Mechanics I2                         | Departm           | nentally a | approved electives from the following6 |
| PHYS 3     | 311          | Electric Circuit Theory3                        | PHYS              | 2020       | Analytical Methods for Physics         |
| PHYS 3     | 3511         | Modern Physics I3                               |                   |            | and Engineering3                       |
| PHYS 42    | 212          | Analytical Mechanics II3                        | PHYS              | 3512       | Modern Physics II3                     |
| PHYS 4     | 411          | Thermodynamics3                                 | PHYS              | 4312       | Electricity & Magnetism3               |
| CHEM 1     | 131          | General Chemistry I5                            | PHYS              | 4512       | Intro. to Quantum Mechanics3           |
| CHEM 1     | 132          | General Chemistry II5                           | PHYS              | 4513       | Solid State Physics3                   |
| MATH 1     | 151          | Calculus & Analytic Geometry I5                 | PHYS              | 4711       | Atomic & Nuclear Physics3              |
| Students w | whose hi     | gh school preparation is inadequate should take | PHYS 1101         | during t   | heir first year at CMSU.               |
| MINOR NO   | T REQU       | IIRED   |                   |            |  |
| GENERAL I  | EDUCAT       | ΓΙΟΝ REQUIREMENTS (page 49)48 s.h. (In the      | e functional i    | major, M   | ATH 1151 fulfills 3 s.h. of Div. I C;  |
| PHYS 212   | 21, PHYS     | S 2122, CHEM 1131, and CHEM 1132 are allowe     | ed to fulfill 7 s | s.h. of Di | iv. II A; the Modern Language          |
| Requireme  | ent fulfills | s 3 s.h. of Div. II C)                          |                   |            | 35                                     |
| MODERN L   | _ANGUA       | GE REQUIREMENT (Refer to Bachelor's Degre       | e Requireme       | ents sect  | tion for fulfillment options.)3-9      |
| FREE ELEC  | CTIVES       |   |                   |            | 16-23                                  |
| MINIMUM T  | TOTAL        |   |                   |            | 124                                    |

#### PHYSICS Functional Major, B.S. Degree

 $(43\ 000397)$ 

The graduate with a Bachelor of Science degree in Physics will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information & higher-order thinking).
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety (technology).
- Think logically within a physics framework and be receptive to new ideas and concepts (higher-order thinking).
- Use the language and concepts of physics to communicate effectively in oral and written form, to follow detailed instructions, and to function in independent and collaborative settings (communicating and interacting).
- Exhibit the ethical use of knowledge, materials and procedures that demonstrate an impact on society (valuing).

|          |                    |   |              |             | Sem. Hours                           |  |  |
|----------|--------------------|---|--------------|-------------|--------------------------------------|--|--|
| FUNCTIO  | DNAL MAJ           | OR REQUIREMENTS                                   |              |             | 66-67                                |  |  |
| PHYS     | 2121               | University Physics I5                             | MATH         | 1151        | Calculus & Analytic Geometry I5      |  |  |
| PHYS     | 2122               | University Physics II5                            | MATH         | 1152        | Calculus & Analytic Geometry II5     |  |  |
| PHYS     | 3012               | Elec. Measurements Laboratory2                    | MATH         | 2153        | Calculus & Analytic Geometry III3    |  |  |
| PHYS     | 3080               | Advanced Physics Lab2-3                           | MATH         | 3151        | Differential Equations, 3 or         |  |  |
| PHYS     | 3211               | Analytical Mechanics I2                           | MATH         | 3160        | Advanced Applied Calc., 33           |  |  |
| PHYS     | 3311               | Electric Circuit Theory3                          | Departm      | nentally ap | proved electives from the following6 |  |  |
| PHYS     | 3511               | Modern Physics I3                                 | PHYS         | 2020        | Analytical Methods for Physics       |  |  |
| PHYS     | 3512               | Modern Physics II3                                |              |             | and Engineering3                     |  |  |
| PHYS     | 4212               | Analytical Mechanics II3                          | PHYS         | 3611        | Optics3                              |  |  |
| PHYS     | 4312               | Electricity & Magnetism3                          | PHYS         | 4512        | Intro. to Quantum Mechanics3         |  |  |
| PHYS     | 4411               | Thermodynamics3                                   | PHYS         | 4513        | Solid State Physics3                 |  |  |
| CHEM     | 1131               | General Chemistry I5                              | PHYS         | 4711        | Atomic & Nuclear Physics3            |  |  |
| CHEM     | 1132               | General Chemistry II5                             |              |             |                                      |  |  |
| Students | s whose hi         | gh school preparation is inadequate should take P | HYS 1101     | during the  | eir first year at CMSU.              |  |  |
| MINOR N  | MINOR NOT REQUIRED |   |              |             |                                      |  |  |
| CENIEDA  | I EDITICA          | TION DEOLUDEMENTS (page 40) 48 c.h. (In the       | functional r | major MAA   | TH 1151 fulfille 3 c b of Div I C:   |  |  |

| GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. (In the functional major, MATH 1151 fulfills 3 s.h. of Div. I C; |    |
|--|----|
| PHYS 2121, PHYS 2122, CHEM 1131 and CHEM 1132 are allowed to fulfill 7 s.h. of Div. II A)                        | 38 |
| FREE ELECTIVES   | 20 |
| MINIMUM TOTAL  | 24 |

Com Hours

# PHYSICS Minor, B.S. Degree

(CMSU does not confer teacher certification for this minor; available only to mathematics majors) (000479)

|   | Sem. Hours  |
|---|---|
| MINOR REQUIREMENTS  | 21-22   |
| PHYS 2121 University Physics I5                                     | Electives (continued)                                   |
| PHYS 2122 University Physics II5                                    | PHYS 4312 Electricity & Magnetism3                      |
| PHYS 3080 Advanced Physics Lab 2-3                                  | PHYS 4411 Thermodynamics3                               |
| PHYS 3511 Modern Physics I3   | PHYS 4512 Intro. to Quantum Mechanics3                  |
| Departmentally approved electives from the following6               | PHYS 4513 Solid State Physics3                          |
| PHYS 3512 Modern Physics II3  | PHYS 4711 Atomic & Nuclear Physics3                     |
| PHYS 3611 Optics3   | GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, |
| PHYS 2121 and PHYS 2122 are allowed to fulfill 4 s.h. of Div. II A) |   |

#### PHYSICS Functional Major, B.S. in Ed. Degree

(Certification to teach physics in grades 9-12) (41 000486)

The graduate with a Bachelor of Science in Education degree in Physics will use the knowledge and skills obtained in the program to:

- Collect, analyze and apply information to solve problems (managing information & higher-order thinking).
- Use various laboratory techniques and/or instruments with understanding, accuracy, precision and safety (technology).
- Think logically within a physics framework and be receptive to new ideas and concepts (higher-order thinking).
- Use the language and concepts of physics to communicate effectively in oral and written form, to follow detailed instructions, and to function in independent and collaborative settings (communicating and interacting).
- Exhibit the ethical use of knowledge, materials and procedures that demonstrate an impact on society (valuing).
- Manage a secondary education program in physics, that has a laboratory emphasis, with confidence, enthusiasm, efficiency, and safety

|           |              |  |              |             | Sem. Ho                              | ours |
|-----------|--------------|--|--------------|-------------|--------------------------------------|------|
| FUNCTIO   | NAL MAJ      | OR REQUIREMENTS  |              |             | 66                                   | 6-69 |
| PHYS      | 2121         | University Physics I5                                  | MATH         | 1151        | Calculus & Analytic Geometry I       | 5    |
| PHYS      | 2122         | University Physics II5                                 | MATH         | 1152        | Calculus & Analytic Geometry II      | 5    |
| PHYS      | 3080         | Advanced Physics Lab 2-3                               | MATH         | 2153        | Calculus & Analytic Geometry III     | 3    |
| PHYS      | 3511         | Modern Physics I3                                      | CS           | 1100        | Intro. to Computing I                | 3    |
| CHEM      | 1131         | General Chemistry I5                                   | T&OE         | 2000        | Technology & Change                  | 3    |
| CHEM      | 1132         | General Chemistry II5                                  | Departm      | nentally ap | proved electives from                |      |
| CHEM      | 4011         | Methods of Teaching Physical Sci3                      | the follo    | wing        | 8-8                                  | 9    |
| BIOL      | 1004         | Intro. to the Sciences: Ecology4                       | PHYS         | 3211        | Analytical Mechanics I2              |      |
| BIOL      | 1111         | Biology I4   | PHYS         | 3512        | Modern Physics II3                   |      |
| EASC      | 1004         | Intro. to the Sciences: Geology, 4 or                  | PHYS         | 3611        | Optics3                              |      |
| EASC      | 3114         | Meteorology, 3 3-4                                     | PHYS         | 4312        | Electricity & Magnetism3             |      |
|           |              |  | PHYS         | 4411        | Thermodynamics3                      |      |
| MINOR N   | IOT REQU     | JIRED  |              |             |                                      |      |
| GENERA    | L EDUCA      | TION REQUIREMENTS (page 49)48 s.h. (In the fu          | inctional i  | major, MA1  | ΓH 1151 fulfills 3 s.h. of Div. I C; |      |
|           |              | S 2122, CHEM 1131, and CHEM 1132 are allowed to        |              |             |                                      |      |
| 2 s.h. of |              | n the professional education requirements, ICAP 44     |              | 3 s.h. of D | Piv. IV B)                           | . 33 |
| HIST      | 1350         | Div. II B or   |              |             | Div. II B (required)3                |      |
| HIST      | 1351         | Div. II B (required)3                                  | PSY          | 4230        | Psy. of Adolescence3                 |      |
| Seconda   | ary Educa    | tion students will be allowed to substitute PSY 4230   | to fulfill 3 | s.h. of Div | /. III.                              |      |
|           |              | DUCATION REQUIREMENTS28 s.h. (see page 2               |              |             |                                      |      |
| the majo  | or field and | d 1 s.h. of Secondary Field Experience II in the major | r field)     |             |                                      | . 25 |
| MINIMUN   | I TOTAL .    |  |              |             |                                      | 124  |
|           |              |  |              |             |                                      |      |

Sem. Hours

# **COOPERATIVE ENGINEERING 3-2 Functional Major, B.A. Degree**

(42000395)

The University of Missouri-Rolla, the University of Missouri-Columbia, the University of Kansas, and Central Missouri State University offer cooperative five-year engineering programs leading to a B.A. degree from CMSU and a B.S. in Engineering from the cooperating institution. Any student electing to enter the five-year program must apply for a degree audit at the close of the sophomore year indicating upon application plans to complete the cooperative plan at another institution and name the institution. For details, consult the Chair of the Chemistry and Physics Department. For the first three years, students should complete the following program.

| FUNCTI   | ONAL MA | JOR REQUIREMENTS               |      |      |                                  |   |  |
|--|---------|--------------------------------|------|------|----------------------------------|---|--|
| PHYS   | 2121    | University Physics I5          | COMM | 1000 | Public Speaking                  |   |  |
| PHYS   | 2122    | University Physics II5         | MATH | 1151 | Calculus & Analytic Geometry I   | 5 |  |
| PHYS   | 3012    | Elec. Measurements Laboratory2 | MATH | 1152 | Calculus & Analytic Geometry II  | 5 |  |
| PHYS   | 3211    | Analytical Mechanics I2        | MATH | 2153 | Calculus & Analytic Geometry III | 3 |  |
| PHYS   | 3311    | Electric Circuit Theory3       | MATH | 3151 | Differential Equations           | 3 |  |
| PHYS   | 4212    | Analytical Mechanics II3       | CS   | 1100 | Intro. to Computing I            |   |  |
| PHYS   | 4411    | Thermodynamics3                | GRAP | 1110 | Fundamentals of Drafting         | 3 |  |
| CHEM   | 1131    | General Chemistry I5           | ECON | 1010 | Principles of Macroeconomics     | 3 |  |
| CHEM   | 1132    | General Chemistry II5          | ECON | 1011 | Principles of Microeconomics     | 3 |  |
| Students whose high school preparation is inadequate should take PHYS 1101 during their first year at CMSU.  Depending upon major engineering area, the student should consider taking PHYS 3511, PHYS 3611, PHYS 4513, PHYS 4312 and/or PHYS 4711. In particular, electrical engineers should consider taking PHYS 3511, PHYS 3611, PHYS 4513, and/or PHYS 4312. Other engineering students should check major requirements of the transfer university.  MINOR NOT REQUIRED  GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. (In the functional major, COMM 1000 fulfills 3 s.h. of Div. I B; MATH 1151 fulfills 3 s.h. of Div. I C; PHYS 2121, PHYS 2122, CHEM 1131, and CHEM 1132 are allowed to fulfill 7 s.h. of Div. II A; ECON 1010 fulfills 3 s.h. of Div. II B; the Modern Language Requirement fulfills 3 s.h. of Div. II C) |         |                                |      |      |                                  |   |  |
| MINIMUM TOTAL AT CMSU96  |         |                                |      |      |                                  |   |  |

PHYS 1101 College Physics I (4) Properties of matter, mechanics, sound, and heat. Laboratory required. Prerequisites: MATH 1111 or consent of the instructor. PHYS 1104 is recommended for students whose background in science and/or mathematics is limited.

PHYS 1102 College Physics II (4) Electricity, magnetism, light, and atomic and nuclear physics. Laboratory required. Prerequisite: PHYS 1101.

PHYS 1103 Introduction to the Sciences: Physics (3) An introduction to physics. Topics include mechanics, energy, heat, sound, electricity, magnetism, light, atomic and nuclear physics, relativity, and astrophysics. Laboratory not included. Not available to those with credit in PHYS 1104.

PHYS 1104 Introduction to the Sciences: Physics (4) An introduction to physics. Topics include mechanics, energy, heat, sound, electricity, magnetism, light, atomic and nuclear physics, relativity, and astrophysics. Laboratory included. Not available to those with credit in PHYS 1103.

PHYS 2020 Analytic Methods for Physics and

Engineering (3) Technique development in and application of topics necessary to describe physical problems in the physics and pre-engineering curricula including coordinate systems, vectors and vector operators, series expansions, complex numbers, partial derivatives, special functions, and ordinary differential equations. Prerequisite: PHYS 2121.

PHYS 2121 University Physics I (5) Kinematics, dynamics, statics, rotational motion, elasticity, periodic motion, fluids, and heat. Laboratory required. Prerequisites: PHYS 1101 or consent of department, and MATH 1151.

PHYS 2122 University Physics II (5) Wave motion, sound, electricity and magnetism, electromagnetic waves, and optics. Laboratory required. Prerequisites: PHYS 2121 and MATH 1152.

PHYS 3012 Electrical Measurements Laboratory (2) Basic electrical and magnetic measurements from DC to radio frequencies, including electric transients and calibration

procedures. Introductory experiments using analog and digital circuits. Prerequisite: PHYS 3311 concurrently. PHYS 3020 Special Topics in Physics (1-4) Study, interpretation, and discussion of special topics and problems in physics. May be repeated for a maximum of 6 semester hours. Prerequisite: consent of instructor.

PHYS 3040 Practicum in Physics Laboratory Management (1.5) The student will assist with all aspects of an undergraduate physics laboratory at the appropriate level, including answering student questions, preparing equipment, and grading. The student will also be expected to prepare and present two or three introductory lectures for the laboratory, critique materials and methods presently in use, and suggest, design, and produce written materials for a new experiment. May be repeated for a maximum of 3 semester hours. Prerequisite: consent of department.

PHYS 3080 Advanced Physics Laboratory (1-3) Experimental activities in optics, solid state, atomic, and nuclear physics. Modern instrumentation and analysis methods. May be repeated for a maximum of 6 semester hours. Prerequisite: PHYS 2122.

PHYS 3211 Analytical Mechanics I (2) The principles of mechanics using elements of vector analysis applied to bodies in equilibrium, trusses, friction; centroids, and moments of inertia. Prerequisites: PHYS 2121 and MATH 1152

PHYS 3311 Electric Circuit Theory (3) The basic principles of circuit analysis including Kirchhoff's laws, network theorems, equivalent circuits, transients, and AC circuits. Prerequisite: PHYS 2122.

PHYS 3511 Modern Physics I (3) Special and general relativity; quantized nature of energy and matter; structure and properties of the atom; matter waves; uncertainty principle; Schr dinger equation and its applications. Prerequisites: PHYS 2122 and MATH 2153 or concurrently: PHYS 3080 concurrently.

PHYS 3512 Modern Physics II (3) Applications of basic and intermediate level quantum physics to atoms, molecules, nuclei, solids, and elementary particles. Includes quantum statistical physics. Prerequisites: PHYS 3511 and MATH 2153; PHYS 3080 concurrently.

PHYS 3611 Optics (3) Wave optics, including the principles of superposition, interference, diffraction, polarization, and dispersion. Introduction to quantum optics. Prerequisites: PHYS 2122 and MATH 2153.; PHYS 3080 concurrently. PHYS 4212 Analytical Mechanics II (3) Using a vector analysis, a study is made of kinematics; motion of a particle; kinetics of rigid bodies; work and energy, impulse and momentum; impact. Prerequisites: PHYS 3211 and MATH 2153.

PHYS 4312 Electricity and Magnetism (3) Electric and magnetic fields using vector analysis, dielectrics, vector potential, Coulomb's law, Gauss' law, Laplace's equation, and Maxwell's equations. Prerequisites: PHYS 2122 and MATH 2153.

PHYS 4411 Thermodynamics (3) Properties of gases, kinetic theory of gases; laws of thermodynamics; entropy and introduction to statistical thermodynamics. Prerequisites: PHYS 2122 and MATH 2153 or concurrently.

PHYS 4512 Introduction to Quantum Mechanics (3) Experimental basis; fundamental postulates; Schrodinger wave equation; superposition of states; calculation of energy, position, momentum; hydrogen atom; identical particles; perturbation theory. Prerequisites: PHYS 3511 and MATH 2153

PHYS 4513 Solid State Physics (3) Crystal structure and diffraction in solids. Thermal dielectric properties. Free electron model of metals. Band theory of solids. Brillouin zones. Prerequisite: PHYS 3512; PHYS 3080 concurrently. PHYS 4711 Atomic and Nuclear Physics (3) Designed to use introductory quantum concepts and techniques as applied to the analysis of atoms and nuclei. Prerequisite: PHYS 3512.

PHYS 4911 Special Problems in Physics (1-3) Individual work under supervision of a staff member. Problems may be undertaken in any phase of physics. May be repeated for a maximum of 6 semester hours.

#### **Integrative Studies General**

IGEN 4236 Science and Religion: From Conflict to Dialogue\* (3) A clarification of the historical and philosophical issues that arise in the relationship between science and religion. The course emphasizes a variety of interpretive viewpoints. \*Not available for graduate credit.

# Communication

#### **Mission Statement**

The Department of Communication embraces the traditions, study, and practice of symbolic interaction through a variety of communication genres, such as broadcast media, corporate communication, journalism, mass communication, public relations, rhetoric, and speech communication.

Students must make a C grade in each of the following core courses: COMM 1100. COMM 1110. COMM 2100. COMM 2110, COMM 3100 and COMM 3110

#### Admissions

Students entering Central Missouri State University to pursue a degree in communication (Communication, B.A.; Broadcast Media, B.S.; Journalism, B.S.; Public Relations, B.S.) should indicate their intentions to become a communication major at the time of first enrollment and be assigned a departmental adviser. Departmental advisers can be obtained at the department office, Martin 136.

Admission to all communication degree programs is conditional upon the completion of the following prerequisites:

- 1. Completion of the following General Education requirements with no grade lower than C: COMM 1000; ENGL 1020 and ENGL 1030, or ENGL 1080.
- 2. Proficiency in keyboarding is required for all writing courses.

Application into the communication programs should be made during the freshman year. Applications made after completion of 75 semester hours of academic credit will normally entail the taking of more than the minimum of 49 additional semester hours. Application forms are available in Martin 136

Departmental decision on admission will be made after completion of the 9 semester hours of course work in the appropriate category.

- 1. Broadcast Media Majors must obtain a 2.50 GPA in: COMM 1200, COMM 2400, COMM 2415.
- 2. Journalism Majors must obtain a 2.25 GPA in: COMM 1520, COMM 2520.
- 3. Public Relations Majors must obtain a 2.25 GPA in: COMM 1520, COMM 2520, COMM 2620.

## **Course Work**

- 1. Subsequent to initial enrollment as entering students, students majoring in communication programs should obtain pre-enrollment authorization from their departmental adviser before registering for additional classes.
- 2. Students will not be permitted to withdraw more than one time from each communication course without permission of the departmental Student Affairs Committee.
- 3. A student may not graduate with a degree in a communication major in which the grade of record for any required communication course work is an F. Excluding COMM 1200, COMM 2400, COMM 2415, COMM 1520, COMM 2620, COMM 4500, a maximum of six semester hours in which the grade of record for any communication course is a D may be counted toward a degree with a communication major.

- 4. Course substitutions for the catalog requirements may be made only upon approval by the appropriate departmental advisor and department chair.
- 5. Some production or writing courses require participation in activities outside the class meeting hours. Students should be prepared to participate in these activities that sometimes include assignments in conjunction with the campus media.
- 6. Some lecture courses require attendance at departmental colloquia and/or other university presentations. Students should be prepared to participate in these assignments as a part of their degree programs.
- 7. In order to graduate with a degree with a communication major, a student must attain a 2.25 (or above) grade-point average for all credit hours (completed at CMSU or elsewhere) and attain a certain grade-point average for all course work in the major (see individual major descriptions for GPA requirements).

#### **BROADCAST MEDIA Major, B.S. Degree**

Please see the Department of Communication for updates regarding this program. (43 000342)

#### **Broadcast Media Statement of Policy**

#### Admissions

Students entering Central Missouri State University to pursue a Bachelor of Science degree in Broadcast Media should indicate their intentions to become a Broadcast Media major at the time of first enrollment and be assigned a departmental adviser. Department advisers can be obtained at the department office, Martin 136.

Application into the Broadcast Media major should be made during the freshman or sophomore year. Applications made after completion of 75 semester hours of academic credit will normally entail the taking of more than the minimum of 49 additional semester hours.

Admission to the Broadcast Media program is conditional upon the completion of the following prerequisites:

- Completion of the following General Education requirements with no grade lower than C: COMM 1000, ENGL 1020 and ENGL 1030, or ENGL 1080.
- Completion of the following Broadcast Media gateway courses: COMM 1200, COMM 2400, COMM 2415.
   Students must maintain a 2.50 grade point average with no course credit lower than a C in these courses.

#### **Course Work**

 A first semester student majoring in Broadcast Media should meet with a departmental adviser before registering for additional classes.

- Students will not be permitted to withdraw more than one time from each Broadcast Media course without permission of the departmental Broadcast Media Committee
- A student may not graduate with a degree in Broadcast Media in which the grade of record for any required communication course work is an F.
- Excluding COMM 1200, COMM 2400, COMM 2415, a maximum of six semester hours in which the grade of record for any communication coursework is a D may be counted toward a Broadcast Media major.
- Course substitutions for the catalog requirements may be made only upon approval by the appropriate departmental adviser and department chair.
- Some production or writing courses require participation in activities outside the class meeting hours. Students should be prepared to participate in these activities, which sometimes include assignments in conjunction with the campus media.
- Some lecture courses require attendance at departmental colloquia and/or other university presentations. Students should be prepared to participate in these assignments as a part of their degree programs.
- In order to graduate with a degree in Broadcast Media, a student must attain a 2.25 (or above) grade-point average for all credit hours (completed at CMSU or elsewhere) and attain a 2.50 (or above) grade-point average for all course work in the major.

Sem. Hours

The graduate with a Bachelor of Science degree in Broadcast Media will use the knowledge and skills obtained in the program to:

- Demonstrate an understanding of the theories of communication through broadcast media.
- Demonstrate an understanding of how research is applied and critiqued in media industries.
- Demonstrate preparedness for the industries of mass media through practical knowledge of the process of production.
- Demonstrate an understanding of the history of and effects of electronic media in today's society.

| MAJOR REQUIREMENTS                      |             |                     | 45-57                          |
|---|-------------|---------------------|--------------------------------|
| COMM 1100 Intro. to Communication       | 1           | (electives continue | ed)                            |
| COMM 1110 Communication Skills Lab      | 1           | COMM 3412           | Single Camera Drama Prod3      |
| COMM 2100 Introduction to Communication | n Theory .3 | COMM 4410           | Video Production III3          |
| COMM 2110 Intro. to Communication Theo  | ry Lab1     | COMM 4470           | Corp. & Org. Media Production3 |
| COMM 3100 Communication Research Me     | thods3      | lı                  | ndustry Practice and Analysis  |
| COMM 3110 Resource and Methods Lab      | 1           | Electives from the  | e following 3-5                |
| COMM 1200 Intro. to Mass Communication  | 3           | COMM 4240           | Media Management2              |
| COMM 4250 Mass Communication Law        | 3           | COMM 4245           | Media Economics & Sales3       |
| COMM 2400 Foundations of Broadcasting   | 3           | COMM 3430           | Broadcast Prog. & Operations3  |
| COMM 2410 Multimedia I                  | 3           | COMM 4415           | Screenplay Writing3            |
| COMM 2411 Audio Production I            |             | COMM 4475           | New Media Technologies2        |
| COMM 2412 Video Production I            | 5           | COMM 3640           | Mass Media Advertising3        |
| COMM 2415 Broadcast Copywriting         | 3           |                     | Theory and Criticism           |
| COMM 4490 Senior Capstone Seminar       | 2           | Electives from the  | e following 3-5                |
| COMM 3200 Practicum, 1-3 or             |             | COMM 4200           | Spec. Topics in Mass Media 1-6 |
| COMM 4295 Internship, 1-3               | 1-3         | COMM 4260           | Comparative Media Systems2     |
| Production                              |             | COMM 4280           | Criticism of Mass Media2       |
| Electives from the following            |             | COMM 4285           | Women & Minorities in Media3   |
| COMM 3410 Audio Production II           | 3           | COMM 4290           | Special Proj. in Mass Comm 1-3 |
| COMM 3411 Video Production II           | 3           | COMM 3400           | History of American Film3      |
| COMM 3413 Multimedia II                 | 3           |                     |                                |

(Continued on next page)

(Continued from previous page)

| MINOR REQUIRE             | MENTS (see Statement of Policy) |      |      | 18                   | 3-25 |  |  |
|---------------------------|---------------------------------|------|------|----------------------|------|--|--|
|                           | ATION REQUIREMENTS (page 49)    |      |      |                      |      |  |  |
|                           | Div. I B (required)3            |      |      | Div. IV A or         |      |  |  |
| COMM 3000                 | Div. II C (required)3           | IGEN | 3232 | Div. IV A or         |      |  |  |
| GEOG 3201                 | Div. II D (required)3           | IGEN | 3224 | Div. IV A (required) | 3    |  |  |
| COMM 3010                 | Div. III (required)3            |      |      |                      |      |  |  |
| UPPER-LEVEL ELECTIVES1-13 |                                 |      |      |                      |      |  |  |
| MINIMUM TOTAL             |                                 |      |      |                      |      |  |  |

#### **BROADCAST MEDIA Minor for a Bachelor's Degree**

Please see the Department of Communication for updates regarding this program (CMSU does not confer teacher certification for this minor) (000343)

|   |                     | Sem. Hours                    |
|---|---------------------|-------------------------------|
| MINOR REQUIREMENTS                      |                     | 21                            |
| COMM 1200 Intro. to Mass Communication3 | Electives (continue | d)                            |
| COMM 2400 Foundations of Broadcasting3  | COMM 3411           | Video Production II3          |
| COMM 2415 Broadcast Copywriting3        | COMM 3412           | Single Camera Drama Prod3     |
| COMM 4250 Mass Communication Law3       | COMM 3413           | Multimedia II3                |
| Electives from the following3           | COMM 3430           | Broadcast Prog. & Operations3 |
| COMM 2410 Multimedia I3                 | COMM 4240           | Media Management2             |
| COMM 2411 Audio Production I            | COMM 4280           | Criticism of Mass Media2      |
| COMM 2412 Video Production I5           | COMM 4410           | Video Production III3         |
| Electives from the following6           | COMM 4415           | Screenplay Writing3           |
| COMM 3200 Mass Media Practicum1         | COMM 4470           | Corporate & Org. Media Prod3  |
| COMM 3410 Audio Production II3          |                     |                               |

# JOURNALISM Major, B.S. Degree

Please see the Department of Communication for updates regarding this program. For admissions and classwork requirements, see Statement of Policy. (43 000345)

Journalism Statement of Policy

Admissions. Students entering the Department of Communication to pursue a degree in Journalism should indicate their intentions to become a communication major at the time of their first enrollment and be assigned a departmental advisor. Departmental advisors can be obtained through the office professional in Martin 136.

Admission to the program is conditional upon the following prerequisites:

- Completion of the following general education requirements with a grade no lower than a C: COMM 1000, ENGL 1020, ENGL 1030 or ENGL 1080, and COMM 3010.
- Application into the communication programs should be made during the freshman year. Applications made after completion of 75 hours of academic credit will normally entail the taking of more than the minimum of 49 additional semester hours. Application forms are available in Martin 136. Departmental approval of admission will be made after completion of the six semester hours of course work which are called the gateway courses (see item 3).

 All journalism majors must obtain a 2.35 GPA in COMM 1520 and COMM 2520 and maintain a 2.00 GPA in all of their coursework.

Program Goals. The graduate with a Bachelor of Science degree in Journalism will use the knowledge and skills obtained in the program to:

- Understand newsgathering and reporting
- Appreciate photojournalism
- Understand media law and ethics.
- Edit writing for new value, style, grammar and writing quality.
- Appreciate electronic journalism.
- Understand mass media and society.
- Be able to conceptualize page design.

(Program on next page)

|                |              |  |             |               |                                  | Sem. Hours        |
|----------------|--------------|--|-------------|---------------|----------------------------------|-------------------|
| MAJOR RE       | EQUIREN      | MENTS                                      |             |               |                                  | 40-45             |
| COMM 1         | 1100         | Introduction to Communication1             | COMM        | 4500          | Heritage of American Journalis   | sm3               |
| COMM 1         | 1110         | Communication Skills Lab1                  | COMM        | 4535          | Advanced News Reporting          | 3                 |
| COMM 1         | 1520         | Elements of News Reporting3                | Elective    | es from the   | following:                       | . 9-12            |
| COMM 2         | 2100         | Intro. to Communication Theory3            | COMN        | A 3530        | Photo Journalism                 | 3                 |
| COMM 2         | 2110         | Intro. to Comm. Theory Lab1                | COMN        | <i>l</i> 4200 | Special Topics in                |                   |
| COMM 2         | 2520         | Copy Editing & Layout3                     |             |               | Mass Media                       | 1-6               |
| COMM 3         | 3100         | Communication Research Methods3            | COMN        | <i>l</i> 4260 | Comparative Media Systems        | 2                 |
| COMM 3         | 3110         | Resources and Methods Lab1                 | COMN        | <i>l</i> 4280 | Criticism of Mass Media          | 2                 |
| COMM 3         | 3200         | Mass Media Practicum1                      | COMN        | A 4555        | Advanced Editing                 | 3                 |
| COMM 3         | 3525         | Feature Writing3                           | Students    | that want     | to concentrate in broadcast jour | rnalism or        |
| COMM 4         | 1210         | Mass Media Practicum II1                   | editing fo  | r newspar     | pers and magazines may do so     | with the aid of a |
| COMM 4         | 1250         | Mass Communication Law3                    | departme    | ental advis   | or who may substitute some ap    | proved courses    |
| COMM 4         | 1295         | Internship 1-3                             | to meet t   | hose need     | ds.                              |                   |
| MINOR RE       | QUIREM       | MENTS (see University Statement of Policy) |             |               |                                  | 18-25             |
| <b>GENERAL</b> | <b>EDUCA</b> | TION REQUIREMENTS (page 49)                |             |               |                                  | 48                |
|                | 1000         | Div. I B (required)3                       | <b>IGEN</b> | 3232          | Div. IV A or                     |                   |
| COMM 3         | 3010         | Div. III (required)3                       | <b>IGEN</b> | 3224          | Div. IV A or                     |                   |
|                |              |  | <b>IGEN</b> | 4224          | Div. IV A (required for Area 3)  | 3                 |
| FREE ELEC      | CTIVES       |  |             |               |                                  | 6-18              |
| MINIMUM 7      | TOTAL .      |  |             |               |                                  | 124               |

#### JOURNALISM Minor, B.S. in Ed. Degree

Please see the Department of Communication for updates regarding this program (Certification to teach journalism in grades 9-12) (000346)

The graduate with a Bachelor of Science in Education degree with a Journalism minor will use the knowledge and skills obtained in the program to:

- Understand newsgathering and reporting.
- Appreciate photojournalism.
- Demonstrate management and business skills for publication advisors.
- Appreciate electronic journalism.
- Understand mass media and society.
- Be able to conceptualize page design.

| 20 0.5. |          | praduizo pago doorgiii      |      |      |                                 | Sem. Hours |
|---------|----------|-----------------------------|------|------|---------------------------------|------------|
| MINOR F | REQUIREN | MENTS                       |      |      |                                 | 33         |
| COMM    | 1100     | Intro to Communication1     | COMM | 3525 | Feature Writing                 | 3          |
| COMM    | 1110     | Communication Skills Lab1   | COMM | 3535 | Broadcast Journalism            | 3          |
| COMM    | 3280     | Sports Writing3             | COMM | 4500 | Heritage of American Journalisr | n3         |
| COMM    | 4250     | Mass Communication Law3     | COMM | 4522 | Desktop Design for Teachers     | 3          |
| COMM    | 1520     | Elements of News Reporting3 | COMM | 4555 | Advanced Editing                | 3          |
| COMM    | 2520     | Copy Editing and Layout3    | COMM | 4571 | Methods of Teaching Journalism  | n3         |
| COMM    | 3505     | Introduction to High School |      |      | -                               |            |
|         |          | Video Production1           |      |      |                                 |            |

# **JOURNALISM Minor for a Bachelor's Degree**

Please see the Department of Communication for updates regarding this program (Except for a B.S. in Ed. Degree) (200008)

| MINIOD DEOL | JIREMENTS                          |           |                             | Sem. Hours |
|-------------|------------------------------------|-----------|-----------------------------|------------|
|             |                                    |           |                             |            |
| COMM 110    |                                    |           | e following                 |            |
| COMM 111    | 0 Communication Skills Lab1        | COMM 3200 | Mass Media Practicum        | 1-2        |
| COMM 425    | Mass Communication Law3            | COMM 3280 | Sports Writing              | 3          |
| COMM 152    | 20 Elements of News Reporting3     | COMM 4280 | Criticism of Mass Media     | 2          |
| COMM 252    | Copyediting & Layout3              | COMM 3530 | Photo Journalism            | 3          |
| COMM 352    |                                    | COMM 3535 | Broadcast Journalism        | 3          |
| COMM 450    | 0 Heritage of American Journalism3 | COMM 4520 | Editorial & Interp. Writing | 3          |
| COMM 453    | Advanced News Reporting3           | COMM 4555 | Advanced Editing            | 3          |

Sem Hours

#### **COMMUNICATION Major, B.A. Degree**

Please see the Department of Communication for updates regarding this program For admissions and classwork requirements, see Statement of Policy. (42000348)

#### **B.A. Communication Statement of Policy**

Admissions. Students entering Central Missouri State University to pursue a B.A. degree in Communication should indicate their intentions to become a major at the time of first enrollment and be assigned a departmental advisor. Departmental advisors can be obtained at the department office, Martin 136.

Admission to all communication degree programs is conditional upon the completion of the following prerequisites:

- 1. Subsequent to initial enrollment as entering students, students majoring in all communication programs should obtain pre-enrollment authorization from their departmental advisor before registering for additional
- 2. Students will not be permitted to withdraw more than one time from each communication course without permission of the departmental Student Affairs Committee.
- 3. A student may not graduate with a degree in a communication major in which the grade of record for any required communication course work is an F. A maximum of six semester hours in which the grade of record for any communication elective course is a D may be counted toward a degree with a communication major.
- 4. Course substitutions for the catalog requirements may be made only upon approval by the appropriate departmental advisor and department chair.
- 5. Some production, writing, and forensics courses require participation in activities outside the class meeting

- hours. Students should be prepared to participate in these activities that sometimes include assignments in conjunction with the campus media.
- 6. Some lecture courses require attendance at departmental colloquia and/or other university presentations. Students should be prepared to participate in these assignments as part of their degree programs.
- 7. In order to graduate with a degree with a communication major, a student must attain a 2.25 (or above) gradepoint average for all credit hours (completed at CMSU or elsewhere) and attain a 2.5 grade-point average for all course work in the major.

Program Goals. The graduate with a Bachelor of Arts degree in Communication will use the knowledge and skills obtained in the program to:

- Demonstrate a general knowledge and appreciation of mass and/or speech communication theories.
- Demonstrate ability to critique and/or apply various research methods and/or approaches.
- Demonstrate preparedness for professional life and/or further academic study.
- Demonstrate a basic knowledge of the combined disciplines of mass and speech communication through each of the following core areas: production, criticism, classical rhetoric, survey, and relational dynamics.

| MAJOR F  | REQUIREN    | MENTS                                  |   |
|----------|-------------|--|---|
| COMM     | 1100        | Introduction to Communication          | 1 |
| COMM     | 1110        | Communication Skills Lab               | 1 |
| COMM     | 2100        | Introduction to Communication Theory 3 | 3 |
| COMM     | 2110        | Intro. to Communication Theory Lab     | 1 |
| COMM     | 3100        | Communication Research Methods3        | 3 |
| COMM     | 3110        | Resources and Methods Lab              | 1 |
| COMM     | 1200        | Introduction to Mass Communication3    | 3 |
| COMM     | 2325        | Improving Listening Skills             | 3 |
| COMM     | 3327        | Improving Interviewing Skills          | 3 |
| COMM     | 4335        | Gender Communication                   | 3 |
| COMM     | 4390        | Contemporary Communication             | 2 |
| COMM     | 3200        | Mass Media Practicum, 1 or             |   |
| COMM     | 3390        | Forensics                              | 1 |
| Departme | entally app | roved upper-level electives in         |   |
| communi  | cation      | 3-6                                    | 3 |
|          |             | Criticism*                             |   |
| Elective | s from the  | following 2-3                          | 3 |
| COMM     | 14260       | Comparative Media Systems2             |   |
| COMM     | 14280       | Criticism of Mass Media2               |   |
| COMM     | 3320        | Audience Adaptation3                   |   |
| COMM     | 3355        | Speech Writing and Criticism3          |   |
|          |             | Production*                            |   |
| Elective | s from the  | following 3-6                          | 3 |
| COMM     |             | Prin. of Presentational Speaking3      |   |
| COMM     | 12415       | Broadcast Copywriting3                 |   |

<sup>\*</sup> A minimum of 7 hours of these electives must be upper level. Proficiency in typing is required (see Statement of Policy).

|                      |                             | 39-47 |
|----------------------|-----------------------------|-------|
| (electives continued |                             |       |
| COMM 4415            | Screen Play Writing         | 3     |
| COMM 1520            | Elements of News Reporting  | 33    |
| COMM 2410            | Multimedia I, 3 or          |       |
| COMM 2411            | Audio Production I, 3 or    |       |
| COMM 2412            | Video Production I, 5       | 3-5   |
|                      | Survey*                     |       |
| Electives from the   | following                   | 3     |
| COMM 2320            | Found. of Rhetorical Theory | 3     |
| COMM 2400            | Foundations of Broadcasting | g3    |
| COMM 3400            | History of American Film    | 3     |
| COMM 4500            | Heritage of Am. Journalism. | 3     |
| COMM 2620            | Public Relations            | 3     |
|                      | Relational*                 |       |
| Electives from the   | following                   | 2-3   |
| COMM 3325            | Nonverbal Communication.    | 2     |
| COMM 3340            | Intercultural Communication | 3     |
| COMM 4330            | Theories of Interpersonal   |       |
|                      | Communication               | 3     |
|                      | Classical*                  |       |
| Electives from the   | following                   | 2-3   |
| COMM 2340            | Argument and Debate         |       |
| COMM 4320            | Persuasion                  | 2     |
| COMM 4340            | Classical Rhetorical Theory |       |
| COMM 4345            | Modern Rhetorical Theory    | 3     |
| (Continued on next   | page)                       |       |

| (Continued from pr |   |             |          |   |
|--------------------|---|-------------|----------|---|
|                    | MENTS (see Statement of Policy)                       |             |          |   |
| GENERAL EDUCA      | TION REQUIREMENTS (page 49)48 s.h. (The M             | odern Lan   | guage Re | quirement fulfills 3 s.h. of Div. II C)45 |
| COMM 1000          | Div. I B (required)3                                  | COMM        | 3010     | Div. III (required)3                      |
| COMM 3000          | Div. II D (required)3                                 | IGEN        | 4224     | Div. IV A or                              |
| ANTH 1820          | Div. II E or  | <b>IGEN</b> | 3232     | Div. IV A or                              |
| GEOG 3201          | Div. II E or  | <b>IGEN</b> | 3224     | Div. IV A (required)3                     |
| WS 2000            | Div. II E (required)3                                 |             |          |   |
| MODERN LANGUA      | AGE REQUIREMENT                                       |             |          | 6   |
| (Refer to Bachelo  | r's Degree Requirements section for fulfillment opti- | ons.)       |          |   |
|                    | ECTIVES   |             |          |   |
| MINIMUM TOTAL      |   |             |          | 124                                       |
|                    |   |             |          |   |

# **COMMUNICATION Minor for a Bachelor's Degree**

(Students majoring in any Communication degree are not eligible to take this minor)
Please see the Department of Communication for updates regarding this program
(CMSU does not confer teacher certification for this minor)
(000349)

| MINOR REQUIREMENTS                               | Sem. Hours                                  |
|--|---|
| COMM 1100 Introduction to Communication1         | COMM 3100 Comm. Research Methods3           |
| COMM 1110 Communication Skills Lab1              | COMM 3110 Resources and Methods Lab1        |
| COMM 2100 Introduction to Communication Theory 3 | Departmentally approved electives in COMM11 |
| COMM 2110 Intro. to Communication Theory Lab1    |   |

# **PUBLIC RELATIONS Major, B.S. Degree**

Please see the Department of Communication for updates regarding this program For admissions and classwork requirements, see Statement of Policy.

(43 000351)

The graduate with a Bachelor of Science degree in Public Relations will use the knowledge and skills obtained in the program to:

- Demonstrate public relations driven knowledge and application of communication theories/concepts.
- Demonstrate ability to effectively evaluate and utilize research for public relations purposes.
- Demonstrate preparedness for professional life and/or further academic study.
- Demonstrate strategic management/decision-making abilities.

|                |           |   |           |          | Sem. Hours                          |
|----------------|-----------|---|-----------|----------|-------------------------------------|
| <b>MAJOR F</b> | REQUIRE   | MENTS   |           |          |                                     |
| COMM           | 1100      | Introduction to Communication1                      | Electives | from the | following6                          |
| COMM           | 1110      | Communication Skills Lab1                           | COMM      | 3200     | Mass Media Practicum 1-3            |
| COMM           | 2100      | Introduction to Communication Theory .3             | COMM      | 4200     | Spec. Topics in Mass Media 1-6      |
| COMM           | 2110      | Intro. to Communication Theory Lab1                 | COMM      | 4280     | Criticism of Mass Media2            |
| COMM           | 3100      | Communication Research Methods3                     | COMM      | 4295     | Internship1-3                       |
| COMM           | 3110      | Resources and Methods Lab1                          | COMM      | 2415     | Broadcast Copywriting3              |
| COMM           | 1200      | Intro. to Mass Communication3                       | COMM      | 4470     | Corporate & Organizational          |
| COMM           | 4250      | Mass Communication Law3                             |           |          | Media Production3                   |
| COMM           | 1520      | Elements of News Reporting3                         | COMM      | 3525     | Feature Writing3                    |
| COMM           | 2520      | Copy Editing & Layout3                              | COMM      | 3530     | Photo Journalism3                   |
| COMM           | 4510      | Magazine Design & Production3                       | COMM      | 4520     | Editorial & Inter. Writing3         |
| COMM           | 2620      | Public Relations3                                   | COMM      | 3640     | Mass Media Advertising3             |
| COMM           | 4680      | Publicity3  | GRAP      | 1010     | Intro. to Desktop Pub. & Printing 3 |
| COMM           | 4685      | Case Studies in Public Relations2                   | Phot      | 1210     | Elementary Photography3             |
| COMM           |           | Campaigns3  |           |          |                                     |
|                |           | g is required (see Statement of Policy).            |           |          |                                     |
| MINOR F        | REQUIRE   | MENTS (see Statement of Policy)                     |           |          | 18-25                               |
| GENERA         | L EDUCA   | TION REQUIREMENTS (page 49)<br>Div. I B (required)3 |           |          | 48                                  |
|                |           | Div. I B (required)3                                |           |          |                                     |
| COMM           |           | Div. II D (required)3                               |           | 3232     | Div. IV A or                        |
| COMM           |           | Div. III (required)3                                |           | 3224     | Div. IV A (required)3               |
|                |           | ECTIVES   |           |          |                                     |
| MINIMUN        | I TOTAL . |   |           |          | 124                                 |

Sem. Hours

Sem Hours

# **CORPORATE COMMUNICATION Major, B.S. Degree**

Please see the Department of Communication for updates regarding this program (43 000356)

The graduate with a Bachelor of Science degree in Corporate Communication will use the knowledge and skills obtained in the program to:

- Demonstrate a general knowledge and application of communication theory within an organizational context.
- Demonstrate ability to critique and apply various research methods and/or approaches within an organizational context.
- Demonstrate preparedness for professional life and/or further academic study.

#### Statement of Policy

Students entering Central Missouri State University to pursue the Corporate Communication Major, B.S. Degree should indicate their intentions at the time of first enrollment and be assigned a departmental advisor. Departmental advisors can be requested through the department office, Martin 136.

Admission to the degree program is contingent upon the completion of the following prerequisites:

- 1. Successful completion of the department foundation courses with a 2.50 grade-point average.
- 2. A cumulative grade-point average of 2.50.

Application to the program should be made as soon as all ten hours of the Foundation courses have been completed. Permission to proceed with the internship requirement is contingent upon the student presenting grades of AC@ or better in the pre-internship requirements.

Transfer students without Communication 3010 equivalency must take COMM 3010 B Interpersonal Communication.

| MAJOR REQUIREMENTS                             |   | 42     |
|--|---|--------|
| Core Courses                                   | Electives (continued)                                 |        |
| COMM 1100Introduction to Communication1        | COMM 3350 Principles of Presentational                |        |
| COMM 1110Communication Skills Lab1             | Speaking3   |        |
| COMM 2100Intro. to Communication Theory3       | COMM 3730 Comm. Conflict Management3                  |        |
| COMM 2110Intro. to Communication Theory Lab1   | COMM 4475 New Media Technologies2                     |        |
| COMM 3100Communication Research Methods3       | COMM 4780 Adv. Theories of Org. Comm3                 |        |
| COMM 3110Research and Methods Lab1             | COMM 4783 Communication Training3                     |        |
| Electives in Professional Courses              | Internship 3-6  |        |
| COMM 2325Improving Listening Abilities3        | COMM 4785 Internship in Speech Comm 3-6               |        |
| COMM 2330Small Group Communication3            | (If a 3 hour internship is selected, one additional 3 |        |
| COMM 2380Intro to Organizational Comm3         | semester hour upper-level course must be selected     |        |
| COMM 2620Public Relations3                     | from the Professional Courses category)               |        |
| COMM 3327Improving Interviewing Skills3        |   |        |
| MINOR REQUIREMENTS                             |   | .20-25 |
| GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h |   | 48     |
| COMM 1000Div IB (required)3                    | COMM 3010 Div. III (required)                         | 3      |
| ANTH 1820 Div. II D or                         | IGEN 4224 Div. IV A or                                |        |
| GEOG 3201 Div. II D or                         | IGEN 3232 Div. IV A or                                |        |
| WS 2000 Div. II D (required)3                  | IGEN 3224 Div. IV A (required)                        | 3      |
| UPPER-LEVEL ELECTIVES                          |   |        |
| FREE ELECTIVES                                 |   | 0-5    |
| MINIMUM TOTAL                                  |   | 124    |
|  |   |        |

#### CORPORATE COMMUNICATION Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000556)

|              |  | Seni. Hours   |
|--------------|--|---|
| MINOR REQUIR | REMENTS                                  | 25-26   |
| COMM 1000    | Public Speaking3                         | * MGT 3325 Business Communications3                     |
| COMM 2330    | Small Group Communication3               | Elective from the following2                            |
| COMM 2380    | Intro. to Organizational Comm3           | COMM 2325 Improving Listening Abilities3                |
| COMM 3350    | Principles of Presentational Speaking .3 | COMM 3325 Nonverbal Communication2                      |
| COMM 3730    | Communication Conflict Management .3     | COMM 3327 Improving Interviewing Skills3                |
| COMM 4781    | Assessment of Organizational             | * If MGT 3325 is required as part of a student's major, |
|              | Communication3                           | then the student must select one additional course      |
| COMM 4783    | Communication Training3                  | from the Electives.                                     |
|              |  |   |

# SPEECH COMMUNICATION Major, B.A. Degree

Please see the Department of Communication for updates regarding this program (42 000358)

The graduate with a Bachelor of Arts degree in Speech Communication will use the knowledge and skills obtained in the program to:
- Formulate appropriate communication strategies for dealing with potential conflict situations within and between specific cultures.

- Implement appropriate communication strategies for reducing existing conflicts within and between specific cultures.
- Communicate appropriately and ethically within culturally diverse contexts.
- Communicate effectively yet ethically in goal-relevant situations involving diverse cultures.
- Articulate/present significant principles of international/intercultural communication gained from direct, personal interaction with members of diverse ethnic, racial and cultural backgrounds.
- Analyze organizational and family structures in terms of cultural influences, which affect the relationships.

| ,a., _ o o . ga   | and the farm of the detailed in terms of cultural in   |                  |           | and relationinger                   |            |
|-------------------|--|------------------|-----------|-------------------------------------|------------|
|                   |  |                  |           |                                     | Sem. Hours |
| MAJOR REQUIRE     | MENTS  |                  |           |                                     | 35         |
| COMM 1000         | Public Speaking3                                       | COMM 4           | 4330      | Theories of Interpersonal           |            |
| COMM 3010         | Interpersonal Communication3                           |                  |           | Communication                       | 3          |
| COMM 2100         | Foundations of Comm. Theory3                           | COMM 4           | 4335      | Gender Communication                | 3          |
| COMM 2320         | Foundations of Rhetorical Theory3                      | COMM 4           | 4340      | Classical Rhetorical Theory         | 3          |
| COMM 2325         | Improving Listening Abilities3                         | COMM :           | 3730      | Communication Conflict Mgt.         | 3          |
| COMM 2330         | Small Group Communication3                             | COMM :           | 3320      | Audience Adaptation, 3 or           |            |
| COMM 3340         | Intercultural Communication3                           | COMM 4           | 4345      | Modern Rhetorical Theory, 3         | 3          |
| MINOR REQUIRE     | MENTS  |                  |           |                                     | 18-25      |
| GENERAL EDUCA     | ATION REQUIREMENTS (page 49)48 s.h. (In the            | ne major, COM    | IM 1000   | fulfills 3 s.h. of Div. I B; the Mo | dern       |
| Language Requir   | rement fulfills 3 s.h. of Div. II C; in the major, CON | 1M 3010 fulfills | 3 s.h. of | f Div. II E)                        | 39         |
| ANTH 1820         | Div. II D or   | IGEN 4           | 4224      | Div. IV A or                        |            |
| GEOG 3201         | Div. II D or   | IGEN :           | 3232      | Div. IV A or                        |            |
| WS 2000           | Div. II D (required)3                                  | IGEN :           | 3224      | Div. IV A (required)                | 3          |
| MODERN LANGU      | AGE REQUIREMENT  |                  |           |                                     |            |
| (Refer to Bachelo | or's Degree Requirements section for fulfillment of    | ptions.)         |           |                                     |            |
| FREE ELECTIVES    | S  |                  |           |                                     | 16-29      |
| MINIMUM TOTAL     |  |                  |           |                                     | 124        |

# SPEECH COMMUNICATION Major, B.S. Degree

Please see the Department of Communication for updates regarding this program  $(43\ 000359)$ 

The graduate with a Bachelor of Science degree in Speech Communication will use the knowledge and skills obtained in the program to:

- Demonstrate a general knowledge and application of communication theories/concepts.
- Demonstrate ability to effectively evaluate and utilize research.
- Demonstrate preparedness for professional life and /or further academic study.

| MAJOR REQUIREMENTS   | - Demonstrate prep | baleuriess for professional life and for further acad | erriic study | /.          | Sen                           | n. Hours |
|--|--------------------|---|--------------|-------------|-------------------------------|----------|
| COMM         1110         Communication Skills Lab         1         COMM 1200         Intro. to Mass Communication         .3           COMM         2100         Introduction to Communication Theory Jab         1         COMM 4250         Mass Communication Law         .3           COMM         2100         Intro. to Communication Theory Lab         .1         COMM 4260         Comparative Media Systems         .2           COMM         3100         Communication Research Methods         .3         COMM 230         Criticism of Mass Media         .2           COMM         3110         Resources and Methods Lab         .1         COMM 2340         Argumentation and Debate         .3           COMM         2325         Improving Listening Ablitites         .3         COMM 3320         Audience Adaptation         .3           COMM         2325         Improving Listening Ablitites         .3         COMM 4500         Heritage of American           COMM         3350         Principles of Presentational Speaking         .3         COMM 4500         Heritage of American           COMM         4320         Persuasion         .2         .2         POLS 2550         Political Parties & Pressure           Electives in applied         communication*         .2         .3  | MAJOR REQUIREM     | MENTS   |              |             |                               | 45-52    |
| COMM         2100         Introduction to Communication Theory         3         COMM 4250         Mass Communication Law         3           COMM         2110         Intro. to Communication Theory Lab         1         COMM 4260         Command Comparative Media Systems         2           COMM         3100         Communication Research Methods         3         COMM 4280         Criticism of Mass Media         2           COMM         3110         Resources and Methods Lab         1         COMM 2340         Argumentation and Debate         3           COMM         2320         Foundations of Rhetorical Theory         3         COMM 3320         Audience Adaptation         3           COMM         2320         Improving Listening Ablities         3         COMM 4500         Heritage of American           COMM         3350         Principles of Presentational Speaking         3         COMM 4500         Heritage of American           COMM         4320         Persuasion         2         POLS 2550         Pollitical Parties & Pressure           Electives in applied communication*         2-3         Groups         3           COMM 3327         Improving Interviewing Skills         3         POLS 3550         Public Opinion & Mass Media         3           COMM 33   | COMM 1100          | Introduction to Communication1                        | Electives    | in social i | nfluence*                     | 7-9      |
| COMM 2110 Intro. to Communication Theory Lab 1 COMM 4260 Comparative Media Systems 2 COMM 3100 Communication Research Methods 3 COMM 3101 Resources and Methods Lab 1 COMM 2340 Argumentation and Debate 3 COMM 2320 Foundations of Rhetorical Theory 3 COMM 2325 Improving Listening Abilities 3 COMM 2325 Improving Listening Abilities 3 COMM 2330 Small Group Communication 3 COMM 3330 Principles of Presentational Speaking 3 COMM 4320 Persuasion 2 Electives in applied communication* 2 Electives in applied communication* 3 COMM 3355 Speech Writing and Criticism 3 COMM 3355 Speech Writing and Criticism 3 COMM 3350 Forensics 1-3 Electives in interaction skills* 2-3 COMM 3325 Nonverbal Communication 2 COMM 3326 Nonverbal Communication 2 COMM 3330 Theories of Interpersonal Comm. 3 COMM 4330 Theories of Interpersonal Comm. 3 COMM 4330 Theories of Interpersonal Comm. 3 COMM 4330 Comm. Conflict Management 3 *A minimum of 14 credit hours of these electives must be upper-level MINOR REQUIREMENTS (page 49) COMM 3000 Div. II D (required) 3 COMM 3000 Div. II D (required) 3 IGEN 3222 Div. IV A or GEOG 3201 Div. II D or, GEOG 3201 Div. II D or, GEOG 3201 Div. II D or, GEOG 3201 Div. II D (required) 3 UPPER-LEVEL ELECTIVES  | COMM 1110          | Communication Skills Lab1                             | COMM         | 1 1200      | Intro. to Mass Communication3 | }        |
| COMM         3100         Communication Research Methods         .3         COMM 4280         Criticism of Mass Media         .2           COMM         3110         Resources and Methods Lab         .1         COMM 2340         Argumentation and Debate         .3           COMM         2320         Foundations of Rhetorical Theory         .3         COMM 3320         Audience Adaptation         .3           COMM         2325         Improving Listening Ablitites         .3         COMM 4500         Heritage of American           COMM         2330         Small Group Communication         .3         COMM 4500         Heritage of American           COMM         3330         Principles of Presentational Speaking         .3         PHIL         2300         Ethics         .3           COMM         3320         Principles of Presentational Speaking         .3         PHIL         2300         Ethics         .3           COMM         3230         Principles of Presentational Speaking         .3         PHIL         2300         Ethics         .3           COMM         3320         Principles of Presentational Speaking         .3         PUS         2550         Polltical Parties         .8           Electives in applied communication         .3   | COMM 2100          | Introduction to Communication Theory 3                | COMM         | 1 4250      | Mass Communication Law3       | }        |
| COMM 3110 Resources and Methods Lab  | COMM 2110          | Intro. to Communication Theory Lab1                   | COMM         | 1 4260      | Comparative Media Systems2    | <u>)</u> |
| COMM 2320 Foundations of Rhetorical Theory   | COMM 3100          | Communication Research Methods3                       | COMM         | 1 4280      | Criticism of Mass Media2      | <u>)</u> |
| COMM 2325 Improving Listening Abilities  | COMM 3110          | Resources and Methods Lab1                            | COMM         | 1 2340      | Argumentation and Debate3     | 3        |
| COMM         2330         Small Group Communication         3         Journalism         3           COMM         3350         Principles of Presentational Speaking         3         PHIL         2300         Ethics         3           COMM         4320         Persuasion         2         POLS         2550         Political Parties & Pressure           Electives in applied communication*         2-3         Groups         3           COMM 3327         Improving Interviewing Skills         3         POLS         3550         Public Opinion & Mass Media         3           COMM 3355         Speech Writing and Criticism         3         REL         2310         World Views and Values         3           COMM 3390         Forensics         1-3         Electives in rhetorical studies*         5-6           Electives in interaction skills*         2-3         COMM 4340         Classical Rhetorical Theory         3           COMM 3325         Nonverbal Communication         2         COMM 4345         Modern Rhetorical Theory         3           COMM 4330         Theories of Interpersonal Comm. 3         Departmentally approved upper-level electives         6-8           COMM 3730         Comm. Conflict Management         3         COMM 3010         Div. II (required) <td>COMM 2320</td> <td>Foundations of Rhetorical Theory3</td> <td>COMM</td> <td>1 3320</td> <td>Audience Adaptation3</td> <td>3</td> | COMM 2320          | Foundations of Rhetorical Theory3                     | COMM         | 1 3320      | Audience Adaptation3          | 3        |
| COMM 3350 Principles of Presentational Speaking .3 PHIL 2300 Ethics  | COMM 2325          | Improving Listening Abilities3                        | COMM         | 1 4500      |                               |          |
| COMM 4320 Persuasion 2 POLS 2550 Political Parties & Pressure Electives in applied communication* 2-3 GOMM 3327 Improving Interviewing Skills 3 POLS 3550 Public Opinion & Mass Media 3 COMM 3355 Speech Writing and Criticism 3 REL 2310 World Views and Values 3 COMM 3390 Forensics 1-3 Electives in interaction skills* 2-3 COMM 4340 Classical Rhetorical Theory 3 COMM 3325 Nonverbal Communication 2 COMM 4345 Modern Rhetorical Theory 3 COMM 3340 Intercultural Communication 3 COMM 4390 Contemporary Communication 2 COMM 4330 Theories of Interpersonal Comm. 3 COMM 3730 Comm. Conflict Management 3 *A minimum of 14 credit hours of these electives must be upper-level MINOR REQUIREMENTS 18-25 GENERAL EDUCATION REQUIREMENTS (page 49) 48 COMM 1000 Div. I B (required) 3 IGEN 4224 Div. IV A or ANTH 1820 Div. II D or, IGEN 3232 Div. IV A or GEOG 3201 Div. II D or, IGEN 3224 Div. IV A (required) 3 UPPER-LEVEL ELECTIVES 0-13  | COMM 2330          | Small Group Communication3                            |              |             | Journalism3                   | 3        |
| Electives in applied communication*  |                    |   | PHIL         | 2300        |                               | 3        |
| COMM 3327 Improving Interviewing Skills3 COMM 3355 Speech Writing and Criticism3 COMM 3390 Forensics   |                    |   | POLS         | 2550        | Political Parties & Pressure  |          |
| COMM 3355 Speech Writing and Criticism   |                    | communication*2-3                                     |              |             |                               |          |
| COMM 3390 Forensics  | COMM 3327          | Improving Interviewing Skills3                        | POLS         |             | Public Opinion & Mass Media3  | \$       |
| Electives in interaction skills*   | COMM 3355          | Speech Writing and Criticism3                         | REL          | 2310        | World Views and Values3       | \$       |
| COMM 3325 Nonverbal Communication  |                    |   |              |             |                               |          |
| COMM 3340 Intercultural Communication  |                    |   | COMM         | 4340        | Classical Rhetorical Theory3  | \$       |
| COMM 4330 Theories of Interpersonal Comm. 3 Departmentally approved upper-level electives 6-8 COMM 4335 Gender Communication   |                    |   | COMM         | 4345        |                               |          |
| COMM 4335  |                    | Intercultural Communication3                          |              |             | . ,                           |          |
| COMM 3730       Comm. Conflict Management3         *A minimum of 14 credit hours of these electives must be upper-level         MINOR REQUIREMENTS   |                    | •   | Departme     | entally app | proved upper-level electives  | 6-8      |
| *A minimum of 14 credit hours of these electives must be upper-level MINOR REQUIREMENTS  |                    |   |              |             |                               |          |
| MINOR REQUIREMENTS       18-25         GENERAL EDUCATION REQUIREMENTS (page 49)       48         COMM 1000       Div. I B (required)       3       COMM 3010       Div. III (required)       3         COMM 3000       Div. II D (required)       3       IGEN 4224       Div. IV A or       3         ANTH 1820       Div. II D or,       IGEN 3232       Div. IV A or       3         GEOG 3201       Div. II D or,       IGEN 3224       Div. IV A (required)       3         WS 2000       Div. II D (required)       3         UPPER-LEVEL ELECTIVES       0-13   |                    |   |              |             |                               |          |
| GENERAL EDUCATION REQUIREMENTS (page 49)       48         COMM 1000 Div. I B (required)       3 COMM 3010 Div. III (required)       3         COMM 3000 Div. II D (required)       3 IGEN 4224 Div. IV A or         ANTH 1820 Div. II D or,       IGEN 3232 Div. IV A or         GEOG 3201 Div. II D or,       IGEN 3224 Div. IV A (required)       3         WS 2000 Div. II D (required)       3         UPPER-LEVEL ELECTIVES       0-13  |                    |   |              |             |                               |          |
| COMM 1000       Div. I B (required)       3       COMM 3010       Div. III (required)       3         COMM 3000       Div. II D (required)       3       IGEN 4224       Div. IV A or         ANTH 1820       Div. II D or,       IGEN 3232       Div. IV A or         GEOG 3201       Div. II D or,       IGEN 3224       Div. IV A (required)       3         WS 2000       Div. II D (required)       3         UPPER-LEVEL ELECTIVES       0-13  |                    |   |              |             |                               |          |
| COMM 3000       Div. II D (required)   |                    |   |              |             |                               | 48       |
| ANTH 1820 Div. II D or, IGEN 3232 Div. IV A or GEOG 3201 Div. II D or, IGEN 3224 Div. IV A (required)  |                    |   |              |             |                               | 3        |
| GEOG 3201 Div. II D or,       IGEN 3224 Div. IV A (required)   |                    |   |              |             |                               |          |
| WS 2000 Div. II D (required)   |                    | - ,   |              |             |                               |          |
| UPPER-LEVEL ELECTIVES0-13  |                    |   | IGEN         | 3224        | Div. IV A (required)          | 3        |
|  |                    |   |              |             |                               |          |
| MINIMUM TOTAL  |                    |   |              |             |                               |          |
|  | MINIMUM TOTAL      |   |              |             |                               | 124      |

# SPEECH COMMUNICATION Minor for a Bachelor's Degree

Please see the Department of Communication for updates regarding this program (Except for a B.S. in Ed. Degree) (000360)

|               |                             | (000                | 000)                   |                                  |                      |
|---------------|-----------------------------|---------------------|------------------------|----------------------------------|----------------------|
|               |                             |                     |                        |                                  | Sem. Hours           |
| MINOR REQUIRE | MENTS                       |                     |                        |                                  | 21                   |
| COMM 1000     | Public Speaking             | 3                   | COMM 2330              | Small Group Communication        | 3                    |
| COMM 3010     | Interpersonal Communication | 3                   | Electives in speed     | ch communication                 | 12                   |
| GENERAL EDUCA | ATION REQUIREMENTS (page 49 | 9) (In the minor, C | COMM 1000 fulfills 3 s | s.h. of Div. I B; COMM 3010 fulf | fills 3 s.h. of Div. |
| II F)         |                             | , ,                 |                        |                                  |                      |

# SPEECH COMMUNICATION AND THEATRE Major, B.S. in Ed. Degree

Please see the Department of Communication for updates regarding this program (Certification to teach speech and theatre in grades 9-12) (41 000362)

|        |         | \                            | 1 00000= |      |                             |            |
|--------|---------|------------------------------|----------|------|-----------------------------|------------|
|        |         |                              |          |      |                             | Sem. Hours |
| CORE R | EQUIREM | ENTS                         |          |      |                             | 21         |
| THEA   | 1500    | Acting3                      | COMM     | 2330 | Small Group Communication . | 3          |
| THEA   | 1600    | Stagecraft3                  | COMM     | 2340 | Argumentation & Debate      | 3          |
| THEA   | 3700    | Directing3                   | COMM     | 3325 | Nonverbal Communication     | 2          |
| COMM   | 2100    | Foundations of Comm. Theory3 | COMM     | 3390 | Forensics                   | 1          |

(Options are listed on next page)

(Continued from previous page)

#### Speech Communication Major Option, B.S. in Ed. Degree

The graduate with a Bachelor of Science in Education degree in Speech & Theatre (with a Speech Communication Major Option) will use the knowledge and skills obtained in the program to:

- Demonstrate knowledge and application of the fundamentals of communication.
- Demonstrate knowledge and application of public speaking concepts and principles.
- Demonstrate knowledge and application of the theory and practice of argumentation and debate.
- Demonstrate an understanding of communication ethics.
- Demonstrate knowledge and application of the theory and practice of interpersonal and group communication.
- Demonstrate knowledge and application of school forensics through experiential co-curricular activities.
- Demonstrate knowledge and application of mass communication concepts, principles and basic techniques.

| MAJOR F  | REQUIRE   | MENTS                                 |                  |              |             | Sem   | 36    |
|--|-----------|---------------------------------------|------------------|--------------|-------------|---|-------|
|  |           | ts                                    |                  |              |             | Lit. & History of the Theatre I, 3 or         |       |
| COMM   | 3010      | Interpersonal Communication           | 3                | THEA         | 4420        | Lit. & History of the Theatre II, 3           | 3     |
| COMM   | 3320      | Audience Adaptation                   | 3                | Elective     | s in THEA   | or Comm                                       | 3     |
| COMM   | 3350      | Prin. of Presentational Speaking .    | 3                |              |             |   |       |
| MINOR F  | REQUIRE   | MENTS                                 |                  |              |             |   | 18-25 |
| GENERA   | L EDUCA   | TION REQUIREMENTS (page 49)-          | -48 s.h. (In the | major, CO    | MM 3010     | fulfills 3 s.h. of Div. III; in the professio | nal   |
|  |           | *                                     | ,                |              |             |   | 42    |
| Student  | s must ha | ve one course in a physical or earth  | science and or   | ne in a biol | ogical scie |   |       |
| COMM   | 1000      | Div. I B (required)                   | 3                | THEA         | 2400        | Div. II C (required)                          | 3     |
| HIST   | 1350      | Div. II B or                          |                  | ANTH         | 1820        | Div. II D or                                  |       |
| HIST   | 1351      | Div. II B (required)                  |                  |              | 3201        | Div. II D or                                  |       |
| POLS   | 1510      | Div. II B (required)                  |                  |              | 2000        | Div. II D (required)                          | 3     |
| COMM   |           | Div. II C (required)                  |                  |              |             | Psy. of Adolescence                           | 3     |
|  | ,         | tion students will be allowed to sub- |                  |              |             |   |       |
| PROFESSIONAL EDUCATION REQUIREMENTS (see page 205) |           |                                       |                  |              |             | 28  |       |
| MINIMUN  | // TOTAL  |                                       |                  |              |             |   | 124   |

Theatre Major Option, B.S. in Ed. Degree - See requirements as outlined in the Department of Theatre.

#### SPEECH COMMUNICATION AND THEATRE Minor, B.S. in Ed. Degree

See requirements as outlined in the Department of Theatre.

**COMM 1000 Public Speaking (3)** A study and practice of basic principles involved in discovering, arranging, delivering, and evaluating ideas in speech situations.

**COMM 3000 Film Appreciation (3)** Students will critically examine motion pictures as a communicative art. For mass communication majors or minors, this course is available only as a free elective or General Education requirement.

**COMM 3010 Interpersonal Communication (3)** Principles of symbolic interaction and their implications for social, personal, and physiological adaptation across the human life span. Includes the patterns involved in establishing and maintaining effective relationships, managing conflict, and promoting tolerance for human diversity.

#### **COMM 1100 Introduction to Communication Studies (1)**

This course introduces the student to communication and the way it impacts the social, economic and political lives of consumers and how they can have impact upon the media. **COMM 1110 Communication Skills Lab (1)** This course provides the fundamentals essential for a student to communicate effectively in various written formats used by communication practitioners.

#### **COMM 2100 Introduction to Communication Theory**

(3) The process by which communication principles are formulated and the principles themselves, with emphasis on both their theoretical and pragmatic dimensions. Prerequisite: COMM 2110 concurrently.

#### **COMM 2110 Foundations of Communication Theory Lab**

(1) Through structured learning activities this lab supports the application/practice of the objectives and outcomes of COMM 2100 (Foundations of Communication Theory). Prerequisite: COMM 2100 concurrently.

#### **COMM 3100 Communication Research Methods**

(3) Use of research techniques applied to the study of communication, with stress upon those factors affecting the mass media. Prerequisite: COMM 3110 concurrently.

COMM 3110 Resources and Methods Lab (1) Through structured learning activities this lab supports the application/ practice of the objectives and outcomes of Communication 3100 (Introduction to Communication Research).

Prerequisite: COMM 3100 concurrently.

#### COMM 1200 Introduction to Mass Communication (3)

Theory of mass communication, roles and functions of mass media in a contemporary society.

**COMM 3200 Mass Media Practicum (1)** Laboratory experience in the mass media. Prerequisite: consent of instructor.

**COMM 3280 Sports Writing (3)** Develops sports writing skills, both news and column writing. Prerequisite: COMM 2520

# COMM 4200 Special Topics in Mass Media (1-9)

Departmentally selected topics of contemporary interest in mass media or specialized areas of the media; variable content. May be repeated for a maximum of 9 semester hours (only 6 hours will apply to the major).

**COMM 4210 Mass Media Practicum II (1)** Provides handson experience at the Muleskinner. Prerequisite: COMM 3200.

**COMM 4240 Media Management (2)** Elements involved in the organization and successful operation of mass media enterprises; special emphasis upon interpersonal problems.

**COMM 4245 Media Economics and Sales (3)** Business aspects of mass media in a competitive economy, including techniques for selling advertising space and time.

**COMM 4250 Mass Communication Law (3)** Application of principles of law to the mass communication media, media practice, advertising, and freedom of information, including libel, right of privacy, copyright. Prerequisite: Junior, senior or graduate standing.

COMM 4260 Comparative Media Systems (2) Role of mass media in major countries and in developing areas; sociopolitical, economic, cultural and historical perspective. COMM 4280 Criticism of Mass Media (2) Evaluation of the products of the audiovisual and print media, social effects, and the historical bases of public criticism of the individual

COMM 4285 Women and Minorities in Media (3) The study of women and minorities, their contributions and images, in a variety of media. Prerequisite: COMM 1200 or COMM 3010 or consent of instructor.

**COMM 4290 Special Projects in Mass Communication** (1-3) Individual study/research in mass communication. May be repeated for a maximum of 3 semester hours. Prerequisite: written consent.

COMM 4295 Internship (1-3) A training program in the professional mass media or public relations field. May be repeated for a maximum of 3 semester hours. Prerequisites: completion of 20 semester hours of preadmission course work in the major, 2.50 overall GPA and 2.75 GPA in major, and approval of the internship committee.

COMM 2320 Foundations of Rhetorical Theory (3) Nature and functions of rhetoric across various communication situations

COMM 2325 Improving Listening Abilities (3) Theories and principles for improving listening in a variety of communication situations.

#### **COMM 2330 Small Group Communication (3)**

Communication process as it relates to small group behavior, including the study of principles, methods, and forms of discussion used in small groups.

**COMM 2340 Argumentation and Debate (3) Principles** of analysis, evidence, reasoning, briefing, refutation, case construction, preparing and evaluating arguments. Practical experience with different types of debate.

**COMM 2380 Intro to Organizational Communication (3)** Examines human communication within an organizational context. Contemporary approaches, the enduring processes, and emergent communication processes facing contemporary organizations are considered.

COMM 3320 Audience Adaptation (3) Audience dimensions and their relationship to communicative acts. Prerequisite: **COMM 1000** 

COMM 3325 Nonverbal Communication (2) An examination of selected areas of nonverbal communication; e.g., space and territory relationships, physical behavior, appearance and dress; paralinquistics; and artifacts.

COMM 3327 Improving Interviewing Skills (3) Theory and purposes of interviewing, emphasizing the principles and practice of interviewing skills.

### **COMM 3340 Intercultural Communication (3)**

Communication between and among cultures, including enculturation and relational implications of cross-cultural communication across a variety of contexts. Prerequisite: COMM 2320 or GEOG 2212 or consent of instructor.

COMM 3350 Principles of Presentational Speaking (3) Designed to increase awareness and understanding of speech theory and, by means of speaking exercises, to increase proficiency as a speaker in a variety of professional settings. Prerequisite: COMM 1000.

COMM 3355 Speech Writing and Criticism (3) A study of critical practices and methodology including the composition of speech manuscripts and the application of standards for

**COMM 3370 Special Topics in Speech Communication** (1-3) The study of subjects not included in department's regular offering such as parliamentary procedure, intercultural and/or therapeutic communication. May be repeated for a maximum of 6 semester hours. Prerequisite: Consent.

COMM 3390 Forensics (1) Participation in intercollegiate forensics--debate, oratory, extemporaneous speaking, discussion, and oral interpretation. May be repeated for a maximum of 3 semester hours.

COMM 4300 Special Projects in Speech Communication (1-3) May be repeated for a maximum of 6 semester hours. Prerequisite: Consent.

COMM 4320 Persuasion (2) Emotive, cognitive, and behavioral sources of persuasive appeal.

**COMM 4330 Theories of Interpersonal Communication** (3) An in-depth study of selected theories and supporting research findings of the communication process as it occurs in informal face-to-face situations.

COMM 4335 Gender Communication (3) Gender as it influences communication processes in intrapersonal, interpersonal, group, public and mediated contexts. Prerequisite: COMM 3010 or consent of instructor. COMM 4340 Classical Rhetorical Theory (3) Foundations

and development of rhetorical theory during the Classical Period with special emphasis given to Plato, Aristotle, Cicero, and Quintillian.

COMM 4345 Modern Rhetorical Theory (3) An examination of significant movements in the development of twentieth century rhetorical theory including the contributions of Kenneth Burke, Richard Weaver, and Marshall McLuhan. COMM 4390 Contemporary Communication (2) Public address as it functions in contemporary society in a variety of traditional and mass media settings.

COMM 2400 Foundations of Broadcasting (3) Legal, historical, economic, societal and technological foundations of broadcasting. Prerequisite: COMM 1200 or consent. COMM 2410 Multimedia I (3) Principles and practices of designing multimedia for the Broadcast industries. The course covers both hardware and software appropriate to the discipline, including hands-on experience. Prerequisite: COMM 2400 or consent.

COMM 2411 Audio Production I (3) Techniques of vocal skills and operation of audio equipment used in broadcasting. Prerequisite: COMM 2400.

COMM 2412 Video Production I (5: 3 lecture, 2 lab) Basic techniques and studio procedures used in performance and production of interviews and news programs most commonly found in television stations. Prerequisite: COMM 2411.

COMM 2415 Broadcast Copywriting (3) A survey course of different styles of broadcast writing and practical applications. COMM 3400 History of American Film (3) Development of the American film from the silent era to the present.

COMM 3410 Audio Production II (3) Techniques of digitalaudio post-production and practical studio performance applications. Prerequisite: COMM 2411.

COMM 3411 Video Production II (3) Intermediate course in digital video production/performance covering electronic field production, electronic news gathering, producing, directing, shooting and editing techniques. Prerequisite: COMM 2412.

**COMM 3412 Single Camera Dramatic Production (3)** Production of dramatic programs shot on 16mm film or digital video. Topics include scripting, directing, shooting, non-linear editing and animation. Prerequisite: COMM 2412.

COMM 3413 Multimedia II (3) Advanced multimedia applications, including audio/video, animation, and incorporation of moving images, two-dimensional images and text to create interactive, multi-media environments. Prerequisite: COMM 2410.

**COMM 3430 Broadcast Programming and Operations (3)** Operation and programming of radio and television stations with emphasis on analysis of programming principles and practices, schedule development and audience behavior. Prerequisite: COMM 2400.

organizations.

**COMM 4410 Video Production III (3)** Preparation and production of short programs, with emphasis on advanced shooting and editing techniques. Prerequisite: COMM 3411 or COMM 3412.

COMM 4415 Screenplay Writing (3) Principles, techniques and formats of dramatic screenwriting for film and television. COMM 4470 Corporate and Organizational Media Production (3) Production of instructional, training and informational videos for use within corporations and other

**COMM 4475 New Media Technologies (2)** Technological developments and their uses (existing and potential) as information distribution systems.

**COMM 4490 Senior Capstone Seminar (2)** Preparation of a portfolio and r sum tape representing the student's best work; in addition, students will participate in assisting and tutoring students in lower-level courses in the major. Prerequisite: instructor's permission.

**COMM 1520 Elements of News Reporting (3)** News, news sources, principles and techniques of news writing; duties and responsibilities of the reporter. Keyboarding ability necessary. Laboratory required. Prerequisite: completion of General Education Div. I A.

**COMM 2520 Copy Editing and Layout (3)** Copyediting, rewriting, headline writing, and page make-up. Laboratory work on campus newspaper required. Prerequisite: COMM 1520.

COMM 3500 Reporting Public Affairs (3) Techniques of reporting city, county, state, and federal government, as well as boards of education and other governmental entities. Prerequisites: COMM 2520 and COMM 3200 or consent of instructor.

**COMM 3505** Introduction to High School Video **Production (1)** The high school journalism teacher will learn about single camera operation, lighting, graphics, talent position, voice, body and performance. Prerequisite: admission to the journalism minor, B.S. in Ed.

**COMM 3525 Feature Writing (3)** Advanced course in writing special articles for newspapers and magazines. Prerequisites: COMM 2520 and completion of General Education Div. I A.

**COMM 3530 Photo Journalism (3)** Effective use of photography in journalism communication. Prerequisites: GRAP 1210 or consent.

COMM 3535 Broadcast Journalism (3) Philosophy and techniques of radio and television journalism. Prerequisite: COMM 1520.

COMM 4500 Heritage of American Journalism (3)

Development of the American press from colonial days to modern times; factors affecting the shape and contents of the press in contemporary society.

**COMM 4510 Magazine Design and Production (3)** The magazine process from the collection of raw material through layout and design to the circulation of the finished product. Prerequisite: COMM 1520.

**COMM 4520 Editorial and Interpretative Writing (3)**Principles and techniques of editorial and interpretative article writing; relationship between the news, the editorial and the business aspects of a newspaper. Prerequisite: COMM

3525.

COMM 4522 Desktop Design for Teachers (3) Instructs students in the use of QuarkXpress for newspaper design and makeup. Prerequisite: COMM 2520 or consent.

COMM 4535 Advanced News Reporting (3) Problems and techniques of researching and gathering material for in-depth news reporting concerning the political, economic, and social aspects of contemporary society. Prerequisite: COMM 3525. COMM 4555 Advanced Editing (3) Provides advanced editing skills for news media. Emphasis on news judgment, language use, copy improvement, headline and cutline writing, wire services, photo editing, page layout and design.

Prerequisite: COMM 2520.

**COMM 4571 Methods of Teaching Journalism (3)**Practical methods in the teaching of journalism. Prerequisite: admission to the journalism minor, B.S. in Ed.

COMM 2620 Public Relations (3) Public relations communications, principles, and techniques in historical perspective, including research and report writing. Prerequisite: completion of General Education Div. I A. COMM 3640 Mass Media Advertising (3) The techniques and roles of advertising in the mass media. COMM 4680 Publicity (3) Overview of the publicity process

**COMM 4680 Publicity (3)** Overview of the publicity process including written, spoken, and/or videotaped messages using the mass media as a public relations tool. Prerequisites: COMM 2520 and COMM 2620.

**COMM 4685 Case Studies in Public Relations (2)**Public relations problems of individual business and civic organizations; analysis of actual and proposed solutions. Prerequisite: COMM 2620.

**COMM 4690 Campaigns (3)** Overview of the public relations campaign process with actual "hands on" application. Students will plan, organize and conduct an actual campaign for an organization. Prerequisite: COMM 4680.

**COMM 3730 Communication Conflict Management (3)** An examination of communication factors which contribute to conflicts and an analysis of their resolution.

COMM 4780 Advanced Theories of Organizational Communication (3) A consideration of theories and principles of communication structures and systems within organizations.

**COMM 4781 Assessment of Organizational** 

**Communication (2)** The assessment and measurement of human interaction within professional settings.

**COMM 4783 Communication Training (3)** Communication as the coupling that holds organizations together and the agent of change that ensures health and growth. Students will assess needs and determine communication links; design, develop, and implement learning modules for human resource development; and design and interpret evaluation means to determine the effectiveness of the training. Prerequisite: Consent of instructor.

COMM 4785 Internship in Speech Communication (1-6) The application of speech communication principles and theories in business, industry, and government settings. May be repeated for a maximum of 6 semester hours. Prerequisites: COMM 2330, COMM 2380, COMM 3327, and COMM 4780 with a grade of AC@ or better. COMM 4780 may be taken concurrently with COMM 4785 with the permission of the department chair.

### **Integrative Studies General**

**IGEN 3224 Critical Thinking (3)** Provides insight into and application of the skills needed to think critically about interpersonal and media messages, as well as analyze information

**IGEN 3232 Media Literacy (3)** Explores the relationships among media, its consumers, and producers. Integrates cultural, technological, and economic perspectives on mass media and visual communication.

**IGEN 4224 Communication, Science and Technology** (3) Students will focus on the interactions among science, technology and society by examining scientific communication and scientific technological controversies. Prerequisite: completion of General Education Div. II A.

Som Hours

# **English and Philosophy**

# **English**

In the section of English, the second digit in the course number stands for the following: 0--Rhetoric and Composition, 1--Language Study and Grammar, 2--Literary Study and Criticism, 3--English Literature Before 1500 and English Literature From 1500 to 1640, 4--English Literature From 1640 to 1800, 5--English Literature From 1800 to 1900, 6--American Literature From Its Beginnings to 1914, 7--Modern Literature, 8--Teaching Methods in English, 9--Research and Readings.

# **ENGLISH Major, B.A. Degree**

(42 000303)

The graduate with a Bachelor of Arts in English degree will use the knowledge and skills obtained in the program to:

- Appreciate the aesthetics of literature; understand its origins, trends, critical approaches, classifications, and limitations; and evaluate significant patterns of meaning found in its study.
- Write and speak with clarity, originality, grammatical correctness, and logic, demonstrating rhetorical skills necessary for successful communication.
- Accomplish primary and secondary research, incorporating the results into formal written and oral presentations.
- Understand language diversity as well as language uses, the relationship between spoken and written language, historical developments and social/cultural adaptations.
- Understand the relationship between a work of literature and the historical/cultural milieu in which it was written.

|  |             |  |                        | Sem. He                        |      |  |  |  |
|--|-------------|--|------------------------|--------------------------------|------|--|--|--|
|  |             | MENTS  |                        |                                | 35   |  |  |  |
| ENGL                                   | 2000        | Orientation for the Major1                     | (Electives continue    | ed)                            |      |  |  |  |
| ENGL                                   | 3000        | Critical Studies1                              | ENGL 4450              | The Age of Milton3             |      |  |  |  |
| <b>ENGL</b>                            | 4000        | Senior Seminar1                                | ENGL 4460              | The Age of Pope & Johnson3     |      |  |  |  |
| <b>ENGL</b>                            | 3120        | History of English Language2                   |                        | American Literature            |      |  |  |  |
| <b>ENGL</b>                            | 4360        | Shakespeare3                                   | Select American        | Literature Area A or B         | 9    |  |  |  |
| 3000-4000 level electives in English9  |             |  |                        | American Literature Area A     |      |  |  |  |
|  |             | British Literature                             | ENGL 2200              | American Literature to 18653   |      |  |  |  |
| Select British Literature Area A or B9 |             |  | Electives from the     | Electives from the following6  |      |  |  |  |
|  |             | British Literature Area A                      | ENGL4640               | American Realists              |      |  |  |  |
| ENGL                                   | 2210        | British Literature to 17983                    |                        | & Naturalists3                 |      |  |  |  |
| Elective                               | es from the | e following6                                   | ENGL4660               | Women Writers of the           |      |  |  |  |
| ENGL                                   | 4500        | 19th Century English Novel3                    |                        | United States3                 |      |  |  |  |
| ENGL                                   | 4510        | Romantic Poets & Essayists3                    | ENGL4670               | Ethnic American Lit3           |      |  |  |  |
| ENGL                                   | 4540        | Victorian Poets & Essayists3                   | ENGL4680               | African American Lit3          |      |  |  |  |
| ENGL                                   | 4560        | British Women Writers3                         | ENGL4710               | Modern American Fiction3       |      |  |  |  |
| ENGL                                   | 4700        | British Fiction                                | ENGL4730               | Modern American Poetry3        |      |  |  |  |
|  |             | 1890 to Present 3                              |                        | American Literature Area B     |      |  |  |  |
| ENGL                                   | 4720        | Modern British Poetry3                         | ENGL 2205              | American Lit. 1865 to Present3 |      |  |  |  |
|  |             | British Literature Area B                      | Electives from th      | ne following6                  |      |  |  |  |
| ENGL                                   | 2215        | British Lit. 1798 to Present3                  | ENGL4610               | American Renaissance3          |      |  |  |  |
| Elective                               | es from the | e following6                                   | ENGL4620               | Early American Literature3     |      |  |  |  |
| ENGL                                   |             | Chaucer3                                       | ENGL4670               | Ethnic American Lit3           |      |  |  |  |
| ENGL                                   | 4330        | Renaissance English Writers3                   | ENGL 4680              | African American Lit3          |      |  |  |  |
| ENGL                                   | 4340        | Old & Middle English Lit3                      |                        |                                |      |  |  |  |
| MINOR R                                | REQUIREN    | MENTS  |                        | 18                             | 3-25 |  |  |  |
| GENERA                                 | L EDUCA     | TION REQUIREMENT48 s.h. (The Modern            | Language Requirement f | ulfills 3 s.h. of Div. II C)   | 45   |  |  |  |
| <b>ENGL</b>                            |             | Div. II C (required)3                          |                        | •                              |      |  |  |  |
|  |             | . ,  |                        |                                |      |  |  |  |
| MODERN                                 | I LANGUA    | GE REQUIREMENT                                 |                        |                                | .3-9 |  |  |  |
| (Refer to                              | Bachelor    | s's Degree Requirements section for fulfillmen | nt options.)           |                                |      |  |  |  |
|  |             |  |                        | 10                             | 0-23 |  |  |  |
| MINIMUM                                | I TOTAL .   |  |                        |                                | 124  |  |  |  |

# ENGLISH Major, B.S. in Ed. Degree

(Certification to teach English in grades 9-12) (41 000311)

The graduate with a Bachelor of Science in Education degree in English will use the knowledge and skills obtained in the program to:

- Appreciate the aesthetics of literature; understand its origins, trends, critical approaches, classifications, and limitations; and evaluate significant patterns of meaning found in its study.
- Write and speak with clarity, originality, grammatical correctness, and logic, demonstrating rhetorical skills necessary for successful communication.
- Accomplish primary and secondary research, incorporating the results into formal written and oral presentations.
- Understand language diversity as well as language uses, the relationship between spoken and written language, historical developments and social/cultural adaptations, and particular and universal linguistic features.
- Understand the relationship between a work of literature and the historical/cultural milieu in which it was written.
- Identify the components of a sound language arts curriculum at the secondary school level.
- Understand and apply currently accepted teaching theory and practice.
- Develop a personal philosophy and teaching style that accounts for diverse student backgrounds, needs, and abilities and that reflects growing teacher expertise.

| growin   | ig teacher     | expertise.                                      |          |                            |                               | Sem. Hours |  |  |
|--|----------------|---|----------|----------------------------|-------------------------------|------------|--|--|
| MAJOR I  | REQUIRE        | MENTS   |          |                            |                               |            |  |  |
| ENGL   | 2000           | Orientation for the Major1                      |          |                            | he following                  |            |  |  |
| ENGL   | 3000           | Critical Studies1                               |          | L4310                      | Chaucer                       |            |  |  |
| ENGL   | 4000           | Senior Seminar                                  |          | L4330                      | Renaissance Engl. Writers     |            |  |  |
| ENGL   | 3030           | Composition & Evaluation3                       |          | L4340                      | Old & Middle English Lit      |            |  |  |
| ENGL   | 4040           | Advanced Rhetoric3                              |          | L4360                      | Shakespeare                   |            |  |  |
| ENGL   | 3110           | English Grammar3                                |          | L4450                      | The Age of Milton             |            |  |  |
| ENGL   | 3120           | History of English Language2                    |          | L 4460                     | Age of Pope & Johnson         |            |  |  |
| ENGL   | 2220           | World Masterpieces3                             | 2.10.    | _ 1100                     | American Literature           |            |  |  |
| ENGL   |                | Literature for Adolescents2                     |          |                            |                               |            |  |  |
|  |                | Elective in English                             | Select A | American                   | Literature Area A or B        | 9          |  |  |
| 0000   | 1000 E0101     | British Literature                              |          | American Literature Area A |                               |            |  |  |
| Select F   | Rritich Liter  | rature Area A or B9                             | ENGL     |                            | American Literature to 1865   |            |  |  |
| OCICCI   | JIIIIJII LIICI | British Literature Area A                       |          |                            | he following                  | 6          |  |  |
| ENGL   | 2210           |   | ENG      | L4640                      | American Realists             |            |  |  |
|  |                | e following6                                    | & Natura | lists 3                    |                               |            |  |  |
|  | L4500          | 19th Century English Novel3                     | ENG      | L4660                      | Women Writers of the U.S      | 3          |  |  |
|  | L4500<br>L4510 |   | ENG      | L4670                      | Ethnic American Literature    | 3          |  |  |
|  |                | Romantic Poets & Essayists3                     | ENGI     | L4680                      | African American Literature   | 3          |  |  |
|  | L4540          | Victorian Poets & Essayists3                    | ENG      | L4710                      | Modern American Fiction       | 3          |  |  |
| ENGL 4700 British Women Writers3   |                | ENGI  | L4730    | Modern American Poetry     | 3                             |            |  |  |
| ENGL 4700 British Fiction  |                |   |          |                            | American Literature Area B    |            |  |  |
| 1890 to F  |                | 3   | ENGL     | 2205                       | American Lit. 1865 to Present | 3          |  |  |
| ENGL4720 Modern British Poetry3  |                |   |          |                            | he following                  |            |  |  |
|  |                | British Literature Area B                       |          | L4610                      | American Renaissance          |            |  |  |
| ENGL   | 2215           | British Lit. 1798 to Present3                   |          | L4620                      | Early American Literature     |            |  |  |
|  |                |   | L4670    | Ethnic American Literature |                               |            |  |  |
|  |                |   |          | L4680                      | African American Literature   |            |  |  |
| MINOR F  | REOLURE        | MENTS   |          |                            |                               |            |  |  |
|  |                | TION REQUIREMENTS (page 49)48 s.h. (In t        |          |                            |                               |            |  |  |
|  |                | THON REQUIREMENTS (page 49)40 S.II. (III t      |          |                            |                               |            |  |  |
|  |                | tion students must have one course in a physica |          |                            |                               |            |  |  |
| HIST   | 1350           | Div. II B or                                    | ENGL     |                            | Div. II C (required)          |            |  |  |
| HIST   | 1351           | Div. II B (required)3                           | PSY      | 4230                       | Psychology of Adolescence     |            |  |  |
| POLS   | 1510           | Div. II B (required)                            | 1 0 1    | 7230                       | i sychology of Adolescence    |            |  |  |
| ( - 1 1  |                |   |          |                            |                               |            |  |  |
| Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. III.  PROFESSIONAL EDUCATION REQUIREMENTS (see page 205) |                |   |          |                            |                               |            |  |  |
|  |                |   |          |                            |                               |            |  |  |
| MINIMU   | VITOTAL .      |   |          |                            |                               | 130        |  |  |

# **ENGLISH Functional Major, B.S. in Ed. Degree**

(Certification to teach English in grades 9-12) (41 000313)

The graduate with a Bachelor of Science in Education degree in English will use the knowledge and skills obtained in the program to:

- Appreciate the aesthetics of literature; understand its origins, trends, critical approaches, classifications, and limitations; and evaluate significant patterns of meaning found in its study.
- Write and speak with clarity, originality, grammatical correctness, and logic, demonstrating rhetorical skills necessary for successful communication.
- Accomplish primary and secondary research, incorporating the results into formal written and oral presentations.
- Understand language diversity as well as language uses, the relationship between spoken and written language, historical developments and social/cultural adaptations, and particular and universal linguistic features.
- Understand the relationship between a work of literature and the historical/cultural milieu in which it was written.
- Identify the components of a sound language arts curriculum at the secondary school level.
- Understand and apply currently accepted teaching theory and practice.
- Develop a personal philosophy and teaching style that accounts for diverse student backgrounds, needs, and abilities and that reflects growing teacher expertise.

| Select American Literature Area A   Select British Literature Area A   Select American Literature Area A   Select British Literature Area B   Select British Literature Area B   Select British Literature British Literature Area B   Select British Lite |
|--|
| ENGL         3000         Critical Studies         1         Select American Literature Area A or B         9           ENGL         4000         Senior Seminar         1         American Literature Area A         American Literature to 1865         3           ENGL         4040         Advanced Rhetoric         3         Electives from the following         6           ENGL         3110         English Grammar         3         ENGL 4640         American Realists           ENGL         3120         History of English Language         2         8         Naturalists         3           ENGL         2220         World Masterpieces         3         ENGL 4660         Women Writers of the U. S.         3           ENGL         2830         Literature for Adolescents         2         ENGL 4670         Ethnic American Literature         3           SO00 - 4000 Level Electives in English         6         ENGL 4680         African American Literature         3           ENGL         4360         Shakespeare         3         Shakespeare         3         ENGL 4710         Modern American Poetry         3           Select British Literature Area A or B         9         American Literature Area B         ENGL 4730         Modern American Literature         3   |
| ENGL         4000         Senior Seminar         1         American Literature Area A           ENGL         3030         Composition & Evaluation         3         ENGL 2200         American Literature to 1865         3           ENGL         4040         Advanced Rhetoric         3         Electives from the following         6           ENGL         3110         English Grammar         3         ENGL 4640         American Realists           ENGL         2220         World Masterpieces         3         ENGL 4660         Women Writers of the U. S.         3           ENGL         2830         Literature for Adolescents         2         ENGL 4670         Ethnic American Literature         3           2830         Literature for Adolescents         2         ENGL 4670         Ethnic American Literature         3           3000 - 4000 Level Electives in English         6         ENGL 4670         Ethnic American Literature         3           ENGL 4360         Shakespeare         3         ENGL 4710         Modern American Poetry         3           Select British Literature Area A or B         9         ENGL 4730         Modern American Literature Area B         ENGL 4730         Modern American Literature Area B         ENGL 4501         American Literature Area B         ENGL 460  |
| ENGL         3030         Composition & Evaluation         3         ENGL 2200         American Literature to 1865         3           ENGL         4040         Advanced Rhetoric         3         Electives from the following         6           ENGL         3110         English Grammar         3         Electives from the following         6           ENGL         3120         History of English Language         2         & Naturalists         3           ENGL         2220         World Masterpieces         3         ENGL 4660         Women Writers of the U. S.         3           ENGL         2830         Literature for Adolescents         2         ENGL 4670         Ethnic American Literature         3           3000 - 4000 Level Electives in English         6         ENGL 4680         African American Literature         3           ENGL         4360         Shakespeare         3         ENGL 4710         Modern American Literature         3           Select British Literature Area A or B         9         8         American Literature Area B         ENGL 4730         Modern American Literature Area B         ENGL 2205         American Literature Area B         ENGL 2205         American Literature Area B         ENGL 4610         American Literature         3         ENGL 4610  |
| ENGL         4040         Advanced Rhetoric         3         Electives from the following         6           ENGL         3110         English Grammar         3         ENGL 4640         American Realists           ENGL         3120         History of English Language         2         & Naturalists         3           ENGL         2220         World Masterpieces         3         ENGL 4660         Women Writers of the U. S.         3           ENGL         2830         Literature for Adolescents         2         ENGL 4670         Ethnic American Literature         3           ENGL         4360         Shakespeare         3         ENGL 4710         Modern American Literature         3           ENGL 4730         Shakespeare         3         ENGL 4730         Modern American Poetry         3           Select British Literature Area A or B         9         American Literature Area B         8         ENGL 4730         Modern American Poetry         3           ENGL 2210         British Literature to 1798         3         Electives from the following         6         ENGL 4610         American Renaissance         3         Electives from the following         6         ENGL 4610         American Literature         3         ENGL 4660         Enrican American Poetry   |
| ENGL       3110       English Grammar       3       ENGL 4640       American Realists         ENGL       3120       History of English Language       2       & Naturalists       3         ENGL       2220       World Masterpieces       3       ENGL 4660       Women Writers of the U. S.       3         ENGL       2830       Literature for Adolescents       2       ENGL 4670       Ethnic American Literature       3         3000 - 4000       Level Electives in English       6       ENGL 4680       African American Literature       3         ENGL       4360       Shakespeare       3       ENGL 4710       Modern American Poetry       3         ENGL       4360       Shakespeare       3       ENGL 4730       Modern American Poetry       3         Select British Literature Area A or B       9       9       American Literature Area B       ENGL 4730       Modern American Literature Area B       ENGL 4730       American Literature Area B       ENGL 4730       American Realists       3       Electives from the following       6       ENGL 4710       Modern American Literature       3       ENGL 4730       American Literature Area B       ENGL 4730       American Literature       3       ENGL 4740       American Literature       3       ENGL 4610       <  |
| ENGL       3120       History of English Language       2       & Naturalists       3         ENGL       2220       World Masterpieces       3       ENGL 4660       Women Writers of the U. S.       3         ENGL       2830       Literature for Adolescents       2       ENGL 4670       Ethnic American Literature       3         3000 - 4000 Level Electives in English       6       ENGL 4680       African American Literature       3         ENGL       4360       Shakespeare       3       ENGL 4710       Modern American Fiction       3         ENGL 4360       Shakespeare       3       ENGL 4730       Modern American Poetry       3         Select British Literature Area A or B       9       American Literature Area B       ENGL 2205       American Literature Area B         ENGL 2210       British Literature to 1798       3       Electives from the following       6       ENGL 4610       American Renaissance       3         ENGL 4500       19th Century English Novel       3       ENGL 4610       American Renaissance       3         ENGL 4540       Victorian Poets & Essayists       3       ENGL 4670       Ethnic American Literature       3         ENGL 4560       British Women Writers       3       ENGL 4680       African Americ   |
| ENGL       2220       World Masterpieces       3       ENGL 4660       Women Writers of the U. S.       3         ENGL       2830       Literature for Adolescents       2       ENGL 4670       Ethnic American Literature       3         3000 - 4000 Level Electives in English       6       ENGL 4680       African American Literature       3         ENGL       4360       Shakespeare       3       ENGL 4710       Modern American Fiction       3         ENGL 4730       Shakespeare       3       ENGL 4730       Modern American Poetry       3         Select British Literature Area A or B       9       American Literature Area B       8         ENGL 2210       British Literature to 1798       3       Electives from the following       6         ENGL 4500       19th Century English Novel       3       ENGL 4610       American Literature       3         ENGL 4510       Romantic Poets & Essayists       3       ENGL 4620       Early American Literature       3         ENGL 4560       British Women Writers       3       ENGL 4680       African American Literature       3         ENGL 4700       British Fiction       Select one of the Cognate Areas A, B, C, or D       6-9         1890 to Present       3       PHIL       1000   |
| ENGL 2830 Literature for Adolescents 2 ENGL 4670 Ethnic American Literature 3 3000 - 4000 Level Electives in English 6 ENGL 4680 African American Literature 3 ENGL 4710 Modern American Fiction 3 ENGL 4710 Modern American Poetry 3 ENGL 4730 Modern American Poetry 3 American Literature Area B ENGL 2210 British Literature Area A BENGL 2210 British Literature to 1798 3 Electives from the following 6 ENGL 4500 19th Century English Novel 3 ENGL 4510 Romantic Poets & Essayists 3 ENGL 4680 African American Literature 3 ENGL 4540 Victorian Poets & Essayists 3 ENGL 4670 Ethnic American Literature 3 ENGL 4680 African American Literature 3 ENGL 4560 British Women Writers 3 ENGL 4700 British Fiction Select one of the Cognate Area A ENGL 4720 Modern British Poetry 3 PHIL 1000 Introduction to Philosophy 3 Electives in Philosophy 6 ENGL 2215 British Lit. 1798 to Present 3 Electives in Philosophy 6 ENGL 2215 British Lit. 1798 to Present 3 Electives in Philosophy 6 Ecognate Area B  |
| 3000 - 4000 Level Electives in English   |
| British Literature  ENGL 4360 Shakespeare  |
| ENGL 4360 Shakespeare 3 ENGL 4730 Modern American Poetry 3 American Literature Area B  British Literature Area A or B 5 ENGL 2210 British Literature to 1798 3 ENGL 2210 British Literature to 1798 3 Electives from the following 6 ENGL 4500 19th Century English Novel 3 ENGL 4510 Romantic Poets & Essayists 3 ENGL 4620 Early American Literature 3 ENGL 4540 Victorian Poets & Essayists 3 ENGL 4670 Ethnic American Literature 3 ENGL 4560 British Women Writers 3 ENGL 4700 British Fiction Select one of the Cognate Area A B. C. or D 6-9 1890 to Present 3 ENGL 4720 Modern British Poetry 3 British Literature Area B ENGL 2215 British Lit. 1798 to Present 3 Electives in Philosophy 6 Cognate Area B  |
| Select British Literature Area A or B  |
| British Literature Area A  ENGL 2210 British Literature to 1798  |
| ENGL 2210 British Literature to 1798 3 Electives from the following 6 Electives from the following 6 ENGL 4500 19th Century English Novel 3 ENGL 4510 Romantic Poets & Essayists 3 ENGL 4620 Early American Literature 3 ENGL 4540 Victorian Poets & Essayists 3 ENGL 4670 Ethnic American Literature 3 ENGL 4540 Pritish Women Writers 3 ENGL 4680 African American Literature 3 ENGL 4560 British Women Writers 3 ENGL 4680 African American Literature 3 ENGL 4700 British Fiction Select one of the Cognate Areas A, B, C, or D 6-9 1890 to Present 3 PHIL 1000 Introduction to Philosophy 6 ENGL 2215 British Lit. 1798 to Present 3 Electives in Philosophy 6 Cognate Area B   |
| Electives from the following 6 ENGL 4610 American Renaissance 3 ENGL 4500 19th Century English Novel 3 ENGL 4620 Early American Literature 3 ENGL 4510 Romantic Poets & Essayists 3 ENGL 4670 Ethnic American Literature 3 ENGL 4540 Victorian Poets & Essayists 3 ENGL 4680 African American Literature 3 ENGL 4560 British Women Writers 3 ENGL 4680 African American Literature 3 ENGL 4700 British Fiction Select one of the Cognate Areas A, B, C, or D 6-9 1890 to Present 3 Cognate Area A ENGL 4720 Modern British Poetry 3 PHIL 1000 Introduction to Philosophy 3 British Literature Area B Electives in Philosophy 6 ENGL 2215 British Lit. 1798 to Present 3 Cognate Area B   |
| ENGL 4500       19th Century English Novel       3       ENGL 4620       Early American Literature       3         ENGL 4510       Romantic Poets & Essayists       3       ENGL 4670       Ethnic American Literature       3         ENGL 4540       Victorian Poets & Essayists       3       ENGL 4680       African American Literature       3         ENGL 4560       British Women Writers       3       Cognates         ENGL 4700       British Fiction       Select one of the Cognate Areas A, B, C, or D       6-9         1890 to Present       3       Cognate Area A         ENGL 4720       Modern British Poetry       3       PHIL       1000       Introduction to Philosophy       3         British Literature Area B       Electives in Philosophy       6         ENGL 2215       British Lit. 1798 to Present       3       Cognate Area B  |
| ENGL 4510 Romantic Poets & Essayists3 ENGL 4540 Victorian Poets & Essayists3 ENGL 4560 British Women Writers3 ENGL 4700 British Fiction Select one of the Cognate Areas A, B, C, or D6-9 1890 to Present3 ENGL 4720 Modern British Poetry3 British Literature Area B ENGL 2215 British Lit. 1798 to Present  |
| ENGL 4540       Victorian Poets & Essayists       3       ENGL 4680       African American Literature       3         ENGL 4560       British Women Writers       3       Cognates         ENGL 4700       British Fiction       Select one of the Cognate Areas A, B, C, or D       6-9         1890 to Present       3       Cognate Area A         ENGL 4720       Modern British Poetry       3       PHIL       1000 Introduction to Philosophy       3         British Literature Area B       Electives in Philosophy       6         ENGL 2215       British Lit. 1798 to Present       3       Cognate Area B   |
| ENGL 4560         British Women Writers         3         Cognates           ENGL 4700         British Fiction         Select one of the Cognate Areas A, B, C, or D         6-9           1890 to Present         3         Cognate Area A           ENGL 4720         Modern British Poetry         3         PHIL         1000 Introduction to Philosophy         3           British Literature Area B         Electives in Philosophy         6           ENGL 2215         British Lit. 1798 to Present         3         Cognate Area B   |
| ENGL 4700         British Fiction         Select one of the Cognate Areas A, B, C, or D         6-9           1890 to Present         3         Cognate Area A           ENGL 4720         Modern British Poetry         3         PHIL         1000 Introduction to Philosophy         3           British Literature Area B         Electives in Philosophy         6           ENGL 2215         British Lit. 1798 to Present         3         Cognate Area B  |
| 1890 to Present  |
| 1890 to Present  |
| British Literature Area B Electives in Philosophy  |
| ENGL 2215 British Lit. 1798 to Present   |
|  |
| Flectives from the following 6 PFI 1510 Exploring Peligion 3   |
| Liebures from the following  |
| ENGL 4310 Chaucer  |
| ENGL4330 Renaissance Engl. Writers3 Cognate Area C   |
| ENGL 4340 Old & Middle English Lit   |
| ENGL 4450 The Age of Milton  |
| ENGL 4460 The Age of Pope & Johnson3 Electives from one modern language  |
| MINOR NOT REQUIRED   |
| GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. (In the functional major, if elected, PHIL 1000, REL 1510,   |
| or modern language fulfills 3 s.h. of Div. II C; in the professional education requirements, ICAP 4468 fulfills  |
| 3 s.h. of Div. III B)  |
| Secondary Education students must have one course in a physical or earth science and one in a biological science in Div. II A.   |
| HIST 1350 Div. II B or ENGL 2220 Div. II C (required)  |
| HIST 1351 Div. II B (required)   |
| POLS 1510 Div. II B (required)   |
| Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. III.   |
| PROFESSIONAL EDUCATION REQUIREMENTS (see page 205)   |
| MINIMUM TOTAL  |

# ENGLISH Minor, B.S. in Ed. Degree

(Certification to teach English in grades 5-9 with a middle school-junior high school major. Elementary education functional majors may use this as an area of concentration. (000305)

|                   |  |                 |           | Sem. Hours                       |
|-------------------|--|-----------------|-----------|----------------------------------|
| MINOR REQUIRE     |  |                 |           |                                  |
| ENGL 3030         | Composition & Evaluation3              |                 |           | American Literature Area B       |
| ENGL 3110         | English Grammar3                       | ENGL            | 2205      | American Lit. 1865 to Present3   |
| ENGL 3120         | History of English Language2           | Electiv         | e from th | ne following3                    |
| ENGL 2220         | World Masterpieces3                    | ENG             | L4610     | American Renaissance3            |
| 3000 - 4000 Leve  | l Elective in English3                 | ENG             | L4620     | Early American Literature3       |
|                   | American Literature                    | ENG             | L4670     | Ethnic American Literature3      |
| Select American L | Literature Area A or B6                | ENG             | L4680     | African American Literature3     |
|                   | American Literature Area A             |                 |           | British Literature               |
| ENGL 2200         | American Literature to 18653           | ENGL            | 2210      | British Literature to 1798, 3 or |
| Elective from the | e following3                           | ENGL            | 2215      | British Lit. 1798 to Present, 33 |
| ENGL4640          | American Realists                      |                 |           |                                  |
|                   | & Naturalists3                         |                 |           |                                  |
| ENGL4660          | Women Writers of the U. S3             |                 |           |                                  |
| ENGL4670          | Ethnic American Literature3            |                 |           |                                  |
| ENGL 4680         | African American Literature3           |                 |           |                                  |
| ENGL4710          | Modern American Fiction3               |                 |           |                                  |
| ENGL4730          | Modern American Poetry3                |                 |           |                                  |
| GENERAL EDUCA     | TION REQUIREMENTS (page 49) (ENGL 2220 | ), Div. IICD re | quired)   |                                  |

# **ENGLISH Minor for a Bachelor's Degree**

(Except for a B.S. in Ed. Degree) (200009)

| Sem. Hours   |
|--|
| 23 American Literature                               |
| Select American Literature Area A or B6              |
| American Literature Area A                           |
| ENGL 2200 American Literature to 18653               |
| Elective from the following3                         |
| ENGL 4640 American Realists                          |
| & Naturalists3                                       |
| ENGL4660 Women Writers of the U.S3                   |
| ENGL 4670 Ethnic American Literature3                |
| ENGL 4680 African American Literature3               |
| ENGL4710 Modern American Fiction3                    |
| ENGL4730 Modern American Poetry3                     |
| American Literature Area B                           |
| ENGL 2205 American Lit. 1865 to Present3             |
| Elective from the following3                         |
| ENGL 4610 American Renaissance3                      |
| ENGL 4620 Early American Literature3                 |
| ENGL 4670 Ethnic American Literature3                |
| ENGL 4680 African American Literature3               |
| GENERAL EDUCATION REQUIREMENTS (page 49) (ENGL 2220, |
| Div. IICD required)                                  |
|  |
|  |
| -  |

# CREATIVE WRITING Minor for a Bachelor's Degree (CMSU does not confer teacher certification for this minor)

(000490)

| MINOR REQUIRE      | MENTS                                 |    |                    |                     | Sem. Hours21 |
|--------------------|---------------------------------------|----|--------------------|---------------------|--------------|
| ENGL 2050          | Creative Writing                      | .3 | Electives from the | following           | 9-12         |
| Electives from the | e following3-                         | -6 | English (at least  | 3 hours must be     |              |
| ENGL 3051          | Advanced Poetry Writing3              |    |                    | 3000 or 4000 level) | 3-12         |
| ENGL 3052          | Advanced Fiction Writing3             |    | COMM 4415          | Screenplay Writing  | 3            |
| Electives from the | e following 3-                        | -6 | THEA 4800          | Playwriting         | 1-3          |
| ENGL 4051          | Writing Poetry for Publication3       |    |                    |                     |              |
| ENGL 4052          | Writing Fiction for Publication3      |    |                    |                     |              |
| ENGL 4053          | Writing Non-fiction for Publication 3 |    |                    |                     |              |

#### **Rhetoric and Composition**

NOTE: Students desiring preparatory courses to ENGL 1020 should see "Academic Enrichment" in this catalog.

ENGL 1020 Composition I (3) The logic and rhetoric of expository writing. Prerequisite: placement according to University policy applies.

ENGL 1030 Composition II (3) Advanced writing involving research and a generic study of literature. Prerequisite: ENGL 1020 or equivalent.

ENGL 1080 Advanced Composition (3) The logic and rhetoric of expository writing taught at an advanced level, involving research. Prerequisite: placement according to University policy applies.

ENGL 2000 Orientation for the Major (1) Provides a sense of community for English majors as they commence their major study. It will suggest a logical sequencing of courses and will expand the majors' terminology, perspective, and responsibilities in the field of English.

ENGL 2050 Creative Writing (3) Introduces students to terminology and techniques in writing and analyzing poetry and fiction; lecture and workshop format.

ENGL 3000 Critical Studies (1) Introduction to critical theory and application of various approaches and analyses to works of literature. Continuation of ENGL 2000 work on research and assessment techniques; review of majors portfolios and cocurricular transcripts. Prerequisite: ENGL 2000.

ENGL 3030 Composition and Evaluation (3) Techniques of writing and evaluating composition for those planning to teach. Prerequisite: admission to Teacher Education Program for English majors and functional majors, B.S. in Ed. degree.

ENGL 3051 Advanced Poetry Writing (3) Poetry writing at advanced level; written and oral analysis of students' creative work; preparation of individualized portfolio (may include research); workshops. Prerequisites: ENGL 2050 or consent of instructor.

ENGL 3052 Advanced Fiction Writing (3) Fiction writing at advanced level; written and oral analysis of students' creative work; preparation of individualized portfolio (may include research); workshops. Prerequisites: ENGL 2050 or consent of instructor.

ENGL 4000 Senior Seminar\* (1) Provides an opportunity for students to reflect on their program and to identify the coherence of their experience, through assessment and selfassessment of majors portfolio and cocurricular transcript. It will culminate in a senior paper and a formal presentation. Prerequisite: ENGL 3000. \*Not available for graduate credit. ENGL 4040 Advanced Rhetoric (3) Practice in the devices of effective writing. Prerequisite: admission to Teacher Education Program for English majors and functional majors, B.S. in Ed. degree.

ENGL 4051 Writing Poetry for Publication (3) Poetry writing at advanced level; written and oral analysis of published works and of students' submissions; preparation of individualized portfolio; individualized research into publishing. Prerequisites: ENGL 2050, ENGL 3051,3052 or consent of instructor.

ENGL 4052 Writing Fiction for Publication (3) Fiction writing at advanced level; written and oral analysis of published works and of students' submissions; preparation of individualized portfolio; individualized research into publishing. Prerequisites: ENGL 2050 and one of the following: ENGL 3051 or 3052, or consent of instructor. ENGL 4053 Writing Non-fiction for Publication (3) Nonfiction prose writing at advanced level; written and oral analysis of published works and of students' submissions; preparation of individualized portfolio; individualized research into publishing. Prerequisites: ENGL 2050 and one of the following: ENGL 3051 or 3052, or consent of instructor.

#### Language Study and Grammar

ENGL 1180 Communication Skills in English as a Second Language (3) For international students who need additional reinforcement in listening and reading comprehension, study skills, grammar, and composition. May be repeated for a maximum of 6 semester hours.

ENGL 1190 Expository Composition in English as a Second Language (3) For international students who demonstrate through the initial evaluation procedure a need for additional study in English expository writing. May be repeated for a maximum of 6 semester hours. Prerequisite: ENGL 1180 or consent of the English as a Second Language Committee.

ENGL 3110 English Grammar (3) A comparative study of English grammars with strong emphasis on traditional grammar and including structural and transformational approaches. Prerequisite: admission to Teacher Education Program for English majors and functional majors, B.S. in Ed.

ENGL 3120 History of English Language (2) Growth and nature of the English language.

ENGL 4110 Linguistics (3) Approaches to the nature and structure of language.

ENGL 4120 Language and Culture (3) A survey of the ways in which languages and varieties of a language differ in content and structure from culture to culture.

#### Literary Study and Criticism

ENGL 2200 American Literature to 1865 (3) An introduction to major American authors and works from the colonial period to the Civil War. Prerequisites: ENGL 1020 and ENGL 1030, or ENGL 1080, or equivalents.

ENGL 2205 American Literature 1865 to Present (3) An introduction to major American authors and works from the Civil War to the present. Prerequisites: ENGL 1020 and ENGL 1030, or ENGL 1080, or equivalents.

ENGL 2210 British Literature to 1798 (3) An introduction to major British authors and works from 700 to 1798. Prerequisites: ENGL 1020 and ENGL 1030, or ENGL 1080, or equivalents.

ENGL 2215 British Literature 1798 to Present (3) An introduction to major British authors and works from 1798 to the present. Prerequisites: ENGL 1020 and ENGL 1030, or ENGL 1080, or equivalents.

ENGL 2220 World Masterpieces (3) Major works of world literature, excluding British and American. Prerequisites: ENGL 1020 and ENGL 1030, or ENGL 1080, or equivalents. ENGL 2230 Literature and Film (3) Reading and discussion of selected novels and film scripts combined with laboratory viewing sessions.

ENGL 2240 Literature and the Arts (3) A course relating literature to the arts of painting, sculpture, architecture, music, and the dance.

ENGL 2270 Fiction by Women Around the World (3) Novels and short stories by women around the globe. ENGL 2290 Science Fiction and Fantasy (2) An introduction to science fiction and fantasy.

ENGL 3230 Special Topics in Gothic Literature (3) This course is designed to cover topics in the literature of horror and the supernatural of interest to English majors and nonmajors.

#### **English Literature Before 1500**

ENGL 4310 Chaucer (3) Life and times of Chaucer with extensive reading in his major works. Prerequisite for English majors: ENGL 2215.

# 142 English and Philosophy

**ENGL 4340 Old and Middle English Literature (3)** Literary genres and contributions from *Beowulf* to 1500 (excluding Chaucer). Prerequisite for English majors: ENGL 2215.

# English Literature From 1500 to 1640

ENGL 4330 Renaissance English Writers (3) Literary figures of the Elizabethan and Jacobean periods, excluding Shakespeare. Prerequisite for English majors: ENGL 2215. ENGL 4360 Shakespeare (3) Study seven or more Shakespearean plays, including comedies, histories, tragedies and romances, with attention to Renaissance backgrounds, literary analysis, and theatrical traditions. Prerequisite for English majors: ENGL 2210 or ENGL 2215.

#### English Literature From 1640 to 1800

**ENGL 4450 The Age of Milton (3)** English poetry, prose, and drama of the Puritan and Restoration times. Prerequisite for English majors: ENGL 2215.

**ENGL 4460 The Age of Pope and Johnson (3)** Fiction, poetry, essays and drama during the times of Pope and Johnson. Prerequisite for English majors: ENGL 2215.

#### English Literature From 1800 to 1900

ENGL 4500 Nineteenth Century English Novel (3)

Representative novels from Austen through Gaskell. Prerequisite for English majors: ENGL 2210.

**ENGL 4510 Romantic Poets and Essayists (3)** Major poets and essayists of the English Romantic period. Prerequisite for English majors: ENGL 2210.

**ENGL 4540 The Victorian Poets and Essayists (3)** Major poets and essayists of the English Victorian period. Prerequisite for English majors: ENGL 2210.

**ENGL 4560 British Women Writers (3)** Study of major works by British women writers, with an introduction to feminist criticism.. Prerequisite for English majors: ENGL 2210.

#### American Literature From Its Beginnings to 1914

**ENGL 3660 Studies in Literature and Philosophy (3)** An interdisciplinary approach to the study of literature and philosophy. Course instructors will change to fit the particular topic of the course.

**ENGL 4610 American Renaissance (3)** The works of Emerson, Hawthorne, Thoreau and Melville. Prerequisite for English majors: ENGL 2205.

**ENGL 4620 Early American Literature (3)** Major figures of colonial, federal, and early 19th century literature. Prerequisite for English majors: ENGL 2205.

**ENGL 4640 American Realists and Naturalists (3)** Works of Twain, Howells, James, Dreiser, Chopin, and Crane. Prerequisite for English majors: ENGL 2200.

**ENGL 4660 Women Writers of the United States (3)** Prerequisite for English majors: ENGL 2200.

**ENGL 4670 Ethnic American Literature (3)** A survey of America's old and new ethnic writing, with particular emphasis on Native, Asian, Hispanic, and African American writers and a general emphasis on other groups. Prerequisite for English majors: ENGL 2200 or ENGL 2205.

**ENGL 4680 African American Literature (3)** A survey of African American writers from the Colonial period to the present with emphasis on twentieth century writers. Prerequisite for English majors: ENGL 2200 or ENGL 2205.

#### **Modern Literature**

#### ENGL 4700 British Fiction 1890 to Present (3)

Representative fiction by major British authors from 1890 to the present. Prerequisite for English majors: ENGL 2210. **ENGL 4710 Modern American Fiction (3)** Prerequisite for English majors: ENGL 2200.

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**ENGL 4720 Modern British Poetry (3)** British poetry of the twentieth century. Prerequisite for English majors: ENGL 2210

**ENGL 4730 Modern American Poetry (3)** American poetry of the twentieth century. Prerequisite for English majors: ENGL 2200.

**ENGL 4740 Modern Drama (2)** Readings in the significant drama of the Western World from Ibsen and Chekov to the present.

#### **Teaching Methods in English**

ENGL 2830 Literature for Adolescents (2) Reading course intended for those who will teach high school English. ENGL 4810 Seminar in Teaching English (2-3) May be repeated with different offerings, such as Individualizing Instruction, Teaching Traditional Grammar, How to Teach the Novel, Techniques of Theme Grading, Teaching Creative Writing, or Teaching Prosody. May be repeated for a maximum of 6 semester hours of undergraduate credit and 6 semester hours of graduate credit.

ENGL 4820 Secondary Field Experience II\* (1)

Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with ENGL 4890 during the Professional Semester. \*Not available for graduate credit.

**ENGL 4850** Introduction to Second Language Teaching (3) An examination of the theories and procedures underlying the application of linguistic concepts to the teaching of languages including English as a second or foreign language.

ENGL 4890 Methods of Teaching English\* (2)
Prerequisites: admission to Teacher Education Program;
double majors must take a methods course for each
major; methods should be taken concurrently with ENGL
4820 during the Professional Semester. \*Not available for
graduate credit.

#### Research and Readings

**ENGL 3990 Special Topics in English (1-3)** Individual or group work by qualified students in areas such as creative writing, literature, or language. *May be repeated for a maximum of 6 semester hours*. Prerequisite: approval of department chair.

ENGL 4990 Special Projects in English (1-3) May be repeated for a maximum of 6 semester hours.

# Philosophy

In the section of Philosophy, the second digit in the course number stands for the following: 0--General, 1--History, 2--Special Projects, 3--Ethics, 4--Logic, 5--Aesthetics, 6--Special Topics, 7--Religion, 8--Theory of Knowledge.

### PHILOSOPHY Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000317)

Students who complete a minor in Philosophy will use the knowledge and skills obtained to:

- Demonstrate knowledge and understanding of the major writings of the eminent philosophers of the classical period and the modern period (16-18th century).
- Demonstrate knowledge and understanding of how philosophical ideas have evolved through the history of philosophy.
- Demonstrate knowledge and understanding of the major theories of ethics (such as virtue ethics, consequentialism, utilitarianism, deontological ethics, etc.) as well as the writings of philosophers such as Plato, Aristotle, Hume, Kant, etc.
- Demonstrate practical competence in applying the techniques of formal and informal logic for evaluating arguments.

| MINOR | REQUIRE | MENTS                      |   |          |             |                       | Sem. Hours21 |
|-------|---------|----------------------------|---|----------|-------------|-----------------------|--------------|
| PHIL  | 1000    | Introduction to Philosophy |   | PHIL     | 1400        | Deductive Logic, 3 or |              |
| PHIL  | 2100    | History of Philosophy I    | 3 | PHIL     | 1410        | Critical Thinking, 3  | 3            |
| PHIL  | 3100    | History of Philosophy II   | 3 | Elective | es in philo | sophy                 | 6            |
| PHIL  | 2300    | Ethics                     | 3 |          |             | • •                   |              |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, PHIL 1000 fulfills 3 s.h. of Div. II C; PHIL 2300 fulfills 3 s.h. of Div. III)

#### General

PHIL 1000 Introduction to Philosophy (3) A first course in philosophy, surveying selected problems and perspectives in metaphysics, ethics, the theory of knowledge and/or philosophy of mind.

#### History

PHIL 2100 History of Philosophy I (3) Problems, positions, and arguments in ancient philosophy from the pre-Socratics to the beginning of the Middle Ages, with particular emphasis on Plato and Aristotle.

PHIL 3100 History of Philosophy II (3) A consideration of and criticism of the views of the major Western philosophers from the end of the Middle Ages through Kant.

### **Special Projects**

PHIL 2250 Special Projects in Philosophy (3) An introduction to an analysis of philosophical problems and theories in the student's major area of study. May be repeated for a maximum of 6 semester hours.

### **Ethics**

PHIL 2300 Ethics (3) An examination of systematic moral philosophies, challenges to the possibility of an objectively correct morality, and application of morality to a variety of specific problems.

### Logic

PHIL 1400 Deductive Logic (3) An introduction to the principles, forms, and methods of valid reasoning by a survey of syllogistic logic, propositional logic, and elementary quantificational logic.

PHIL 1410 Critical Thinking (3) An introduction to the basic principles and patterns of good reasoning, emphasizing informal argument analysis and practical applications of logic.

#### **Aesthetics**

PHIL 3500 Aesthetics (3) A survey of philosophy of art from Plato to the present, covering the nature of art, its function in human experience, the basis for standards of evaluation,

problems of interpretation, comparisons of different arts, and related topics.

#### **Special Topics**

PHIL 3600 Special Topics in Philosophy (1-3) Individual or group work by qualified and specially selected students in carefully chosen fields, for more intensive study. May be repeated for a maximum of 6 semester hours.

PHIL 3660 Studies in Literature and Philosophy (3) An interdisciplinary approach to the study of literature and philosophy. Course instructors will change to fit the particular topic of the course.

### Religion

PHIL 3710 Philosophy of Religion (3) The concept of religion, analysis and evaluation of arguments for God's existence, the problem of evil, the nature of religious language, the concept of immortality, and related topics.

# Theory of Knowledge

PHIL 3800 Philosophy of Science and Technology (3) Philosophical examination of the nature of scientific theorizing; the relation between scientific methodology. rationality, and progress; the nature of technology and its relation to science.

### **Integrative Studies General**

IGEN 4235 Cognitive Science\* (3) Studies the nature and structure of the human mind from the interdisciplinary perspective derived of philosophy, psychology, computer science, linguistics, and neurobiology. \*Not available for graduate credit.

# Religious Studies

In the area of Religious Studies, the second digit in the course number stands for the following: 1--Literature of Religions, 2--History of Religions, 3--Ethics and Moral Issues, 4--Interdisciplinary Studies Including Theologies, 5--Religion and Society, 9--Research and Readings.

### Center for Religious Studies Statement of Policy

Students are encouraged to seek advisement concerning courses taken toward a minor in Religious Studies from the Director of the Center for Religious Studies.

# **RELIGIOUS STUDIES Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000839)

The graduate with a minor in Religious Studies will use the knowledge, experience, and skills obtained when this program is completed to:

- Recognize differences between the academic study of religions and the personal or corporate practice of religions.
- Reflect upon personal values and value systems in a global environment by using symbolic approaches to describe problems, identify
  alternative solutions, and make reasoned choices among those solutions.
- Compare and contrast definitions of religion and the opinions of scholars within the fields of Religious Studies.
- Demonstrate awareness and recollection of a wide variety of religious beliefs and practices within a global, pluralistic, non-racist, and non-sexist perspective.
- Recognize conflicts within and between value systems that may have their roots within religious traditions.
- Comprehend a variety of methodologies used in the study of religions which will help to develop skills in problem solving, analyzing, and interpreting data.
- Interpret primary religious texts and experiences by summarizing, evaluating, and articulating a point of view.
- Consider multiple perspectives, recognize biases, and cope with ambiguous points of view while listening carefully and thoughtfully to the ideas of others.
- Develop a vocabulary rooted in the study of religions that will facilitate understanding of literatures, themes, and influences upon our society and the world.
- Converse in an intelligent manner about a variety of cultures, beliefs, rituals, religious literatures, world systems, and ethical issues with people from around the globe.

|         |              |                                 |            |          | Seili. Hours                   |
|---------|--------------|---------------------------------|------------|----------|--------------------------------|
| MINOR   | REQUIRE      | MENTS                           |            |          | 21                             |
| REL     | 2210         | Religions in America, 3 or      | Electives  | from the | following                      |
| REL     | 3210         | Comparative World Religions, 33 | or other a | pproved  | electives6                     |
| REL     | 2310         | World Views & Values, 3 or      | ART        | 1815     | Art History Survey I3          |
| REL     | 2510         | Gender & Religions, 33          | ART        | 1825     | Art History Survey II3         |
| REL     | 4410         | Modern Religious Thought, 3 or  | *ENGL      | 4450     | The Age of Milton3             |
| REL     | 4520         | Legal Issues & Religion, 33     | *ENGL      | 4620     | Early American Literature3     |
| REL     | 3900         | Special Projects in Religion3   | PHIL       | 3710     | Philosophy of Religion3        |
| Electiv | e from the t | following3                      | HIST       | 4412     | Era of Renaissance             |
| REL     | 1130         | The Bible as Literature3        |            |          | & Reformation3                 |
| REL     | 1510         | Exploring Religion3             | THEA       | 4400     | Lit. & History of Theatre I 3  |
|         |              |                                 | THEA       | 4420     | Lit. & History of Theatre II 3 |
|         |              |                                 | SOC        | 4885     | Religion and Society3          |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, if elected, REL 1510 fulfills 3 s.h. of Div. II C)

### Literature of Religions

**REL 1130 The Bible as Literature (3)** A literary and historical critical analysis of the Old Testament/Hebrew Bible, the Apocrypha, and the New Testament.

#### **History of Religions**

**REL 2210 Religions in America (3)** Historical development of American religious pluralism.

**REL 3210 Comparative World Religions (3)** Similar and contrasting aspects of the world's major religions.

### **Ethics and Moral Issues**

**REL 2310 World Views and Values (3)** Studies in selected contemporary religio-ethical problems. Topics will include bio-medical, computer, ecological, and gender issues, corporate responsibility, war and peace, racism, and death and dying.

### Interdisciplinary Studies Including Theologies

Sem Hours

REL 2410 Exploring Religions of Africa, the Caribbean and African-Americans in the U.S.A. (3) Explores the diversity and religious traditions in Africa, the Caribbean and among African-Americans in the U.S., emphasizing beliefs, rituals and ethical constraints.

**REL 4410 Modern Religious Thought (3)** Selected contemporary religious writers. Topics may include liberation theology, civil religion, feminist criticism, and black theology. Prerequisite: one course in religious studies.

# **Religion and Society**

**REL 1510 Exploring Religion (3)** Definitions, experiences, expressions, beliefs, socio-cultural contexts, and concept of self within religious traditions and practices.

**REL 2510 Gender and Religions (3)** Studies in how major world religions view the social responsibilities, activities, and relationships of males and females.

<sup>\*</sup>Course has prerequisite(s) not listed in the program.

REL 4520 Legal Issues and Religion (3) A survey of historic and recent legal issues dealing with the relationship between religion (church) and the state. Topics will include: Bible reading and curriculum in the schools, conscientious objectors, taxation and the church, prayer and the Pledge of Allegiance. Prerequisite: REL 1510 or PHIL 3710 or equivalent.

#### Research and Readings

REL 3900 Special Projects in Religion (1-3) Individual or group study of problems in special areas of interest, such as research projects and travel seminars. May be repeated for a maximum of 6 semester hours.

# **History and Anthropology**

### Department of History and Anthropology Statement of Policy

A course with a grade lower than a "C" will not be allowed to fulfill a major or minor requirement in any program offered by the Department of History and Anthropology.

# History

# **HISTORY Major, B.A. Degree**

(42 000420)

The graduate with a Bachelor of Arts in History degree will use the knowledge and skills obtained in the program to:

- Learn and judge the basis of historical knowledge in references, documents, archives, artifacts, and electronic media.
- Differentiate between fact and interpretation, logic and bias; effectively communicate this knowledge in written and technological
- Recognize conceptual frameworks and apply a point-of-view.
- Determine cause-and-effect relationships in the past.
- Read history critically for alternatives.
- Learn lessons from the past by applications to the present.
- Respect the past as prologue to the present.
- Integrate historical knowledge with other fields of study.

| integrate mo  | toriour knowledge with other helds of study.           | Sem. Ho   | ours  |
|---------------|--|---|-------|
| MAJOR REQU    | IREMENTS   |   | 39    |
| HIST 1350     | History of the U. S. to 18773                          | IGEN 4231 Myth, Memory & Realities                | 3     |
| HIST 1351     | History of the U. S. from 18773                        | Upper-level electives in American history         | 6     |
| HIST 2400     | History of the Early World3                            | Upper-level electives in world history            | 9     |
| HIST 2401     | Hist. of the Early Modern World3                       | A minimum of three hours of world history must be |       |
| HIST 2402     | Hist. of the Modern World3                             | non-western history, or HIST 4452 or HIST 4453.   |       |
| SOSC 3010     | Writing in Social Sciences3                            | Upper-level elective in history                   | 3     |
| MINOR REQUI   | REMENTS  | 18  | 3-25  |
| GENERAL EDU   | JCATION REQUIREMENTS (page 49)48 s.h. (In t            | he major, HIST 1350 fulfills 3 s.h. of Div. II B; |       |
| the Modern La | anguage Requirement fulfills 3 s.h. of Div. II C; HIST | 2402 fulfills 3 s.h. of Div. II D;                |       |
| IGEN 4231 ful | Ifills 3 s.h. of Div. IV A)                            |   | 36    |
| MODERN LAN    | GUAGE REQUIREMENT (Refer to Bachelor's Degr            | ee Requirements section for fulfillment options)  | . 3-9 |
| FREE ELECTIV  | /ES  | 15  | 5-28  |
| MINIMUM TOT   | AL   |   | 124   |

# **HISTORY Major, B.S. Degree**

(43 000421)

The graduate with a Bachelor of Science in History degree will use the knowledge and skills obtained in the program to:

- Learn and judge the basis of historical knowledge in references, documents, archives, artifacts, and electronic media.
- Differentiate between fact and interpretation, logic and bias; effectively communicate this knowledge in written and technological
- Recognize conceptual frameworks and apply a point-of-view.
- Determine cause-and-effect relationships in the past.
- Read history critically for alternatives.
- Learn lessons from the past by applications to the present.
- Respect the past as prologue to the present.
- Integrate historical knowledge with other fields of study.

|         |              |  | 5   | em. Hours |
|---------|--------------|--|---|-----------|
| MAJOR   | REQUIRE      | MENTS  |   | 39        |
| HIST    | 1350         | History of the U. S. to 18773                          | IGEN 4231 Myth, Memory & Realities                | 3         |
| HIST    | 1351         | History of the U. S. from 18773                        | Upper-level electives in American history         | 6         |
| HIST    | 2400         | History of the Early World3                            | Upper-level electives in world history            | 9         |
| HIST    | 2401         | History of the Early Modern World3                     | A minimum of three hours of world history must be | Э         |
| HIST    | 2402         | History of the Modern World3                           | non-western history, or HIST 4452 or HIST 4453.   |           |
| SOSC    | 3010         | Writing in Social Sciences3                            | Upper-level elective in history                   | 3         |
| MINOR I | REQUIRE      | MENTS  |   | 18-25     |
| GENER/  | AL EDUCA     | ATION REQUIREMENTS (page 49)48 s.h. (In the            | e major, HIST 1350 fulfills 3 s.h. of Div. II B;  |           |
| HIST 2  | 402 fulfills | 3 s.h. of Div. II D; IGEN 4231 fulfills 3 s.h. of Div. | IV A)   | 39        |
| FREE EI | LECTIVES     | S  | ······································            | 21-28     |
| MINIMU  | M TOTAL      |  |   | 124       |

### **HISTORY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000422)

|         |         |                                 |          |              | Sem. Hours                         |
|---------|---------|---------------------------------|----------|--------------|------------------------------------|
| MINOR F | REQUIRE | MENTS                           | <br>     |              | 20                                 |
| HIST    | 1350    | History of the U. S. to 18773   | HIST     | 2401         | History of the Early Modern World3 |
| HIST    | 1351    | History of the U. S. from 18773 | HIST     | 2402         | History of the Modern World3       |
| HIST    | 2400    | History of the Early World3     | Upper-le | evel electiv | ves in history5                    |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, HIST 1350 fulfills 3 s.h. of Div. II B; HIST 2402 fulfills 3 s.h. of Div. II D)

### **American History**

HIST 1350 History of the United States to 1877 (3) Survey of U.S. history from the age of exploration to 1877. Fulfills state requirements of Section 170.011 RSMo.

HIST 1351 History of the United States from 1877 (3) Survey of U.S. history from 1877 to present. Fulfills state requirements of Section 170.011 RSMo.

HIST 4300 Missouri History (3) Missouri history from earliest times to the present.

HIST 4301 American Historical Biography (3) Biographies of selected American political leaders and molders of opinion and institutions showing the interaction of men/women and their times and the resulting influences on American

HIST 4307 American Colonial History 1607-1763 (3) American political, economic, and cultural institutions in the colonial period.

HIST 4309 The African-American in American History (3) Economic, political, and social development of the African-American in the United States.

HIST 4310 Women in America (3) Women in America from colonial times to the present with emphasis upon the nineteenth century feminist movement and the recent twentieth century women's rights movement.

HIST 4311 Revolution and Republic (3) American political, economic, and cultural institutions from 1763 to the War of

HIST 4314 Jacksonian America (3) Cultural, social, political and economic development of the United States from the War of 1812 to 1848.

HIST 4315 The Civil War and Reconstruction (3) The causes of the war, the social, political, economic and military impact of the war; and the post-war reconstruction process. HIST 4316 The American Military Experience (3) A military history of the American people from colonial times to the present, specifically designed to satisfy the Professional Military Education component of the Military Qualifications Standards required of all candidates for commissioning in the United States Army.

HIST 4317 The Jazz Age and the Great Depression (3) The social, cultural and political trends of the Jazz Age, the social and economic impact of the Great Depression, and the advent of the New Deal.

HIST 4320 History of the Westward Movement (3) Economic, social, cultural, and political contributions to American development by the Westward Movement. HIST 4321 History of the South (3) Social, economic, and political development of the South from colonial times to the present.

HIST 4322 The United States During the Era of the Cold War (3) Emphasizes political, social, economic, and foreign policy developments from the end of WW II (1945) to the end of the Cold War (1992).

HIST 4324 Truman and Civil Rights (3) This course analyzes the civil rights record of President Harry S. Truman. HIST 4325 History of American Diplomacy (3) Foreign relations of the United States with emphasis on the period

HIST 4326 Native American History of the United States (3) A survey of relations between Native Americans and Euro-Americans from colonial times to the present.

HIST 4327 African American Women, Gender, and Girlhood (3) This course focuses on the history and development of black women and girls from their African origins to the present.

HIST 4330 The United States and World War II (3) The rise of totalitarianism in the 1930's. America's reaction to totalitarianism, the war in Europe 1939-41 and America's reaction, America in World War II, the impact of World War II upon American society, and the post-war settlement and the Cold War.

HIST 4331 The Vietnam Era (3) Vietnam in the pre-French (1880's) era, France in Vietnam until 1954, the gradual U.S. involvement in Vietnam 1954-64, the Vietnam war 1964-73, Vietnam of the post-American involvement era to the present and finally an analysis of the impact of the Vietnam war on American society.

HIST 4351 Special Projects in History (1-6) Study, interpretation, and discussion of special topics and problems in American and world history. May be repeated for a maximum of 6 semester hours.

#### World History: Surveys

HIST 2400 History of the Early World (3) A survey of ancient and medieval civilizations from earliest times to 1300. Particular emphasis will be placed upon political, economic. social, and religious developments and achievements. HIST 2401 History of the Early Modern World (3) World civilization from 1300 to 1800. Special emphasis will be given to economic contact and cultural clashes among European, Asian, American, and African civilizations. HIST 2402 History of the Modern World (3) A survey of modern world civilization since 1800. Special attention will be given to industrialization, democratization, imperialism, global wars, and modernization of the non-western world. HIST 2410 Introduction to Africana Studies (3) Examines the rise of African world civilizations, with emphasis on the development of complex empires and the influence of African cultures in the Western Hemisphere.

### Western World History

HIST 4402 Ancient Greece (3) A survey of Greek history from the pre-classical Minoan and Mycenaean civilizations, through the classical period, to the Roman conquest. HIST 4403 Ancient Rome (3) A survey of Roman history from its origins to the decline of the imperial system. Particular emphasis will be placed upon the political, social, and economic developments in the Republic and the factors that led to the fall of the empire.

HIST 4412 Era of Renaissance and Reformation (3) The intellectual and cultural institutions of Europe during the Age of the Renaissance and the Protestant Revolt and Catholic Reformation.

HIST 4413 Europe in the Seventeenth Century (3) Political, social, economic, and cultural history of Europe in the seventeenth century.

HIST 4414 The Age of the French Revolution and Napoleon (3) The origins, development, and consequences of the French Revolution and the Napoleonic Empire in France and in the larger European world, with special reference to the broad transformation of the entire continent during the eighteenth century.

HIST 4415 Revolutionary Europe (3) A survey of the political, social, economic, and cultural transformation of Europe in a century of revolution, from the ancient regime to World War I.

HIST 4416 Europe in Crisis: 1914 to Present (3) A political, social, economic and cultural history of Europe, 1914 to the

present; including especially the effect of two world wars, the origins and legacies of Fascism and Nazism, the Depression, Cold War, and Europe's regeneration after 1945.

HIST 4417 Intellectual History of Modern Europe (3) Political, social, and religious ideas shaping the culture, society, and institutions of Europe.

HIST 4418 War and Modern Society (3) This course will explore the relationship between warfare and society from the advent of gunpowder weaponry to the 21st century.

HIST 4422 England to 1689 (3) The history and institutions of England from Anglo-Saxon times to the Glorious Revolution.

HIST 4423 England and the Commonwealth (3) Political, economic, and social development of modern England and

HIST 4431 Modern Germany and the Nazi Experience (3) A political, social, economic and cultural history of Germany from World War I through the post-World War II era with emphasis on the Third Reich.

HIST 4432 The Holocaust (3) Examines the Holocaust within the context of historical anti-Semitism and the chronology of Nazism's rise, World War II, the Final Solution, and the legacy.

HIST 4441 The Rise of Imperial Russia (3) This course will explore the history of Imperial Russia from Kievan Rus' through the end of the reign of Tsar Alexander II.

HIST 4442 Modern Russia and the Soviet Union (3) Russia and its place in world affairs since the eighteenth century. HIST 4451 Imperial Spain 1469-1714 (3) The rise of the Spanish Empire in the Old World and the New from the fifteenth through the seventeenth centuries.

HIST 4452 Modern Latin America (3) Latin American history from the independence movement of the eighteenth century to the present.

HIST 4453 History of Mexico (3) A survey of the political, social, economic and cultural history of Mexico from pre-Columbian civilizations to the present.

### Non-Western World History

HIST 4461 The Rise of Chinese Civilization (3) The origins, development, and transformation of Chinese civilization from ancient to modern times, including China's impact on peripheral nations and the modifications of traditional culture by Western influences until 1949.

HIST 4462 The Rise of Japanese Civilization (3) The origins, development, and transformation of Japanese civilization from ancient to modern times, emphasizing the unique qualities of Japanese history and culture and the role of Japanese leadership in modern East Asia.

HIST 4463 Communist China (3) Communist China since World War II, including the expulsion of the Nationalist government from the mainland, the consolidation of communist power and authority, internal upheavals such as the "Hundred Flowers," the Great Leap Forward, and the Cultural Revolution and Communist China's foreign policies and role in international affairs.

HIST 4471 The African Diaspora (3) Examines the global dispersal of Africans with particular emphasis on the rise and abolition of the Trans-Saharan and Atlantic slave trades. HIST 4472 African History (3) Examines the African continent, its development and its place in world affairs since prehistory, from complex societies to independence in the twentieth century

HIST 4473 History of South Africa (3) This course is a survey of South African History from the pre-1800's to the present.

### 148 History and Anthropology

HIST 4481 Traditional Middle East (3) The history of West Asia and the Eastern Mediterranean from Muhammad to Napoleon, with special emphasis on the rise and expansion of Islam, including its principles, the Arab and Persian empires, and the impact of the Mongols, the Turks, and the Crusades.

HIST 4482 The Modern Middle East (3) The course will focus on western Asia, north Africa, and the Eastern Mediterranean region since the Napoleonic invasion of Egypt, with special emphasis on the decline of the Ottoman Empire, the impact of the great powers, and the effects of nationalism, oil, and the religious dynamic.

#### **Integrative Studies General**

**IGEN 4231 Myth, Memory and Realities\* (3)** Examines a selected topic in American or World history and literature to understand how interpretations of the past have been constructed to explain the present. \*Not available for graduate credit.

# Anthropology

# **ANTHROPOLOGY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000424)

The graduate with a Bachelor's degree that includes a Minor in Anthropology will use the knowledge and skills obtained in his/her minor program to:

- Judge the basis of anthropological knowledge through the study of primates, fossils, artifacts, tools, customs, beliefs, and languages.
- Apply the concept of cultural adaptation to the environment, from prehistory into the diverse present.
- Recognize that all cultures meet the common goals of provision, protection, interaction and reproduction through different strategies.
- Convey multicultural lessons and mutual respect through the comparison of cultures.
- Understand that interacting with other cultures contributes to life-long learning.

|            |           |                       |                       |  | Sem. Hours |
|------------|-----------|-----------------------|-----------------------|--|------------|
| MINOR F    | REQUIRE   | MENTS                 |                       |  | 20         |
| ANTH       | 1810      | Human Prehistory      | 3                     | Electives (continued)                          |            |
| ANTH       | 1820      | Cultural Anthropology | 3                     | Elective in sociology                          | 3          |
|            |           |                       |                       | Electives in Anthropology                      | 8-14       |
| ENGL       | 4110      | Linguistics           | 3                     |  |            |
| GENER/     | AL EDUC   | ATION REQUIREMENTS (p | age 49) (In the minor | , ANTH 1810 fulfills 3 s.h. of Div. II D; ANTH | 1820       |
| fulfills 3 | s.h. of D | iv. II B)             |                       |  |            |

**ANTH 1810 Human Prehistory (3)** Surveys the empirical evidence of fossils and artifacts for human biological and cultural origins from <u>circa</u> five million to five thousand years

**ANTH 1820 Cultural Anthropology (3)** Surveys the origin, development, and varieties of contemporary cultures, including non-Western; comparisons of technology, customs, groups, and institutions between and among these cultures; implications of earlier cultures for modern society.

**ANTH 2820 Archaeology (3)** An examination of societies that are now extinct and an introduction to the field and laboratory methods used to reconstruct their cultures.

**ANTH 2845 Physical Anthropology (3)** The biology of the human organism; primatology, primate paleontology, and fossil hominids; the role of genetics in evolutionary theory; basic ideas in population genetics, and racial variation.

**ANTH 3801 Applied Anthropology (3)** Applications of the four major subfields of anthropology: cultural anthropology, physical anthropology, archaeology, and linguistics. Prerequisite: ANTH 1810 or ANTH 1820 or consent of instructor.

ANTH 3850 Peoples of the World (3) An examination of more than twenty cultures throughout the world.

ANTH 4815 Special Projects in Anthropology (1-6) Stur

**ANTH 4815 Special Projects in Anthropology (1-6)** Study, interpretation, and discussion of special topics and problems in anthropology. *May be repeated for a maximum of 6 semester hours.* Prerequisite: consent of instructor.

**ANTH 4820 Sexual Dynamics and Culture (3)** Explores cultural factors influencing roles of women and men in a variety of cultures, from small foraging bands to large industrialized states. Topics include cultural influences on sexual equality, sexual hierarchy, heterosexuality, and homosexuality.

**ANTH 4830 Archaeological Field Research (3)** Field experience in which students learn archaeological methods of surveying, recording and excavation, as well as how and why we investigate and preserve sites.

**ANTH 4840 Historical Archaeology (3)** The study of artifacts, architecture, and other material culture to address anthropological topics, such as race, gender, and class, within historic North America.

**ANTH 4850 The North American Indian (3)** The anthropological study of the native peoples of America north

of Mexico; the physical types of American Indian populations; the comparative study of native American languages, North American prehistory, and North American ethnology. ANTH 4870 Comparative Cultures (3) Compares various aspects of cultures in selected societies and helps students to collect and analyze data on cultural patterns in their own and other societies.

ANTH 4894 Cross-Cultural Aspects of Aging (3) A wide variety of societies, from small hunting and gathering to large industrialized societies, is examined in an attempt to explore probable causes and effects of different patterns of aging.

### Social Science

In the area of Social Sciences, the second digit in the course number stands for the following: 0--Social Science Education, 2--Geography, 3--American History, 4--World History, 5--Political Science, 8--Anthropology.

# Department of History and Anthropology Statement of Policy

A course with a grade lower than a "C" will not be allowed to fulfill a major or minor requirement in any program offered by the Department of History and Anthropology.

#### Accreditation

The Social Studies program is accredited by the National Council for the Social Studies located at 8555 16<sup>th</sup> Street, Silver Springs, MD 20910; phone 301-588-1800.

### SOCIAL STUDIES Functional Major, B.S. in Ed. Degree

(Certification to teach social studies in grades 9-12) (41 000416)

The graduate with a Bachelor of Science in Education degree with a functional major in Social Studies will use the knowledge and skills obtained in the program to:

- Explain the methodologies and themes of the disciplines comprising the social sciences.
- Write competency-based objectives that state the learning and performance outcomes expected of secondary school students.
- Apply content learned in university social science courses to develop social studies lessons based upon NCSS (National Council for the Social Studies) themes for secondary school students.
- Plan, develop, and write a complete social studies teaching unit for social science courses taught at the secondary school level.
- Demonstrate through the use of questioning strategies and learning activities the ability to teach higher order thinking skills.
- Present controversial issues to secondary school students so that different points of view are properly represented and fairly evaluated.

Sem. Hours SOSC 3010 Writing in the Social Sciences ......3 Electives from the following ......6 History of the Early World ......3 SOSC 4050 The Social Studies ......3 HIST 2400 History of the U. S. to 1877 ......3 HIST HIST 1350 2401 History of the Early Modern World 3 History of the U. S. from 1877 ......3 HIST 1351 or History of the Early Modern World 3 POLS 1510 American Government ......3 HIST 2401 State Government ......3 HIST 2402 History of the Modern World ......3 POLS 2511 GEOG 2212 World Geography ......3 Upper-level elective in SOC or ANTH ......3 Principles of Macroeconomics ......3 Upper-level electives in American history ......6 **ECON** 1010 SOC 1800 General Sociology ......3 Upper-level elective in world history ......6 Upper-level elective in geography ......3 Upper-level electives in at least two of the following: GEOG, HIST, POLS, SOC, ANTH, or ECON ......9 The program must include at least one course that focuses on a non-western society, nation or region or on the non-western world. A

list of the courses which fulfill this requirement is available from the History and Anthropology Department and on file with the Academic Advisors.

#### MINOR NOT REQUIRED

GENERAL EDUCATION REQUIREMENTS (page 49)--48 s.h. (In the functional major, HIST 1350, ECON 1010, SOC 1800 fulfill Psy. of Adolescence ......3 1350 Div. İl B or 4230 HIST HIST 1351 Div. II B (required) ......3

Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. III and must have one course in a physical or earth science and one in a biological science in Div. II A. If elected, HIST 2402 fulfills 3 s.h. of Div. II D. Psv. of Except. Children (required) .....2 To be recommended for student teaching by the Department of History and Anthropology, a student with a major or minor in social studies must achieve at least a 2.50 GPA in all social science courses taken at CMSU. MINIMUM TOTAL 124

# SOCIAL STUDIES Minor, B.S. in Ed. Degree

(Certification to teach social studies in grades 5-9 is available only with a major in middle school-junior high school. May fulfill an area of concentration requirement for elementary education functional majors.) (000418)

|                    |   |                        | Sem. Hours                           |
|--------------------|---|------------------------|--------------------------------------|
| MINOR REQUIREM     | MENTS   |                        | 24-27                                |
| HIST 1350          | History of the U. S. to 18773                           | ECON 1010              | Principles of Macroeconomics, 3 or   |
| HIST 1351          | History of the U. S. from 18773                         | ECON 1011              | Principles of Microeconomics, 33     |
| HIST 2402          | History of the Modern World3                            | Upper-level elective   | ve in American history2-3            |
| POLS 1510          | American Government3                                    | Upper-level elective   | ve in world history2-3               |
| GEOG 2212          | World Geography, 3 or                                   | 2000-4000 level e      | elective in GEOG,                    |
| GEOG 3201          | The Cultural Landscape, 33                              | POLS, SOC, or A        | ANTH2-3                              |
| GENERAL EDUCAT     | TION REQUIREMENTS (page 49) (In the minor, HIS          | ST 1350, POLS 151      | 10 fulfill 6 s.h. of Div. II B;      |
| if elected, ECON 1 | 1010 or GEOG 2212 fulfills 3 s.h. of Div. II B; HIST 2  | 402 fulfills 3 s.h. of | Div. II D)                           |
| To be recommende   | ed for student teaching by the Department of History    | y and Anthropology     | , a student with a major or minor in |
| social studies mus | st achieve at least a 2.50 GPA in all social science co | ourses taken at CM     | SU.                                  |

#### **Social Science Education**

SOSC 3010 Writing in the Social Sciences (3) Practicum in writing in the social sciences. Prerequisite: completion of General Education Div. I A.

### SOSC 4020 Secondary Field Experience II\* (1)

Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with SOSC 4074 during the Professional Semester. \*Not available for graduate credit.

SOSC 4050 The Social Studies\* (3) The "structures" of the disciplines and practice in redesigning university course work for high school lessons. \*Not available for graduate credit. SOSC 4074 Methods of Teaching Social Studies\* (2) Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with SOSC 4020 during the Professional Semester. \*Not available for graduate credit.

# Africana Studies

# **AFRICANA STUDIES Minor for a Bachelor's Degree**

(000323)

|           |             | (   | ,         |              |                                |               |   |
|-----------|-------------|---|-----------|--------------|--------------------------------|---------------|---|
|           |             |   |           |              |                                | Sem. Hours    |   |
| MINOR F   | REQUIRE     | MENTS   |           |              |                                | 21-22         | 2 |
| HIST      | 2410        | Introduction to Africana Studies3                 |           |              | Africana Studies Area B        |               |   |
| AE        | 1450        | Valuing Differences1                              | Gender,   | Culture a    | nd Social Issues               |               |   |
| *ISP      | 4000        | Study Abroad, 3 or                                | SOC       | 1800         | General Sociology              | 3             |   |
| **HIST    | 4351        | Special Projects in History, 3 or                 | Elective  | s from the   | following                      | 9             |   |
| #ENGL     | 4990        | Special Projects in English, 33                   | +#A&S     | 1244         | Special Topics                 | 3             |   |
|           |             | Africana Studies                                  | WS        | 2000         | Race, Class and Gender         | 3             |   |
| Select 11 | -12 credit  | hours from Area A or Area B as a field of         | REL       | 2410         | Exploring Religions of Africa, | the           |   |
| concentra | ation. Sele | ect 2-3 credit hours from the Area not chosen for | Caribbea  | an, and Afri | ican-America                   | 3             |   |
| concentra | ation for a | total of 14-15 credit hours.                      | SOC       | 1830         | Social Problems                | 3             |   |
|           |             | Africana Studies Area A                           | SOC       | 3825         | Race and Ethnic Relations      | 3             |   |
| Literary, | Geograp     | hical, Political and Historical                   | SOC       | 3845         | Social Inequality              | 3             |   |
| Develop   | ment        |   | SOC       | 4810         | Urban Sociology                | 3             |   |
| MUS       | 1281        | History and Development of Jazz3                  | *(Univers | sity of Gha  | na)                            |               |   |
| GEOG      | 3310        | Geography of Africa3                              | **(Resea  | rch & Writ   | ing Course in African/African  |               |   |
| HIST      | 4309        | African American in American History3             | Ameri     | ican Histor  | y)                             |               |   |
| HIST      | 4471        | The African Diaspora3                             | #( Resea  | arch & Writ  | ing Course in African Americar | n Literature) |   |
| HIST      | 4472        | African History3                                  | +( Resea  | arch & Writ  | ing Course in Survey of Twent  | ieth          |   |
| +ENGL     | 3990        | Special Topics in English3                        | Centu     | ıry African  | American Literature)           |               |   |
| ENGL      | 4680        | African American Literature3                      | +#(Elem   | entary Aka   | n)                             |               |   |
| POLS      | 3551        | Race & Ethnic Politics in the U.S3                |           |              |                                |               |   |
| POLS      | 4553        | 20 <sup>th</sup> Cent. African-American Politics3 |           |              |                                |               |   |
|           |             |   |           |              |                                |               |   |

# Women's Studies

# WOMEN'S STUDIES Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000471)

|                |                                   | ( /      |            |                                 |
|----------------|-----------------------------------|----------|------------|---------------------------------|
|                |                                   |          |            | Sem. Hours                      |
| MINOR REQUI    | REMENTS                           |          |            | 21-22                           |
| WS 1050        | Introduction to Women's Studies3  | Elective | es (contin | ued)                            |
| WS 4910        | Spec. Proj. in Women's Studies3   | NUR      | 2020       | Health: Women's Perspective2    |
| Electives from | the following9-10                 | NUR      | 4030       | Human Sexuality2                |
| HIST 4310      | Women in America3                 | CJ       | 4403       | Sexual Assault & the            |
| ANTH 4820      | Sexual Dynamics & Culture3        |          |            | Criminal Justice System3        |
| *COMM 4335     | Gender Communications3            | PSY      | 4320       | Psychology of Women2            |
| ENGL 2270      | Fict. by Women Around the World 3 | SOC      | 4855       | Sociology of Gender3            |
| ENGL 4560      | British Women Writers3            | SOC      | 4865       | Family Diversity3               |
| ENGL 4660      | Women Writers of the              | Elective | es from th | ne above list or as approved by |
|                | United States3                    | the Wo   | men's Stu  | udies Coordinator6              |
| REL 2510       | Gender & Religions3               |          |            |                                 |

<sup>\*</sup>Course has prerequisite(s) not listed in the program.

WS 1050 Introduction to Women's Studies (3) Provides an overview of the interdisciplinary nature of the women's studies program. Focuses upon social, psychological, economic, political, cultural, religious, and historical aspects of women's roles in the United States.

WS 2000 Race, Class, and Gender (3) An exploration of the interrelations between gender, class, and race historically and cross-culturally. These interrelations will be explored using a

multidisciplinary approach and a variety of kinds of materials, including ethnography, literature, life histories, and law. WS 4910 Special Projects in Women's Studies\* (3) Extensive reading and discussion of selected topics to integrate the various courses in the women's studies program. Prerequisite: 15 semester hours in the minor, including WS 1050 and consent. \*Not available for graduate credit.

Sem Hours

# **Mathematics and Computer Science**

#### Department of Mathematics and Computer Science Statement of Policy

A course with a grade lower than a "C" will not be allowed to fulfill a major or minor requirement in any program offered by the Department of Mathematics and Computer Science.

A student may enroll in a course offered by the Department of Mathematics and Computer Science only if a grade of at least "C" is earned in each of the course's prerequisites taken.

# **MATHEMATICS**

In the Department of Mathematics and Computer Science, the second digit in a course number with a MATH prefix stands for the following: 0-Unclassified, 1-Analysis, 2-Geometry, 3-Statistics, 4-Discrete Mathematics, 5-Actuarial Science, 6-General Education, 7-Modern Algebra, 8-Mathematics Education, 9-Research and Special Problems.

# **ACTUARIAL SCIENCE AND MATHEMATICS Functional Major, B.S. Degree**

(43 000475)

A graduate with a Bachelor of Science degree in Actuarial Science and Mathematics will use the knowledge and skills obtained in the program to:

- Integrate and apply knowledge in the areas of mathematics, statistics, finance, and economics.
- Develop an aptitude for problem solving and apply mathematical, statistical, and financial models in the actuarial area.
- Develop critical thinking skills and the ability to study independently.
- Interpret and utilize precise mathematical language involving definitions, statements, and proofs.
- Examine, describe, and represent functions of various types using analysis techniques.
- Solve a variety of mathematics problems and applications using analytic, numeric, and graphing techniques.
- Think logically, develop algorithms, implement the algorithms in an appropriate computer language, and solve problems with the algorithms.
- Value mathematics and actuarial science for their diverse and related contributions to mathematically based disciplines.
- Achieve a score of at least 3 on the Society of Actuaries Course 1 exam and prepare for Course 2 and part of Course 3 and Course 4.
- Establish a career in actuarial science, mathematics, or related fields and prepare for entry-level positions in business, industry, government, or public education.
- Prepare for graduate study in mathematics, actuarial science, or related fields.

Candidates for this degree must: (1) achieve a score of 3 or above in course 1 of the Actuarial Examination Series and (2) possess a 3.00 grade-point average overall and in the major.

|             |              |  |         |       |             | Ser                              | n. Hours |
|-------------|--------------|--|---------|-------|-------------|----------------------------------|----------|
| FUNCTION    | ONAL MA      | JOR REQUIREMENTS                           |         |       |             |                                  | 63-64    |
| MATH        | 1151         | Calculus & Analytic Geometry I5            | ECC ECC | N     | 3010        | Intermediate Macroeconomics      | 3        |
| MATH        | 1152         | Calculus & Analytic Geometry II5           | 5 FIN   |       | 3861        | Financial Management I           | 3        |
| MATH        | 2153         | Calculus & Analytic Geometry III3          | FIN     |       | 4803        | Risk MgtProperty & Liability Ins | 3        |
| MATH        | 2310         | Applied Statistics                         |         |       |             | Managing Fin. Derivatives        |          |
| MATH        | 3311         | Introduction to Mathematical Statistics .3 | B Elec  | tives | from the    | following                        | 6-7      |
| MATH        | 4312         | Probability Models                         | B MA    | ΛTΗ   | 3151        | Differential Equations3          | }        |
| MATH        | 2410         | Discrete Mathematics                       | B MA    | TΗ    | 3160        | Advanced Applied Calculus3       | }        |
| MATH        | 4501         | Actuarial Exam Review Problem Set I 1      | MA      | ΛTΗ   | 4180        | Advanced Calculus3               | }        |
| MATH        | 4510         | Mathematics of Finance                     | B MA    | TΗ    | 4450        | Introduction to Graph Theory3    | }        |
| MATH        | 4511         | Actuarial Exam Review Problem Set II .1    | MA      | ΛTΗ   | 3720        | Algebraic Structures2            | <u>.</u> |
| MATH        | 4520         | Life Contingencies3                        | S CS    | ;     | 2300        | Data Structures3                 | }        |
| MATH        | 4530         | Actuarial Modeling                         |         | ;     | 4400        | Numerical Analysis I3            | 3        |
| MATH        | 3710         | Linear Algebra3                            | S CS    | ;     | 4410        | Operations Research3             | }        |
| CS          | 1100         | Intro. to Computing I                      | B EC    | ON    | 3030        | Intermediate Microeconomics3     | 3        |
| CS          | 1110         | Intro. to Computing II                     | S CIS   | S     | 3655        | COBOL Programming                | }        |
|             |              | TION REQUIREMENTS (page 49)48 s.l          |         |       |             |                                  |          |
| fulfill 3 s | s.h. of Div. | IC)  |         |       |             |                                  | 45       |
| ECON        | 1010 Div.    | II B (required)3                           | ICA     | P 42  | 245 Div. IV | B (required)                     | 3        |
| FREE EL     | LECTIVES     |  |         |       |             |                                  | 15-16    |
| MINIMUI     | M TOTAL      |  |         |       |             |                                  | 124      |
|             |              |  |         |       |             |                                  |          |

Cama Harrina

# MATHEMATICS Major, B.A. Degree

(42 000453)

A graduate with a Bachelor of Arts degree in Mathematics will use the knowledge and skills obtained in the program to:

- Interpret and utilize precise mathematical language involving definitions, statements, and proofs.
- Examine, describe, and represent functions of various types using analysis techniques.
- Solve a variety of mathematics problems and applications using analytic, numeric, and graphing techniques.
- Apply a variety of mathematical models in the solution of problems and applications.
- Think logically, develop algorithms, implement the algorithms in a computer language, and solve problems with the algorithms.
- Value mathematics and computer science for their diverse and related contributions to mathematically based disciplines.
- Communicate his/her mathematical thinking coherently, analyze and evaluate the mathematical thinking of others, and use the language of mathematics to express mathematical ideas precisely.
- Use representations to model and interpret physical, social, and mathematical phenomena.
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole and apply mathematics in contexts outside of mathematics.
- Establish a career in a mathematical science and prepare for entry-level positions in business, industry, government, or education.
- Prepare for graduate study in mathematics or a related field.

|   |                                |                                       |            |  | Sem. Hours |
|---|--------------------------------|---------------------------------------|------------|--|------------|
| MAJOR REQUIREMENTS                      |                                |                                       |            |  | 34         |
| MATH 1151 Calculus & Analytic G         | eometry I5                     | MATH                                  | 2410       | Discrete Mathematics                   | 3          |
| MATH 1152 Calculus & Analytic G         | eometry II5                    | MATH                                  | 3710       | Linear Algebra                         | 3          |
| MATH 2153 Calculus & Analytic G         | eometry III3                   | MATH                                  | 3720       | Algebraic Structures                   | 2          |
| MATH 2221 Foundations of Geom           | netry3                         | CS                                    | 1100       | Intro. to Computing I                  | 3          |
| MATH 4211 Introduction to Topolo        | gy3                            | Upper-I                               | evel elect | tives in MATH or CS                    | 4          |
| MINOR REQUIREMENTS                      |                                |                                       |            |  | 18-25      |
| GENERAL EDUCATION REQUIREMENT           | S (page 49)48 s.h. (In the     | e major, MA                           | TH 1151    | is allowed to fulfill 3 s.h. of Div. I | C;         |
| the Modern Language Requirement fulfil  | ls 3 s.h. of Div. II C)        |                                       |            |  | 42         |
| ICAP 4233 Div. IV B (required)          | 3                              |                                       |            |  |            |
| MODERN LANGUAGE REQUIREMENT             |                                |                                       |            |  | 3-9        |
| (Refer to Bachelor's Degree Requirement | nts section for fulfillment op | otions)                               |            |  |            |
| FREE ELECTIVES                          | •                              | · · · · · · · · · · · · · · · · · · · |            |  | 14-27      |
| MINIMUM TOTAL                           |                                |                                       |            |  | 124        |

# MATHEMATICS Major, B.S. Degree

(43 000454)

A graduate with a Bachelor of Science degree in Mathematics will use the knowledge and skills obtained in the program to:

- Interpret and utilize precise mathematical language involving definitions, statements, and proofs.
- Examine, describe, and represent functions of various types using analysis techniques.
- Solve a variety of mathematics problems and applications using analytic, numeric, and graphing techniques.
- Apply a variety of mathematical models in the solution of problems and applications.
- Think logically, develop algorithms, implement the algorithms in a computer language, and solve problems with the algorithms.
- Value mathematics and computer science for their diverse and related contributions to mathematically based disciplines.
- Communicate his/her mathematical thinking coherently, analyze and evaluate the mathematical thinking of others, and use the language of mathematics to express mathematical ideas precisely.
- Use representations to model and interpret physical, social, and mathematical phenomena.
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole and apply mathematics in contexts outside of mathematics.
- Establish a career in a mathematical science and prepare for entry-level positions in business, industry, government, or education.
- Prepare for graduate study in mathematics or a related field.

|         |           |  |             |            |                                      | Sem. Hours |
|---------|-----------|--|-------------|------------|--------------------------------------|------------|
| MAJOR   | REQUIRE   | EMENTS                                     |             |            |                                      | 41         |
| MATH    | 1151      | Calculus & Analytic Geometry I5            | MATH        | 3710       | Linear Algebra                       | 3          |
| MATH    | 1152      | Calculus & Analytic Geometry II5           | MATH        | 3720       | Algebraic Structures                 | 2          |
| MATH    | 2153      | Calculus & Analytic Geometry III3          | CS          | 1100       | Intro. to Computing I                | 3          |
| MATH    | 2221      | Foundations of Geometry3                   | CS          | 1110       | Intro. to Computing II               | 3          |
| MATH    | 2410      | Discrete Mathematics3                      | Upper-I     | evel elect | tives in MATH or CS                  | 11         |
| MINOR I | REQUIRE   | MENTS                                      |             |            |                                      | 18-25      |
| GENER/  | AL EDUC   | ATION REQUIREMENTS (page 49)48 s.h. (In th | e major, MA | TH 1151    | is allowed to fulfill 3 s.h. of Div. | I C)45     |
| ICAP    | 4233 Div. | IV B (required)                            | -           |            |                                      |            |
| FREE EI | LECTIVES  | S  |             |            |                                      | 13-20      |
| MINIMU  | M TOTAL   |  |             |            |                                      | 124        |

# MATHEMATICS Major, B.S. in Ed. Degree

(Certification to teach mathematics in grades 9-12) (41 000459)

A graduate with a Bachelor of Science in Education degree in Mathematics will use the knowledge and skills obtained in the program to:

- Interpret and utilize precise mathematical language involving definitions, statements, and proofs.
- Examine, describe, and represent functions of various types using analysis techniques.
- Solve a variety of mathematics problems and applications using analytic, numeric, and graphing techniques.
- Apply a variety of mathematical models in the solution of problems and applications.
- Think logically, develop algorithms, implement the algorithms in an appropriate computer language, and solve problems with the
  algorithms.
- Value mathematics and computer science for their diverse and related contributions to mathematically based disciplines.
- Communicate his/her mathematical thinking coherently, analyze, and evaluate the mathematical thinking of others, and use the language of mathematics to express mathematical ideas precisely.
- Use representations to model and interpret physical, social, and mathematical phenomena.
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole and apply mathematics in contexts outside of mathematics.
- Understand the appropriate use of technology as tools for representing ideas, investigating patterns, testing conjectures, and representing data.
- Teach mathematics to a diverse population of 9 B 12 learners by applying relevant learning theories, using a variety of teaching strategies, and incorporating materials, technology, and resources.
- Prepare for graduate study in mathematics or mathematics education.

| MAJOR    | REQUIRE   | EMENTS   |                  |           |  | Sem. Hours35.5 |
|----------|-----------|--|------------------|-----------|--|----------------|
| MATH     | 1151      | Calculus & Analytic Geometry I5                    | Elective         | s from th | e following or as approved             |                |
| MATH     | 1152      | Calculus & Analytic Geometry II5                   | by depa          |           |  | 3              |
| MATH     | 1850      | Orientation Seminar0.5                             | MATH             |           | Calc. & Analytic Geom. III             |                |
| MATH     | 2221      | Foundations of Geometry3                           | MATH             | 3151      | Differential Equations                 |                |
| MATH     | 2410      | Discrete Mathematics3                              | MATH             | 3221      | College Geometry                       |                |
| MATH     | 3720      | Algebraic Structures2                              | MATH             | 3311      | Intro. Mathematical Statistics         |                |
| MATH     | 3850      | Strategies in Teaching                             | MATH             | 3710      | Linear Algebra                         | 3              |
| Seconda  | ry Mathe  | matics3  | MATH             | 4211      | Introduction to Topology               | 3              |
| MATH     | 4710      | Real Number System2                                | MATH             | 4312      | Probability Models                     |                |
| MATH     | 4851      | Prob. & Stat. for Mid/HS Math3                     | MATH             | 4450      | Introduction to Graph Theory           | 3              |
| CS       | 1100      | Intro. to Computing I3                             | MATH             | 4510      | Mathematics of Finance                 | 3              |
| ICAP     | 4233      | The Scientific, Historical, and                    | MATH             | 4711      | Modern Algebra I                       | 3              |
| Sociolog | ical Impa | ct of Mathematics3                                 | MATH             | 4741      | Intro. to Theory of Numbers            |                |
|          |           |  | CS               | 1110      | Intro. to Computing II                 | 3              |
|          |           |  | CS               | 3310      | Introduction to Combinatorics          |                |
| MINOR F  | REQUIRE   | MENTS  |                  |           |  | 18-25          |
| GENERA   | AL EDUC   | ATION REQUIREMENTS (page 49)48 s.h. (In t          | he maior. MAT    | ΓH 1151   | is allowed to fulfill 3 s.h. of Div. I | C:             |
|          |           | al education requirements, ICAP 4468 fulfills 3 s. |                  |           |  |                |
|          |           | ation students must have one course in a physica   |                  |           |  |                |
| HIST     | 1350      | Div. II B or                                       | POLS             | 1510      | Div. II B (required)                   | 3              |
| HIST     | 1351      | Div. II B (required)3                              | PSY              | 4230      | Psy. of Adolescence                    | 3              |
| Second   | larv Educ | ation students will be allowed to substitute PSY 4 | 230 to fulfill 3 | s.h. in D | iv. III.                               |                |
|          |           | EDUCATION REQUIREMENTS (see page 205)              |                  |           |  | 28             |
|          |           | S  |                  |           |  |                |
| MINIMUI  | M TOTAL   |  |                  |           |  | 124            |

# MATHEMATICS Functional Major, B.S. in Ed. Degree

(Certification to teach mathematics in grades 9-12) (41 000461)

A graduate with a Bachelor of Science in Education degree in Mathematics will use the knowledge and skills obtained in the program to:

- Interpret and utilize precise mathematical language involving definitions, statements, and proofs.
- Examine, describe, and represent functions of various types using analysis techniques.
- Solve a variety of mathematics problems and applications using analytic, numeric, and graphing techniques.
- Apply a variety of mathematical models in the solution of problems and applications.
- Think logically, develop algorithms, implement the algorithms in an appropriate computer language, and solve problems with the
- Value mathematics and computer science for their diverse and related contributions to mathematically based disciplines.
- Communicate his/her mathematical thinking coherently, analyze, and evaluate the mathematical thinking of others, and use the language of mathematics to express mathematical ideas precisely.
- Use representations to model and interpret physical, social, and mathematical phenomena.
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole and apply mathematics in contexts outside of mathematics.
- Understand the appropriate use of technology as tools for representing ideas, investigating patterns, testing conjectures, and representing data.
- Teach mathematics to a diverse population of 9 B 12 learners by applying relevant learning theories, using a variety of teaching strategies, and incorporating materials, technology, and resources.
- Prepare for graduate study in mathematics or mathematics education.

| FUNCTION   | NAL MAJ   | OR REQUIREMENTS                                     |             |              |                                 | Sem. Hours<br>53.5 |
|--|-----------|---|-------------|--------------|---------------------------------|--------------------|
| MATH '   | 1151      | Calculus & Analytic Geometry I5                     | MATH        | 4851         | Prob. & Stat. for Mid/HS Math   | 3                  |
| MATH 1   | 1152      | Calculus & Analytic Geometry II5                    | CS          | 1100         | Intro. to Computing I           | 3                  |
| MATH 2   | 2153      | Calculus & Analytic Geometry III3                   | ICAP        | 4233         | The Scientific, Historical, and |                    |
| MATH 2   | 2221      | Foundations of Geometry3                            |             |              | Sociological Impact of Math     | 3                  |
| MATH 3   | 3221      | College Geometry3                                   | Elective    | s from the   | following                       | 8-10               |
| MATH 2   | 2410      | Discrete Mathematics3                               | PHYS        | 1101         | College Physics I               | 4                  |
| MATH 3   | 3720      | Algebraic Structures2                               | PHYS        | 1102         | College Physics II              | 4                  |
| MATH 4   | 4710      | Real Number System2                                 |             | or           |                                 |                    |
| MATH 1   | 1850      | Orientation Seminar0.5                              | PHYS        | 2121         | University Physics I            |                    |
|  | 3850      | Strategies in Teaching                              | PHYS        |              | University Physics II           |                    |
| Secondary  | Mathem    | atics3  | Upper-le    | evel electiv | ves in MATH or CS               | 5-7                |
| MINOR NO   | OT REQU   | JIRED   |             |              |                                 |                    |
| GENERAL  | EDUCA     | TION REQUIREMENTS (page 49)48 s.h. (In the f        | unctional   | major, MA    | TH 1151 is allowed to           |                    |
|  |           | IC; PHYS 1101 and PHYS 1102 or PHYS 2121 an         |             |              |                                 | A;                 |
| in the prof  | fessional | education requirements, ICAP 4468 fulfills 3 s.h. o | f Div. IV B | )            |                                 | 38-39              |
| BIOL 1   | 1003      | Div. II A or  | HIST        | 1350         | Div. II B or                    |                    |
| BIOL 1   | 1004      | Div. II A (required) 3-4                            | HIST        | 1351         | Div. II B (required)            | 3                  |
| POLS 1   | 1510      | Div. II B (required)3                               | PSY         | 4230         | Psy. of Adolescence             |                    |
| Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. III. |           |   |             |              |                                 |                    |
|  |           | DUCATION REQUIREMENTS (see page 205)                |             |              |                                 | 28                 |
|  |           |   |             |              |                                 |                    |
|  |           |   |             |              |                                 |                    |

### MATHEMATICS Minor, B.S. in Ed. Degree

Certification to teach mathematics in grades 5-9 with a middle school-junior high major. Elementary education functional majors 1-6 may use this as an area of concentration. (000480)

A graduate with a Mathematics Minor for a Bachelor of Science in Education degree will use the knowledge and skills obtained in the program to:

- Teach mathematics to a diverse population of 5-9 learners by applying relevant learning theories, using a variety of teaching strategies, and incorporating materials, technology, and resources.
- Understand the appropriate uses of technology as tools for representing mathematical ideas, investigating patterns, testing conjectures, and representing data.
- Communicate his/her mathematical thinking coherently, analyze and evaluate the mathematical thinking of others, and use the language of mathematics to express mathematical ideas precisely.
- Use representations to model and interpret physical, social, and mathematical phenomena.
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole and apply mathematics in contexts outside of mathematics.

|         |         |                                     |      |      | Sem. Hours                          |
|---------|---------|-------------------------------------|------|------|-------------------------------------|
| MINOR F | REQUIRE | MENTS                               |      |      | 25                                  |
| MATH    | 1800    | Introduction to Teaching Elementary | MATH | 4821 | Elements of Algebra3                |
|         |         | & Middle School Mathematics2        | MATH | 4822 | Elements of Geometry3               |
| MATH    | 2802    | Concepts & Methods in               | MATH | 4823 | Introduction to Infinite Processes5 |
|         |         | Middle School Mathematics3          | MATH | 4851 | Prob & Stat for Mid/HS Math3        |
| MATH    | 3840    | Strategies in Teaching              | MATH | 4871 | Algebraic Concepts for Teachers3    |
|         |         | Middle School Mathematics3          |      |      | ,                                   |

<sup>\*</sup>Course has prerequisite(s) not listed in the program.

### MATHEMATICS Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (Recommended for majors in business, economics, physical science, social sciences and related fields) (000482)

| MINOR F | REQUIRE | MENTS                            |               | Seni. Hot                      |  |
|---------|---------|----------------------------------|---------------|--------------------------------|--|
| MATH    |         | Calculus & Analytic Geometry I5  |               | e following or as approved     |  |
| MATH    | 1152    | Calculus & Analytic Geometry II5 | by department | 6                              |  |
| MATH    | 2410    | Discrete Mathematics3            | MATH 2153     | Calc. & Analytic Geometry III3 |  |
| MATH    | 3710    | Linear Algebra3                  | MATH 3311     | Intro. to Math. Statistics3    |  |
| MATH    | 3720    | Algebraic Structures2            | CS 1100       | Intro. to Computing I3         |  |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, MATH 1151 is allowed to fulfill 3 s.h. of Div. I C)

# **Analysis**

MATH 1101 Intermediate Algebra (3) The properties of real numbers, polynomials, rational exponents, radicals, functions, and systems of equations. Prerequisite: high school credit in basic algebra or AE 1030. Placement according to University policy applies.

MATH 1111 College Algebra (3) Continuation of algebra including such topics as linear and quadratic equations, linear and quadratic inequalities, second degree relations and functions, systems of equations and inequalities, and exponential and logarithmic functions. Prerequisite: high school program including advanced algebra or MATH 1101.

MATH 1112 College Trigonometry (2) Elementary trigonometric functions, identities, trigonometric equations, multiple angle formulas, and general triangle solutions. Prerequisite: a high school program including advanced algebra and one unit of geometry; or MATH 1111 or concurrently.

MATH 1131 Calculus for Business and Economics (3) The fundamental skills and concepts of calculus with an emphasis on applications in business and economics. Prerequisite: a high school program including one unit of advanced algebra and one unit of geometry, or MATH 1111.

MATH 1150 Pre-Calculus Mathematics (4) Pre-calculus concepts in algebra and trigonometry for the student with an above average preparation in high school mathematics. Prerequisite: a high school program including advanced algebra, one unit of geometry, and one-half unit of

trigonometry. Placement according to University policy

Com Hours

### MATH 1151 Calculus and Analytic Geometry I (5)

A combined course in calculus and analytic geometry. Prerequisite: a high school program including advanced algebra, one unit of geometry, and one-half unit of trigonometry; or MATH 1112 or MATH 1150. MATH 1152 Calculus and Analytic Geometry II (5) A

continuation of MATH 1151. Prerequisite: MATH 1151. MATH 2153 Calculus and Analytic Geometry III (3) A continuation of MATH 1152. Prerequisite: MATH 1152.

MATH 3151 Differential Equations (3) Presents techniques of solving ordinary differential equations with applications to physics and engineering. Prerequisite: MATH 2153.

MATH 3160 Advanced Applied Calculus (3) Differential and integral calculus of functions of several variables, vector differential and integral calculus, and Fourier series. Prerequisite: MATH 3710 or consent of Chairperson and MATH 2153.

MATH 4180 Advanced Calculus (3) A rigorous approach to the fundamental concepts of differential calculus, integral calculus, and infinite series. Prerequisites: MATH 2153 and MATH 3710.

#### Geometry

MATH 2221 Foundations of Geometry (3) An emphasis on the techniques of proof and constructions in geometry, the properties of a set of postulates, a brief review of Euclidean geometry, and the study of other geometries. Only

offered Fall semester. Prerequisite: One unit of high school

MATH 3221 College Geometry (3) Modern Euclidean geometry, geometric transformations, advanced Euclidean constructions, constructible numbers, extension fields and the three impossible problems of antiquity. Prerequisite: MATH

MATH 4211 Introduction to Topology (3) Introduces the concept of point set topology. Includes the study of the real number line, the real plane, metric spaces, topological spaces, continuity, connectedness, compactness, product spaces, and separation properties. Prerequisite: MATH 3720.

#### **Statistics**

MATH 2310 Applied Statistics (3) Applied statistical models and methods with an emphasis on regression analysis, time series analysis and forecasting. Only offered Fall semester. Prerequisite: MATH 1152.

MATH 3311 Introduction to Mathematical Statistics (3) Basic concepts of probability and statistics. Only offered Fall semester. Prerequisite: MATH 1152 and MATH 2410. MATH 4312 Probability Models (3) An in-depth study of probability theory and stochastic processes with their applications in fields such as computer science, management science, social science, and operations research. Prerequisites: MATH 2153 and MATH 3311.

#### **Discrete Mathematics**

MATH 2410 Discrete Mathematics (3) Basic concepts of logic, mathematical proof techniques, sets and relations, functions, mathematical induction and recursive algorithms, principles of counting, permutations and combinations, discrete probability theory, integers and algorithms. Prerequisite: high school program including advanced algebra or MATH 1111.

MATH 4450 Introduction to Graph Theory (3) Basic graph theory concepts: connectivity, trees, matchings, graph coloring, Eulerian and Hamiltonian graphs, distance, planarity, and network flows. Prerequisite: MATH 2410.

### **Actuarial Science**

MATH 4501 Actuarial Exam ReviewBProblem Set I (1) Problems from calculus, analytic geometry, and probability that apply to actuarial science. Prerequisite: MATH 4312. MATH 4510 Mathematics of Finance (3) The basic measures of interest, annuities, discounted cash flow analysis, and their applications. Prerequisite: MATH 1152. MATH 4511 Actuarial Exam ReviewBProblem Set II (1) Problems from math of finance, financial management, and micro- and macroeconomics. Prerequisites: MATH 4510, FIN 3861, FIN 4817, and ECON 1010.

MATH 4520 Life Contingencies (3) Theory and applications of contingency mathematics in the areas of life and health insurance, annuities and pensions. Only offered Fall semester. Prerequisites: MATH 4312 and MATH 4510. Math 4530 Actuarial Modeling (3) Actuarial concepts, principles, and techniques that are used in insurance modeling including loss distributions, aggregate loss models, credibility theory, and simulations. Prerequisite: Math 4312.

#### General Education

MATH 1620 Contemporary Mathematics (3) Mathematical concepts, with historical perspectives, from various branches of mathematics including an introduction to statistics, logic,

combinatorics, linear programming, number theory, geometry and probability. Prerequisite: a high school program including advanced algebra or MATH 1101. Placement according to University policy applies.

#### Modern Algebra

MATH 3710 Linear Algebra (3) An introduction to matrices, determinants, vector spaces and linear transformations. Prerequisite: MATH 2410.

MATH 3720 Algebraic Structures (2) Basic mathematical systems: groups, rings and fields. Prerequisite: MATH

MATH 4710 Real Number System (2) The real number system beginning with the natural numbers using Peano's postulates. Prerequisite: MATH 3720.

MATH 4711 Modern Algebra I (3) Some of the theories of modern algebra with emphasis on algebraic systems with one operation. Prerequisite: MATH 3720.

MATH 4741 Introduction to the Theory of Numbers (3) Congruences, quadratic residues, the reciprocity theorem, and Diophantine equations. Prerequisite: MATH 3720.

#### **Mathematics Education**

MATH 1800 Introduction to Teaching Elementary and Middle School Mathematics (2) A six-week course focusing on the concepts and methods of teaching mathematics in both elementary and middle school. Prerequisite: MATH 1620.

MATH 1850 Orientation Seminar (0.5) Five 90-minute seminars will acquaint students majoring in secondary mathematics education with courses, portfolio assessment, interview process, standardized tests and professional organizations. Only offered Fall semester.

MATH 2801 Concepts and Methods in Elementary School Mathematics (3) A nine-week course focusing on the concepts and methods of teaching mathematics in grades K-5. Prerequisite: MATH 1800.

MATH 2802 Concepts and Methods in Middle School Mathematics (3) A nine-week course focusing on the concepts and methods of teaching mathematics in grades 5-9. Prerequisite: MATH 1800.

MATH 3812 Mathematics in the Integrated Middle School Curriculum (3) An emphasis on integrating mathematics with other subject areas at the middle school level. A focus on relationships between mathematics and other subject areas together with investigation of relevant applications of mathematics outside the classroom. Only offered Fall semester. Prerequisites: MATH 1620 and completion of 9 semester hours in minor teaching field.

MATH 3840 Strategies in Teaching Middle School Mathematics (3) An investigation of techniques, problems, and issues involved in the teaching of middle school mathematics. Involves both lecture and field experience. Not applicable to major requirements for secondary majors. Prerequisite: MATH 2802.

MATH 3850 Strategies in Teaching Secondary Mathematics (3) An investigation of instructional strategies, problems and issues relevant to the teaching of secondary school mathematics. Only offered Fall semester. Prerequisites: MATH 1152, MATH 2221 and MATH 2410.

MATH 3890 Concepts and Methods of Teaching for Special Education (3) A survey of concepts and methods for teaching mathematics grades K-12 with particular attention to needs of special education inclusion students. Prerequisite: MATH 1620.

MATH 4820 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide

### 158 Mathematics and Computer Science

the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with MATH 4870 during the Professional Semester. \*Not available for graduate credit.

MATH 4821 Elements of Algebra (3) Basic concepts of algebra adapted to the needs of elementary teachers. May be taken for graduate credit by elementary teachers only. Only offered Fall semester. Prerequisite: MATH 2802.

MATH 4822 Elements of Geometry (3) Concepts and relationships of geometry adapted to the needs of elementary/middle school teachers. Available for graduate credit to elementary teachers only. Prerequisite: MATH 2802.

MATH 4823 Introduction to Infinite Processes (5)
Transition from the concepts of elementary analysis to
the infinite processes which form the foundation for the
calculus. Open only to elementary and middle school/junior
high education majors in the B.S. in Ed. and Master of
Science in Education degrees. Only offered Fall semester.
Prerequisites: MATH 4821 and MATH 4822.

MATH 4851 Probability and Statistics for Middle/High School Mathematics (3) A course focusing on the concepts and methods of teaching probability and statistics in the middle and high school mathematics program. Not available for graduate credit for M.S. Mathematics. Prerequisites: MATH 4821and MATH 4822 or MATH 1151. MATH 4870 Methods of Teaching Mathematics\* (2) Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with MATH 4820 during the Professional Semester. \*Not available for graduate credit.

MATH 4871 Algebraic Concepts for Teachers (3)

The properties and language of sets, functions, groups, rings, integral domains, and fields. Recommended for middle school/junior high school teachers. Will not satisfy requirements on undergraduate programs where MATH 3720 is a requisite. Prerequisite: MATH 4821 or equivalent course in college algebra.

MATH 4890 Mathematics for Special Education (2) Individual and small group investigation of concepts and procedures appropriate for instruction of mathematics to all special needs children. Prerequisite: EDSP 2100; and MATH 2801 or MATH 2802 or MATH 3890.

#### **Research and Special Problems**

MATH 4910 Special Problems in Mathematics (1-3) Individual reading and research leading to an acceptable paper on some topic not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisite: mathematics major or MATH 3720 or consent.

MATH 4912 Internship in Mathematical Sciences (3-8) Opportunity for students to gain knowledge in areas of mathematical science, both theoretical and applied, that would not normally be included as a part of the department's curriculum. Internship contract must be completed prior to beginning work/learning experience. May be repeated for a maximum of 16 semester hours. A maximum of 8 semester hours may be applied to any one degree. Prerequisite: consent of department Internship Committee and if taken for graduate credit, approval of graduate adviser.

#### **Integrative Studies Capstone**

ICAP 4233 The Scientific, Historical, and Sociological Impact of Mathematics\* (3) Provides an opportunity to experience and understand the importance of mathematics

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in human development. Prerequisite: 15 semester hours of college mathematics. \*Not available for graduate credit. ICAP 4245 Actuarial Science Capstone Experience\* (3) Integration of actuarial science topics and skills with topics from various other disciplines, including actuarial ethics, social roles, and the Code of Professional Conduct. Prerequisite: MATH 4520. \*Not available for graduate credit.

# **COMPUTER SCIENCE**

In the Department of Mathematics and Computer Science, the second digit in a course number with a CS prefix stands for the following: 0-Research and Special Problems, 1-Programming Languages, 2-Architecture, 3-Algorithms and Data Structures, 4-Numerical and Symbolic Computation, 5-Operating Systems, 6-Database and Information Retrieval, 7-Artificial Intelligence and Robotics, 8-Human-Computer Communication, 9-Software Engineering and Professional Issues.

#### **COMPUTER SCIENCE AND MATHEMATICS Functional Major, B.S. Degree** (43000448)

A graduate with a Bachelor of Science degree in Computer Science and Mathematics will use the knowledge and skills obtained in the program to:

- Interpret and utilize precise mathematical language involving definitions, statements, and proofs.
- Examine, describe, and represent functions of various types using analysis techniques.
- Solve a variety of mathematics problems and applications using analytic, numeric, and graphing techniques.
- Apply a variety of mathematical models in the solution of problems and applications.
- Think logically, develop algorithms, implement the algorithms in an appropriate computer language, and solve problems with the
- Value mathematics and computer science for their diverse and related contributions to mathematically based disciplines.
- Establish a career in mathematics or computer science and prepare for entry-level positions in business, industry, government, or public
- Prepare for graduate study in mathematics, computer science, or related fields.
- Stay abreast of advancements in the area of computer science.

| FUNCTIO | ONAL MA      | JOR REQUIREMENTS                            |              |            | Sem. Hours<br>63-64        |
|---------|--------------|---|--------------|------------|----------------------------|
| CS      | 1100         | Intro. to Computing I3                      | MATH         | 2410       | Discrete Mathematics3      |
| CS      | 1110         | Intro. to Computing II3                     | MATH         | 3710       | Linear Algebra3            |
| CS      | 3100         | Programming Languages3                      | Elective     | s from the | e following or as approved |
| CS      | 2200         | Intro. to Computer Systems                  | by depa      | rtment     | 8-9                        |
|         |              | & Organization3                             | CS           | 3110       | Object-Oriented Prog2      |
| CS      | 2300         | Data Structures3                            | CS           | 4300       | Analysis of Algorithms3    |
| CS      | 3310         | Introduction to Combinatorics3              | CS           | 4310       | Theory of Computation3     |
| CS      | 4400         | Numerical Analysis I3                       | CS           | 4700       | Artificial Intelligence3   |
| CS      | 4410         | Operations Research3                        | CS           | 3800       | Math. Computer Graphics3   |
| CS      | 4500         | Operating Systems3                          | MATH         | 3151       | Differential Equations3    |
| CS      | 4600         | Database Theory & Applications3             | MATH         | 3160       | Advanced Applied Calculus3 |
| CS      | 4900         | Compiler Construction3                      | MATH         | 4180       | Advanced Calculus3         |
| MATH    | 1151         | Calculus & Analytic Geometry I5             | MATH         | 4312       | Probability Models3        |
| MATH    | 1152         | Calculus & Analytic Geometry II5            | MATH         | 4450       | Intro. to Graph Theory3    |
| MATH    | 2153         | Calculus & Analytic Geometry III3           | MATH         | 3720       | Algebraic Structures2      |
| MATH    | 3311         | Introduction to Math. Statistics3           |              |            |                            |
| MINOR N | NOT REQ      | UIRED                                       |              |            |                            |
| GENERA  | AL EDUCA     | ATION REQUIREMENTS (page 49)48 s.h. (In the | functional i | major, MA  | ATH 1151 is                |
| allowed | to fulfill 3 | s.h. of Div. I C)                           |              |            | 45                         |
| ICAP    | 4225 Div.    | IV B (required)                             |              |            |                            |
| FREE EL | ECTIVES      | 3   |              |            | 15-16                      |
| MINIMUN | M TOTAL      |   |              |            | 124                        |

### **COMPUTER SCIENCE AND MATHEMATICS Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000449)

| MINOR F  | REQUIRE    | MENTS                            | ` |           |           |                            | Sem. Hours<br>21-22 |
|----------|------------|----------------------------------|---|-----------|-----------|----------------------------|---------------------|
| CS       | 1100       | Intro. to Computing I3           | E | Electives | (continue | ed)                        |                     |
| CS       | 1110       | Intro. to Computing II3          |   | CS        | 2200      | Intro. to Computer Systems |                     |
| MATH     | 1151       | Calculus & Analytic Geometry I5  | 8 | & Organi  | zation    | 3                          |                     |
| MATH     | 1152       | Calculus & Analytic Geometry II5 |   | CS        | 2300      | Data Structures            | 3                   |
| Elective | s from the | following or as                  |   | CS        | 4410      | Operations Research        | 3                   |
| approve  | ed by depa | rtment 5-6                       |   | CS        | 3800      | Math. Computer Graphics    | 3                   |
| CS       | 3100       | Programming Languages3           |   | MATH      | 3311      | Intro. to Math. Statistics | 3                   |
| CS       | 3110       | Object-Oriented Programming2     |   |           |           |                            |                     |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, MATH 1151 is allowed to fulfill 3 s.h. of Div. I C)

### **Research and Special Problems**

CS 4000 Special Problems in Computer Science (1-3) Individual reading and research on some topics not included in the regular offerings of the department. May be repeated

for a maximum of 3 semester hours. Prerequisite: CS 2300

CS 4020 Internship in Computer Science (3-8) Opportunity for students to gain knowledge in areas of computer science, both theoretical and applied, that would not normally be

included as part of the department's curriculum. Internship contract must be completed prior to beginning work/learning experience. *May be repeated for a maximum of 16 semester hours*. A maximum of 8 semester hours may be applied to any one degree. Prerequisites: consent of department Internship Committee and if taken for graduate credit, approval of graduate adviser.

#### **Programming Languages**

CS 1100 Introduction to Computing (3) Emphasis on techniques of problem analysis, structured algorithm and program development, and program design. Prerequisite: three units of high school mathematics or MATH 1101.
CS 1110 Introduction to Computing II (3) A continuation of CS 1100. Topics include functions, arrays, structures, and pointers. Prerequisite: CS 1100.

**CS 3100 Programming Languages (3)** An overview of the main features of major programming languages. Various programming languages will be compared in their handling of variables, types, control structures, and input-output. Only offered Fall semester. Prerequisite: CS 2300.

**CS 3110 Object-Oriented Programming (2)** An introduction to object-oriented programming. Topics include objects, classes, inheritance, polymorphism, dynamic binding, and system design from an object-oriented viewpoint. Prerequisite: CS 1110 or CIS 3655.

#### **Architecture**

CS 2200 Introduction to Computer Systems and Organization (3) An introduction to the characteristics of computer systems at that digital logic and organizational levels. Prerequisite: CS 1110.

#### **Algorithms and Data Structures**

CS 2300 Data Structures (3) An introduction to data representations and information structures including a variety of non-numerical algorithms and their applications. Linear lists, arrays, trees, multilinked structures and dynamic storage allocation are investigated. Prerequisite: CS 1110 or CIS 3655.

**CS 3310 Introduction to Combinatorics (3)** Basic concepts of graphs and trees, principles of enumeration, mathematical induction, integer functions, advanced binomial coefficients, inclusion-exclusion principle, recurrence relations, and generating functions. Prerequisite: MATH 2410.

CS 4300 Analysis of Algorithms (3) Techniques needed to analyze algorithms. The application of these techniques to topics such as sorting, graph algorithms, fast Fourier transforms, dynamic programming, and NP-completeness. Prerequisite: MATH 2153.

**CS 4310 Theory of Computation (3)** Includes finite-state automata, pushdown automata, and Turing machines. The topics of regular expressions, context-free languages, the halting problem, Post's correspondence problem, P, NP, NP-completeness, and some NP-complete problems will be discussed. Prerequisite: CS 3310.

### **Numerical and Symbolic Computation**

CS 4400 Numerical Analysis I (3) Finite difference interpolation, numerical differentiation and integration, numerical solution of nonlinear equations, numerical solution of ordinary differential equations. Computational techniques stressed and extensive quantity of problems to be solved on a digital computer. Only offered Fall semester. Prerequisites: CS 1110 and MATH 2153.

**CS 4410 Operations Research (3)** Systems and models, including Random Number Process, (Monte Carlo Process) and Queuing Concepts. Combining these concepts into model building techniques. Prerequisites: CS 1110 and MATH 3311, or CIS 3655 and FIN 2801.

### **Operating Systems**

CS 4500 Operating Systems (3) Operating systems including process management, storage management, processor management, and performance. The topics of asynchronous concurrent processes, concurrent programming, deadlock, real and virtual storage, processor scheduling, multiprocessing, queuing theory, Markov processes, and case studies will be discussed. Prerequisites: CS 2200 and CS 2300.

#### **Database and Information Retrieval**

CS 4600 Database Theory and Applications (3) An introduction to database theory and design, including relational algebra/calculus, normalization of data, and query optimization. Security, integrity, and concurrent operation issues will be presented. Distributed database systems will also be introduced. Significant application-oriented projects using SQL will be required. Only offered Fall semester. Prerequisites: CS 2300 and CS 3310.

#### **Artificial Intelligence and Robotics**

CS 4700 Artificial Intelligence (3) An introduction to Artificial Intelligence (AI) and AI languages such as LISP and PROLOG. Specific topics will include knowledge representation, predicate calculus, resolution, pruning, heuristic search techniques, probabilistic reasoning, and expert systems. Only offered Fall semester. Prerequisites: CS 2300 and CS 3310.

### **Human-Computer Communication**

**CS 3800 Mathematical Computer Graphics (3)** An introductory course to integrate mathematics, numerical methods, and computers to provide computer generated graphics. Prerequisites: CS 2300 and MATH 1152.

#### Software Engineering and Professional Issues

CS 4900 Compiler Construction (3) Includes finite-state machines, top-down and bottom-up parsing, and syntax-directed translation. The topics of regular grammars, lexical analysis, LL(k) grammars, LR(k) grammars, syntax-directed translation schemes, and simple transducers will be discussed. Prerequisite: CS 2300.

# **Integrative Studies Capstone**

ICAP 4225 Computer Science Capstone Experience\* (3) Integration of computer science topics from other disciplines, including studies in computer ethics, the social impact of computing, and the psychological issues of computer/human interfaces. Prerequisite: Senior standing in Computer Science. \*Not available for graduate credit.

# **Modern Languages**

In the Department of Modern Languages, the second digit in the course number stands for the following: 0--General, 2--French, 3--German, 6--Spanish, 7--Chinese,

### **Department of Modern Languages Statement of Policy**

A placement examination determines the level of a student's initial enrollment in elementary and intermediate language courses. If a student enrolls in FREN 1202 or GER 1302 or SPAN 1602 and completes the class with a grade of "C" or higher, the student may be eligible for validated credit for FREN 1201 or GER 1301 or SPAN 1601. If a student enrolls in FREN 2201 or GER 1303 or SPAN 2601 or a higher level class and completes the class with a grade of "C" or higher, the student may be eligible for validated credit for FREN 1201 and FREN 1202 or GER 1301 and GER 1302 or SPAN 1601 and SPAN 1602. Other restrictions may apply. For further information contact the Chair of the Department of Modern Languages.

#### Requirements for Certification in Modern Languages

For certification as a modern language teacher in Missouri, grades K-12, 30 semester hours are required in the language taught, or 27 hours in the language taught plus two or more high school units in that language.

Certification for grades K-9 only requires 21 semester hours in the language taught, or 18 semester hours in the language taught plus two or more high school units in that language.

# FRENCH Major, B.A. Degree

(42 000318)

The graduate with a Bachelor of Arts in French will use the knowledge and skills in the program to:

- Use French orally and in writing in a variety of informal and formal situations
- Comprehend a variety of authentic materials in French for personal and/or professional use
- Demonstrate knowledge of linguistic elements, pronunciation and intonation, grammar, forms of discourse, and vocabulary to satisfy a variety of everyday tasks
- Engage in socially appropriate forms of communication
- Demonstrate an understanding of the target cultures in their geographical and historical contexts, including perspectives, practices, and products.

|  |                                       |                    | Sem. Hours                    |  |  |  |
|--|---------------------------------------|--------------------|-------------------------------|--|--|--|
| MAJOR REQUIR   | EMENTS                                |                    | 42                            |  |  |  |
| FREN 1201  | Elementary French I3                  | FREN 4223          | Advanced French Composition3  |  |  |  |
| FREN 1202  | Elementary French II3                 | FREN 4243          | Advanced French Conversation3 |  |  |  |
| FREN 2201  | Intermediate French I3                | FREN 4263          | French Phonetics3             |  |  |  |
| FREN 2202  | Intermediate French II3               | FREN 4265          | The Contemporary              |  |  |  |
| FREN 3223  | French Composition3                   | French-Speaking    | World3                        |  |  |  |
| FREN 3243  | French Conversation3                  |                    | nch at 3000 or 4000 level     |  |  |  |
| FREN 3261  | French Civilization & Lit. I3         | (Students must t   | take 12 hours at 3000 or 4000 |  |  |  |
| FREN 3262  | French Civilization & Lit. II3        | level in their maj | or)6                          |  |  |  |
| MINOR REQUIRE  | EMENTS                                |                    | 18-25                         |  |  |  |
| GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. (The major fulfills 3 s.h. of Div. II C) |                                       |                    |                               |  |  |  |
| MODERN LANGU   | JAGE REQUIREMENT (fulfilled by major) | -                  |                               |  |  |  |
| FREE ELECTIVE  | S                                     |                    | 12-19                         |  |  |  |
| MINIMUM TOTAL  |                                       |                    | 124                           |  |  |  |

# FRENCH Major, B.S. Degree

(43 000319)

The graduate with a Bachelor of Science in French will use the knowledge and skills in the program to:

- Use French orally and in writing in a variety of informal and formal situations
- Comprehend a variety of authentic materials in French for personal and/or professional use
- Demonstrate knowledge of linguistic elements, pronunciation and intonation, grammar, forms of discourse, and vocabulary to satisfy a variety of everyday tasks
- Engage in socially appropriate forms of communication
- Demonstrate an understanding of the target cultures in their geographical and historical contexts, including perspectives, practices, and products.

| p                  |                                  | Sem. Hours                                   |  |  |  |  |
|--------------------|----------------------------------|--|--|--|--|--|
| MAJOR REC          | QUIREMENTS                       | 42   |  |  |  |  |
| FREN 12            | 201 Elementary French I3         | FREN 4223 Advanced French Composition3       |  |  |  |  |
| FREN 12            | 202 Elementary French II3        | FREN 4243 Advanced French Conversation3      |  |  |  |  |
| FREN 22            | 201 Intermediate French I        | FREN 4263 French Phonetics                   |  |  |  |  |
| FREN 22            | 202 Intermediate French II3      | FREN 4265 The Contemporary                   |  |  |  |  |
| FREN 32            | French Composition3              | French-Speaking World3                       |  |  |  |  |
| FREN 32            | French Conversation3             | Electives in French at 3000 or 4000 level    |  |  |  |  |
| FREN 32            | 261 French Civilization & Lit. I | (Students must take 12 hours at 3000 or 4000 |  |  |  |  |
| FREN 32            | French Civilization & Lit. II    | level in their major)6                       |  |  |  |  |
| MINOR REQUIREMENTS |                                  |  |  |  |  |  |
|                    |                                  | . (The major fulfills 3 s.h. of Div. II C)   |  |  |  |  |
|                    |                                  | 12-19  |  |  |  |  |
|                    |                                  | 124  |  |  |  |  |

# FRENCH Major, B.S. in Ed. Degree

(Certification to teach French in grades K-12) (41 000334)

The graduate with a Bachelor of Science in Education in French will use the knowledge and skills in the program to:

- Use French orally and in writing in a variety of informal and formal situations
- Comprehend a variety of authentic materials in French for personal and/or professional use
- Demonstrate knowledge of linguistic elements, pronunciation and intonation, grammar, forms of discourse, and vocabulary to satisfy a variety of everyday tasks
- Engage in socially appropriate forms of communication
- Demonstrate an understanding of the target cultures in their geographical and historical contexts, including perspectives, practices, and products.
- Teach essential elements of French at elementary and secondary school levels.

| - ICacii  | Coociilai  | siements of French at elementary and se     | condary sci | 1001 10 00  |             |                                    | Sem. Hours |
|---|------------|---|-------------|-------------|-------------|------------------------------------|------------|
| MAJOR   | REQUIRE    | MENTS                                       |             |             |             |                                    | 42         |
| FREN  | 1201       | Elementary French I                         | .3          | FREN        | 4223        | Advanced French Composition        | 3          |
| FREN  | 1202       | Elementary French II                        | .3          | FREN        | 4243        | Advanced French Conversation       | n3         |
| FREN  | 2201       | Intermediate French I                       | .3          | FREN        | 4263        | French Phonetics                   | 3          |
| FREN  | 2202       | Intermediate French II                      | .3          | FREN        | 4265        | The Contemporary                   |            |
| FREN  | 3223       | French Composition                          | .3          |             |             | French-Speaking World              | 3          |
| FREN  | 3243       | French Conversation                         | .3          | Elective    | s in French | h at 3000 or 4000 level            |            |
| FREN  | 3261       | French Civilization & Lit. I                | .3          | (Studen     | ts must tal | ke 12 hours at 3000 or 4000        |            |
| FREN  | 3262       | French Civilization & Lit. II               | .3          | level in    | their major | ·)                                 | 6          |
| MINOR F   | REQUIRE    | MENTS                                       |             |             |             |                                    | 18-25      |
| GENERA  | AL EDUCA   | TION REQUIREMENTS (page 49)48 s             | h. (The maj | or fulfills | 3 s.h. of D | iv. II C; in the professional      |            |
| educati   | on require | ments, ICAP 4468 fulfills 3 s.h. of Div. IV | B)          |             |             |                                    | 42         |
| Second  | ary Educa  | tion students must have one course in a     | physical or | earth sci   | ence and c  | one in a biological science in Div | . II A.    |
| HIST  | 1350       | Div. II B or                                |             | POLS        | 1510        | Div. II B (required)               | 3          |
| HIST  | 1351       | Div. II B (required)                        | .3          | PSY         | 4230        | Psy. of Adolescence                |            |
| Secondary Education students will be allowed to substitute PSY 4230 to fulfill 3 s.h. in Div. II B. |            |   |             |             |             |                                    |            |
| PROFES  | SÍONAL E   | DUCATION REQUIREMENTS (see pag              | e 205)      |             |             |                                    | 28         |
| MINIMUN   |            |   |             |             |             |                                    |            |

# FRENCH Minor for a Bachelor's Degree

(Certification to teach French in grades K-9 is available only on a B.S. in Ed. Degree with an elementary education functional major 1-6 or middle school-junior high major.) (200013)

|          |         |                        | (=000.0) |          |           |                                    |            |
|----------|---------|------------------------|----------|----------|-----------|------------------------------------|------------|
|          |         |                        |          |          |           |                                    | Sem. Hours |
| MINOR RE | EQUIREN | MENTS                  |          |          |           |                                    | 27         |
| FREN 1   | 1201    | Elementary French I    | .3       | FREN     | 4265      | The Contemporary                   |            |
| FREN 1   | 1202    | Elementary French II   | .3       |          |           | French-Speaking World              | 3          |
| FREN 2   | 2201    | Intermediate French I  | .3       | FREN     | 3261      | French Civilization & Lit. I, 3 or | •          |
| FREN 2   | 2202    | Intermediate French II | .3       | FREN     | 3262      | French Civilization & Lit. II, 3.  | 3          |
| FREN 3   | 3223    | French Composition     | .3       | Elective | in French | at 3000 or 4000 level              | 3          |
| FREN 3   | 3243    | French Conversation    | .3       |          |           |                                    |            |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, 3 s.h. of Div. II C are fulfilled)

# **GERMAN Major, B.A. Degree**

(42 000321)

This program has been placed in abeyance. See the Department Chair for more information.

### **GERMAN Major, B.S. Degree**

(43 000322)

This program has been placed in abeyance. See the Department Chair for more information.

# GERMAN Major, B.S. in Ed. Degree

(Certification to teach German in grades K-12)  $(41\ 000335)$ 

This program has been placed in abeyance. See the Department Chair for more information.

### GERMAN Minor, B.S. in Ed. Degree

(Certification to teach German in grades K-9 is available only on a B.S. in Ed. Degree with an elementary education functional major 1-6 or middle school-junior high major.) (000333)

|           |        | · ·                         | () |       |         |      |          | Sem. Hours |
|-----------|--------|-----------------------------|----|-------|---------|------|----------|------------|
| MINOR REC | QUIREN | MENTS                       |    |       |         |      |          |            |
| GER 13    |        | Intermediate German3        |    |       |         |      |          |            |
| GER 13    | 304    | German Readings3            | E  | ectiv | es in 2 | 2000 | level or |            |
| GER 23    | 301    | Advanced German Readings3   | hi | gher  | Germ    | an c | ourses   | 6          |
| GER 23    | 323    | German Conversation & Comp3 |    | -     |         |      |          |            |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, 3 s.h. of Div. II C are fulfilled)

# **GERMAN Minor for a Bachelor's Degree**

(Except for a B.S. in Ed. Degree) (200014)

| MINOR | REQUIRE | MENTS                       | ,   |      | Sem. Hours21              |
|-------|---------|-----------------------------|-----|------|---------------------------|
| GER   | 1303    | Intermediate German3        | GER | 2362 | German Civilization3      |
| GER   | 1304    | German Readings3            | GER | 3371 | Survey of German Lit. I3  |
| GER   | 2301    | Advanced German Readings3   | GER | 3372 | Survey of German Lit. II3 |
| GER   | 2323    | German Conversation & Comp3 |     |      |                           |

# SPANISH Major, B.A. Degree

(42 000338)

The graduate with a Bachelor of Arts in Spanish will use the knowledge and skills in the program to:

- Express himself or herself orally and in writing in a variety of informal and formal situations in Spanish
- Comprehend a variety of authentic materials in Spanish for personal and/or professional use
- Demonstrate knowledge of linguistic elements, pronunciation and intonation, grammar, forms of discourse, and vocabulary to satisfy a variety of everyday tasks
- Engage in socially appropriate forms of communication
- Demonstrate an understanding of the target cultures in their geographical and historical contexts, including perspectives, practices, and products.

| MAIOR   | REQUIRE  | MENTS                                    |                  |            |                              | Sem. Hours |
|---------|----------|--|------------------|------------|------------------------------|------------|
| SPAN    | 1601     | Elementary Spanish I3                    | Elective         | es from th | e following                  | 9          |
| SPAN    | 1602     | Elementary Spanish II3                   | SPAN             | 4650       | Introduction to Spanish for  |            |
| SPAN    | 2601     | Intermediate Spanish I3                  |                  |            | Business                     | 3          |
| SPAN    | 2602     | Intermediate Spanish II3                 | SPAN             | 4665       | Culture and Issues in the    |            |
| SPAN    | 2603     | Spanish Conversation I3                  |                  |            | Contemporary Spanish-        |            |
| SPAN    | 3603     | Spanish Conversation II3                 |                  |            | Speaking World               | 3          |
| SPAN    | 3623     | Spanish Composition3                     | SPAN             | 4671       | Cinema of the Spanish-       |            |
| SPAN    | 3661     | Spanish Civilization & Literature3       |                  |            | Speaking World               | 3          |
| SPAN    | 3662     | Spanish American Civilization &          | SPAN             | 4680       | Twentieth Century Literature |            |
|         |          | Literature3                              |                  |            | of the Spanish-Speaking      |            |
| SPAN    | 4603     | Advanced Readings & Oral                 |                  |            | World                        | 3          |
|         |          | Expression3                              |                  |            |                              |            |
| SPAN    | 4623     | Advanced Spanish Composition3            |                  |            |                              |            |
| MINOR I | REQUIRE  | MENTS                                    |                  |            |                              | 18-25      |
|         |          | ATION REQUIREMENTS (page 49)48 s.h. (The | e major fulfills | 3 s.h. of  | Div. II C)                   | 45         |
|         |          | AGE REQUIREMENT (fulfilled by major)     |                  |            |                              |            |
|         | LECTIVES |  |                  |            |                              | 12-19      |
| MINIMUI | M TOTAL  |  |                  |            |                              | 124        |

# SPANISH Major, B.S. Degree

(43 000339)

The graduate with a Bachelor of Arts in Spanish will use the knowledge and skills in the program to:

- Express himself or herself orally and in writing in a variety of informal and formal situations in Spanish
- Comprehend a variety of authentic materials in Spanish for personal and/or professional use
- Demonstrate knowledge of linguistic elements, pronunciation and intonation, grammar, forms of discourse, and vocabulary to satisfy a variety of everyday tasks
- Engage in socially appropriate forms of communication
- Demonstrate an understanding of the target cultures in their geographical and historical contexts, including perspectives, practices, and products.

(Program on next page)

| MAJOR   | DEOLUDE  | MENTO                              |                     |             |                              | Sem. Hours |
|---------|----------|------------------------------------|---------------------|-------------|------------------------------|------------|
|         |          | MENTS                              |                     |             |                              | 42         |
| SPAN    | 1601     | Elementary Spanish I3              | Elective            | es from the | e following                  | 9          |
| SPAN    | 1602     | Elementary Spanish II3             | SPAN                | 4650        | Introduction to Spanish for  |            |
| SPAN    | 2601     | Intermediate Spanish I3            |                     |             | Business                     | 3          |
| SPAN    | 2602     | Intermediate Spanish II3           | SPAN                | 4665        | Culture & Issues in the      |            |
| SPAN    | 2603     | Spanish Conversation I3            |                     |             | Contemporary Spanish-        |            |
| SPAN    | 3603     | Spanish Conversation II3           |                     |             | Speaking World               | 3          |
| SPAN    | 3623     | Spanish Composition3               | SPAN                | 4671        | Cinema of the Spanish-       |            |
| SPAN    | 3661     | Spanish Civilization & Literature3 |                     |             | Speaking World               | 3          |
| SPAN    | 3662     | Spanish American Civilization &    | SPAN                | 4680        | Twentieth Century Literature |            |
|         |          | Literature3                        |                     |             | of the Spanish-Speaking      |            |
| SPAN    | 4603     | Advanced Readings & Oral           |                     |             | World                        | 3          |
|         |          | Expression3                        |                     |             |                              |            |
| SPAN    | 4623     | Adv. Spanish Composition3          |                     |             |                              |            |
| MINOR I | REQUIRE  | MENTS                              |                     |             |                              | 18-25      |
| GENERA  | AL EDUCA | TION REQUIREMENTS (page 49)48 s.h. | (The major fulfills | 3 s.h. of   | Div. II C)                   | 45         |
| FREE EI | LECTIVES |                                    |                     |             |                              | 12-19      |
| MINIMUI | M TOTAL  |                                    |                     |             |                              | 124        |

Sem Hours

# SPANISH Major, B.S. in Ed. Degree

(Certification to teach Spanish in grades K-12)

(41 000337)

The graduate with a Bachelor of Science in Education in Spanish will use the knowledge and skills in the program to:

- Express himself or herself orally and in writing in a variety of informal and formal situations in Spanish
- Comprehend a variety of authentic materials in Spanish for personal and/or professional use
- Demonstrate knowledge of linguistic elements, pronunciation and intonation, grammar, forms of discourse, and vocabulary to satisfy a variety of everyday tasks
- Engage in socially appropriate forms of communication
- Demonstrate an understanding of the target cultures in his/her geographical and historical contexts, including perspectives, practices, and products.
- Teach essential elements of Spanish at elementary and secondary school levels.

| MAJOR   | REQUIRE    | MENTS  |                 |           |                                    | Seili. Hours |
|---------|------------|--|-----------------|-----------|------------------------------------|--------------|
| SPAN    | 1601       | Elementary Spanish I3                                |                 |           | e following                        |              |
| SPAN    | 1602       | Elementary Spanish II3                               | SPAN            | 4650      | Introduction to Spanish for        |              |
| SPAN    | 2601       | Intermediate Spanish I3                              |                 |           | Business                           | 3            |
| SPAN    | 2602       | Intermediate Spanish II3                             | SPAN            | 4665      | Culture & Issues in the            |              |
| SPAN    | 2603       | Spanish Conversation I3                              |                 |           | Contemporary Spanish-              |              |
| SPAN    | 3603       | Spanish Conversation II3                             |                 |           | Speaking World                     | 3            |
| SPAN    | 3623       | Spanish Composition3                                 | SPAN            | 4671      | Cinema of the Spanish-             |              |
| SPAN    | 3661       | Spanish Civilization & Literature3                   |                 |           | Speaking World                     | 3            |
| SPAN    | 3662       | Spanish American Civilization &                      | SPAN            | 4680      | Twentieth Century Literature o     |              |
|         |            | Literature3  |                 |           | the Spanish-Speaking World         | 3            |
| SPAN    | 4603       | Advanced Readings and Oral                           |                 |           |                                    |              |
|         |            | Expression3  |                 |           |                                    |              |
| SPAN    | 4623       | Adv. Spanish Composition3                            |                 |           |                                    |              |
| MINOR   | REQUIRE    | MENTS  |                 |           |                                    | 18-25        |
| GENER   | AL EDUCA   | ATION REQUIREMENTS (page 49)48 s.h. (The r           | najor fulfills  | 3 s.h. of | Div. II C; in the professional     |              |
| educati | on require | ments, ICAP 4468 fulfills 3 s.h. of Div. IV B)       |                 |           |                                    | 42           |
| Second  | lary Educa | ation students must have one course in a physical    | or earth sci    | ence and  | one in a biological science in Div | /. II A.     |
| HIST    | 1350       | Div. II B or   | POLS            | 1510      | Div. II B (required)               | 3            |
| HIST    | 1351       | Div. II B (required)3                                | PSY             | 4230      | Psy. of Adolescence                |              |
| Second  | larv Educa | ation students will be allowed to substitute PSY 423 | 30 to fulfill 3 | s.h. in D | iv. II B.                          |              |
|         |            | EDUCATION REQUIREMENTS (see page 205)                |                 |           |                                    | 28           |
|         |            |  |                 |           |                                    |              |
|         |            |  |                 |           |                                    |              |

# SPANISH Minor for a Bachelor's Degree

(Certification to teach Spanish in grades K-9 is available only on a B.S. in Ed. Degree with an elementary education functional major 1-6 or middle school-junior high major) (200015)

|         |         |                                       | (/ |          |            |                              |            |
|---------|---------|---------------------------------------|----|----------|------------|------------------------------|------------|
|         |         |                                       |    |          |            |                              | Sem. Hours |
| MINOR I | REQUIRE | MENTS                                 |    |          |            |                              | 27         |
| SPAN    | 1601    | Elementary Spanish I                  | 3  | Elective | from the f | following                    | 3          |
| SPAN    | 1602    | Elementary Spanish II                 | 3  | SPAN     | 4603       | Advanced Readings &          |            |
| SPAN    | 2601    | Intermediate Spanish I                | 3  |          |            | Oral Expressions             | 3          |
| SPAN    | 2602    | Intermediate Spanish II               | 3  | SPAN     | 4623       | Advanced Spanish Comp        | 3          |
| SPAN    | 2603    | Spanish Conversation I                | 3  | SPAN     | 4650       | Introduction to Spanish for  |            |
| SPAN    | 3603    | Spanish Conversation II               | 3  |          |            | Business                     | 3          |
| SPAN    | 3623    | Spanish Composition                   | 3  | SPAN     | 4665       | Culture & Issues in the      |            |
| SPAN    | 3661    | Span. Civilization & Literature ,3 or |    |          |            | Contemporary Spanish-        |            |
| SPAN    | 3662    | Spanish American Civilization &       |    |          |            | Speaking World               | 3          |
|         |         | Literature, 3                         | 3  | SPAN     | 4671       | Cinema of the Spanish-       |            |
|         |         |                                       |    |          |            | Speaking World               | 3          |
|         |         |                                       |    | SPAN     | 4680       | Twentieth Century Literature | e of       |
|         |         |                                       |    |          |            | the Spanish-Speaking World   | d b        |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, 3 s.h. of Div. II C are fulfilled)

### General

ML 1040 Special Projects in Modern Languages (1-3) Small-group instruction at the introductory level. ML 2010 Foreign Studies in Language (1-6) Credit granted for study in a departmentally-approved program in a foreign country. May be repeated for a maximum of 12 semester hours.

ML 4010 Foreign Studies in Language (French) (German) (Spanish) (1-6) Credit granted for study in a CMSU approved program in a foreign country. Freshmen and sophomores permitted to enroll with consent of the Chair of the Department of Modern Languages. Available for graduate credit upon approval of student's graduate program adviser. May be repeated for a maximum of 12 semester hours. ML 4020 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teachinglearning process. Prerequisites: admission to Teacher

Education Program; should be taken concurrently with ML 4054 during the Professional Semester. \*Not available for graduate credit.

ML 4040 Special Projects in Foreign Language (1-3) Individualized and group instruction in foreign and modern languages. May be repeated for a maximum of 6 semester hours. Prerequisite: consent of department chair.

ML 4054 Methods of Teaching Foreign Languages\* (2) Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with ML 4020 during the Professional Semester. \*Not available for graduate credit.

#### French

**FREN 1201 Elementary French I (3)** Fundamental principles of French pronunciation, the building of basic vocabulary of words and expressions, studies in structure, oral work, and reading selections. Not open to native speakers or students who have had three years of high school French without the permission of the department chair.

**FREN 1202 Elementary French II (3)** A continuation of French I. Increased attention to grammar. Not open to native speakers or students who have had four years of high school French without the permission of the department chair. Prerequisite: FREN 1201 or equivalent.

**FREN 2201 Intermediate French I (3)** Reading, conversation, vocabulary, and idiom drill. Prerequisite FREN 1202 or equivalent.

FREN 2202 Intermediate French II (3) Continuing development of the ability to use the language on the intermediate level. Prerequisite: FREN 2201 or equivalent. FREN 2290 Special Topics in French (1-3) Individual or group work by selected students in carefully chosen fields for intermediate level study. May be repeated for a maximum of 6 semester hours. Prerequisites: 6 semester hours of French and consent of the department chair.

**FREN 3223 French Composition (3)** Review of grammar. Intensive practice in composition with increased attention to stylistics. Prerequisite: FREN 2202 or equivalent.

**FREN 3243 French Conversation (3)** Provides intensive drill in conversational language using culture-based materials. Prerequisite: FREN 2201.

**FREN 3261 French Civilization and Literature I (3)** From the origins to the eighteenth century. Prerequisite: FREN 2202 or equivalent.

FREN 3262 French Civilization and Literature II (3) From the eighteenth century to 1945. Prerequisites: FREN 2202 or equivalent

**FREN 4223 Advanced French Composition\* (3)** Oral and written composition, review of more difficult grammatical construction and idioms. Prerequisite: FREN 3223 or equivalent. \*Not available for graduate credit.

**FREN 4243 Advanced French Conversation\* (3)**Conversational drill in everyday idiomatic French. Reading and discussion of topics chosen from current newspapers and magazines. Prerequisite: FREN 3243 or equivalent. \*Not available for graduate credit.

**FREN 4263 French Phonetics\* (3)** The sound system of the French language: analysis of problems encountered by a native English speaker in learning spoken French. Prerequisite: FREN 3243 or equivalent. \*Not available for graduate credit.

**FREN 4264 Commercial French\* (3)** French commercial terminology, stressing the difference between French and American forms and practices. Prerequisite: FREN 3223 or equivalent. \*Not available for graduate credit.

FREN 4265 The Contemporary French-Speaking World\* (3) An overview of contemporary France and other French-

speaking nations. Prerequisites: FREN 3261 or FREN 3262, or equivalent. \*Not available for graduate credit.

FREN 4286 French Literature of the Nineteenth Century
\* (3) Romanticism, realism, and naturalism. Analysis of texts
and literary theories. Prerequisite: 6 semester hours of 3000
level French courses. \*Not available for graduate credit.
FREN 4287 French Literature of the Twentieth Century\*
(3) Symbolism, surrealism, and existentialism in prose, poetry

and theatre. Prerequisite: 6 semester hours of 3000 level French courses. \*Not available for graduate credit. FREN 4288 French Translation\* (3) Commercial and technical translation from French into English and English

**FREN 4288 French Translation\* (3)** Commercial and technical translation from French into English and English into French. Prerequisite: 6 semester hours of 3000 level French courses. \*Not available for graduate credit.

FREN 4289 Cinema of the French-Speaking World\*
(3) A survey of films from the French-speaking world with emphasis on the cultural contexts in which the films are produced and viewed. Prerequisites: 6 semester hours of 3000 level French courses. \*Not available for graduate credit. FREN 4290 Special Topics in French\* (1-3) Individual or group work by selected students in carefully chosen fields for advanced study. May be repeated for a maximum of 6 semester hours. Prerequisite: 18 semester hours of French and consent of department chair. \*Not available for graduate credit.

#### German

**GER 1301 Elementary German I (3)** Fundamental principles of German pronunciation, building a basic vocabulary of German words and idiomatic expressions, oral work, and reading simple selections. Not open to native speakers or students who have had three years of high school German without the permission of the department chair.

**GER 1302 Elementary German II (3)** A continuation of German I. Increased attention to grammar. Not open to native speakers or students who have had four years of high school German without the permission of the department chair. Prerequisite: GER 1301 or equivalent.

**GER 1303 Intermediate German (3)** Reading, conversation, vocabulary, and idiom drill. Prerequisite: acceptable proficiency as demonstrated by adequate high school course work in German or by departmental approval.

**GER 1304 German Readings (3)** Continuing development of the ability to use the language on the intermediate level. Prerequisite: GER 1303 or equivalent.

**GER 2301 Advanced German Readings (3)** Selected novels, poems, and plays are read and discussed. Prerequisite: GER 1304 or equivalent.

**GER 2323 German Conversation and Composition (3)**Oral and written composition, dictation, idioms, and reviews of difficult construction and grammatical forms. Prerequisite: 9 semester hours of German.

**GER 2362 German Civilization (3)** Germany's social, cultural, and political history from its Germanic beginnings through World War II to the present. Prerequisite: GER 1304.

**GER 2390 Special Topics in German (1-3)** Individual or group work by selected students in carefully chosen fields for intermediate level study. May be repeated for a maximum of 6 semester hours. Prerequisites: 6 semester hours of German and consent of the department chair.

**GER 3371 Survey of German Literature I (3)** German literature and literary history from the Old High German literature to Schiller's Don Carlos (1787). Prerequisite: GER 2301

**GER 3372 Survey of German Literature II (3)** German literature and literary history from Goethe and Schiller's classical period (1790) to modern writers, including modern East German literature. Prerequisite: GER 2301.

GER 3381 The Classic Movement (3) Poems of Goethe, Schiller and other selected authors. Readings and discussion. Prerequisites: GER 3371 and GER 3372. GER 3383 The Romantic Period (3) Philosophers, the novel and the drama. Reading of selected works. Prerequisites: GER 3371 and GER 3372.

GER 3385 Modern German Literature (3) Readings and discussions of selected works of Mann, Hauptmann, Hesse, Kafka, Remarque, Zweig. Prerequisites: GER 3371 and GER 3372.

GER 4390 Special Topics in German\* (1-3) Individual or group work by selected students in carefully chosen fields for advanced study. May be repeated for a maximum of 6 semester hours. Prerequisite: 18 semester hours of German and consent of department chair. \*Not available for graduate credit.

#### Spanish

SPAN 1601 Elementary Spanish I (3) Fundamentals of Spanish pronunciation, the building of basic vocabulary and patterns, oral work, studies in structure, and reading selections. Not open to native speakers or students who have had three years of high school Spanish without the permission of the department chair.

SPAN 1602 Elementary Spanish II (3) A continuation of Spanish I, with increased attention to grammar. Not open to native speakers or students who have had four years of high school Spanish without the permission of the department chair. Prerequisite: SPAN 1601 or equivalent.

SPAN 2601 Intermediate Spanish I (3) Development of the ability to use the language by oral-aural laboratory drills and readings. Prerequisite: SPAN 1602 or equivalent.

SPAN 2602 Intermediate Spanish II (3) Continuing development of the ability to use the language on the intermediate level, with more advanced grammar, laboratory work and readings. Prerequisite: SPAN 2601 or equivalent. SPAN 2603 Spanish Conversation I (3) Conversational Spanish using culture-based materials emphasizing the four skills: speaking, listening, reading, and writing. Prerequisites: SPAN 2601 or equivalent.

SPAN 2690 Special Topics in Spanish (1-3) Individual or group work by selected students in carefully chosen fields for intermediate level study. May be repeated for a maximum of 6 semester hours. Prerequisites: 6 semester hours of Spanish and consent of the department chair.

SPAN 3603 Spanish Conversation II (3) Oral practice in everyday Spanish, discussion, idiomatic usage, listening comprehension, speaking. Prerequisite: SPAN 2603.

SPAN 3623 Spanish Composition (3) Review of grammar, oral-aural training, and special study of the subjunctive mood. Prerequisite: SPAN 2602 or equivalent.

SPAN 3661 Spanish Civilization and Literature (3) The social, cultural, literary, and political history of Spain. Prerequisite: SPAN 2602 or equivalent.

SPAN 3662 Spanish American Civilization and Literature (3) The social, cultural, literary, and political history of Spanish America. Prerequisite: SPAN 2602 or equivalent. SPAN 4603 Advanced Readings and Oral Expression\* (3) Emphasis on advanced readings and oral-aural practice in Spanish. Prerequisite: SPAN 3603. \*Not available for graduate credit.

SPAN 4623 Advanced Spanish Composition\* (3) Oral and written composition; review of more difficult grammatical constructions and idioms. Prerequisite: SPAN 3623 or equivalent. \*Not available for graduate credit.

SPAN 4650 Introduction to Spanish for Business\* (3) Enhances linguistic and cultural knowledge of Spanish for business and will be conducted primarily in Spanish.

Prerequisites: 6 semester hours of 3000 level Spanish courses. \*Not available for graduate credit.

SPAN 4665 Culture and Issues in the Contemporary Spanish-Speaking World\* (3) An exploration of contemporary political, economic and societal issues affecting Spanish-speaking cultures with emphasis on further developing language skills through discussions and written assignments. Prerequisite: SPAN 3661 or SPAN 3662. \*Not available for graduate credit.

SPAN 4671 Cinema of the Spanish-Speaking World\* (3) A survey of Latin American, Spanish and Latino films with emphasis on the cultural contexts in which the films are produced and viewed. Prerequisite: 6 semester hours of 3000 level Spanish courses. \*Not available for graduate

SPAN 4680 Twentieth Century Literature of the Spanish-**Speaking World\* (3)** Literary texts of the 20<sup>th</sup> century from Spain and Spanish America with emphasis on developing language skills through discussions and written assignments. Prerequisite: 6 semester hours of 3000 level Spanish courses. \*Not available for graduate credit.

SPAN 4690 Special Topics in Spanish\* (1-3) Individual or group work by selected students in carefully chosen fields for advanced study. May be repeated for a maximum of 6 semester hours. Prerequisite: 18 semester hours of Spanish and consent of department chair. \*Not available for graduate credit.

#### Chinese

CHIN 1701 Elementary Chinese I (3) Fundamental principles of pronunciation, vocabulary and idiomatic expressions of spoken Mandarin Chinese. Not open to native speakers or advanced students without permission of department chair.

CHIN 1702 Elementary Chinese II (3) Continuation of CHIN 1701. Not open to native speakers or advanced students without permission of department chair. Prerequisite: CHIN 1701 or equivalent.

CHIN 2790 Special Topics in Chinese (1-3) Individual or group work by selected students in carefully chosen fields for intermediate level study. May be repeated for a maximum of 6 semester hours. Prerequisites: 6 semester hours of Chinese and consent of the department chair.

### Music

All programs in the Department of Music have been accredited since 1947 by the National Association of Schools of Music, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190-5248, phone 703-437-0700, email info@arts-accredit.org.

In the Department of Music, the second digit in the course number stands for the following: 0--General, 1--Music Theory, 2--Music History and Literature, 3--Music Education, 4--Conducting, 5--Piano and Organ, 6--Voice, 7--String Instruments, 8--Woodwind Instruments, 9--Brass and Percussion Instruments.

### **Department of Music Statement of Policy**

Successful completion of an entrance audition and a passing score on the music theory placement examination are required for admission to all degree programs in the Department of Music. Contact the department for specific requirements.

All music majors, except for the B.A. degree, must demonstrate keyboard competency as listed in the degree programs. All students must meet the keyboard competency requirement before being admitted to special methods classes.

Credit for private lessons is based on one lesson per week for each 1-1.5 hours of credit. Upper-level credit is given only after the sophomore examination is passed. Minimum practice requirement is one hour per day for each 1-1.5 hours of credit.

All students majoring or minoring in music are required to attend a designated number of recitals and concerts given on the campus. Music majors and minors are required to

enroll for pass-fail in and to complete satisfactorily the following number of semesters of MUS 1000, Recital Attendance: music majors on the B.A. degree, six semesters; on the B.M. degree, eight semesters; on the B.M.E. degree, seven semesters; and music minors, four

semesters. Deficiencies in MUS 1000 must be removed before a student may graduate.

Students are encouraged to participate in ensembles to broaden their general musical background and further develop their performance abilities and listening skills. Each degree program includes specific ensemble requirements noted under the course listing for those programs.

### MUSIC Major, B.A. Degree (42 000436)

The graduate with a Bachelor of Arts degree in music will use the knowledge and skills obtained in the program to:

- Understand the basic elements and structures of music history, theory, and performance literature.
- Understand music's relationship to the other arts, and how the arts relate to mankind.
- Use technology in appropriate music applications.
- Communicate the intellectual (thinking), emotional, and aesthetic (valuing) qualities of music to a diverse society.
- Perform with appropriate tone, technique, and musicality in his/her primary performance medium.

|            |           |   |             |             |                               | Sem. Hours |
|------------|-----------|---|-------------|-------------|-------------------------------|------------|
| MAJOR      | REQUIR    | EMENTS  |             |             |                               | 37         |
| MUS        | 1000      | Recital Attendance0                                   | MUS         | 2221        | Intro. to Music Literature I  | 2          |
| MUS        | 1111      | Theory I3   | MUS         | 2222        | Intro. to Music Literature II | 2          |
| MUS        | 1112      | Theory II3  | MUS         | 3211        | Music History to 1800         | 3          |
| MUS        | 1121      | Aural Training I1                                     | MUS         | 3212        | Music History 1800-Present    | 3          |
| MUS        | 1122      | Aural Training II1                                    | Major i     | nstrument   | or voice, 1000 level          | 4          |
| MUS        | 2111      | Theory III3   | Major i     | nstrument   | or voice, 3000 level          | 6          |
| MUS        | 2121      | Aural Training III1                                   | Large       | vocal or in | strumental ensemble           | 2          |
|            |           |   | Electiv     | e in Music  | :                             | 3          |
| MINOR      | REQUIRE   | EMENTS  |             |             |                               | 18-25      |
| GENER      | AL EDUC   | CATION REQUIREMENTS (page 49)48 s.h. (In the          | major, ML   | JS 3211 a   | nd MUS 3212 are allowed       |            |
| to fulfill | 3 s.h. of | Div. II C; the Modern Language Requirement fulfills   | 3 s.h. of D | iv. II C)   |                               | 42         |
|            |           | Div. II D (required)3                                 |             |             |                               |            |
| MODER      | N LANG    | JAGE REQUIREMENT                                      |             |             |                               | 3-9        |
| `          |           | lor's Degree Requirements section for fulfillment opt | ,           |             |                               |            |
| FREE E     | LECTIVE   | S   |             |             |                               | 11-24      |
| MINIMU     | M TOTAL   |   |             |             |                               | 124        |

Sem. Hours

# MUSIC Functional Major, B.M. Degree

(44 000472)

The graduate with a Bachelor of Music degree will use the knowledge and skills obtained in the program to:

- Understand the basic elements and structures of music history, theory, and performance literature.
- Understand music's relationship to the other arts, and how the arts relate to mankind.
- Use technology in appropriate music applications.
- Communicate the intellectual (thinking), emotional, and aesthetic (valuing) qualities of music to a diverse society.
- Perform at the highest possible level in his/her primary performance medium.
- Articulate essential elements of music and music performance.
- Demonstrate functional piano performance skills.

| FUNCTI | ONAL MA | JOR REQUIREMENTS                                      | 79-84.5  |
|--------|---------|---|--|
| MUS    | 1000    | Recital Attendance0                                   | MUS 2400 Fundamentals of Conducting2                         |
| MUS    | 1111    | Theory I3   | Major instrument or voice, 1000 level8                       |
| MUS    | 1112    | Theory II3  | Major instrument or voice, 3000 level10.5                    |
| MUS    | 1121    | Aural Training I1                                     | Major large instrumental or vocal ensemble4                  |
| MUS    | 1122    | Aural Training II1                                    | Departmentally approved electives to complete an emphasis in |
| MUS    | 2111    | Theory III3   | one of the following areas                                   |
| MUS    | 2112    | Theory IV3  | Area 1 Jazz-Commercial Music                                 |
| MUS    | 2121    | Aural Training III1                                   | * Area 2 Music Technology                                    |
| MUS    | 2122    | Aural Training IV1                                    | Area 3 Performance (Instrumental, Piano, Voice)              |
| MUS    | 4125    | Form & Analysis3                                      | Area 4 Piano Pedagogy  |
| MUS    | 3211    | Music History to 18003                                |  |
| MUS    | 3212    | Music History 1800-Present3                           |  |
| ,      |         | c courses required for each emphasis is available fro | •  |
|        |         | r large instrumental or vocal ensemble will be deterr | ·  |
|        |         | tency is demonstrated by passing MUS 2502 (Piano      | Class IV) with a grade of AB @or better, or                  |
|        | •       | proficiency examination.**                            |  |
|        | NOT REQ |   |  |
|        |         | ATION REQUIREMENTS (page 49)48 s.h. (In the f         |  |
|        |         | ,   | 45   |
|        | 1225    | Div. II D (required)3                                 |  |
|        |         | ogy emphasis, PSY 1100 Div. II B is required.         |  |
|        |         | sis, FREN 1201 or GER 1301 Div. II C is required.     |  |
|        |         | logy emphasis, ECON 1010 Div. II B is required.       | 404  |
| MINIMU | MIOIAL  |   |  |

<sup>\*</sup>In the music technology emphasis, MUS 2040, MUS 2045, MUS 3040, and MUS 4045 will substitute for 4 s.h. of major instrument or voice, 1000 level, and major instrument or voice, 3000 level.

### MUSIC Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor.) (000483)

|       |         | ,                           | ,      |            |                                    | Sem. Hours |
|-------|---------|-----------------------------|--------|------------|------------------------------------|------------|
| MINOR | REQUIRE | MENTS                       |        |            |                                    | 23         |
| MUS   | 1000    | Recital Attendance0         | MUS    | 2221       | Intro. to Music Literature I, 2 or |            |
| MUS   | 1111    | Theory I3                   | MUS    | 2222       | Intro. to Music Literature II, 2   | 2          |
| MUS   | 1112    | Theory II3                  | Major  | instrument | t or voice                         | 4          |
| MUS   | 1121    | Aural Training I1           | Major  | large ense | mble                               | 4          |
| MUS   | 1122    | Aural Training II1          | Depart | mentally a | approved electives                 | 2          |
| MUS   | 3212    | Music History 1800-Present3 |        | -          |                                    |            |

# MUSIC EDUCATION Functional Major, B.M.E. Degree

The graduate with a Bachelor of Music Education degree will use the knowledge and skills obtained in the program to:

- Understand the basic elements and structures of music history, theory, and performance literature.
- Understand music's relationship to the other arts, and how the arts relate to mankind.
- Use technology in appropriate music applications.
- Communicate the intellectual (thinking), emotional, and aesthetic (valuing) qualities of music to a diverse society.
- Teach essential elements of music and music performance at elementary and secondary school levels.
- Perform with appropriate tone, technique, and musicality in his/her primary performance medium.
- Demonstrate functional piano performance skills.

(Continued on next page)

<sup>\*\*</sup>In the piano performance and piano pedagogy emphases, keyboard competency is demonstrated through successful completion of the sophomore examination.

For additional certification to teach instrumental music with the VOCAL Functional Major Option, B.M.E. Degree, see the department chair.

#### General

**MUS 1000 Recital Attendance (0)** Laboratory in music listening and musical performance. Attendance at a designated number of department sponsored or approved concerts. Enrollment for pass-fail only.

MUS 1005 Marching Band (1) Appears at all home games, one away game, and frequently at professional football games. Membership selected by audition. May be repeated. MUS 1008 Campus Band (1) A concert band open to any university student who wishes to continue band performance which explores a wide range of original and transcribed works. Music majors may gain experience on a secondary instrument. Membership selected by audition. May be repeated

**MUS 1010 Symphonic Band (1)** Open without audition to any University student interested in band. Instrumental music majors may gain experience on a secondary instrument in the University Band. *May be repeated.* 

MUS 1040 Introduction to Music Technology (2) The effects of changing technology on music and an introduction to the basic elements, terminology, and concepts of music technology. Prerequisite: Completion of MUS 1100 with a grade of AC@ or better, or successful completion of the music theory placement exam.

**MUS 1045 Seminar in Music Technology (1)** Studies and practical applications in music recording and MIDI production. *May be repeated.* 

**MUS 1055 Collegiate Choir (1)** A large mixed chorus which sings music representative of the finest in sacred and secular choral literature. Membership selected by audition. *May be repeated.* 

MUS 1081 Jazz Ensemble 2 (1) Study and performance of traditional and progressive jazz ensemble music.

Membership selected by audition. May be repeated.

MUS 1085 Jazz-Rock Combo (1) Study and performance of traditional and progressive jazz-rock music in a small group format. Membership selected by audition. May be repeated.

Participation in small ensembles is strongly recommended. These are ensembles with flexible instrumentation designed to promote musical independence and discriminating listening through performance of a wide variety of chamber music. Open to any university student by music faculty permission.

May be repeated.

MUS 1095 Keyboard Ensemble (1)
MUS 1097 String Ensemble (1)
MUS 1098 Chamber Winds and Percussion (1)

MUS 2040 Music Technology I (4) An introduction to the theory and usage of audio recording/reproduction components as well as the application of informed musical judgment to the music production process. Laboratory included. Prerequisites: completion of MUS 1040, MUS 1111, and MUS 1121 with a grade of C or better, as well as full admission into the Bachelor of Music degree program. An additional fee is associated with this course.

MUS 2045 Music Technology II (4) Intermediate audio production focusing on computer-based recording and editing, with continued refinement of student ability to bring informed musical judgment to the mixing process. Laboratory included. Prerequisites: completion of MUS 2040 and MUS 1122 with a grade of C or better. An additional fee is associated with this course.

MUS 3000 Symphonic Wind Ensemble (1) A select band which performs original band literature and transcriptions of

many famous works at frequent appearances. Membership selected by audition. *May be repeated.* 

**MUS 3025 University Symphony Orchestra (1)** Performs concerts of standard and contemporary literature. Members selected by audition. *May be repeated*.

MUS 3040 Music Technology III (5) Advanced audio production and theory. Includes advanced work in musical approaches to recording and editing, as well as study of recording studio design, studio maintenance and acoustics. Laboratory included. Prerequisites: completion of MUS 2045 and MUS 2121 with a grade of C or better, as well as successful completion of the applied area sophomore exam and the Music Technology III entrance exam. An additional fee is associated with this course.

MUS 3050 University Concert Choir (1) A select choir which performs the best of choral literature in concert. Membership selected by audition. *May be repeated.* MUS 3060 Junior Recital (1) One-half of a public recital. Prerequisite: consent of instructor.

**MUS 3070 Chamber Singers (1)** A select small chamber choir of mixed voices that performs vocal chamber music from all historical periods. Membership selected by audition. *May be repeated*.

MUS 3075 Madrigal Singers (1) A select performing group specializing in Renaissance and twentieth century madrigal singing. Membership selected by audition. May be repeated. MUS 3077 Vocal Jazz Ensemble (1) A select ensemble specializing in vocal jazz arrangements of music from all styles. Membership is by audition. May be repeated. MUS 3081 Jazz Ensemble 1 (1) A select ensemble which performs original jazz ensemble literature representing traditional as well as the most current forms of jazz. Membership selected by audition. May be repeated. MUS 3095 Piano Accompanying Practicum (1) Instruction and supervised practical experience in piano accompanying on an individual basis. May be repeated. Prerequisite: MUS

MUS 4000 Special Projects in Music (1-3) May be repeated for a maximum of 6 semester hours.

**MUS 4040 Music Business Practices (3)** Covers copyright, performance rights, client management and interaction. Prerequisite: ECON 1010.

MUS 4045 Music Technology IV\* (5) Advanced digital audio theory, advanced computer-based audio recording and editing, audio-for-video, electroacoustic composition, and historic origins of computer and electroacoustic music. Laboratory included. Prerequisites: completion of MUS 3040 and MUS 2122 with a grade of C or better. \*Not available for graduate credit. An additional fee is associated with this

MUS 4049 Internship in Music Technology (1-6) Field application of music industry theories and practices in professional music production or recording arts fields. May be repeated for a maximum of 6 semester hours. Prerequisite: consent of the music technology coordinator. MUS 4060 Senior Recital\* (1-2) Full length public recital. Prerequisite: consent of instructor. \*Not available for graduate credit.

### **Music Theory**

MUS 1100 Fundamentals of Music (3) Basic theory: notation, scales, chords, terminology. Application to simple rhythm, chording, and melody instruments and piano.

MUS 1111 Theory I (3) Basic materials: notation, rhythm and meter, scales, intervals, triads, primary and secondary

harmony, V7, phrase, period, cadence, the concept of tonality, and related analysis. Prerequisite: MUS 1121 concurrently for music majors and minors. Admission by examination or completion of MUS 1100 with grade of C or better

**MUS 1112 Theory II (3)** Melodic and harmonic structure and embellishment, nonharmonic tones, consonance and dissonance principles, simple two-part counterpoint, part writing, harmonic progression, secondary dominants, regions, and modulation. Prerequisites: MUS 1122 concurrently and MUS 1111.

MUS 1121 Aural Training I (1) Basic listening and aural awareness skills: rhythm and pitch patterning, scales, intervals, triads, V7, primary triads, harmonic dictation, melodic memory, melodic dictation, and sight singing. Prerequisite: MUS 1111 concurrently. Admission by examination or completion of MUS 1100 with grade of C or better.

**MUS 1122 Aural Training II (1)** Continuation of development of aural skills introduced in MUS 1121 plus two-part dictation, nonharmonic tones, secondary triads, secondary dominants, and modulation. Prerequisites: MUS 1112 concurrently and MUS 1121.

MUS 2111 Theory III (3) Continuation of the materials and organization of music: modality, modulation, seventh chords, chromatic harmony, contrapuntal procedures, and form. Prerequisites: MUS 2121 concurrently and MUS 1112.

MUS 2112 Theory IV (3) Continuation of MUS 2111 including impressionism and twentieth century music. Prerequisites: MUS 2122 concurrently and MUS 2111.

MUS 2121 Aural Training III (1) Continuation of the development of aural skills in MUS 1122 applied to sight singing and aural perception of rhythm, melody, and chromatic harmony. Prerequisites: MUS 2111 concurrently and MUS 1122.

MUS 2122 Aural Training IV (1) Continuation of the development of aural skills in MUS 2121 including rhythmic, melodic, and harmonic techniques from the twentieth century. Prerequisites: MUS 2112 concurrently and MUS 2121. MUS 2141 Composition I (3) Techniques of twentieth century composition through projects in smaller forms. Electronic music studio techniques. Aural and visual analysis of twentieth century music. May be repeated for a maximum of 6 semester hours. Prerequisites: MUS 1112 and MUS 1122

**MUS 2180 Jazz Improvisation I (2)** The techniques and materials of jazz improvisation at the introductory level. Scales, chords, phrasing, articulation, and guided listening. Performance mandatory. Prerequisite: MUS 1112 and MUS 1122

**MUS 2181 Jazz Improvisation II (2)** A continuation of MUS 2180. Advanced concepts in style and form. Transcription of recorded solos using altered scales and chords and the development of style. Performance mandatory. Prerequisite: MUS 2180.

MUS 3141 Composition II (3) Continuation of MUS 2141 through projects of small and medium dimensions adapted to needs and interests of the student. May be repeated for a maximum of 12 semester hours. Prerequisite: MUS 2141. MUS 4101 Counterpoint I (3) Eighteenth century style in two parts: melodic structure, resolution of melodic and harmonic contrapuntal dissonances, canon, and the writing of original two-part inventions. Prerequisites: MUS 2112 and MUS 2122.

**MUS 4115 Instrumentation (3)** Characteristics of instruments normally found in band and orchestra. Short writing projects for instrumental choirs, full band and orchestra. Score study. Prerequisites: MUS 2112 and MUS 2122.

**MUS 4125 Form and Analysis (3)** Small song forms, rondos, variations and sonata forms, with emphasis on aural analysis and score readings. Prerequisites: MUS 2112 and MUS 2122 or concurrently.

**MUS 4130 Choral Arranging (2)** Practical arrangements for various choral ensembles for school organizations and church choirs. Prerequisites: MUS 2112 and MUS 2122 or concurrently.

**MUS 4181 Advanced Jazz Improvisation (2)** Advanced study of jazz improvisation techniques in applied, private lessons. May be repeated. Prerequisite: MUS 2181 or consent of instructor.

MUS 4185 Jazz-Commercial Arranging (3) Characteristics of instruments normally found in jazz ensemble and commercial performing groups. Emphasis on style and voicing problems in these idioms. Writing projects for combo and jazz ensemble. Score study. Prerequisites: MUS 2112 and MUS 2122.

MUS 4186 Advanced Jazz-Commercial Arranging (2) Private lessons in composition, arranging, score study, and analysis for various jazz or commercial ensembles based on individual student needs and interests. May be repeated. Prerequisite: MUS 4185.

**MUS 4190 Electronic Music Composition (3)** Composition of electronic music in popular and artistic styles. Technical principles, history of the genre, and aesthetic considerations of electronic music. Prerequisite: Mus 1112.

#### **Music History and Literature**

MUS 1210 Experiencing Music (3) An introduction to important musical masterpieces with emphasis on the knowledge and skills involved in perceptive listening. Prerequisite: no previous musical experience is necessary. MUS 1225 Music of the World's Cultures (3) The fusion of western and non-western musical cultures through their folk, popular, and classical musics.

**MUS 1281 History and Development of Jazz (3)** A survey of the evolution in jazz music in the United States. Includes discussion of the styles and characteristics of each period of jazz history and the contributions of influential groups and individuals.

**MUS 2221 Introduction to Music Literature I (2)** An introduction to the principal genres of instrumental music with emphasis on representative works from the standard repertoire. A basic knowledge of instrumental music is assumed. Prerequisite: MUS 1112 or consent.

MUS 2222 Introduction to Music Literature II (2) An introduction to the principal genres of vocal music including oratorio, church music, opera, and art songs. A basic knowledge of vocal music is assumed. Prerequisite: MUS 1112 or consent.

**MUS 3211 Music History to 1800 (3)** Early history of music including the Medieval, Renaissance, Baroque, and Classic eras. For music majors and minors only. Prerequisite: nonmusic majors only with consent.

**MUS 3212 Music History 1800-Present (3)** Music of Beethoven, the Romantic era, and the twentieth century. For music majors and minors only. Prerequisite: nonmusic majors only with consent.

**MUS 4201 Piano Literature Through Beethoven (2)** Survey and analysis of music written for clavichord, harpsichord, and piano through the music of Beethoven. Prerequisite: four semesters of MUS 1510 or equivalent.

MUS 4202 Piano Literature From the Romantic Era to the Present (2) Survey and analysis of music written for piano from the Romantic era through the present. Prerequisite: four semesters of MUS 1510 or equivalent.

MUS 4230 Choral Literature (2) Music literature for all

choral groups with emphasis on the performance style and interpretative problems of the choral conductor. Prerequisite: MUS 2400.

MUS 4235 Vocal Literature (3) A survey of solo literature for all voice classifications with emphasis on the development of art song in the Italian, British, German, French, and American repertories. Prerequisite: MUS 2222 or consent of instructor. MUS 4240 String Instrument Literature and Pedagogy (2) A survey of literature, instructional materials, and pedagogy of the various string instruments. Prerequisite: 12 semester hours credit on major instrument.

MUS 4245 Woodwind Instrument Literature and Pedagogy (2) A survey of literature, instructional materials, and pedagogy of woodwind instruments. Prerequisite: 12 semester hours credit on major instrument.

**MUS 4250 Brass Instrument Literature and Pedagogy (2)** A survey of literature, instructional materials, and pedagogy of brass instruments. Prerequisite: 12 semester hours credit on major instrument.

**MUS 4255 Percussion Literature and Pedagogy (2)** A survey of literature, instructional materials, and pedagogy of percussion instruments. Prerequisites: 12 semester hours credit on major instrument.

#### **Music Education**

**MUS 3301 Music for Elementary Schools (2)** The study of music fundamentals, methods and materials appropriate for teaching music to children K-6. Developing skills in listening, singing, playing percussion and tonal instruments. Planning and evaluating learning experiences.

MUS 3305 Methods of Teaching Elementary School Music (3) Musical growth and materials designed for music majors who are preparing to teach vocal music in the elementary schools. Prerequisite: MUS 1112 and admission to the Teacher Education Program.

MUS 3306 Methods of Teaching Instrumental Music (2-3) Materials, techniques, and organization of the elementary and middle school instrumental program designed for music majors who are preparing to teach instrumental music. Includes an introduction to early childhood choral literature and musical instruments. Prerequisite: MUS 1112 and admission to the Teacher Education Program.

**MUS 3308 Marching Band Techniques (1)** The various techniques of pageantry, precision drill, arranging, charting and planning, as well as problems of organization, administration and public relations.

MUS 4310 Methods of Teaching Music\* (2) Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with MUS 4350 during the Professional Semester. \*Not available for graduate credit. MUS 4320 Methods of Teaching Middle School Music

(2) Objectives, materials, subject matter and problems in the teaching of vocal and general music in the junior high school. Prerequisite: MUS 3305 or MUS 3306 or consent of instructor.

MUS 4350 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with MUS 4310 during the Professional Semester. \*Not available for graduate credit.

MUS 4370 Band Instrument Repair (2) A study and practice of band instrument maintenance and repair techniques. Prerequisite: one semester each of woodwind and brass study, or one year of teaching music in public schools.

MUS 4381 Jazz Pedagogy (2) Techniques, systems and materials for teaching of jazz ensembles and jazz

improvisation. Supervised conducting experience with a University jazz ensemble. Prerequisite: MUS 2400 and successful completion of the piano proficiency requirement.

#### Conducting

**MUS 2400 Fundamentals of Conducting (2)** An introductory course in conducting including baton technique and basic score preparation. Prerequisites: MUS 1112 and MUS 1122 or concurrently.

**MUS 3410 Choral Conducting (2)** Techniques of choral conducting, rehearsal procedures, and basic choral repertoire. Prerequisite: MUS 2400.

MUS 3415 Choral Techniques (2) Aspects of choral singing, including the human voice and choral tone, choral diction, organization, rehearsal procedures, and basic choral repertoire. Prerequisites: MUS 3410 or concurrently, successful demonstration of keyboard competency and admission to the Teacher Education Program.

MUS 3420 Instrumental Conducting (3) Advanced techniques of conducting instrumental ensembles, development of visual/aural discrimination skills for diagnosing and correcting problems in performance; and selection of appropriate methods and literature. Prerequisites: MUS 2400, successful demonstration of keyboard competency and admission to the Teacher Education Program.

#### Piano and Organ

MUS 1501 Piano Class I (1) Study of the piano, especially for adult students who have had no previous training.

MUS 1502 Piano Class II (1) A continuation of MUS 1501.

Prerequisite: MUS 1501.

MUS 1507 Secondary Keyboard Lessons (1) Private lesson study in any keyboard instrument listed in this catalog. Does not count for any music major or minor as the principal performing area. Prerequisite: initial enrollment by permission of applied area faculty. May be repeated.

MUS 1510 Piano I (1) Technical study and easier

compositions selected from the various eras of keyboard literature. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: Successful completion of entrance examination required for initial enrollment.

**MUS 1520 Organ I (1)** Manual and pedal study, elementary registration and specification; Bach short preludes and fugues, chorale preludes, etc. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: Successful completion of entrance examination required for initial enrollment.

**MUS 2501 Piano Class III (1)** A continuation of MUS 1502 with additional emphasis on functional keyboard skills. May be repeated. Prerequisite: MUS 1502.

MUS 2502 Piano Class IV (1) Emphasis on specific piano proficiency skills for vocal and instrumental students preparing for a teaching career. May be repeated. Prerequisite: MUS 2501 or MUS 1510 or permission of instructor.

**MUS 2515 Piano Accompanying (2)** A study of and practical experience in piano accompanying in various musical mediums, using music from several styles and historical eras. Prerequisite: one year of college level private piano or consent of instructor.

**MUS 3510 Piano II (1.5)** Technical study and moderately difficult compositions selected from the various eras of keyboard literature. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: successful completion of lower level credit as determined by departmental examination.

MUS 3520 Organ II (1.5) Continued manual and pedal study; Bach preludes and fugues; selections from advanced classic and modern organ works; church playing and accompaniments. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: successful completion of lower level credit as determined by departmental examination.

**MUS 4511 Piano Pedagogy I--The Beginner (3)** Goals, methods, and materials for individual and class instruction of beginning piano students. Includes practice teaching and observation. Prerequisite: Two semesters of MUS 1510 or equivalent.

MUS 4512 Piano Pedagogy II--The Intermediate Student (3) Goals, methods, and materials for teaching intermediate piano students. Includes practice teaching and observation. Prerequisite: Two semesters of MUS 1510 or equivalent. MUS 4513 Piano Pedagogy III--The Advanced Student (3) Goals, methods, and materials of advanced piano teaching. Includes practice teaching and observation. Prerequisite: Two semesters of MUS 1510 or equivalent.

MUS 4514 Piano Pedagogy IV--Seminar (3) Intensive individual study in piano pedagogy designed to improve the student's understanding of a selected area of interest. Prerequisite: MUS 4511 or MUS 4512 or MUS 4513 or the equivalent

**MUS 4515 Practice Teaching in Piano (1.5)** Supervised teaching of piano students. Course must be repeated. Prerequisites: MUS 4511 and MUS 4512 or the equivalent.

#### Voice

**MUS 1601 Voice Class I (1)** Breathing exercises, diction, stage deportment, acquaintance with familiar vocal literature, and experience in solo and duet singing. Designed for beginning voice students. Prerequisite: demonstrated ability to read music

**MUS 1602 Voice Class II (2)** Instruction in breathing, resonance, diction, musicality, performance skills, and the nature of the vocal instrument, using solo song and duet literature in English and Italian. Prerequisite: one semester of MUS 1610, or MUS 1601.

MUS 1607 Secondary Voice Lessons (1) Private lesson study in voice. Does not count as credit for any music major or minor as the principal performing area. Prerequisite: initial enrollment by permission of applied area faculty. May be

**MUS 1610 Voice I (1)** Breath control; technical exercises represented by Sieber, Vaccai, and other specified methods. Early Italian songs. English songs of medium difficulty, and other repertoire suggested by the instructor. In addition to weekly lessons, attendance at biweekly studio classes is required. *May be repeated*. Prerequisite: Successful completion of entrance examination required for initial enrollment.

**MUS 1615 Opera Theatre (1-2)** Production of scenes from operatic repertoire. *May be repeated for a maximum of 4 semester hours.* 

**MUS 1620 Musical Theatre Practicum (1-2)** Rehearsal and performance of Musical Theatre repertoire. *May be repeated for a maximum of 4 semester hours.* Prerequisite: entrance by audition.

MUS 2632 Diction for Singers (3) Systematic instruction in singing English, French, German, and Italian art songs emphasizing clear, correct, and expressive diction. Prerequisite: MUS 1610 or consent of instructor.

MUS 3610 Voice II (1.5) Advanced technical exercises, modern art songs; the great Lieder composers; French art songs; and representative repertoire from opera and oratorio. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite:

successful completion of lower level credit as determined by departmental examination.

**MUS 4600 Vocal Pedagogy (2)** For prospective singing teachers. Includes study of the physiology of the vocal instrument, the techniques of singing production, goals and materials, teaching techniques, and analysis of vocal problems. Observation of master teachers, and supervised teaching will be required. Prerequisite: three years of vocal training.

#### **String Instruments**

**MUS 1701 String Class (1)** A laboratory course in the fundamentals of playing and teaching string instruments. *May be repeated for a maximum of 2 semester hours.* Two different string instruments will be studied in each semester. **MUS 1703 Folk Guitar Techniques (2)** Beginning instruction in folk guitar performance intended to equip the student with the skills required to harmonize folk melodies.

**MUS 1707 Secondary String Lessons (1)** Private lesson study in any string instrument listed in this catalog. Does not count for any music major or minor as the principal performing area. Prerequisite: initial enrollment by permission of applied area faculty. *May be repeated*.

The course description is applicable for all applied string instruments courses: easy technical studies, easy standard sonatas, concertos, and short solos. In addition to weekly lessons, attendance at biweekly studio classes is required. *May be repeated.* Prerequisite: Successful completion of entrance examination required for initial enrollment.

MUS 1710 Violin I (1) MUS 1715 Viola I (1) MUS 1720 Cello I (1) MUS 1725 String Bass I (1)

**MUS 1760 Guitar I (1)** Technical studies, standard solo literature from all style periods. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: Successful completion of entrance examination required for initial enrollment.

The course description is applicable for the following string instruments courses: advanced technical studies, advanced standard sonatas, concertos, and short solos. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: successful completion of lower level credit as determined by departmental examination.

MUS 3710 Violin II (1.5) MUS 3715 Viola II (1.5) MUS 3720 Cello II (1.5) MUS 3725 String Bass II (1.5)

MUS 3760 Guitar II (1.5) Advanced technical studies, advanced standard sonatas, concertos, and short solos. In addition to weekly lessons, attendance at biweekly studio classes is required. *May be repeated*. Prerequisite: successful completion of lower level credit as determined by departmental examination.

### **Woodwind Instruments**

**MUS 1807 Secondary Woodwind Lessons (1)** Private lesson study in any woodwind instrument listed in this catalog. Does not count for any music major or minor as the principal performing area. Prerequisite: initial enrollment by permission of applied area faculty. *May be repeated*.

The course description is applicable for the following

woodwind instruments courses: breath control; fundamentals of mechanism, embouchure; proper tonal color; technical exercises; easy solos; supervised chamber ensemble rehearsals. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: Successful completion of entrance examination required for initial enrollment.

MUS 1810 Flute I (1) MUS 1815 Clarinet I (1) MUS 1820 Oboe I (1) MUS 1825 Saxophone I (1) MUS 1830 Bassoon I (1)

**MUS 2801 Woodwind Class I (1)** A laboratory course in the fundamentals of playing and teaching the clarinet and the saxophone.

MUS 2802 Woodwind Class II (1) A laboratory course in the fundamentals of playing and teaching the oboe, the bassoon, and the flute

The course description is applicable for all applied woodwind instruments courses: advanced technical studies; standard solos; chamber ensemble playing. In addition to weekly lessons, attendance at biweekly studio classes is required. *May be repeated*. Prerequisite: successful completion of lower level credit as determined by departmental examination.

MUS 3810 Flute II (1.5) MUS 3815 Clarinet II (1.5) MUS 3820 Oboe II (1.5) MUS 3825 Saxophone II (1.5) MUS 3830 Bassoon II (1.5)

#### **Brass and Percussion Instruments**

MUS 1907 Secondary Brass and Percussion Lessons (1) Private lesson study in any brass instrument listed in this catalog or in percussion. Does not count for any major or minor as the principal performing area. Prerequisite: initial enrollment by permission of applied area faculty. May be repeated

The course description is applicable for the following brass instruments courses: breath control; fundamentals of mechanism, embouchure; proper tonal color; technical exercises; easy solos; supervised chamber ensemble rehearsals. In addition to weekly lessons, attendance at biweekly studio classes is required. *May be repeated*. Prerequisite: Successful completion of entrance examination required for initial enrollment.

MUS 1910 Trumpet I (1) MUS 1915 French Horn I (1) MUS 1920 Trombone I (1) MUS 1925 Baritone Horn I (1) MUS 1930 Tuba I (1)

MUS 1960 Percussion I (1) Fundamental skills in rudimental and concert snare drum techniques. Study of the keyboard percussion instruments and an introduction to the timpani. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: Successful completion of entrance examination required for initial enrollment.

**MUS 2901 Brass Class I (1)** A laboratory course in the fundamentals of playing and teaching the trumpet and French horn.

**MUS 2902 Brass Class II (1)** A laboratory class in the fundamentals of playing and teaching the baritone horn, the trombone, and the tuba.

MUS 2950 Percussion Class (1) A laboratory course in the basic techniques of playing and teaching the instruments of percussion.

The course description is applicable for the following applied brass instruments courses: advanced technical studies; standard solos; chamber ensemble playing. In addition to weekly lessons, attendance at biweekly studio classes is required. **May be repeated**. Prerequisite: successful completion of lower level credit as determined by departmental examination.

MUS 3910 Trumpet II (1.5) MUS 3915 French Horn II (1.5) MUS 3920 Trombone II (1.5) MUS 3925 Baritone Horn II (1.5) MUS 3930 Tuba II (1.5)

MUS 3960 Percussion II (1.5) Advanced study of snare drum, keyboard, percussion, and timpani, as well as an emphasis in performance literature. In addition to weekly lessons, attendance at biweekly studio classes is required. May be repeated. Prerequisite: successful completion of lower level credit as determined by departmental examination

# Political Science and Geography

### Political Science

# POLITICAL SCIENCE Major, B.A. Degree

(42 000425)

The graduate with a Bachelor of Arts degree in Political Science will use the knowledge and skills obtained in the program to:

- Understand individual rights and responsibilities in a democratic system
- Understand and explain the complexities of politics in an international community
- Comprehend alternative perspectives on political values and behavior, political cultures, institutions, policy making, theory, jurisprudence, and civil liberties and rights
- Think critically and to construct logical arguments concerning institutions and processes of government and contemporary public policy issues
- Communicate effectively about politics in both written and oral forms
- Prepare for successful careers in public, private and non-profit service sector
- Qualify for post-graduate education.

|            |           |   |               |              |                               | Sem. Hours |
|------------|-----------|---|---------------|--------------|-------------------------------|------------|
| MAJOR      | REQUIR    | EMENTS  |               |              |                               | 33         |
| POLS       | 2520      | Comp. Government & Politics3                          | POLS          | 3560         | Research Methods in Pol. Sci  | 3          |
| POLS       | 2530      | International Relations3                              | POLS          | 4570         | Public Administration         | 3          |
| POLS       | 2580      | Public Law & Judicial Process3                        | Elective      | s in politic | cal science                   | 15         |
| POLS       | 3540      | Survey of Political Theory3                           |               |              |                               |            |
| MINOR      | REQUIRE   | EMENTS  |               |              |                               | 18-25      |
| GENER/     | AL EDUC   | CATION REQUIREMENTS (page 49)48 s.h. [Stud            | dents majorin | ig in Politi | cal Science must take PolS150 | 0 which    |
| fulfills 3 | s.h. in D | iv. II B & POLS 1510 which fulfills state law require | ements, Sect  | ion 170.1    | 1 RSMO Supp (1988).]          | 42         |
| MODER      | N LANGU   | JAGE REQUIREMENT (Refer to Bachelor's Degre           | ee Requirem   | ents secti   | on for fulfillment options.)  | 3-9        |
|            |           | S   |               |              |                               |            |
| MINIMU     | M TOTAL   |   |               |              |                               | 124        |

# POLITICAL SCIENCE Major, B.S. Degree

(43 000426)

The graduate with a Bachelor of Science degree in Political Science will use the knowledge and skills obtained in the program to:

- Understand individual rights and responsibilities in a democratic system
- Understand and explain the complexities of politics in an international community
- Comprehend alternative perspectives on political values and behavior, political cultures, institutions, policy making, theory, jurisprudence, and civil liberties and rights
- Think critically and to construct logical arguments concerning institutions and processes of government and contemporary public policy
- Communicate effectively about politics in both written and oral forms
- Prepare for successful careers in public, private and non-profit service sector
- Qualify for post-graduate education.

| MAJOR R      | FOLIRE      | MENTS   |              |               |                               | Sem. Hours |
|--------------|-------------|---|--------------|---------------|-------------------------------|------------|
| POLS         |             | Comp. Government & Politics3                        |              |               | Research Methods in Pol. Sc   |            |
| POLS         |             | International Relations3                            |              | 4570          |                               |            |
| POLS         | 2580        | Public Law & Judicial Process3                      | Elective     | es in politic | cal science                   | 15         |
| POLS         | 3540        | Survey of Political Theory3                         |              | ·             |                               |            |
| MINOR RE     | EQUIRE      | MENTS   |              |               |                               | 18-25      |
| GENERAL      | _ EDUCA     | TION REQUIREMENTS (page 49)48 s.h. [Stude           | ents majorin | ng in Politi  | cal Science must take POLS 15 | 00 which   |
| fulfills 3 s | s.h. in Div | . II B & POLS 1510 which fulfills state law require | ments, Sect  | tion 170.1    | 1 RSMO Supp (1988).]          | 45         |
|              |             |   |              |               |                               |            |
| MINIMUM      | TOTAL       |   |              |               |                               | 124        |
|              |             |   |              |               |                               |            |
|              |             | POLITICAL SCIENCE Minor                             | for a Ba     | chelor's      | Degree                        |            |
|              |             | (CMSU does not confer teacher                       |              |               | •                             |            |

(000427)

|         |         |                                |          |              |                            | Sem. Hours |
|---------|---------|--------------------------------|----------|--------------|----------------------------|------------|
| MINOR F | REQUIRE | MENTS                          |          |              |                            | 20         |
| POLS    | 2520    | Comp. Government & Politics3   | POLS     | 3540         | Survey of Political Theory | 3          |
| POLS    | 2530    | International Relations3       | Elective | s in politic | al science                 | 8          |
| POLS    | 2580    | Public Law & Judicial Process3 |          |              |                            |            |

GENERAL EDUCATION REQUIREMENTS (page 49) [Students minoring in Political Science must take POLS 1510 which fulfills state law requirements, Section 170.11 RSMO Supp (1988)]

# **INTERNATIONAL STUDIES Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000489)

|              |           |                                   | Sem. Hours  |
|--------------|-----------|-----------------------------------|---|
| MINOR REC    | QUIREN    | MENTS                             | 24  |
| One mode     | rn (forei | gn) language6                     | Departmentally approved electives from one of                       |
| Electives fi | rom the   | following6                        | the following areas listed below. A listing of                      |
| ANTH         | 4870      | Comparative Cultures3             | courses is available from the Chair of the Department               |
| GEOG         | 2212      | World Geography3                  | or Director of International Programs12                             |
| REL          | 3210      | Comparative World Religions 3     | (Additional information about these options is available at http:// |
| COMM         | 3340      | Intercultural Communication, 3 or | www.cmsu.edu/international)   |
| ENGL         | 4120      | Language & Culture, 33            | Area 1 Generalist: Social Science                                   |
|              |           |                                   | Area 2 Generalist: Humanities                                       |
|              |           |                                   | Area 3 East Asia  |
|              |           |                                   | Area 4 Latin America  |
|              |           |                                   | Area 5 Europe   |
|              |           |                                   | Area 6 Agri-Business  |
|              |           |                                   | Area 7 International Economic Development                           |
|              |           |                                   | Area 8 International Tourism  |
|              |           |                                   | Area 9 Intercultural Studies  |

Students are required to seek advisement concerning courses taken toward a minor in International Studies from the Director of International Programs.

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, if elected GEOG 2212 fulfills 3 s.h. of Div. II B; Modern (foreign) language fulfills 3 s.h. of Div. II C)

POLS 1500 Introduction to Political Science (3) A survey of the determinants defining the relationship of the individual to the political environment and the political system. The primary focus is on the three fundamental levels of politics: the individual, the state, and the international community. POLS 1510 American Government (3) The nature. philosophical bases, development, functions, structure, and processes of the government and politics of the United States and of Missouri. Emphasis on and analysis of the nature and development of the provisions and principles of the Constitution of the United States and of Missouri. Fulfills state requirements of Section 170.011 RSMo.

POLS 2511 State Government (3) Administrative, legislative, and judicial activities of state governments and their relationships to national and local governments with special emphasis on state and local governments in Missouri.

POLS 2520 Comparative Government and Politics (3) Introduction to major forms of government throughout the world.

POLS 2530 International Relations (3) Introduction to international relations with specific focus on the nature and causes of war, conflict resolution, political, social, economic, and military issues in international politics.

POLS 2550 Political Parties and Interest Groups (3) The theory, principles, structures, and functions of interest groups and political parties in the American political system.

POLS 2580 Public Law and the Judicial Process (3) Examination of the nature of law, the organization and staffing of courts, judicial policymaking, the Supreme Court's decision-making process, statutory and constitutional interpretation, and the impact of judicial decisions.

POLS 3520 Asian Government and Politics (3) A comparative study of the major political systems of Asia, focusing on political institutions, policy-making, domestic and foreign policy as well as persistent policy issues, challenges and political dynamics.

**POLS 3521 Latin American Government and Politics** (3) A comparative study of the political system of the Latin American countries.

POLS 3522 Modern East Asia (3) A survey of the cultures, histories, societies, economies, and political systems of the major countries of Asia. Specific focus is on the events and resulting changes within the region during the past century. POLS 3530 International Organizations (3) The role of international organizations in international relations

and collective security with specific emphasis on the United Nations, the European Union and other regional organizations.

POLS 3540 Survey of Political Theory (3) Examines concepts such as justice, authority, equality, liberty, etc., and how they are defined by major political theorists from Plato to

POLS 3541 Civil Society and Democratic Theory (3) Examines recent debates about the meaning of democracy, citizenship, civil society, and community in the contemporary era of increasingly diverse and interconnected nation-states. POLS 3550 Public Opinion and Mass Media (3) Examines the forces that shape, and techniques used to measure, public opinion, also focusing on the media as a link between public opinion and government.

POLS 3551 Race and Ethnic Politics in the United States (3) Survey of the political mobilization, participation, and issues facing Latinos, African Americans, Asian Americans, Native Americans, and European ethnic groups in U.S. politics

# POLS 3560 Research Methods in Political Science (3)

This course will acquaint students with a wide variety of research methods used to analyze political phenomena, concentrating on those approaches that are both quantitative and nonquantitative, including case studies, interviewing, field research, and a lab component utilizing packaged computer programs for statistical analysis.

POLS 4520 Politics of the Developing Nations (3) Problems of development in the developing nations of the

world and the concepts and theories for their comparative analysis.

POLS 4521 Culture and Politics of the Middle East (3) The influence of culture on the politics, political systems and issues of the Middle East.

POLS 4530 International Law (3) An examination of its nature, history, philosophies, and basic rules as found in treaties, court decisions, customs, and other sources. POLS 4531 American Foreign Policy (3) The foreign policy of the United States with specific focus on the policy authority of the American President, the Congress, the Courts, United States foreign policies toward Russia, Europe and the Middle East are considered.

POLS 4532 International Relations of East Asia (3) Study of contemporary regional politics of East Asia focusing on political culture, nationalism and the foreign policies of the

United States, Russia, China and Japan as they relate to security challenges in East Asia.

**POLS 4550 The European Union (3)** An examination of the theory, history, politics and institutions of the European Union with special emphasis on the socioeconomic factors that influenced the formation and subsequent expansions of the EU, particularly the regional differences and concerns over sovereignty.

**POLS 4552 Legislative Politics (3)** The major functions, roles, powers, processes and development of the national and state legislatures. Special attention is given to legislative elections, leadership and decision-making.

POLS 4553 Twentieth Century African-American Politics (3) Examines the political, economic and social aspects of African American politics in the 20th Century.

**POLS 4555 The American Presidency (3)** The constitutional origins of the presidency, its powers, selection process, and the presidents' relations with the public, the media, political parties, and the other major institutions of government. Particular emphasis is on the presidency as an institution of leadership. Prerequisite: POLS 1510

**POLS 4570 Public Administration (3)** A broad and basic study of public administration in the United States. Prerequisite: POLS 1510.

POLS 4571 Municipal Administration (3) Principles of municipal administration as they operate in the United States

under the various forms of municipal governments. Prerequisite: POLS 1510.

**POLS 4580 American Constitutional Law (3)** An interpretation of our constitutional heritage, including the growth of federal judicial power and the role of the Supreme Court.

**POLS 4581 Constitutional Rights (3)** Except for the First Amendment, this course examines individual rights and liberties found within and outside of the Constitution.

POLS 4590 Special Projects in Political Science (1-6) Study, interpretation, and discussion of special topics and problems in political science. May be repeated for a maximum of 6 semester hours.

**POLS 4591 Internship in Political Science (1-6)** Practical experience with a governmental or political unit. Supervision by professional of unit and by member of University faculty. May be repeated for a maximum of 6 semester hours. Prerequisite: consent of department.

POLS 4592 Problems in National, State or Local Government (1-3) Special problems in government, selected by student and instructor. May be repeated for a maximum of 6 semester hours.

Sam Hours

# Geography

# **GEOGRAPHY Major, B.A. Degree**

(42 000429)

The graduate with a Bachelor of Arts degree in Geography will use the knowledge and skills obtained in the program to:

- Appreciate the depth, breadth, and value of geography as both a theoretical and applied science through the study of the basic traditions: earth science, culture-environment, location, and area/regional analysis
- Identify, describe, and analyze patterns of human distribution, movement, interaction, and environmental impact.
- Identify, describe, and analyze physical forms and processes in both classroom and field settings.
- Read, interpret, and produce maps using traditional and electronic methods.
- Communicate in written and spatial form the geographic concepts, theories, and information/data that underlay the cultural and physical diversity of world realms and regions.
- Understand and appreciate patterns and landscapes of global cultural diversity.
- Use library resources and electronic media to explore/collect geographic information from texts, databases, maps and remotely-sensed images.
- Be familiar with the major themes and approaches in current geographic research and be able to employ basic geographic tools for research and analysis.
- To think creatively and critically about geographic factors in case studies, field settings, and real world scenarios.

|  | Sem. nouis  |
|--|---|
| MAJOR REQUIREMENTS                                   | 33  |
| GEOG 2212 World Geography3                           |   |
| GEOG 2246 Economic Geography3                        | in regional geography18                                       |
| GEOG 3270 Research Methods in Geography3             | EASC 1004 Intro. to the Sci.: Geology4                        |
| GEOG 3275 Climatology3                               | EASC 3111 Geomorphology3                                      |
| GEOG 4201 Cartography3                               | Electives in geography11-18                                   |
| MINOR REQUIREMENTS                                   | 18-25   |
| GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. (In  | the major, GEOG 2212 fulfills 3 s.h. of Div. II B; The Modern |
| Language Requirement fulfills 3 s.h. of Div. II C)   | 42  |
| EASC 1004, if elected, fulfills 4 s.h. of Div. II A. |   |
| MODERN LANGUAGE REQUIREMENT (Refer to Bachelor's De  | gree Requirements section for fulfillment options.)           |
| FREE ELECTIVES                                       |   |
| MINIMUM TOTAL  | 124   |

## **GEOGRAPHY Major, B.S. Degree**

(43 000430)

The graduate with a Bachelor of Science degree in Geography will use the knowledge and skills obtained in the program to:

- Appreciate the depth, breadth, and value of geography as both a theoretical and applied science through the study of the basic traditions: earth science, culture-environment, location, and area/regional analysis
- Identify, describe, and analyze patterns of human distribution, movement, interaction, and environmental impact.
- Identify, describe, and analyze physical forms and processes in both classroom and field settings.
- Read, interpret, and produce maps using traditional and electronic methods.
- Communicate in written and spatial form the geographic concepts, theories, and information/data that underlay the cultural and physical diversity of world realms and regions.
- Understand and appreciate patterns and landscapes of global cultural diversity.
- Use library resources and electronic media to explore/collect geographic information from texts, databases, maps and remotely-sensed
- Be familiar with the major themes and approaches in current geographic research and be able to employ basic geographic tools for research and analysis.
- To think creatively and critically about geographic factors in case studies, field settings, and real world scenarios.

| MA IOD DEOLUDE                                       | MENTO                                  |  | OCIII. I IOUI3 |  |  |  |
|--|--|--|----------------|--|--|--|
| MAJOR REQUIRE  | MENIS                                  |  | 33             |  |  |  |
| GEOG 2212  | World Geography3                       | Electives from the following, including two cour     | rses           |  |  |  |
| GEOG 2246  | Economic Geography3                    | in regional geography                                | 18             |  |  |  |
| GEOG 3270  | Research Methods in Geography3         | EASC 1004 Intro. to the Sci.: Geology .              | 4              |  |  |  |
| GEOG 3275  | Climatology3                           | EASC 3111 Geomorphology                              | 3              |  |  |  |
| GEOG 4201  | Cartography3                           | Electives in geography                               | 11-18          |  |  |  |
| MINOR REQUIRE  | MENTS                                  |  | 18-25          |  |  |  |
| GENERAL EDUCA  | TION REQUIREMENTS (page 49)48 s.h. (Ir | n the major, GEOG 2212 fulfills 3 s.h. of Div. II B) | 45             |  |  |  |
| EASC 1004, if elected, fulfills 4 s.h. of Div. II A) |  |  |                |  |  |  |
| FREE ELECTIVES                                       | ·                                      |  | 21-28          |  |  |  |
| MINIMUM TOTAL  |  |  | 124            |  |  |  |
|  |  |  |                |  |  |  |

## **GEOGRAPHY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000431)

|   | , |                    |                                   | Sem. Hours |
|---|---|--------------------|-----------------------------------|------------|
| MINOR REQUIREMENTS                      |   |                    |                                   | 21         |
| GEOG 2212 World Geography               | 3 | Electives from the | e following, including one course |            |
| GEOG 2246 Economic Geography            | 3 | in regional geogra | aphy                              | 9          |
| GEOG 3270 Research Methods in Geography | 3 | EASC 1004          | Intro. to the Sci.: Geology       | 4          |
| GEOG 3275 Climatology                   | 3 | EASC 3111          | Geomorphology                     | 3          |
|   |   | Electives in geo   | graphy                            | 2-9        |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, GEOG 2212 fulfills 3 s.h. of Div. II B. EASC 1004, if elected, fulfills 4 s.h. of Div. II A)

GEOG 2211 Geography of North America (3) Physical and cultural features of the United States and Canada, based on regional concepts.

GEOG 2212 World Geography (3) A survey of the world's major regions, examining their unique peoples, cultures, economies, and physical environments.

GEOG 2246 Economic Geography (3) Influence of geographic factors upon economic life, including such topics as natural resources and the relations of geographic factors to industrial and commercial development.

GEOG 2281 Map Interpretation (3) A survey of the problems encountered in reading maps. Emphasis is on the kinds of information that can be presented on maps, the kinds of symbols used, and limitations of maps.

GEOG 3200 Geography of Europe (3) A systematic and regional approach to Europe involving the description and analysis of its major regions, political units, cultural diversity, and contemporary issues and problems.

GEOG 3201 The Cultural Landscape (3) A survey of fundamental human needs, beliefs, and activities that have molded the varied human landscapes of the world. Emphasis on the identification, description, and correlation of spatial variations of population, land use, and social and economics activities.

GEOG 3225 Geography of Latin America (3) South and Central America, including Mexico and the Caribbean, with analysis of the various physical environments, cultures, economies, and contemporary issues.

GEOG 3270 Research Methods in Geography (3) An overview of and training in methods of geographic data selection, collection, and analysis. Prerequisite: GEOG 2212 or GEOG 3201 or permission of instructor.

GEOG 3275 Climatology (3) Considers on a fundamental basis the physics of the atmosphere, hydrosphere, and lithosphere requisite to an understanding of the cultural implications of climate.

GEOG 4201 Cartography (3) Techniques and tools of map construction including gathering, manipulation, and representation of geographic data. Emphasis on thematic mapping and maps as communication. Traditional and electronic technologies stressed. Prerequisite: GEOG 2212 or EASC 1004 or consent of instructor.

GEOG 4205 Computer Cartography (3) Implementation of mapping software, map design, problems and opportunities associated with computer mapping. Content includes obtaining data in a computer context (e.g., Cyberspace). Prerequisite: GEOG 4201or equivalent or consent of instructor.

**GEOG 4210 Remote Sensing and Image Interpretation** (3) Use of electromagnetic spectrum to obtain information on our environment. Emphasis includes visible spectrum (air photography), thermography, radar, and satellite imagery. Prerequisite: GEOG 2212 or EASC 1004 or consent of instructor.

GEOG 4220 Geographic Information Systems I (3) Automated procedures for storage, analysis, and display of spatial information. Data bases, procurement of spatial information, data manipulation and display techniques, software systems and management issues.

**GEOG 4230 Geography of Asia (3)** A systematic and regional approach to the several Asian landscapes. Emphasis is on physical geography and cultural regions. **GEOG 4235 Geography of the Former Soviet Union (3)** A regional geography of the F.S.U. The relationship of rigorous physical environment to national problems.

**GEOG 4240 Geography of Missouri (2)** A description and analysis of the topical and regional geography of Missouri. **GEOG 4251 Special Projects in Geography (1-6)** Study, interpretation, and discussion of special topics and problems in geography. May be repeated for a maximum of 6 semester hours.

**GEOG 4256 Physical Geography (3)** The areal distribution of the major elements of the physical environment relevant to man's occupance of the earth's surface. Prerequisite: GEOG 2212.

**GEOG 4260 Historical Geography of the United States (3)** Relationship of changing geography to physical environment and developing technology in the United States.

**GEOG 4265 Urban Geography (3)** Location of cities as related to other geographic phenomena. Urban units are analyzed with respect to general location theory.

**GEOG 4270 World Political Geography (3)** The historical development of the political organization of area. Theoretical aspects of political geography are emphasized.

**GEOG 4275 Special Topics in Geography (1-3)** Directed individual or group research of predetermined problems in geography for more intensive study. May be repeated for a maximum of 3 semester hours.

**GEOG 4291 Conservation of Natural Resources (3)** Problems of availability, production, exploitation, appraisal, distribution, and renewability of natural resources.

GEOG 3310 Geography of Africa (3) Historic and modern significance of Africa; description and delimitation of the major natural regions; and the dominant native cultures. GEOG 3314 Geography of North Africa/Southwest Asia (3) Regional study of North Africa/Southwest Asia (Middle East) examining the spatial aspects of the realm's physical, cultural, and political geography. Covers countries from Morocco to Iran

## **Theatre**

In the Department of Theatre, the second digit in the course number stands for the following: 1--Interpretation, 2--Children's Theatre, 3--Production, 4--History and Literature, 5--Acting, 6--Crafts, 7--Directing, 8--Playwriting, 9--General.

# SPEECH COMMUNICATION AND THEATRE Major, B.S. in Ed. Degree

(Certification to teach speech and theatre in grades 9-12) (41 000362)

|         |         |                               |     |        |                             | Sem. Hours |
|---------|---------|-------------------------------|-----|--------|-----------------------------|------------|
| CORE RE | EQUIREM | ENTS                          |     |        |                             | 21         |
| THEA    | 1500    | Acting3                       | COM | M 2330 | Small Group Communication . | 3          |
| THEA    | 1600    | Stagecraft3                   | COM | M 2340 | Argumentation & Debate      | 3          |
| THEA    | 3700    | Directing3                    | COM | M 3325 | Nonverbal Communication     | 2          |
| COMM    | 2100    | Introduction to Comm. Theory3 | COM | M 3390 | Forensics                   | 1          |

## Theatre Major Option, B.S. in Ed. Degree

The graduate with a Speech Communication and Theatre Bachelor of Science in Education degree (with a Theatre Major Option) will use the knowledge and skills obtained in the program to:

- Teach essential elements of speech communication and theatre at secondary school levels.
- Communicate and collaborate effectively in the interactive and creative process of theatre.
- Demonstrate a working knowledge of the historical, cultural, and stylistic dimensions of drama and theatre.
- Utilize critical thinking skills in order to analyze and interpret a script for the purpose of developing a concept and systematic plan for the production of a play.
- Form, communicate, and defend value judgments about quality and aesthetics in works of theatre.
- Demonstrate technical proficiency in the areas of acting and directing in order to create and present theatrical performances.
- Demonstrate a basic proficiency in the areas of theatre design and technology in order to create and present theatrical productions.
- Technical direct and direct one-act plays for public performance and successfully fulfill significant production assignments in the department's mainstage and/or children's theatre series.

|          |           |  |                 |                 |           |                                    | Sem. Hours     |
|----------|-----------|--|-----------------|-----------------|-----------|------------------------------------|----------------|
| MAJOR    | REQUIR    | EMENTS                                 |                 |                 |           |                                    | 36             |
| Core R   | equireme  | nts                                    | 21              |                 |           |                                    |                |
| THEA     | 4400      | Lit. & History of the Theatre I        | 3               | THEA            | 3630      | Studio Theatre I                   | 1              |
|          |           | Lit. & History of the Theatre II       |                 | THEA            | 4730      | Studio Theatre II                  | 1              |
| THEA     | 2610      | Design Fundamentals                    | 3               | Elective        | s in THE  | A or COMM                          | 4              |
| MINOR I  | REQUIRE   | MENTS                                  |                 |                 |           |                                    | 18-25          |
| GENER/   | AL EDUC   | ATION REQUIREMENTS (page 49)           | 48 s.h. ( In th | ne major, TH    | EA 1100   | fulfills 3 s.h. of Div. I B; in th | e professional |
| educatio | n require | ments, ICAP 4468 fulfills 3 s.h. of Di | v. IV B)        |                 |           |                                    | 42             |
| Second   | dary Educ | ation students must have one cours     | e in a physical | or earth scient | ence and  | one in a biological science        | in Div. II A.  |
| THEA     | 1100      | Div. I B (required)                    | 3               | THEA            | 2400      | Div. II C (required)               | 3              |
| HIST     | 1350      | Div. II B or                           |                 | PSY             | 4230      | Psy. of Adolescence                | 3              |
| HIST     | 1351      | Div. II B (required)                   | 3               |                 |           |                                    |                |
| POLS     | 1510      | Div. II B (required)                   | 3               |                 |           |                                    |                |
| Second   | lary Educ | ation students will be allowed to sub  | stitute PSY 42  | 30 to fulfill 3 | s.h. in D | iv. III.                           |                |
| PROFES   | SIONAL    | <b>EDUCATION REQUIREMENTS (SE</b>      | e page 205)     |                 |           |                                    | 28             |
| MINIMUI  | M TOTAL   | `                                      | · = /           |                 |           |                                    | 124            |

## Speech Communication Major Option, B.S. in Ed. Degree

See requirements as outlined in the Department of Communication.

## SPEECH COMMUNICATION AND THEATRE Minor, B.S. in Ed. Degree

(Certification to teach speech and theatre in grades 5-9 with a middle school-junior high major. Elementary education functional majors 1-6 may use this as an area of concentration. (000363)

| MINOR F | REQUIRE | MENTS                       | Sem. Hours                           |
|---------|---------|-----------------------------|--------------------------------------|
| THEA    | 1500    | Acting3                     | COMM 2330 Small Group Communication3 |
| THEA    | 1600    | Stagecraft3                 | COMM 2340 Argumentation & Debate3    |
| THEA    | 3700    | Directing3                  | Elective in THEA or COMM3            |
| COMM    | 2100    | Foundations of Comm. Theory |                                      |

# THEATRE Major, B.A. Degree

(42 000364)

The graduate with a Bachelor of Arts in Theatre degree will use the knowledge and skills obtained in the program to:

- Communicate and collaborate effectively in the interactive and creative process of theatre.
- Demonstrate a working knowledge of the historical, cultural, and stylistic dimensions of drama and theatre.
- Utilize critical thinking skills in order to analyze and interpret a script for the purpose of developing a concept and systematic plan for the production of a play.
- Form, communicate, and defend value judgments about quality and aesthetics in works of theatre.
- Demonstrate technical proficiency in the areas of acting and directing in order to create and present theatrical performances.
- Demonstrate a basic proficiency in the areas of theatre design and technology in order to create and present theatrical productions.
- Technical direct and direct one-act plays for public performance and successfully fulfill significant production assignments in the department's mainstage and/or children's theatre series.

| ucpart  | inchi s mi | anistage and/or children's the | alle selles. |      |      |                                   |
|---------|------------|--------------------------------|--------------|------|------|-----------------------------------|
|         |            |                                |              |      |      | Sem. Hours                        |
| MAJOR   | REQUIRE    | MENTS                          |              |      |      | 35                                |
| THEA    | 1400       | Script Analysis                | 3            | THEA | 3700 | Directing3                        |
| THEA    | 1500       | Acting                         | 3            | THEA | 4730 | Studio Theatre II1                |
| THEA    | 1510       | Stage Movement                 | 3            | THEA | 4400 | Lit. & History of the Theatre I3  |
| THEA    | 1520       | Stage Voice                    | 3            | THEA | 4420 | Lit. & History of the Theatre II3 |
| THEA    | 1600       | Stagecraft                     | 3            | THEA | 3600 | Scenic Design, 3 or               |
| THEA    | 2610       | Design Fundamentals            | 3            | THEA | 3610 | Costume Design, 3 or              |
| THEA    | 3630       | Studio Theatre I               | 1            | THEA | 3620 | Lighting Design, 33               |
|         |            |                                |              |      |      | re3                               |
| MINOR F | REQUIRE    | MENTS                          |              |      |      | 18-25                             |
| GENER/  | AL EDUCA   | ATION REQUIREMENTS (pag        | je 49)48 s.h |      |      | 48                                |
| THEA    | 1100       | Div. IB (required)             |              |      |      | 3 or                              |
| IGEN    |            | Div.IVA (required)             |              | IGEN | 4234 | 3 or                              |
| IGEN    | 3116       | 3 or                           |              | IGEN | 4244 | 3,3                               |
| IGEN    | 3224       | 3 or                           |              |      |      |                                   |
|         |            |                                |              |      |      |                                   |
|         |            |                                |              |      |      | 3-9                               |
|         |            | or's Degree Requirements sec   |              |      |      |                                   |
|         |            |                                |              |      |      | 13-20                             |
| MINIMU  | M TOTAL    |                                |              |      |      | 124                               |

## THEATRE Functional Major, B.F.A. Degree

(47 000366)

The graduate with a Bachelor of Fine Arts degree in Theatre will use the knowledge and skills obtained in the program to:

- Communicate and collaborate effectively in the interactive and creative process of theatre.
- Demonstrate a working knowledge of the historical, cultural, and stylistic dimensions of drama and theatre.
- Utilize critical thinking skills in order to analyze and interpret a script for the purpose of developing a concept and systematic plan for the production of a play.
- Form, communicate, and defend value judgments about quality and aesthetics in works of theatre.
- Demonstrate technical proficiency in the areas of acting and directing in order to create and present theatrical performances.
- Demonstrate a basic proficiency in the areas of theatre design and technology in order to create and present theatrical productions.
- Technical direct and direct one-act plays for public performance and successfully fulfill significant production assignments in the department's mainstage and/or children's theatre series.

| aoparanonto     | ao.ago ana.o. oa.oo a.oaa o oonoo.   |                  |                             | Sem. Hours |
|-----------------|--------------------------------------|------------------|-----------------------------|------------|
| FUNCTIONAL N    | MAJOR REQUIREMENTS                   |                  |                             | 66         |
| THEA 4300       | Professional Practices3              | Elect 6 hours fr | om the following            | 6          |
| THEA 4310       | Principles of Theatre Management3    | THEA 3500        | Advanced Scene Study        |            |
| THEA 1400       | Script Analysis3                     | THEA 4500        | Advanced Acting             | 3          |
| THEA 4400       | Lit. & History of the Theatre I3     | THEA 4510        | Period Acting Styles        | 3          |
| THEA 4420       | Lit. & History of the Theatre II3    | Electives from t | he Design/Technology        |            |
| THEA 1500       | Acting3                              | concentration li | sting                       | 9          |
| THEA 1600       | Stagecraft3                          |                  | Design / Technology         |            |
| THEA 2610       | Design Fundamentals3                 | THEA 2620        | Costume Technology          | 3          |
| THEA 3630       | Studio Theatre I1                    | THEA 3600        | Scene Design                | 3          |
| THEA 3700       | Directing3                           | THEA 3610        | Costume Design              |            |
| THEA 4730       | Studio Theatre II1                   | THEA 3620        | Lighting Design             | 3          |
| THEA 4910       | Senior Showcase1                     | THEA 4600        | Advanced Technical Theatre  | 3          |
| Elect one of th | e following concentrations27         | THEA 4610        | Adv. Stage Lighting & Sound | d t        |
|                 | Performance                          | Electives from t | he Performance              |            |
| THEA 1510       | Stage Movement3                      | concentration li | sting                       | 9          |
| THEA 1520       | Stage Voice3                         | Departmentally a | approved supporting courses | 9          |
| THEA 1610       | Stage Make-Up3                       |                  |                             |            |
| THEA 4710       | Advanced Directing3                  |                  |                             |            |
| MINOR NOT RE    | EQUIRED                              |                  |                             |            |
| GENERAL EDU     | ICATION REQUIREMENTS (page 49)48 s.h |                  |                             | 48         |
| THEA 1100       | Div. IB (required)3                  | IGEN 3232        | 3 or                        |            |
| IGEN            | Div.IVA (required)                   | IGEN 4234        | 3 or                        |            |
| IGEN 3116       | 3 or                                 | IGEN 4244        | 3,                          | 3          |
| IGEN 3224       | 3 or                                 |                  |                             |            |
| FREE ELECTIV    | 'ES                                  |                  |                             | 10         |
| MINIMUM TOTA    | AL                                   |                  |                             | 124        |
|                 |                                      |                  |                             |            |

## **THEATRE Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000365)

| (00000) |         |                     |    |          |              |                                       |
|---------|---------|---------------------|----|----------|--------------|---------------------------------------|
|         |         |                     |    |          |              | Sem. Hours                            |
| MINOR F | REQUIRE | MENTS               |    |          |              | 23                                    |
| THEA    | 1100    | Oral Interpretation | .3 | THEA     | 4400         | Lit. & History of the Theatre I, 3 or |
| THEA    | 1400    | Script Analysis     | .3 | THEA     | 4420         | Lit. & History of the Theatre II, 3 3 |
| THEA    | 1500    | Acting              | .3 | Elective | es in theatr | e5                                    |
| THEA    | 1600    | Stagecraft          | .3 |          |              |                                       |
| THEA    | 3700    | Directing           | .3 |          |              |                                       |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, THEA 1100 fulfills 3 s.h. of Div. I B)

## Interpretation

**THEA 1100 Oral Interpretation (3)** Skills used to convey the intellectual, emotional, and aesthetic values of literature to an audience.

## Children's Theatre

**THEA 3220 Children's Theatre (3)** The study and practice of producing plays for a children's audience. Only offered Spring semester.

## Production

THEA 4300 Professional Practices (1-6) Extended,

supervised experiences in any phase of theatre production. Credit allowed will depend upon the nature and scope of the assignment. *May be repeated for a maximum of 10 semester hours.* Prerequisite: consent.

**THEA 4310 Principles of Theatre Management (3)** An indepth examination of the business theories and practices in modern educational, community, and professional theatre. Box office and publicity work are required.

## **History and Literature**

**THEA 1400 Script Analysis (3)** Structural and performance dimensions of the playscript. It will focus on the role of the various theatrical artists in developing an effective methodology and application for translating the playwright's

script into a public performance.

**THEA 2400 Theatre in Western Civilization (3)** An introductory examination of the various contemporary theatre arts with a survey of the drama and the developments of major theatrical periods in western civilization.

**THEA 4400 Literature and History of the Theatre I (3)** Works and writers for the stage from the beginning to 1700. The development of theatrical modes and presentation and their influences upon the drama of each period. Only offered Fall semester.

**THEA 4420 Literature and History of the Theatre II (3)** Works and writers for the stage from 1700 to the present. The development of theatrical modes and presentation and their influences upon the drama of each period. Only offered Spring semester.

## Acting

**THEA 1500 Acting (3)** An extensive study in the theories and techniques of acting.

**THEA 1510 Stage Movement (3)** An extensive study of the body's use in theatrical performance; this class will work with expanding the imagination of bodily expression.

**THEA 1520 Stage Voice (3)** Course is designed to improve and enhance the skills necessary for excellent stage vocal production. Exercises will focus on breath, resonance, articulation and speech dynamics.

**THEA 3500 Advanced Scene Study (3)** The course is designed to enhance the actor's proficiency with character development within the genre of realism. Prerequisite: THEA 1500.

**THEA 4500 Advanced Acting (3)** An intensified study of characterization centering around the study of difficult roles, and the adaptation of acting techniques to various styles of acting. May be repeated for a maximum of 6 credit hours. Prerequisite: THEA 1500.

**THEA 4510 Period Acting Styles (3)** Examines the craft, methodology, resources and practice of acting in non-realistic (classical and contemporary) dramatic literature. Emphasis on analysis of stylistic determinants in dramatic literature. May be repeated for a maximum of 6 hours.

## Crafts

**THEA 1600 Stagecraft (3)** Lectures and laboratory experiences in the construction, painting, rigging and shifting of stage scenery. Scene shop work arranged as a portion of the course.

**THEA 1610 Stage Make-up (3)** Materials and methods of application of make-up artistry for cosmetic and character effects on stage.

**THEA 2610 Design Fundamentals (3)** Survey of the concepts, applications, and techniques of theatrical design through study of the design areas in lighting, costume, scenic, make-up, hair, sound and properties.

**THEA 2620 Costume Technology (3)** Lectures and laboratory experience in sewing, fabric modification, and the craftwork of costume construction. An additional fee is associated with this course.

**THEA 3610 Costume Design (3)** Theory and practice of costume design as applied to theatrical, musical and operatic productions of live theatre.

**THEA 3620 Lighting Design (3)** Theory and practice of lighting design as it applies to the modern theatrical performance.

**THEA 3630 Studio Theatre I (1)** Technical direction of a play in the Studio Theatre series at approximately the junior class level. Prerequisites: THEA 1500, THEA 1600, THEA 3700 and departmental consent.

**THEA 4600 Advanced Technical Theatre (3)** Advanced techniques in scenery construction and painting, plastics, and selection of stage equipment. Laboratory exercises will be required. Prerequisite: THEA 1600.

**THEA 4610 Advanced Stage Lighting and Sound (3)** Extensive investigation of stage lighting history and practices in the modern theatre and the study and use of live and recorded sound as a theatrical art. Only offered Fall semester. Prerequisite: THEA 1600.

### Directing

**THEA 3700 Directing (3)** Problems, principles, and employment of various directing styles, and the adaptation of directing techniques to various physical facilities. Prerequisites: THEA 1500 and THEA 1600.

**THEA 4710 Advanced Directing (3)** Extensive examination of special directing problems with comedy, tragedy, period drama, and the musical show in arena and proscenium theatres. May be repeated for a maximum of 6 credit hours. Prerequisite: THEA 3700.

**THEA 4730 Studio Theatre II\* (1)** Direction of a play in the Studio Theatre series at approximately the senior class level. Prerequisite: THEA 3630 and departmental consent. \*Not available for graduate credit.

## **Playwriting**

**THEA 4800 Playwriting (1-3)** Dramatic writing, dramatic theory, style dialogue exercises, characterization, with opportunity for the production of student plays. *May be repeated for a maximum of 3 semester hours.* 

#### General

**THEA 1900 Theatre Practicum (1)** Supervised work on selected problems in play direction, acting, scene design, scene construction, stage lighting, and business management. May be repeated for a maximum of 3 semester hours. Prerequisite: consent.

**THEA 3900 Special Topics in Theatre (1-3)** Individual study and research on topics that are of special interest to the student. May be repeated for a maximum of 6 semester hours. Prerequisite: consent.

THEA 4900 Repertory Theatre (3) Practical experience in theatre through participation in a summer repertory season of plays as an actor, a technician, or management personnel. May be repeated for a maximum of 6 semester hours. Prerequisite: enrollment by department approval only. THEA 4910 Senior Showcase (1) Senior Theatre Majors will present a public showcase performance or portfolio

will present a public showcase performance or portfolio presentation. Course is part of the formative assessment process within Theatre Department.

THEA 4920 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teaching-learning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with THEA 4984 during the Professional Semester. \*Not available for graduate credit.

**THEA 4984 Methods of Teaching Speech and Theatre\***(2) Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with THEA 4920 during the Professional Semester. \*Not available for graduate credit.

# Adrian and Margaret Harmon College of Business Administration

In the Harmon College of Business Administration, the second digit in the course number stands for the following: 0--Economics, 1--Accounting, 2--Business Education, 3--Management, 4--Marketing, 5--Office Administration, 6--Computer Information Systems, 7--Business Law, 8--Finance, 9--Human Resource Management.

#### Accreditation

The Harmon College of Businsess Administration and the Accounting program are accredited by AACSB International located at 777 South Harbour Island Boulevard, Suite 750, Tampa, FL 33602; phone 813-769-6500; webpage http://www.aacsb.edu.

#### The HCBA Integrative Business Experience (IBE)

Harmon College of Business students at Central Missouri State University have the option to participate in a program that links their learning to a real-world experience. (This program is required for Management majors.) This program, called the Integrative Business Experience (IBE), was inspired by the MG101 program at Bucknell (Miller, 1991) and the Integrated Business Core (IBCCMichaelsen, 1999) program at the University of Oklahoma. IBE students will be required to create and manage two significant enterprises: an actual start-up company and a hands-on community service project. Thus, IBE students will have the opportunity to: 1) develop interpersonal and group-interaction skills in a work-like setting, and 2) learn from their experience of trying to apply key business concepts and analytical tools to solve a wide range of unstructured, but very real problems.

Participation in the IBE option, which will typically occur during the first semester of the junior year, will require students to enroll in a four-course block that includes three required junior-level core business courses and an Entrepreneurship and Community Service Practicum course\*. The link between learning and experience occurs because the content coverage and many of the assignments in the core courses will be specifically sequenced to support students in organizing and managing their business and service ventures. As a result, IBE students will develop a clear Abig-picture@ understanding of business operations because, on an ongoing basis, they will be using concepts and tools from all three core courses to guide their decisions in the business and service organizations.

## **IBE Program Elements:**

- Students must simultaneously enroll in three required junior-level core business coursesCManagement, Marketing, and Information Systems (MarketingCMKT 3405, ManagementCMGT 3315, and Information SystemsCCIS 3630) plus a three-hour Entrepreneurship and Community Service Practicum (MGT 3385, MKT 3485 or CIS 3685). Students will be responsible for mastering the concepts and terminology of each of the functional area core courses.
- Students will learn in classes in which the instruction is delivered using Team-Based Learning<sup>7</sup>. Thus, instead of listening to lectures, most of their in-class time is spent working in a 7-member learning team that remains stable across the core courses for the entire semester.

- Students will work as an "employee" of a 35-member company that becomes a Alaboratory@ in which they apply concepts from the core business disciplines as they engage in two venturesCa start-up business and a service project on behalf of a non-profit community organization
- Students will spend the first 7 weeks developing a business plan for a start-up company whose profits will finance a hands-on community service project. The plan will then be presented to a loan review committee (First Community Bank officers and local entrepreneurs) to obtain the capital (real money up to \$5,000) needed to implement their plan.
- Students will implement their business plan (i.e., they have 6-7 weeks to do enough business to pay off their loan and expenses and generate enough profit to finance their service work).
- Students will create a program portfolio that contains reflections on their experience and includes a set of Aartifacts@ that will enable them to communicate their learnings to potential employers.

#### References

Michaelsen, L. K. (1999). Integrating the Core Business Curriculum: An Experience-based Solution. Selections, 15 (2), 9-17.

Miller, J. A. (1991) Experiencing Management: A Comprehensive, AHands-on@ Model for the Introductory Management Course. Journal of Management Education, 15 (2), 151-173.

Shinn, Sharon (2003). Junior Executives. BizEd 2(4) May/ June, 48-51.

Turk, Randall (2002). Risky Business. Sooner Magazine, 22(2), 22-26.

#### For Additional Information on Team-Based Learning IBE, and IBC

Contact Dr. Larry K. Michaelsen, Professor of Management at lmichaelsen@cmsu1.cmsu.edu (660) 543-4124 or visit www.teambasedlearning.org, www.cmsuibe.org and/or www.ou.edu/org/ibcore.

\* Enrollment in IBE is limited and will be on a first-come firstenrolled basis

## Bachelor of Science in Business Administration Degree Program Statement of Policy

**College Mission**. The mission of the Harmon College of Business Administration is to provide quality teaching and learning for students from the University's historical 21 county service area preparing to enter careers in business. To accomplish this task the College:

- Primarily provides undergraduate degree programs in business
- Provides instruction for undergraduate students in other disciplines who desire to learn about business
- Provides selected graduate degree programs and instruction to prepare students for professional certifications
- Maintains a curriculum that reflects the current business environment
- Seeks students from outside of the service area, including international student enrollment, to enhance diversity
- Supports the state-wide university mission in technology through selected business-related programs
- Offers domestic and international internship opportunities
- Provides opportunities for entrepreneurial education and experience
- Employs hands-on, technologically enhanced, and outcomes driven pedagogy
- Expects faculty to engage in applied and instructional research while recognizing the contribution of basic research

A supporting mission is to provide meaningful service to the University, area community, and citizens of Missouri. To accomplish this task the college:

- Values and recognizes faculty and student contributions to the University and society
- Encourages active faculty participation in their respective professions
- Sponsors the Institute for Entrepreneurial Development to train and advise small businesses in the state

Admission to B.S.B.A. Programs.\* Acceptance and registration in business administration courses or the declaration of intent to complete a business major do not guarantee admission to the Bachelor of Science in Business Administration programs. A student is not officially admitted to the HCBA until he/she is notified in writing by a representative of the HCBA. Only those students who have applied for admission to a program in the HCBA may file an application for graduation for the Bachelor of Science in Business Administration degree.

\*Students seeking a Bachelor of Science in Education degree with a major in business education must meet requirements of the College of Education and Human Services for admission to the professional sequence.

The desire of the faculty in the HCBA is for all CMSU students to succeed. To facilitate and support (1) overall academic program quality, (2) student progress through his/her academic program at the desired rate and (3) to better ensure receiving the maximum benefit from the curriculum design, students who desire to earn a B.S.B.A. degree are to enroll and take courses that are specifically designed for their academic classification. This means that freshmen (those who have completed 0-29.5 semester hours of college credit) who take courses within the HCBA will enroll in 1000

level courses only, sophomores (completed 30-59.5 semester hours) will enroll in 2000 or 1000 level courses, juniors (completed 60-89.5 semester hours) will enroll in 3000, 2000, or 1000 level courses and seniors (all students who have completed 90 semester hours) will enroll in 4000 level courses or below.

All CMSU students enrolled in business and economics courses are required to comply with prerequisites for those courses.

Students who have not been admitted to a B.S.B.A. degree program may not enroll in more than a total of 30 semester hours in courses with the following prefixes: ACCT, CIS, FIN, HRM, MKT, MGT.\*\*

\*\*Deviations from this limit must be approved in writing by the dean of the Harmon College of Business Administration.

**B.S.B.A.** Admission Requirements. CMSU students who desire to graduate with a B.S.B.A. degree should declare themselves to be pre-business majors upon enrollment at the University. Admission to all B.S.B.A. degree programs is conditional upon the completion of the departmental requirements and the following prerequisites:

 A minimum of 41 semester hours of credit including the following pre-admission courses:

| ACCT        | 2101 | Principles of Financial Accounting    | 3 |
|-------------|------|---------------------------------------|---|
| ACCT        | 2102 | Principles of Managerial Accounting . | 3 |
| BE&O        | 1210 | Essentials of Managing Information    | 2 |
| <b>ECON</b> | 1010 | Principles of Macroeconomics          | 3 |
| <b>ECON</b> | 1011 | Principles of Microeconomics          | 3 |
| FIN         | 2801 | Business Statistics I                 | 3 |
| BLAW        | 2720 | Legal Environment of Business         | 3 |
| MATH        | 1111 | College Algebra                       | 3 |

- Attainment of a 2.25 (or above) grade-point average on a scale of 4.00 for credit hours completed at CMSU and elsewhere and attainment of 2.25 (or above) grade-point on the 23 semester hours of pre-admission courses.
- Transfer students from other colleges and universities must meet all degree program admission requirements. Transfer students may take appropriate additional course work to fulfill admission requirements.
- A student applies for admission at the HCBA Office of the Dean (Ward Edwards 1600). The admission process should be initiated prior to fulfillment of all admission requirements.
- All students pursuing a Bachelor of Science in Business Administration degree must take the ACT before they may be officially admitted to the degree program.
- Effective July 1, 2005, all students pursuing a Bachelor of Science in Business Administration Degree must take and pass the College-BASE for General Education before they may be officially admitted to the degree program.
- All students pursuing a Bachelor of Science in Business Administration must demonstrate competency in elementary calculus before they may be admitted to the degree program

Additional B.S.B.A. Graduation Requirements. In addition to specified major and other requirements, all students graduating with a B.S.B.A. degree must satisfy the following requirements:

- Fifty percent of the hours required for a B.S.B.A. degree must be taken outside of the College of Business and Economics. Up to nine semester hours of economics and up to six semester hours of statistics may be counted either inside or outside the business-economics group.
- Students are required to earn at least 50 percent of their required business credit hours for a B.S.B.A. degree at CMSU.
- Students must achieve a minimum cumulative grade-point average of 2.25.

Transfer of Credit. Students planning to transfer to CMSU should expect to complete most major business courses during their junior and senior years. A student from a two-year or four-year institution may transfer pre-admission courses equivalent to those required for the B.S.B.A. degree at CMSU. Transfer students from four-year institutions should obtain transfer information from the academic department offering the major.

Upper division courses (courses at the 3000 and 4000 level) cannot generally be transferred from a two-year institution and applied to a B.S.B.A. degree. However, the department chair responsible for the CMSU course may elect to allow such a transfer for equivalent credit. Before the department chair may accept the transfer course for equivalent credit, the course must be "validated" through a departmentally administered examination or successful completion of a more advanced course in the discipline.

The specific validation requirement to be applied will be designated by the department chair. The validation policy for the HCBA is consistent with policies and guidelines at comparable business schools and is in effect for all students desiring to transfer courses completed at a community or junior college. Upper division course work transferred from a four-year institution must be reviewed by the department chair before such work can be applied to a B.S.B.A. degree. The department chair may choose to apply the validation requirement to such transfers.

B.S.B.A. Core Courses. All B.S.B.A. degree program students are required to successfully complete carefully selected and designed 3000 and 4000 level business core courses. Students may enroll in 3000 level core courses after successfully completing 59.5 semester hours and may enroll in 4000 level core courses after successfully completing 89.5 semester hours. Prerequisite course requirements are to be complied with at all levels of the core and in other CMSU business and economics courses. Exception to these rules concerning core courses may be granted by the chair of the department in the HCBA in which the course is offered. HCBA 3000 and 4000 level core courses are listed as an integral part of departmental academic programs. Please refer to the following pages of this section of the CMSU catalog for a complete listing of core and major courses required by the faculty in each department in the HCBA.

The Harmon College of Business Administration intends to provide equal opportunities for all through careful blending of human and financial resources. By accentuating growth in the capabilities of people, the College seeks to improve the quality of life for each individual in the region served.

# Accounting

#### **Department of Accounting Statement of Policy**

A minimum grade of C must be earned in the following courses if they are to be applied toward the fulfillment of an accounting functional major or minor: ACCT 2101, ACCT 2102, ACCT 2110, ACCT 3111, ACCT 3112, ACCT 3120, ACCT 3130, and ACCT 3160. Completion of the departmental exit examination is a graduation requirement for the accounting functional major.

A student with an accounting functional major or minor may enroll in a course offered by the Department of Accounting only if a grade of at least C is earned in each of the course's accounting prerequisites.

# ACCOUNTING Functional Major, B.S. in Business Administration Degree

 $(46\ 000501)$ 

The graduate with a Bachelor of Science in Business Administration degree with a major in Accounting will use the knowledge and skill obtained in the program to:

- Read, listen, write, and speak at the level expected of a beginning accountant.
- Locate, obtain, and organize financial information.
- Identify and solve unstructured problems in a business setting.
- Work in groups and provide leadership.
- Integrate general knowledge of the flow of ideas and events in history, cultural differences, socio-political forces, mathematics, aesthetics, and economics into his/her everyday decisions.
- Understand organizations and how they change.
- Recognize the roles that technology and international commerce play in today's business environment.
- Use the common body of accounting knowledge to solve real-world accounting problems.
- Participate in the accounting profession and make value-based judgments in his/her business and professional lives.

|          |   |                                      |             |           |                               | Sein. Hours |
|----------|---|--------------------------------------|-------------|-----------|-------------------------------|-------------|
| FUNCTION | AM JANC   | JOR REQUIREMENTS                     |             |           |                               | 66          |
| *ACCT    | 2101  | Principles of Financial Acct3        | *FIN        | 2801      | Business Statistics I         | 3           |
| *ACCT    | 2102  | Principles of Managerial Acct3       | FIN         | 3801      | Business Statistics II        | 3           |
| ACCT     | 2110  | Microcomputer Appl. in Acct3         | FIN         | 3850      | Principles of Finance         | 3           |
| ACCT     | 3111  | Inter. Financial Accounting I3       | MGT         | 3315      | Management of Organizations   | 3           |
| ACCT     | 3112  | Inter. Financial Accounting II3      | MGT         | 3325      | Business Communications       | 3           |
| ACCT     | 3120  | Cost & Managerial Accounting3        | MGT         | 3360      | Production/Operations Mgt     | 3           |
| ACCT     | 3130  | Introduction to Income Tax3          | MKT         | 3405      | Marketing Policy              |             |
| ACCT     | 3160  | Acct. Information Systems3           | *BLAW       | 2720      | Legal Environment of Business | 3           |
| ACCT     | 4100  | Advanced Accounting I3               | BLAW        | 3721      | Law of Business Transactions  | 3           |
| ACCT     | 4105  | Auditing3                            | **Accou     | nting and | Business Elective             | 6           |
| *ECON    | 1011  | Principles of Microeconomics3        |             |           |                               |             |
|          | NOT REQ   |                                      |             |           |                               |             |
| GENERA   | AL EDUCA  | ATION REQUIREMENTS (page 49)         |             |           |                               | 48          |
| COMM     | 1000  | Div. I B (required)3                 | PSY         | 1100      | Div. II B or                  |             |
| *MATH    | 1111  | Div. I C (required)3                 | SOC         | 1800      | Div. II B (required)          | 3           |
| *BE&O    | 1210  | Div. II A (required)2                | ICAP        | 4357      | Div. IV B (required)          | 3           |
| *ECON    | 1010  | Div. II B (required)3                |             |           |                               |             |
| ELECTI\  | ES OUTS   | SIDE OF THE HARMON COLLEGE OF BUSINE | ESS ADMINIS | TRATION   | ١                             | 8           |
| FREE EL  | ECTIVES   | S                                    |             |           |                               | 2           |
| This pro | This program requires at least 90 hours of courses without the ACCT prefix. |                                      |             |           |                               |             |
| MINIMUI  | M TOTAL   |                                      | •           |           |                               | 124         |

<sup>\*</sup>Students expecting to receive the B.S. in Business Administration Degree must seek admission to this program upon the completion of a minimum of 41 semester hours of credit including ACCT 2101, ACCT 2102, BLAW 2720, BE&O 1210, ECON 1010, ECON 1011, FIN 2801, and MATH 1111. See pages 180-181 for the Statement of Policy on Admission to a B.S. in Business Administration Degree program.

## **ACCOUNTING Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000502)

| MINOR F | REQUIRE | MENTS                           |                        |      |                            | Sem. Hours21 |
|---------|---------|---------------------------------|------------------------|------|----------------------------|--------------|
| ACCT    | 2101    | Principles of Financial Acct3   | ACCT                   | 3130 | Introduction to Income Tax | 3            |
| ACCT    | 2102    | Principles of Managerial Acct3  | ACCT                   | 4100 | Advanced Accounting        | 3            |
| ACCT    | 3111    | Inter. Financial Accounting I3  | Elective in accounting |      |                            | 3            |
| ACCT    | 3112    | Inter. Financial Accounting II3 |                        |      |                            |              |

<sup>\*\*</sup> Electives require approval of the department chair. At least one course must be outside accounting.

### Accounting

ACCT 2100 Survey of Accounting (3) Study of elementary financial and managerial accounting to include the preparation and use of accounting statements and use of accounting information for managerial decisions. Course may not be substituted for ACCT 2101 and/or ACCT 2102. Not available to students with credit in ACCT 2102. **ACCT 2101 Principles of Financial Accounting (3)** Fundamental principles of financial accounting. The preparation and use of financial accounting records and statements for business organizations.

**ACCT 2102 Principles of Managerial Accounting (3)** Development and use of cost and managerial accounting information for management control and decision making. Prerequisite: ACCT 2101 and MATH 1111 or equivalent. ACCT 2110 Microcomputer Applications in Accounting (3) Use of microcomputer to solve accounting related business problems. Prerequisites: ACCT 2101 and BE&O 1210

## ACCT 3111 Intermediate Financial Accounting I (3)

Financial accounting theory and practice applied to selected topics with emphasis on assets and application of generally accepted accounting principles. Prerequisite: ACCT 2101.

ACCT 3112 Intermediate Financial Accounting II (3) Continuation of financial accounting theory and practice applied to selected topics with emphasis on equities and application of generally accepted accounting principles. Prerequisite: ACCT 3111.

ACCT 3120 Cost and Managerial Accounting (3) Application of accounting for managerial decision making, financial reporting and control for business enterprises. Prerequisites: ACCT 2102 and FIN 2801.

ACCT 3130 Introduction to Income Tax (3) Federal Income Tax principles and procedures. Determination of gross income, exclusions from gross income, business and nonbusiness deductions. Application of the principles is by the use of actual tax forms.

ACCT 3135 Internship in Accounting (3-9) Opportunity for students to gain theoretical knowledge and practical experience within a particular field of specialization. May be taken for pass/fail credit only. Prerequisites: 60 semester hours and overall GPA 2.50 or above or permission of internship supervisor.

ACCT 3160 Accounting Information Systems (3) The integration of information flows of various segments of a business into an information system of the total organization. Emphasis areas include accounting aspects of data processing, system security controls, and documentation. Prerequisites: ACCT 2110 and ACCT 3111.

ACCT 4100 Advanced Accounting I\* (3) Selected topics including business combinations, consolidations, financial accounting and reporting practices; and accounting and reporting for non-profit entities. Prerequisite: ACCT 3112. \*Not available for graduate credit.

ACCT 4105 Auditing\* (3) Study of theory and practice relating to attestation engagements, professional liability and ethics. Prerequisites: ACCT 3112, ACCT 3120, ACCT 3130 and ACCT 3160. \*Not available for graduate credit.

ACCT 4115 Financial Statement Analysis (3) Allows students to gain financial statement analytical perspectives required of credit and equity analysts and others impacted by financial statements. Prerequisite: FIN 3850.

ACCT 4120 Advanced Managerial Accounting (3) An indepth analysis of advanced managerial accounting topics and literature. Prerequisite: ACCT 3120

ACCT 4130 Advanced Income Tax (3) Continuation of the study of Federal Income Tax. Consideration of the special

treatment received by the various business entities, including a study of partnerships, corporations, estates, and trusts. Prerequisite: ACCT 3130.

ACCT 4136 Estate Planning (3) Provides students with the knowledge base and analytical skills needed for effective planning and administration. Prerequisites: ACCT 3130. ACCT 4165 Special Projects in Accounting (1-3) Individualized or group study under the supervision of departmental faculty. May be repeated for a maximum of 6 semester hours. Prerequisite: consent of instructor.

# Computer Information Systems

## Computer Information Systems

# **COMPUTER INFORMATION SYSTEMS Functional Major, B.S.** in Business Administration Degree

(46 000534)

The graduate with a Bachelor of Science degree in Business Administration with a functional major in Computer Information Systems will use the knowledge and skills obtained in the program to:

- Demonstrate knowledge of professional and ethical expectations in the work place.
- Use productivity software (word processing, spreadsheet, and database) effectively and manage hardware and software resources by applying knowledge of operating systems and environments.
- Develop application software using skills in appropriate business programming languages (e.g. Java, Visual Basic, COBOL).
- Develop and maintain databases using theoretical and applied knowledge of relational database management systems (e.g. Oracle, SQL Server).
- Develop and maintain telecommunications networks using theoretical and applied knowledge of telecommunications (e.g. Novell, Windows/NT).
- Analyze business problems and develop solutions by applying critical thinking skills within the systems development process (e.g. The Systems Development Life Cycle [SDLC], Prototyping.
- Be a team player by applying group process skills; participate fully in group discussion and activities, lead/follow when appropriate; provide support and collaboration when needed.
- Access information resources and communicate effectively using a variety of methods: oral, written, and electronic.
- Design and construct client/server applications by using appropriate tools and architectures and develop effective graphical user interfaces (GUIs).
- Apply project management skills when creating a business solution within an information architecture.

| FUNCTIO      | ONAL MA | JOR REQUIREMENTS                      |          |             | 68                                 |
|--------------|---------|---------------------------------------|----------|-------------|------------------------------------|
| CIS          | 1605    | Business Application Software2        | Three co | ourses fror | m one of the two following tracks9 |
| CIS          | 2605    | Programming With Visual Basic.net3    |          |             | Software Development               |
| CIS          | 2615    | Introduction to JAVA3                 | CIS      | 3670        | User Interface Design3             |
| CIS          | 2655    | Prin. of Data Comm . & LAN3           | CIS      | 4680        | Data Resource Mgt3                 |
| CIS          | 3630    | Management Information Systems3       | CIS      | 4660        | Appl. Dev. Using JAVA, 3 or        |
| CIS          | 3650    | Database Management Systems3          | CIS      | 4670        | Appl. Dev. Using VB.net, 33        |
| CIS          | 3660    | Anlys. & Des. of Comp. Infor. Sys3    |          |             | Networking                         |
| CIS          | 4690    | Systems Architecture & Development3   | CIS      | 3665        | Data Comm. Technologies3           |
| *ACCT        | 2101    | Principles of Financial Acct3         | CIS      | 4665        | Data Com. & Dist. Data Proc3       |
| *ACCT        | 2102    | Principles of Managerial Acct3        | CIS      | 4685        | Network Planning, Design &         |
| *ECON        | 1011    | Principles of Microeconomics3         |          |             | Security3                          |
| *FIN         | 2801    | Business Statistics I3                |          | es from the | e following3                       |
| FIN          | 3801    | Business Statistics II3               | CIS      | 3655        | COBOL Programming3                 |
| FIN          | 3850    | Principles of Finance3                | CIS      | 3695        | Intern. in Comp. Infor. Sys3       |
| MGT          | 3315    | Management of Organizations3          | CIS      | 4620        | Microcomputer Applications3        |
| MGT          | 3325    | Business Communications3              | CIS      | 4635        | Seminar in Bus. Comp. Appl3        |
| MGT          | 3360    | Production/Operations Mgt3            | CIS      | 4655        | Software Engineering3              |
| MKT          | 3405    | Marketing Policy3                     | CIS      | 4667        | Cont. Voice & Data Sys3            |
| *BLAW        | 2720    | Legal Environment of Business3        | CIS      | 4695        | Adv. Prog. in C/C++3               |
|              |         |                                       | ,        |             | in the track not chosen            |
| MINIOP       | NOT REQ | IIPED                                 | (prere   | equisites a | pply).                             |
|              |         | TION REQUIREMENTS (page 49)           |          |             | 48                                 |
| COMM         |         | Div. I B (required)3                  | PSY      | 1100        | Div. II B or                       |
| *MATH        | 1111    | Div. I C (required)                   | SOC      | 1800        | Div. II B (required)3              |
| *BE&O        | 1210    | Div. If A (required)2                 | ICAP     | 4357        | Div. IV B (required)               |
| *ECON        | 1010    | Div. II A (required)                  | ICAF     | 4337        | Div. IV B (required)               |
|              |         | , , ,                                 |          | TD ATION    |                                    |
|              |         | SIDE OF THE HARMON COLLEGE OF BUSINES |          |             |                                    |
| IVIIIVIIVIUI | VITOTAL |                                       |          |             |                                    |

<sup>\*</sup>Students expecting to receive the B.S. in Business Administration Degree must seek admission to this program upon the completion of a minimum of 41 semester hours of credit including ACCT 2101, ACCT 2102, BLAW 2720, BE&O 1210, ECON 1010, ECON 1011, FIN 2801, and MATH 1111. See pages 180-181 for the Statement of Policy on Admission to a B.S. in Business Administration Degree program.

## **COMPUTER INFORMATION SYSTEMS Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000535)

| MINOR | REQUIRE | MENTS                              |          |           |                               | 22 |
|-------|---------|------------------------------------|----------|-----------|-------------------------------|----|
| CIS   | 1605    | Business Application Software2     | CIS      | 3650      | Database Mgt. Systems, 3 or   |    |
| CIS   | 2605    | Programming With Visual Basic.net3 | CIS      | 3660      | Analysis & Design of Computer |    |
| CIS   | 2615    | Introduction to JAVA3              | Informat | ion Syste | ms, 3                         | 3  |
| CIS   | 2655    | Principles of Data Communication   | ACCT     | 2101      | Principles of Financial Acct  | 3  |
|       |         | & Local Area Networking3           | ACCT     | 2102      | Principles of Managerial Acct | 3  |
|       |         |                                    | BE&O     | 1210      | Essentials of Managing Info   | 2  |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, BE&O 1210 fulfills 2 s.h. of Div. II A)

# **COMPUTER INFORMATION SYSTEMS, Associate in Science Degree**

Inquiries about the status of this program should be directed to the chair of the Department of Computer Information Systems.

**CIS 1600 Principles of Computer Information Systems** (3) Provides a working knowledge of computer information systems. Hands-on experience is gained in major microcomputer software packages including operating systems, word processing, spreadsheets, and databases. CIS 1601 Business Information Technology Institute (2) Provides information about information technology related careers, development of group/team building skills, communication skills, and hands-on experience in solving business problems using information technology. Prerequisite: enrollment in the Business Information Technology Career Institute.

CIS 1605 Business Application Software (2) Solving business problems with a Windows-based operating system/ environment as well as word processing, presentation software, spreadsheet software, database applications and project management software. Prerequisite: BE&O 1210. An additional fee is associated with this course.

CIS 2605 Programming With Visual Basic.net (3) Graphic User Interface (GUI) client server applications development and data processing using Visual Basic. An additional fee is associated with this course.

CIS 2615 Introduction to JAVA (3) Fundamental principles for the design and implementation of programs using JAVA programing language to develop systems and applications programs. Flexibility portability/platform independence, support for object-orientation and the availability of classes to handle complex programming tasks make JAVA an ideal choice for software development. The course adopts a hands-on approach and entails extensive programming. Prerequisite: CIS 2605. An additional fee is associated with this course.

CIS 2655 Principles of Data Communications and Local

Area Networking (3) Overview of the fundamental concepts needed to develop and work with a data communications system. Hardware, software, network topology, network design and implementation is covered with a particular emphasis on the application of theory to solving business data communication needs. Prerequisite: BE&O 1210. CIS 3630 Management Information Systems (3) Emphasizes how general managers can participate in formulating data processing plans that support corporate goals. A working knowledge of systems analysis and design is covered to allow effective participation by information users. Covers what information systems resources are available and how those resources can be used to support the functional management areas. Prerequisites: BE&O 1210, ACCT 2102, FIN 2801, MGT 3315, and CIS 1605 or ACCT 2110.

CIS 3650 Database Management Systems (3) An in-depth treatment of relational database design and implementation. Programming is done using SQL-COBOL, IEF CASE tool, hierarchical database design and current trends are covered. Prerequisite: CIS 3630. An additional fee is associated with this course.

CIS 3655 COBOL Programming (3) Major emphasis on the developing of logical solutions to business problems. The development of programs on on-line terminals with job control and an overview of architecture of the latest IBM systems. Processing business data using COBOL (Common Business Oriented Language) on mainframe IBM systems. Prerequisites: CIS 3650.

CIS 3660 Analysis and Design of Computer Information Systems (3) Systems analysis and procedure writing, designing and maintaining business applications utilizing the latest integrated Computer Aided Software Engineering (CASE) products. Investigate hardware and software products. Prerequisite: CIS 2615 and CIS 3630. An additional fee is associated with this course.

CIS 3665 Data Communication Technologies (3) Current topics in data communications technology. Topics in wireless and wired technologies supporting personal area, local area and/or wide area networks will be considered. Prerequisite: CIS 2665.

CIS 3670 User Interface Design (3) Principles and guidelines for developing interface designs. Foundational theory, the design / development process and testing for web and application software interfaces will be addressed. Prerequisites: CIS 2615 and CIS 3660.

CIS 3680 Systems Project (1-3) An independent individual project to be completed by the student. May be repeated for a maximum of 5 semester hours. Prerequisite: CIS 3660. CIS 3685 Integrative Business Experience Practicum (3) Students will apply concepts from the concurrent courses to their own start-up business venture and to community service. This course must be taken concurrently with special sections of MGT 3315, MKT 3405 and CIS 3630. Prerequisites: ACCT 2102, CIS 1605 or ACCT 2110, ECON 1010, ECON 1011 and Junior standing

CIS 3695 Internship in Computer Information Systems (3-9) Opportunity for students to gain theoretical knowledge and practical application within a particular field of specialization. May not be taken last semester of senior year. Enrollment normally in 6 or 9 semester hours. May be repeated for a maximum of 18 semester hours. Prerequisites: 60 semester hours and overall GPA 2.50 or above or permission of intern program Director.

CIS 4610 Special Projects (1-3) Special projects offerings in computer information systems. May be repeated for a maximum of 6 semester hours. Prerequisite: consent of instructor. An additional fee is associated with this course. CIS 4620 Microcomputer Applications (3) Emphasis will be on current microcomputer hardware, operating system, and database management software. Applications will be developed using the operating system and the database

software. Prerequisites: BE&O 1210; and MATH 1111 or a high school program including one unit of advanced algebra and one unit of geometry.

CIS 4635 Seminar in Business Computer Applications (2-3) Business applications and programming techniques will be studied and prepared for presentation and discussion. Prerequisite: At least one programming course.

CIS 4640 Contemporary Computer Programming and Business Systems (3) Comparison and application of two or three popular programming languages; systems analysis and procedure writing, flowcharting, designing, and maintaining business applications. Not open to computer information systems majors or minors.

CIS 4655 Software Engineering (3) An advanced course in the systematic approach to the specification, development, operation, maintenance, and retirement of software. Topics include formal specification tools, developmental strategies, software metrics, verification and validation techniques. Prerequisite: CIS 3660. An additional fee is associated with this course.

#### CIS 4660 Applications Development Using JAVA

(3) Develop object-oriented web-based Graphical User Interface (GUI) applications for business using JAVA as the programming language. Prerequisites: CIS 2615 with a C grade or better and CIS 2655 and CIS 3650. An additional fee is associated with this course.

CIS 4665 Data Communication and Distributed Data Processing (3) A comprehensive introduction to the field of digital data communications. It provides an understanding of terminology, topology, protocol, and available systems network architecture. Prerequisite: CIS 2655.

CIS 4667 Contemporary Voice and Data Systems\* (3)
An in-depth study of the theory of telephony. Provides the student with tools to understand and manage a large voice and data communications network. Topics include Central Office Switches, ISDN, Dial-Up and ISO-OSI. Prerequisite: CIS 4665. \*Not available for graduate credit.

CIS 4670 Applications Development Using VB.net (3) Develop object-oriented, web-based graphical user interface (GUI) applications for business using VB.net as the programming language. Prerequisites: CIS 2615, CIS 2665, and CIS 3650.

CIS 4680 Data Resource Management (3) In-depth study of client server computing including benefits, technological requirements, platforms and standards, planning and managing client server environments, application and systems software and key products. Prerequisites: CIS 2655 and CIS 3650 or admission to the MSIT or Information Systems concentration in the MBA. An additional fee is associated with this course.

CIS 4685 Network Planning, Design and Security (3) Essential theoretical concepts behind network planning, design and security. Use of network planning tools to design networks, configure firewalls and other security measures. Prerequisites: CIS 3660, CIS 3665 and CIS 4665.

CIS 4690 Systems Architecture and Development (3) Information architecture options for systems development with consideration of security. Project management. Major project incorporating software, hardware and networking components. To be taken last semester. Prerequisites: (CIS 2615, CIS 3650, and CIS 4685 or concurrently) or (CIS 3670, CIS 4680, and (CIS 4660 or CIS 4670)).

CIS 4695 Advanced Programming in C/C++\* (3) Advanced study of the ANSI C Programming Language and C++ programming constructs that improve upon C. Introduces object-oriented world with Objects, Classes, Operators and Friends. \*Not available for graduate credit.

## **Economics and Finance**

## **ECONOMICS Major, B.A. Degree**

(42 000536)

The graduate with a Bachelor of Arts degree in Economics will use the knowledge and skills obtained in the program to:

- Use appropriate concepts and methods of analysis to identify and examine economic conditions and policies.
- Communicate effectively with consumers and producers of economic information and analysis.
- Select, collect, and manipulate data and interpret results.
- Consider the economic issues in the context of individual values, social values, and historical and global circumstances.
- Demonstrate elementary proficiency in a modern foreign language.

| MAJOR REQUIRE          | EMENTS   |                   | 33-36                         |  |  |  |  |
|------------------------|--|-------------------|-------------------------------|--|--|--|--|
| ECON 1010              | Principles of Macroeconomics3  |                   | Intermediate Microeconomics3  |  |  |  |  |
| ECON 1011              | Principles of Microeconomics3  | ECON 4000         | Portfolio Assessment1         |  |  |  |  |
| ECON 2010<br>ECON 3010 | Orientation to the Economics Major2 Intermediate Macroeconomics3   | Electives in econ | omics or related fields 18-21 |  |  |  |  |
| •                      | Students using ECON 1010 to fulfill 3 s.h. of Div. II B of General Education will take 21 elective hours in economics or related fields for a total of 36 s.h. in the major. |                   |                               |  |  |  |  |
| MINOR REQUIRE          | MENTS  |                   | 18-25                         |  |  |  |  |
|                        | ATION REQUIREMENTS (page 49)48 s.h. (The used to fulfill 3 s.h. of Div. II B, 42 s.h. of General   | 0 0               | •                             |  |  |  |  |
| MATH 1111              | Div. I C (required)3   | POLS 1510         | Div. II B (required)3         |  |  |  |  |
|                        | AGE REQUIREMENT (Refer to Bachelor's Degre   |                   |                               |  |  |  |  |
|                        | 3  |                   |                               |  |  |  |  |
| MINIMUM TOTAL          |  |                   | 124                           |  |  |  |  |

# ECONOMICS Major, B.S. Degree (43 000537)

The graduate with a Bachelor of Science degree in Economics will use the knowledge and skills obtained in the program to:

- Use appropriate concepts and methods of analysis to identify and examine economic conditions and policies.
- Communicate effectively with consumers and producers of economic information and analysis.
- Select, collect, and manipulate data and interpret results.
- Consider the economic issues in the context of individual values, social values, and historical and global circumstances.
- Demonstrate quantitative and statistical knowledge and skills.

|             |                 | MENTS   |          |            | Sem. Hours<br>36-41                         |
|-------------|-----------------|---|----------|------------|---|
| <b>ECON</b> | 1010            | Principles of Macroeconomics3   | FIN      | 2801       | Business Statistics I3                      |
| <b>ECON</b> | 1011            | Principles of Microeconomics3   | FIN      | 3801       | Business Statistics II3                     |
| ECON        | 2010            | Orientation to the Economics Major2   | ECON     | 4015       | Mathematical Economics I, 3 or              |
| <b>ECON</b> | 3010            | Intermediate Macroeconomics3  | MATH     | 1151       | Calc. & Analytic Geometry I, 5 3-5          |
| <b>ECON</b> | 3030            | Intermediate Microeconomics3  | Elective | es in econ | omics or related fields 12-15               |
| ECON        | 4000            | Portfolio Assessment1   |          |            |   |
| fields fo   | r a total of    | CON 1010 to fulfill 3 s.h. of Div. II B of Gene<br>39 s.h. in the major.<br>MENTS |          |            | elective hours in economics or related18-25 |
|             |                 |   |          |            | 45-48                                       |
|             |                 | ised to fulfill 3 s.h. of Div. II B, 45 s.h. of Ger                               |          |            |   |
| MATH        | 1111<br>ECTIVES | Div. I C (required)3  | POLS     | 1510       | Div. II B (required)       3                |

## **ECONOMICS Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000538)

|             |         |                              |                   |   | Jeni. Hours |
|-------------|---------|------------------------------|-------------------|---|-------------|
| MINOR F     | REQUIRE | MENTS                        |                   |   | 20          |
| <b>ECON</b> | 1010    | Principles of Macroeconomics | 3                 | Electives in economics                    | 14          |
| <b>ECON</b> | 1011    | Principles of Microeconomics | 3                 |   |             |
| GENERA      | L EDUCA | TION REQUIREMENTS (page 4    | 19) (In the minor | , ECON 1010 fulfills 3 s.h. of Div. II B) |             |

# FINANCE Functional Major, B.S. in Business Administration Degree

(46 000540)

The graduate with a Bachelor of Science degree in Finance will use the knowledge and skills obtained in the program to:

- Take the initiative in identifying and pursuing opportunities for financial growth or improvement.
- Accurately use theoretical frameworks to analyze, solve, evaluate, and implement financial decisions in a systematic manner.
- Recognize international issues when evaluating/implementing financial decisions.
- Effectively communicate analyses/decisions to a wide variety of audiences, in a variety of professional contexts.
- Recognize and apply maximization principle: Maximize value of the firm/shareholders' wealth
- Examine risk and return impacts of the firm's investment and financing decisions
- Make sound financial decisions, using fundamental financial economic models, in a systematic manner
- Recognize function of international financial markets
- Comprehend role of financial intermediation
- Appreciate legal and ethical considerations

| Appreciati       | ic icgai           | and etimear considerations          |              |             | Sem. Hours                     |  |
|------------------|--------------------|-------------------------------------|--------------|-------------|--------------------------------|--|
| FUNCTIONA        | AL MAJ             | OR REQUIREMENTS                     |              |             | 71                             |  |
| *FIN 28          | 801                | Business Statistics I3              | MKT          | 3405        | Marketing Policy3              |  |
| FIN 38           | 801                | Business Statistics II3             | *BLAW        | 2720        | Legal Environment of Business3 |  |
| +FIN 38          | 850                | Principles of Finance3              | ACCT         | 4115        | Financial Statement Analysis3  |  |
| +FIN 38          | 861                | Financial Management I3             | Elective     | es from the | e following15                  |  |
| +FIN 38          | 881                | Financial Institutions and Markets3 | FIN          | 3835        | Internship in Finance3         |  |
| +FIN 38          | 891                | Security Analysis3                  | FIN          | 4862        | Financial Management II3       |  |
| *ECON 10         | 011                | Principles of Microeconomics3       | FIN          | 4880        | Bank Management3               |  |
| ECON 30          | 020                | Money & Banking3                    | FIN          | 4803        | Principles of Insurance3       |  |
| ECON 30          | 030                | Intermediate Microeconomics3        | FIN          | 4804        | Emp. Benefits & Ret. Plan3     |  |
| *ACCT 21         | 101                | Principles of Financial Acct3       | FIN          | 4815        | Investment Portfolio Admin3    |  |
| *ACCT 21         | 102                | Principles of Managerial Acct3      | FIN          | 4817        | Managing Financial             |  |
| CIS 16           | 605                | Business Application Software2      | Derivativ    | es 3        |                                |  |
| CIS 36           | 630                | Management Information Systems3     | FIN          | 4820        | International Finance3         |  |
| MGT 33           | 315                | Management of Organizations3        | Busin        | ess Electi  | ve3                            |  |
| MGT 33           | 325                | Business Communications3            |              |             |                                |  |
| MGT 33           | 360                | Production/Operations Mgt3          |              |             |                                |  |
| MINOR NOT        | T REQU             | JIRED                               |              |             |                                |  |
| GENERAL E        | EDUCA <sup>®</sup> | TION REQUIREMENTS (page 49) 48      |              |             |                                |  |
| COMM 10          | 000                | Div. I B (required)3                | PSY          | 1100        | Div. II B or                   |  |
| *MATH 11         | 111                | Div. I C (required)3                | SOC          | 1800        | Div. II B (required)3          |  |
| *BE&O 12         | 210                | Div. II A (required)2               | ICAP         | 4357        | Div. IV B (required)3          |  |
| *ECON 10         | 010                | Div. II B (required)3               |              |             |                                |  |
| <b>ELECTIVES</b> | OUTS               | IDE OF THE HARMON COLLEGE OF BUSIN  | NESS ADMINIS | TRATION     | l5                             |  |
| MINIMUM TO       | MINIMUM TOTAL      |                                     |              |             |                                |  |

<sup>+</sup>FIN 3850, FIN 3861, FIN 3881 and FIN 3891 must be completed with a grade of C or better to receive the B.S.B.A.-Finance degree. \*Students expecting to receive the B.S. in Business Administration Degree must seek admission to this program upon the completion of a minimum of 41 semester hours of credit including ACCT 2101, ACCT 2102, BLAW 2720, BE&O 1210, ECON 1010, ECON 1011, FIN 2801, and MATH 1111. See pages 180-181 for the Statement of Policy on Admission to a B.S. in Business Administration Degree program.

## **FINANCE Minor for a Bachelor's Degree**

(Central does not confer teacher certification for this minor) (000541)

| MINOR  | REQUIRE | MENTS                  | ( | - ,  |      |                                | Sem. Hours |
|--|---------|------------------------|---|------|------|--------------------------------|------------|
| FIN  | 2801    | Business Statistics I  |   |      | 3891 | Security Analysis              |            |
| FIN  | 3801    | Business Statistics II | 3 | ACCT | 2101 | Principles of Financial Acct   | 3          |
| FIN  | 3850    | Principles of Finance  | 3 | ACCT | 2102 | Principles of Managerial Acct. | 3          |
| FIN  | 3861    | Financial Management I | 3 | MATH | 1111 | College Algebra                | 3          |
| GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, MATH 1111 fulfills 3 s.h. of Div. I C) |         |                        |   |      |      |                                |            |

## PERSONAL FINANCIAL PLANNING Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor. Successful completion of minor requirements satisfies the education requirements of the CERTIFIED FINANCIAL PLANNER ™ certification.)
(000546)

|       |         |                          |      |      | Seili. Hours                      |
|-------|---------|--------------------------|------|------|-----------------------------------|
| MINOR | REQUIRE | MENTS                    |      |      | 18                                |
| FIN   | 3811    | Investments3             | FIN  | 4805 | Adv. Personal Financial Planning3 |
| FIN   | 4803    | Principles of Insurance3 | ACCT | 3130 | Introduction to Income Tax3       |
| FIN   | 4804    | Employee Benefits &      | ACCT | 4136 | Estate Planning3                  |
|       |         | Retirement Planning      |      |      | •                                 |

#### **Economics**

ECON 1010 Principles of Macroeconomics (3) An introduction to principles underlying the operation of modern industrial countries. Special attention is given to the determinants of income and employment.

ECON 1011 Principles of Microeconomics (3) An introduction to the functioning of a market economy. Emphasis is on behavior of consumers and business firms and the resulting allocation of resources and distribution of

ECON 2010 Orientation to the Economics Major (2) Familiarize economics majors with the CPI program, general outcomes, assessment activities (portfolio assessment), and future opportunities for economics majors. Prerequisite: ECON 1010 or ECON 1011.

ECON 3010 Intermediate Macroeconomics (3) Develop various theoretical frameworks for studying the forces affecting income, employment, and output in the economic system of the United States. Attention is given to the impact that government and other countries may have on these variables. Prerequisite: ECON 1010.

ECON 3013 Public Finance (3) The role of government in the modern mixed economy with emphasis on the impact of tax and expenditure policies on resource allocation and income distribution. Prerequisite: ECON 1011.

ECON 3020 Money and Banking (3) Money and banking structures including the Federal Reserve System and how it affects the economy. Monetary and National Income Theory are used to analyze economic policy. Prerequisite: ECON

**ECON 3030 Intermediate Microeconomics (3)** 

Conventional theory of consumption, production, pricing, and resource allocation. Prerequisite: ECON 1011.

ECON 3035 Internship in Economics (3-9) Opportunity for students to gain theoretical knowledge and practical application within a particular field of specialization. May be repeated with consent of department and internship director. Available for Pass/Fail credit only. Prerequisite: 60 semester hours and overall GPA of 2.50 or above and consent of internship director.

ECON 3065 Labor Economics (3) Survey of the labor force, wage and employment theories, economic insecurity including unemployment, trade unionism and collective bargaining from the standpoint of public policy. Prerequisites: ECON 1010 and ECON 1011.

ECON 4000 Portfolio Assessment\* (1) Review and assess the major's overall portfolio that he/she has accumulated and engage in discussion of economic issues. Prerequisites: ECON 2010 and consent of department chair. \*Not available for graduate credit.

**ECON 4010 International Economics (3) Principles** underlying international trade and finance and analysis of current problems and related policies. Prerequisites: ECON 1010 and ECON 1011.

ECON 4015 Mathematical Economics I (3) A survey of mathematics including theory of sets, calculus, differential and difference equations, linear programming, matrices, and their application in economics. Prerequisites: ECON 1011 and FIN 2801 or MATH 1131 or MATH 1151.

ECON 4016 Mathematical Economics II (2) A continuation and more advanced study in the application of mathematical tools in economics. Prerequisite: ECON 4015.

ECON 4020 Natural Resource Economics (3) Nature of natural resources; economic efficiency as basis for natural resource use; externalities in natural resource use; factors influencing environmental quality; alternate public policy tools for influencing natural resource use. Prerequisites: ECON 1010 and ECON 1011.

ECON 4030 Directed Studies in Economics (1-3) Intensive study of significant economic topics. May be repeated for a maximum of 9 semester hours.

ECON 4040 History of Economic Thought (3) Classical economists and the development of economic thought from the mercantilist period through the development of present thought. The course aims at establishing a synthesis of evolving doctrines which have become the basis of currently accepted economic theory. Prerequisite: ECON 1011. ECON 4050 Comparative Economic Systems (3) Analysis of alternate patterns of economic control, planning, and market structures. The experience of British socialism, American capitalism, and Soviet-type central planning is emphasized.

ECON 4052 Regional and Urban Economics (3)

Geographic regions and urban areas as economic systems with emphasis on location theory and economic policy in the regional/urban environments. Prerequisite: ECON 1011.

ECON 4060 Game Theory Applications (3) Provides game theoretical tools used widely in economics to study situations in which various decision-makers interact. Applications include political science and biology. Prerequisites: ECON 1011 and MATH 1111.

ECON 4070 Industrial Organization (3) An analysis of selected economic problems of current interest dealing primarily with the structure of American industry, with emphasis on the conduct and performance of large firms. Prerequisite: ECON 1011.

ECON 4080 Econometrics I (3) Mathematical techniques and problems used in the quantitative approach to economic theory. Prerequisites: ECON 3030, ECON 3010 and statistics.

#### **Finance**

FIN 1820 Personal Finance (3) For the student who desires information on managing his/her own personal income. FIN 2801 Business Statistics I (3) Emphasizes the statistical analysis of business and economic data used in business and how this analysis aids in controlling operations and in making sound business decisions. Prerequisite: MATH 1111 or equivalent.

FIN 3801 Business Statistics II (3) Emphasizes the statistical analysis of business and economic data and how this analysis aids in controlling operations and in making sound business decisions. Prerequisite: FIN 2801. FIN 3811 Investments (3) An analysis of investment planning, decision-making and problem solving including investment policy statements, portfolio strategies, asset allocation, security selection, and performance monitoring. Not open to students with a major or minor in finance. FIN 3835 Internship in Finance (3-9) Opportunity for students to gain theoretical knowledge and practical application within a particular field of specialization. May be repeated with consent of department and internship director. Available for Pass/Fail credit only. Prerequisites: 60 semester hours and overall GPA of 2.50 or above and consent of internship director.

FIN 3850 Principles of Finance (3) An introduction to corporate financial decision-making, including financial analysis, working capital management, capital budgeting, long-term financing, and international finance. Prerequisites: ACCT 2102 or ACCT 2100, FIN 2801, and either admission to B.S. in Business Administration degree program or a declared minor in finance.

FIN 3861 Financial Management I (3) Organization goals and tools of financial management. Analysis of case materials illustrating problems encountered by firms of various sizes and operating characteristics. Examination

of adjustment of financial policy of business to changing conditions. Prerequisite: FIN 3850, or a declared major in Actuarial Science and Mathematics with completion of MATH 4510

**FIN 3881 Financial Institutions and Markets (3)** An analytic study of financial institutions, financial markets, and monetary policy. Prerequisite: ECON 3020 and FIN 3850 or consent of the instructor.

**FIN 3891 Security Analysis (3)** Classification and analysis of securities, markets, and industries. Formulation of investment policy for institutions and aggressive personal investors. Not available for credit to students who received credit in FIN 3811. Prerequisites: FIN 3801 or concurrently and FIN 3850.

FIN 4800 Special Projects in Finance\* (1-3) Individualized or group study under the supervision of departmental faculty. May be repeated for a maximum of 12 semester hours. Prerequisite: consent of the instructor. \*Not available for graduate credit.

FIN 4803 Principles of Insurance (3) Study of importance of risk in personal matters and various methods of treating risk. Includes property/liability insurance, life/health insurance, and insurance regulation. Prerequisite: FIN 3850 or declared functional major in Actuarial Science and Mathematics with completion of MATH 4510 or concurrently FIN 3811.

**FIN 4804** Employee Benefits and Retirement Planning (3) A planning perspective is developed for major employee benefit arrangements, retirement plan provisions, pension design, tax implications and suitability for different businesses.

FIN 4805 Advanced Personal Financial Planning (3)
Develops ability to synthesize financial planning knowledge in order to analyze complex client case scenarios. Emphasis on characteristics of the financial planning profession.
Prerequisites: ACCT 4136, FIN 3811, FIN 4804; or concurrently.

FIN 4815 Investment Portfolio Administration (3) Application of security analysis and investment decision concepts to case problems and computer simulated investment situations. Additional readings in selected portfolio management theories. Prerequisite: FIN 3891. FIN 4817 Managing Financial Derivatives (3) Applied analysis of pricing and hedging techniques for managing investments in derivative contracts (forward, futures, options, and swap contracts) involving the application of concepts and strategies to case problems and computer simulations. Prerequisite: FIN 3850, or a declared major in Actuarial Science and Mathematics with completion of MATH 4510. FIN 4820 International Finance (3) An intensified study of international banking and finance as it relates to international trade and the multinational corporation and the financing of imports and exports. Prerequisite: FIN 3850 or equivalent. FIN 4830 Directed Readings in Finance (3) Intensive study of significant financial topics.

FIN 4862 Financial Management II\* (3) Application of the theories and tools of financial decision making and control to case problems and business problem simulations. Prerequisite: FIN 3861. \*Not available for graduate credit. FIN 4880 Bank Management (3) Study and analysis of the problems of management of commercial banks with an emphasis on investment and loan portfolios. Prerequisite: FIN 3881 or concurrently.

# Management and Business Communication

# MANAGEMENT Functional Major, B.S. in Business Administration Degree

(46 000543)

The graduate with a Bachelor of Science in Business Administration degree with a major in Management will use the knowledge and skills obtained in the program to:

- Evaluate risks and probabilities
- Use the common body of management knowledge to classify and analyze information to solve management problems
- Plan managerial objectives and select appropriate methods for achieving objectives
- Develop appropriate programs for implementation of selected alternatives and organize resources required
- Develop skills necessary to improve continuously one's knowledge and abilities
- Use text and graphics to communicate effectively ideas and information
- Use nonverbal communicative behavior and demonstrate proficiency in making oral presentations in a variety of contexts
- Contribute to a variety of work teams to accomplish tasks and fulfill the needs of the team and its members
- Apply the basic principles of leadership in terms of a strategic perspective
- Assume leadership role by establishing team goals and determining responsibility
- Evaluate the impact of the values of one's chosen profession on society and make professional decisions based on the results of this

|        |          |   |          |         | Sem. Ho                       | Jurs |
|--------|----------|---|----------|---------|-------------------------------|------|
| FUNCTI | IONAL MA | JOR REQUIREMENTS  |          |         |                               | 60   |
| MGT    | 3315**   | Management of Organizations3                                    | HRM      | 3920    | Human Resource Management     | 3    |
| MGT    | 3320     | Systems, Teams & Org. Behavior3                                 | *ACCT    | 2101    | Principles of Financial Acct  | 3    |
| MGT    | 3325     | Business Communications3  | *ACCT    | 2102    | Principles of Managerial Acct | 3    |
| MGT    | 3345     | International Management1                                       | CIS      | 1605    | Business Application Software | 2    |
| MGT    | 3360     | Production/Operations Mgt3                                      | CIS      | 3630**  | Management Information Sys    | 3    |
| MGT    | 3370     | Supply Chain Management3  | *ECON    | 1011    | Principles of Microeconomics  | 3    |
| MGT    | 4310     | Total Quality Management3                                       | *FIN     | 2801    | Business Statistics I         | 3    |
| MGT    | 4320     | Leading & Managing Teams & Org3                                 | FIN      | 3801    | Business Statistics II        | 3    |
| MGT    | 4325     | Management Communication3                                       | FIN      | 3850    | Principles of Finance         | 3    |
| MGT    | 3385**   | Integrative Bus. Experience Pract., 3 or                        | MKT      | 3405**  | Marketing Policy              | 3    |
| MKT    | 3485**   | Integrative Bus. Experience Pract., 3 or                        | *BLAW    | 2720    | Legal Environment of Business | 3    |
| CIS    | 3685**   | Integrative Bus. Experience Pract., 33                          |          |         |                               |      |
| MINOR  | NOT REQ  | UIRED   |          |         |                               |      |
| GENER  | AL EDUCA | ATION REQUIREMENTS (page 49)                                    |          |         |                               | 48   |
| COMM   | 1 1000   | Div. I B (required)3  | PSY      | 1100    | Div. II B or                  |      |
| *MATH  | 1111     | Div. I C (required)3  | SOC      | 1800    | Div. II B (required)          | 3    |
| *BE&O  |          | Div. II A (required)2   | ICAP     | 4357    | Div. IV B (required)          |      |
| *ECON  | 1010     | Div. II B (required)3<br>BIDE OF THE HARMON COLLEGE OF BUSINES: |          |         |                               |      |
| ELECTI | VES OUTS | SIDE OF THE HARMON COLLEGE OF BUSINES:                          | SADMINIS | TRATION |                               | 7    |
| FREE E | LECTIVES | S   |          |         |                               | 9    |
| MINIMU | IM TOTAL |   |          |         |                               | 124  |

<sup>\*</sup>Students expecting to receive the B.S. in Business Administration Degree must seek admission to this program upon the completion of a minimum of 41 semester hours of credit including ACCT 2101, ACCT 2102, BLAW 2720, BE&O 1210, ECON 1010, ECON 1011, FIN 2801, and MATH 1111. See pages 180-181 for the Statement of Policy on Admission to a B.S. in Business Administration Degree program.

# **HUMAN RESOURCE MANAGEMENT Functional Major,**

B.S. in Business Administration Degree (46 000544)

This program has been placed in abeyance. See the Department Chair for more information.

## AGRICULTURE-BUSINESS Functional Major, B.S. Degree

See requirements as outlined in the Department of Agriculture.

## MANAGEMENT Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000510)

|       |         |                                 |      |      | Sem. Hours                     |
|-------|---------|---------------------------------|------|------|--------------------------------|
| MINOR | REQUIRE | EMENTS                          |      |      | 22                             |
| MGT   | 3315    | Management of Organizations3    | ACCT | 2101 | Principles of Financial Acct3  |
| MGT   | 3320    | Systems, Teams & Org. Behavior3 | CIS  | 1605 | Business Application Software2 |
| MGT   | 3325    | Business Communications3        | BE&O | 1210 | Essentials of Managing Info2   |
| HRM   | 3920    | Human Resource Management3      | ECON | 1010 | Principles of Macroeconomics3  |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, BE&O 1210 fulfills 2 s.h. of Div. II A; ECON 1010 fulfills 3 s.h. of Div. II B)

<sup>\*\*</sup>Students must enroll in IBE Practicum (MGT 3384 or MKT 3485 or CIS 3685) concurrently with the IBE sections of MGT 3315, MKT 3405 and CIS 3630.

MGT 1300 Introduction to Business (3) Emphasizes the traditional facets of business (its environment, organization, and basic business functions) as well as the social and physical climate in which business, industry, and government operate. May not be taken for credit by students who have completed in excess of 12 semester hours of College of Business and Economics courses.

MGT 3310 Principles of Management (3) Provides an intensive examination of the basic fundamentals of organization underlying the solution of management problems. Available only to nonbusiness majors.

MGT 3315 Management of Organizations (3) An examination of the theory and practices of managing organizations, including planning, organizational theory,

examination of the theory and practices of managing organizations, including planning, organizational theory, human behavior, and control. Prerequisites: ACCT 2101 and ECON 1010. Available only to business majors.

MGT 3320 Systems, Teams and Organizational Behavior (3) Emphasis on systems, teams, interpersonal relationships between participants and the dominant influence of systems on human behavior in groups and organizations. Prerequisite: MGT 3315 or concurrently.

MGT 3325 Business Communications (3) Improves the student's ability to plan and strategically write letters, memos, proposals, and reports and improve oral and interpersonal communication skills. Both listening and speaking skills will be developed through formal presentations, class discussions, and group work.

MGT 3335 Internship in Management (3-9) Opportunity for students to gain theoretical knowledge and practical application within a particular field of specialization. Take only for pass/fail credit. Prerequisites: 60 semester hours and overall GPA 2.50 or above or permission from internship director.

**MGT 3345 International Management (1)** This course will investigate the impact of 'free economies', cultural differences, negotiation styles, HR practices political systems and ethical dilemmas on international business and management.

MGT 3360 Production/Operations Management (3) Managerial analysis of problems common to operations within a complex organization. Emphasis upon planning, control, and decision-making. Prerequisites: MGT 3315 or concurrently and FIN 3801 or concurrently.

MGT 3370 Supply Chain Management (3) Examines supply chain, materials and logistics management and their role in competitive advantage. Investigates techniques for acquiring, storing, processing and moving materials inventory. Prerequisite: MGT 3360.

MGT 3385 Integrative Business Experience Practicum (3) Students will apply concepts from the concurrent courses to their own start-up business venture and to community service. This course must be taken concurrently with special sections of MGT 3315, MKT 3405 and CIS 3630. Prerequisites: ACCT 2102, CIS 1605 or ACCT 2110, ECON 1010, ECON 1011 and Junior Standing

MGT 4300 Health Care Administration (3) Management concepts, tools, and techniques for effective administration of all types of health care facilities. Prerequisite: MGT 3310 or MGT 3315 or graduate standing.

**MGT 4310 Total Quality Management (3)** Basic principles and methods associated with Total Quality Management. Relationships between TQM theories and models studied in management. Prerequisite: MGT 3360.

MGT 4315 Entrepreneurship\* (3) This course develops the ability to identify new product opportunities and/or ideas for new businesses. Students will learn to evaluate feasibility of product/business concept. Students will interact with entrepreneurs and the course requires a class project. \*Not available for graduate credit. Cannot be used toward any graduate degree offered in the HCBA.

MGT 4320 Leading and Managing Teams and Organizations\* (3) This course is designed to provide students with an indepth explanation of effective leader and follower behaviors necessary to manage business organizations. Prerequisites: MGT 3320, prerequisite or concurrently with MGT 4310. \*Not available for graduate credit

MGT 4325 Management Communication\* (3) Provide advanced communication theories and methods which are essential for effective managers in oral and written communication situations. Emphasizes individual, team, and group communication through a series of business cases. \*Not available for graduate credit. Prerequisite: MGT 3325. MGT 4350 Special Projects in Management (1-3) Advanced course in management theory, practice, methods, and strategies taught on an individual or group basis to advanced management students and graduate students. May be repeated for a maximum of 6 semester hours. Prerequisites: all preadmission courses or MBA background requirements, MGT 3315, and Department Chair's approval with adequate preparation in area to be studied.

### **Human Resource Management**

**HRM 3920 Human Resource Management (3)** Employment, training and development, employee and labor relations, compensation and benefits, health, safety and security, and personnel research. Prerequisite: MGT 3315 or MGT 3310 or concurrently.

HRM 4930 Compensation and Benefits (3) Concepts, models, theories, and application of processes and systems of employee compensation and benefits within organizations. Only offered Fall semester. Prerequisite: HRM 3920. HRM 4960 Employment and Development (3) Concepts, models, theories, and application of human resource planning, employment, and training and development. Prerequisite: HRM 3920.

**HRM 4990 Problems in Human Resource Management** (3) An integrated approach to the administration of the human resource function in various types of organization settings through the use of the case and incident methods. Prerequisite: HRM 3920.

## **Integrative Studies Capstone**

ICAP 4357 Organizational Policy and Strategy\* (3)
Capstone course requiring integration of business functional knowledge using conceptual, communication, interpersonal, and technical skills applied to environmental analysis and strategic management. Case method is used. Prerequisites: Admission to the B.S.B.A. program, MGT 3315, MGT 3325, MKT 3405, FIN 3850, and senior standing. \*Not available for graduate credit.

Sem Hours

# **Marketing and Legal Studies**

## MARKETING Functional Major, B.S. in Business Administration Degree (46 000511)

The graduate with a Bachelor of Science in Business Administration degree with a major in Marketing will use the knowledge and skills obtained in the program to:

- Understand the marketing concepts in consumer behavior, personal selling, marketing research, marketing analysis, strategy development and global decision-making.
- Communicate effectively in both individual and team situations using both oral and written communication.
- Interact effectively with others to analyze situations and solve marketing problems.
- Understand the valuing process as it relates to making optimal decisions in the global business environment.
- Apply analysis and problem solving skills to assess marketing situations and develop strategies for implementation.

|         |          |  |          |             | Seili. Hours                       |
|---------|----------|--|----------|-------------|------------------------------------|
| FUNCTIO | DNAL MA  | JOR REQUIREMENTS                       |          |             | 65                                 |
| MKT     | 3405     | Marketing Policy3                      | CIS      | 3630        | Management Information Systems3    |
| MKT     | 3430     | Personal Selling3                      | *ECON    | 1011        | Principles of Microeconomics3      |
| MKT     | 3480     | Consumer Behavior3                     | *FIN     | 2801        | Business Statistics I3             |
| MKT     | 4460     | International Marketing3               | FIN      | 3801        | Business Statistics II3            |
| MKT     | 4470     | Marketing Research3                    | FIN      | 3850        | Principles of Finance3             |
| MKT     | 4490     | Marketing Management3                  | MGT      | 3315        | Management of Organizations3       |
| *BLAW   | 2720     | Legal Environment of Business3         | MGT      | 3325        | Business Communications3           |
| *ACCT   | 2101     | Principles of Financial Acct3          | MGT      | 3360        | Production/Operations Mgt3         |
| *ACCT   | 2102     | Principles of Managerial Acct3         | Departm  | nentally ap | proved electives in major (contact |
| CIS     | 1605     | Business Application Software2         | Departm  | ent Chair   | for advisement and approval)12     |
| MINOR N | IOT REQI | JIRED                                  |          |             |                                    |
| GENERA  | L EDUCA  | TION REQUIREMENTS (page 49)            |          |             | 48                                 |
| COMM    | 1000     | Div. I B (required)3                   | PSY      | 1100        | Div. II B or                       |
| *MATH   | 1111     | Div. I C (required)3                   | SOC      | 1800        | Div. II B (required)3              |
| *BE&O   | 1210     | Div. II A (required)2                  | ICAP     | 4357        | Div. IV B (required)3              |
| *ECON   | 1010     | Div. II B (required)3                  |          |             |                                    |
| ELECTIV | ES OUTS  | SIDE OF THE HARMON COLLEGE OF BUSINESS | ADMINIS' | TRATION     | 8                                  |
| FREE EL | ECTIVES  |  |          |             | 3                                  |
| MINIMUM | // TOTAL |  |          |             |                                    |

<sup>\*</sup>Students expecting to receive the B.S. in Business Administration Degree must seek admission to this program upon the completion of a minimum of 41 semester hours of credit including ACCT 2101, ACCT 2102, BLAW 2720, BE&O 1210, ECON 1010, ECON 1011, FIN 2801, and Math 1111. See pages 180-181 for the Statement of Policy on Admission to a B.S. in Business Administration Degree program.

## MARKETING Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (00051)

|  |         |                               |   |      |      | Sem. Hours                          |
|--|---------|-------------------------------|---|------|------|-------------------------------------|
| MINOR F  | REQUIRE | MENTS                         |   |      |      | 22                                  |
| MKT  | 3405    | Marketing Policy              | 3 | ECON | 1011 | Principles of Microeconomics3       |
| MKT  | 3430    | Personal Selling              | 3 | MKT  | 3410 | Retail Management, 3 or             |
| MKT  | 3480    | Consumer Behavior             | 3 | MKT  | 3420 | Principles of Advertising, 33       |
| CIS  | 1605    | Business Application Software | 2 | BE&O | 1210 | Essentials of Managing Information2 |
| ECON   | 1010    | Principles of Macroeconomics  | 3 |      |      |                                     |
| GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor BE&O 1210 fulfills 2 s.h. of Div. II A: ECON 1010 |         |                               |   |      |      |                                     |

fulfills 3 s.h. of Div. II B)

### **BUSINESS ADMINISTRATION Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000545)

|                 |  |          |            | Sem. Hours                     |
|-----------------|--|----------|------------|--------------------------------|
| MINOR REQUIRE   | MENTS                                    |          |            | 18-19                          |
| ACCT 2101       | Principles of Financial Accounting, 3 or | Elective | (s) from t | the following                  |
| ACCT 2100       | Survey of Accounting, 33                 | CIS      | 1600       | Principles of Computer         |
| ECON 1010       | Principles of Macroeconomics3            |          |            | Information Systems3           |
| MGT 1300        | Introduction to Business3                |          |            | or                             |
| MGT 3310        | Principles of Management, 3 or           | CIS      | 1605       | Business Application Software2 |
| MGT 3315        | Mgt. of Organizations, 33                | BE&O     | 1210       | Essentials of Managing Info2   |
| *MKT 3400       | Principles of Marketing3                 |          |            |                                |
| *MKT 3405 can s | ubstitute for MKT 3400.                  |          |            |                                |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, if elected, BE&O 1210 fulfills 2 s.h. of Div. II A; ECON 1010 fulfills 3 s.h. of Div. II B)

**MKT 1400 Orientation to Marketing (1)** Orientation to the field of marketing. Available for those with less than 75 hours and no prior credit in MKT 3405 or equivalent. Counts as a free elective.

MKT 3400 Principles of Marketing (3) Methods used in determining the needs and desires of consumers and translating these findings into products of a suitable nature. Methods used in getting these products into the hands of the consumer. Basic marketing class for nonbusiness majors. Not available to students with prior credit in MKT 3405 and may not be used as a marketing elective.

MKT 3405 Marketing Policy (3) A comprehensive study of marketing theory and concepts and the application of these ideas in modern organizations by professionally trained managers. First course in marketing sequence for marketing functional majors and minors, and marketing foundation course for the business core requirement of B.S. in Business Administration degree students. May not be used as a marketing elective. Prerequisites: ECON 1010, ECON 1011 and 60 semester hours of college credit.

**MKT 3410 Retail Management (3)** The initial considerations and decisions for establishing and managing a retail store. Prerequisite: MKT 3400 or MKT 3405.

MKT 3420 Principles of Advertising (3) Advertising purposes and procedures covering primarily the point of view of the advertising manager. Study of proper appeals, copy preparation, layout, and media. Prerequisite: MKT 3400 or MKT 3405 or AGRI 3120.

MKT 3430 Personal Selling (3) Techniques involved in personal selling. Prerequisite: MKT 3400 or MKT 3405 or AGRI 3120.

MKT 3435 Internship in Marketing (3-9) Opportunity for students to gain theoretical knowledge and practical application within a particular field of specialization. May not be taken last semester of senior year. Available for Pass/Fail Credit only. Prerequisites: admission to B.S.B.A., MKT 3405, overall GPA 2.50 or above and consent of internship director. MKT 3460 Advanced Professional Sales (3) This course will apply advanced communication skills to the sales process for those interested in business to business selling as a career. Prerequisites: MKT 3405 and MKT 3430.

**MKT 3480 Consumer Behavior (3)** The application of knowledge from the behavioral sciences to the study, analysis, and interpretation of consumer buying habits and motives. Individual, group, and cultural influences on consumer preferences and purchasing patterns are emphasized. Prerequisite: MKT 3400 or MKT 3405.

MKT 3485 Integrative Business Experience Practicum (3) Students will apply concepts from the concurrent courses to their own start-up business venture and to community service. This course must be taken concurrently with special sections of MGT 3315, MKT 3405 and CIS 3630. Prerequisites: ACCT 2102, CIS 1605 or ACCT 2110, ECON 1010, ECON 1011 and Junior standing.

**MKT 4420 Sales Management (3)** Management aspects of selling with emphasis on the role of the supervisor in the sales field. Prerequisites: MKT 3405; admission to B.S. in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4430 Marketing Distribution (3) Methods and strategies used in distributing products including the design of channels and the activity performed by channel members to facilitate efficient movement of goods. Prerequisites: MKT 3405; admission to B.S. in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4440 Seminar in Marketing (3) Analysis of current issues and problems in marketing with emphasis on new theoretical and methodological developments. Prerequisites: MKT 3405; admission to B.S. in Business Administration for

undergraduate students or department chair approval for graduate students.

MKT 4450 Integrated Marketing Communication (3) The determination of the correct blend of advertising, personal selling, sales promotion, reseller support, and publicity. Prerequisites: MKT 3405; admission to B.S. in Business Administration for undergraduate students or department chair approval for graduate students.

**MKT 4460 International Marketing (3)** Marketing policies and practices in foreign trade. Prerequisites: MKT 3405; admission to B.S. in Business Administration for undergraduate students or department chair approval for graduate students.

**MKT 4470 Marketing Research (3)** Applications of research methods to the problems of marketing. Prerequisites: MKT 3405; admission to B.S. in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4480 Special Projects in Marketing (1-3) Individualized or group study under supervision of department faculty. May be repeated for a maximum of 6 semester hours. Prerequisite: department chair approval. MKT 4490 Marketing Management\* (3) An overview of major areas of marketing from the viewpoint of the marketing executive; a capstone course integrating previous marketing study and background into a managerial context. Prerequisites: MKT 3405, admission to B.S. in Business Administration, and last semester in program. \*Not available for graduate credit.

**BLAW 2720 Legal Environment of Business (3)** A survey of a number of areas of law that are important to persons as citizens and as participants in economic activity. Included are legal process, alternative dispute resolution, contracts, torts, product liability, employment law, antitrust, and international business law.

**BLAW 3721 Law of Business Transactions (3)** Provides a comprehensive discussion of the laws concerning the formation and performance of contracts, sales of goods transactions, creation and transfer of negotiable instruments, and selected transactions in real and personal property. Prerequisite: BLAW 2720.

**BLAW 4740 Labor Legislation (3)** Policy and legal problems arising in an area of acute social and economic conflict. **BLAW 4750 Collective Bargaining (3)** Roles and strategies of labor, management, and the Government as the active participants in the negotiation and performance of the labor contract. Prerequisite: BLAW 4740.

# **College of Education and Human Services**

#### **Integrative Studies General**

IGEN 3472 Sport in American Life (3) Provides for an understanding and appreciation of the role of sport in American life. IGEN 3896 Assessing Global Change for the Information Age (3) Challenges students to assess present and future trends, evaluate what is desirable, and reflect on their responsibility for the quality of life in the information age.

## **Communication Disorders**

In the Department of Communication Disorders, the second digit in the course number stands for the following: 0BGeneral, 1--Professionalism, 3--Speech Science, 4--Language, 5--Speech Pathology, 7--Audiology, 8--Clinical Practicum, 9--Directed Studies.

### Accreditation

Communication Disorders programs are accredited by the American Speech-Language Hearing Association located at 10801 Rockville Pike, Rockville, MD 20852; phone 800-498-2071; webpage http://www.asha.org.

## **Undergraduate Admission Policies and Procedures**

Student enrollment is limited to the following Department of Communication Disorders' courses unless the student is either provisionally or fully admitted to the undergraduate functional major in speech pathology: CD 2000, CD 2301, CD 3301, CD 3501, CD 3802, CD 4401, CD 4402, CD 4900. If the student is not provisionally or fully admitted to the undergraduate program, enrollment in Department of Communication Disorders' courses other than the ones listed above, shall be determined in conference with the director of undergraduate studies in the department.

The Master's Degree is the recognized entry-level degree for both speech-language pathology or audiology in all employment settings. The primary purpose of the B.S. Degree in Speech-Language Pathology is to prepare students for possible admission to graduate programs in either Speech-Language Pathology or Audiology. Completion of the B.S. Degree in Speech-Language Pathology does not prepare students for employment as a speech-language pathologist or audiologist, nor does it guarantee admission to a graduate program in Speech-Language Pathology or Audiology; however, the undergraduate degree can lead to employment opportunities in a variety of other related fields.

Students who have been admitted to the undergraduate program and have not enrolled in Communication Disorders' courses for three consecutive semesters will be dropped from the undergraduate program. These students must reapply for admission to the undergraduate program prior to enrollment in any additional courses in Communication Disorders.

## I. Admission of Non-Transfer Students

- A. Admission Criteria
  - 1. Must have a minimal overall GPA of 2.50.
  - 2. Must have earned a minimum of 30 university credit hours, applicable to graduation, including a grade of "C" or better in ENGL 1020 and ENGL 1030 or ENGL 1080.
  - 3. Must have made a grade of "C" or better and a GPA of 2.50 or better in the following CD courses: CD 2301, CD 3301, CD 3501, CD 3802.
  - 4. Students may enroll in the four courses listed under I.A.3. for a maximum of two times.
  - Students must complete a speech, language and hearing screening.
  - 6. Students must submit a formal application by

- the first week of classes of the semester prior to admission.
- 7. Students who do not meet requirements I.A.1-6. are ineligible for admission to the undergraduate functional major in speech-language pathology.
- B. Maintenance Criteria
  - 1. The first semester the student's overall GPA drops below a 2.50 after being admitted to the undergraduate program in Communication Disorders, the student will receive a letter of written academic warning from the Department of Communication Disorders.
  - 2. Any student under academic warning whose overall GPA falls below a 2.50 for any subsequent semester will become ineligible to continue taking courses in the Department of Communication Disorders and/or to re-apply for admission to the undergraduate program.
  - 3. Any student who receives a grade below AC@ in any CD course or whose GPA drops below a 2.50 in CD courses will receive a letter of warning. Students must obtain a grade of AC@ or better and a GP of 2.50 or better in all CD courses taken prior to completing an undergraduate major in speech pathology. Students may enroll in any CD course a maximum of 2 times.

## II. Admission of Undergraduate Transfer Students

A. Admission Criteria

- 1. Transfer students must meet requirements I.A.1-7.
- 2. Students who are transferring two or more of the courses listed in I.A.3. and meet other criteria listed in I.A. will be provisionally admitted and must take an additional six semester hours of Department of Communication Disorders' courses at Central Missouri State University before applying for full admission.
- 3. Transfer students must demonstrate the competencies required for the CMSU equivalent for any courses being transferred before applying for full admission to the undergraduate program.
- B. Maintenance Criteria
  - Same as for non-transfer students.
- C. Other

1. A minimum letter grade of a "C" or better and a GPA of 2.50 or better must be obtained for the six semester hours under II.A.2. for the transfer student to be able to apply for full admission to the undergraduate program. Those courses in which the undergraduate transfer student makes a grade below a "C" can be retaken only once. If this requirement is not met, the student becomes ineligible to continue taking courses in the Department of Communication Disorders and/or to apply for full admission to the undergraduate functional major in speech-language pathology.

#### III.Admission of International Undergraduate Students\*

\*International students participating in the Department of Communication Disorders' official international exchange program do not need to be admitted to the undergraduate program and will be allowed to enroll in courses on a case-by-case basis.

- A. Admission Criteria
  - 1. Must meet requirements I.A.1-7.
  - 2. Must score 600 or greater on the TOEFL.
    - 3. Must score 55 or greater on the Test of Spoken English.
  - 4. Must score 5 or greater on the Test of Written English.

- Must complete an oral interview with designated faculty from the Department of Communication Disorders
- International students who are transferring two or more of the courses listed in I.A.3. and meet other criteria listed in I.A. will be provisionally admitted and must take an additional six semester hours of Department of Communication Disorders' courses at Central Missouri State University before applying for full admission.
- International transfer students must demonstrate the competencies required for the CMSU equivalent for any courses being transferred before applying for full admission to the undergraduate program.
- B. Maintenance Criteria
  - 1. Same as for non-transfer students
- C. Other
  - 1. Same as for transfer students.

### IV. Post-Baccalaureate Students

Post-Baccalaureate Students must have permission of the Department Chair to enroll in any Communication Disorders' course

Sem Hours

# SPEECH-LANGUAGE PATHOLOGY Functional Major, B.S. Degree

 $(43\ 000844)$ 

The graduate with a Bachelor of Science degree with a functional major in Speech-Language Pathology will use the knowledge and skills obtained in the program to:

- Provide diagnostic and treatment services within a supervised setting.
- Perform oral mechanism screening/examinations, phonological and articulation testing, testing for language/literacy disorders, charting for data collection, pure-tone screening, immittance hearing screening, basic otoscopy and speech audiometry.
- Complete IPA transcription, case histories and oral-language samples.
- Plan and conduct individual/group therapy sessions and communicate results of therapy.
- Use routine infection control procedures in the delivery of services to clients/patients.
- Demonstrate knowledge of cardinal documents of the American Speech-Language-Hearing Association (ASHA), including but not limited to, Certification Standards for the Certificate of Clinical Competence in Speech-Language Pathology/Audiology, ASHA Code of Ethics and ASHA Preferred Practice Patterns for the Profession of Speech-Language Pathology/Audiology.
- Access information systems, apply research to clinical situations and interpret research studies.
- Use current word processing, databases, and spreadsheet technologies to analyze data collection, communicate with external sources and access multiple information resources.

| FUNCTI | ONAL MA | JOR REQUIREMENTS                        |      |      |                                  | 62 |
|--------|---------|---|------|------|----------------------------------|----|
| CD     | 2301    | American Phonetics3                     | CD   | 4510 | Multicultural Issues in Comm.    |    |
| CD     | 3301    | Anatomy & Physiology of                 |      |      | Disorders                        | 2  |
|        |         | Speech and Swallowing2                  | CD   | 4511 | Assistive Technology Across the  |    |
| CD     | 3304    | Speech Science3                         |      |      | Lifespan                         | 2  |
| CD     | 3501    | Intro. to Comm. Disorders3              | CD   | 4512 | Birth to Three: Assessment &     |    |
| CD     | 3503    | Principles of Clinical Mgt3             |      |      | Intervention                     | 3  |
| CD     | 3802    | Observ. of Clinical Practicum in        | CD   | 4515 | Rehabilitation of Cognitive-     |    |
|        |         | Communication Disorders1                |      |      | Linguistic Comm. Disorders       | 2  |
| CD     | 4102    | Counseling Persons with Comm. Disorders | CD   | 4701 | Introduction to Audiology        | 3  |
|        |         | & Their Families2                       | CD   | 4706 | Hearing Measurement              | 3  |
| CD     | 4103    | Introduction to Evidence Based          | CD   | 4708 | Aural Rehabilitation             | 3  |
|        |         | Practice in Comm. Disorders2            | CD   | 4803 | Undergraduate Clinical Practicum | 2  |
| CD     | 4401    | Language Development3                   | ENGL | 4110 | Linguistics                      | 3  |
| CD     | 4501    | Basic Neuroscience of Speech-           | PSY  | 3220 | Life-Span Development            | 3  |
|        |         | Language Pathologists2                  | PSY  | 4000 | Special Projects: Beginning      |    |
| CD     | 4504    | Introduction to Articulation &          |      |      | Sign Language                    | 2  |
|        |         | Phonological Disorders3                 | PSY  | 4520 | Statistics for the Behavioral    |    |
| CD     | 4505    | School-age Issues in Language           |      |      | Sciences                         | 3  |
|        |         | & Literacy3                             | HED, | 4330 | First Aid & CPR for Educators    | 1  |

(continued on next page)

(continued from previous page) MINOR NOT REQUIRED COMM 1000 Div. II A (required) ......3 BIOI Div. II B (required) ......3 

#### General

CD 2000 The Bases of Speech and Language (2) The nature and function of speech and language from the standpoint of normal development. Provides a basis for understanding communicative disorders of a pathological and/or psychological nature.

#### **Professionalism**

CD 4102 Counseling Persons with Communication Disorders and Their Families (2) Application of counseling and interviewing theory to individuals with communication disorders of all ages and their families. Ample opportunity to apply knowledge will be provided. Prerequisite: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4103 Introduction to Evidence Based Practice in Communication Disorders (2) Introduction to the use of current research results to make clinical decisions regarding client care. Prerequisite: admission to the undergraduate program in speech-language pathology or departmental consent.

#### **Speech Science**

CD 2301 American Phonetics (3) Sound system of American English with emphasis on the international phonetic alphabet and dialects.

CD 3301 Anatomy and Physiology of Speech and Swallowing (2) The anatomical and endocrinological bases for normal production of speech and swallowing. CD 3304 Speech Science (3) An introduction to basic physiological and acoustical properties of human communication. Prerequisite: admission to the undergraduate program in speech-language pathology.

## Language

CD 4401 Language Development (3) Theories and sequence of normal language acquisition. CD 4402 Language Acquisition in Children with Developmental Disabilities (2) Theories and sequences of language development with emphasis on language acquisition and deficiencies exhibited by children with various developmental disabilities.

## **Speech Pathology**

CD 3501 Introduction to Communication Disorders (3) Etiology, incidence, and characteristics of communicative disorders. Prerequisite: CD 3802 must be taken concurrently.

CD 3503 Principles of Clinical Management (3)

Fundamental clinical concepts as a foundation for diagnosis and intervention in communication disorders. Prerequisite: admission to the undergraduate program in speech-language pathology.

CD 4501 Basic Neuroscience for Speech-Language Pathologists (2) An introduction to human nervous system structure and function, with special emphasis on neural

processing for normal speech, language, hearing and swallowing. Prerequisite: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4504 Introduction to Articulation and Phonological Disorders (3) An introduction to articulation and phonological disorders; diagnostic procedures and treatment approaches; knowledge of multicultural issues related to these disorders. Prerequisites: admission to the undergraduate program in speech-language pathology and a grade of AC@ of better in CD 3503. CD 4504 may be taken concurrently with CD 3503 under exceptional circumstances with departmental approval.

CD 4505 School-age Issues in Language and Literacy (3) Types of language and literacy disorders; formal/informal assessment procedures of language and literacy skills; intervention procedures for the remediation of language and literacy disorders. Prerequisites: admission to the undergraduate program in speech-language pathology and a grade of AC@ of better in CD 3503. CD 4505 may be taken concurrently with CD 3503 under exceptional circumstances with departmental approval.

CD 4510 Multicultural Issues in Communication Disorders (2) Focused study of various issues important to multiculturalism and diversity when assessing and treating individuals with communication disorders from diverse backgrounds. Prerequisite: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4511 Assistive Technology Across the Lifespan

(2) Assessment and intervention techniques for persons with communication impairments who require assistive technologies; emphasis on broad range of etiologies across the lifespan. Prerequisite: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4512 Birth to Three: Assessment and Intervention (3) Focused study of the nature of communication disorders in children from birth to three with special emphasis on assessment and intervention models. Prerequisite: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4515 Rehabilitation of Cognitive-Linguistic Communication Disorders (2) Exploration of normal and impaired cognitive-linguistic processing, highlighting processing deficits in traumatic brain injury. Methods to assess/treat cognitive-linguistic impairments will be discussed. Prerequisite: admission to the undergraduate program in speech-language pathology or with departmental approval.

#### Audiology

CD 4701 Introduction to Audiology (3) Hearing impairment as related to basic acoustics and psychoacoustics, anatomy and physiology of the ear, and theories of hearing. Prerequisite: admission to the undergraduate program in speech-language pathology.

CD 4706 Hearing Measurement (3) Hearing measurement procedures including pure tone and speech audiometry and some site of lesion testing. Prerequisite: admission to the undergraduate program in speech-language pathology.

**CD 4708 Aural Rehabilitation (3)** Effects of hearing impairment of verbal communication. Principles and methods of aural rehabilitation. Prerequisite: CD 4706.

#### **Clinical Practicum**

### CD 3802 Observation of Clinical Practicum in

Communication Disorders (1) Twenty-five (25) clock hours of supervised observation in the evaluation and treatment of children and adults with disorders of speech, language, and hearing. Prerequisite: CD 3501 must be taken concurrently. CD 4803 Undergraduate Clinical Practicum\* (1) Specialized practice in the management of communication disorders. Must be taken at least two times but can only enroll in course one time per semester. May be repeated for 2 hours. Prerequisites: admission to the undergraduate program in speech-language pathology or consent of department chair; overall GPA of 2.50; a grade of AC@ or better in all previous CD courses, and CD 3503, CD 4701, and either CD 4504 or CD 4505; the remaining CD 4504 or CD 4505 must be taken concurrently with the first semester of clinical practicum. \*Not available for graduate credit.

## **Directed Studies**

**CD 4900 Special Topics in Communication Disorders** (1-3) Selected topics of contemporary interest in speech-language pathology and audiology; variable content. *May be repeated for a maximum of 6 semester hours*. Prerequisite: consent of department.

## Criminal Justice

In the Department of Criminal Justice, the second digit in the course number stands for the following: 0--General, 1--Administration, 2--Traffic, 3--Law, 4--Investigation, 5--Police Science, 6--Problems and Research, 7--Juvenile Justice.

#### **Department of Criminal Justice Statement of Policy**

The program for the Criminal Justice B.S. Degree allows for 18 semester hours of departmentally approved electives. CMSU criminal justice majors may seek departmental approval for courses from the criminal justice program of the University of Glamorgan in Wales or from the social sciences program of the Vaxjo University in Sweden. Prior to enrolling for courses at the University of Glamorgan, the declared CMSU criminal justice major must obtain this approval from the CMSU Criminal Justice Department Chair. Typically the CMSU student should be in the junior year.

## BIOLOGY Functional Major, B.S. Degree, Conservation Enforcement Studies option

See requirements as outlined in the Department of Biology and Earth Science.

## FORENSIC SCIENCE Minor for a Bachelor's Degree

See requirements as outlined in the Department of Biology and Earth Science.

## **CORRECTIONS Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000709)

| MINOR | REQUIRE | MENTS                              | ,   |      | Sem. Hours                       |
|-------|---------|------------------------------------|-----|------|----------------------------------|
| CJ    | 1000    | Introduction to Criminal Justice3  | CJ  | 3104 | Institutional Operations3        |
| CJ    | 2000    | Hist. of Corrections & Penal Inst3 | CJ  | 3310 | Law of Corr. & Prisoners Rights3 |
| CJ    | 3006    | Corrections3                       | CJ  | 4330 | Criminal Justice & the           |
| CJ    | 4006    | Probation, Parole &                |     |      | Mental Health Systems3           |
|       |         | Community Corrections3             | SOC | 3890 | Criminology3                     |

## CRIMINAL JUSTICE Major, B.S. Degree

(43000842)

The graduate with a Bachelor of Science degree in Criminal Justice will use the knowledge and skills obtained in the program to:

- Discern the basic components of the criminal justice system and understand the interrelationship within and between these
- Specify how justice institutions operate within society, as well as how they differ.
- Read and utilize articles from academic journals.
- Recognize personal assumptions, as well as basic American assumptions in analyzing positions on justice issues.
- Communicate effectively both in written and oral form.
- Conduct and report basic research procedures in accord with the scholarly practices of the discipline of Criminal Justice, including the principles of documentation, the acquisition of on and offline resources and do so in line with the ACJS Code of Ethics.
- Create reasonable linkages between empirical evidence and theory utilizing both inductive and deductive forms of logic.
- Recognize the complexity, ambiguity, and uncertainty that are present in the use of knowledge to address crime problems.

|        |          |                                   |        |            | Sem. Hours                        |
|--------|----------|-----------------------------------|--------|------------|-----------------------------------|
| MAJOF  | REQUIRE  | EMENTS                            |        |            | 45                                |
| CJ     | 1000     | Introduction to Criminal Justice3 | CJ     | 3600       | Intro. to Crim. Justice Research3 |
| CJ     | 3006     | Corrections3                      | CJ     | 4605       | Senior Sem. in Criminal Justice3  |
| CJ     | 3010     | Policing a Democratic Society3    | CJ     | 2700       | Introduction to Juvenile Justice3 |
| CJ     | 2300     | Criminal Law3                     | SOC    | 3890       | Criminology3                      |
| CJ     | 3303     | Criminal Procedure3               | Depart | mentally a | approved electives18              |
| MINOR  | REQUIRE  | EMENTS                            |        |            | 20-25                             |
| GENEF  | RAL EDUC | ATION REQUIREMENTS (page 49)      |        |            | 48                                |
| FREE E | ELECTIVE | S                                 |        |            | 6-11                              |
| MINIMU | JM TOTAL |                                   |        |            |                                   |

## CRIMINAL JUSTICE Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000829)

| MINOR | R REQUIRE | MENTS                             |         |             |                                  | Sem. Hours |
|-------|-----------|-----------------------------------|---------|-------------|----------------------------------|------------|
| CJ    | 1000      | Introduction to Criminal Justice3 | CJ      | 3303        | Criminal Procedure               | 3          |
| CJ    | 3006      | Corrections3                      | CJ      | 2700        | Introduction to Juvenile Justice | 3          |
| CJ    | 3010      | Policing a Democratic Society3    | SOC     | 3890        | Criminology                      | 3          |
| CJ    | 2300      | Criminal Law3                     | Electiv | e in crimir | al justice                       | 3          |

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# INTERNATIONAL JUSTICE Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000855)

| MINOR F  | REQUIRE      | MENTS                                |          |              | OCIII.                             | 24 |
|----------|--------------|--------------------------------------|----------|--------------|------------------------------------|----|
| CJ       | 3020         | Comparative Justice Systems3         | GEO      | G 4230       | Geography of Asia, 3 or            |    |
| CJ       | 3398         | International Human Rights &         | GEO(     | G 4235       | Geography of the                   |    |
|          |              | Criminal Justice3                    |          |              | Former Soviet Union, 3 3           |    |
| CJ       | 4607         | Issues in International Justice 3    | Three of | credit hour  | s may be granted for study in a    |    |
| SOC      | 3885         | Globalization and the Future3        | CMSU     | approved     | program or study tour in a foreign |    |
| Elective | s in Politic | al Social Science/Geography6         | country  | which foc    | uses on the justice structures of  |    |
| POLS     | 3520         | Asian Government and Politics, 3 or  | the cou  | ıntry        |                                    | 3  |
| POLS     | 3522         | Modern East Asia, 3 or               | Elective | es in Justic | ce Applications                    | 6  |
| POLS     | 4520         | Politics of Developing Nations, 3 or | CJ       | 2405         | International Policing3            |    |
| POLS     | 4521         | Culture and Politics of the          | CJ       | 4025         | Comparative Corrections3           |    |
|          |              | Middle East, 33                      | CJ       | 4352         | International Criminal Law3        |    |
| GEOG     | 3200         | Geography of Europe, 3 or            | CJ       | 4444         | Terrorism3                         |    |
| GEOG     | 3225         | Geography of Latin America, 3 or     | CJ       | 4703         | International Juvenile Justice3    |    |
| GEOG     | 3310         | Geography of Africa, 3 or            |          |              |                                    |    |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, POLS 3522 fulfills 3 s.h. of Div. II D)

#### General

**CJ 1000 Introduction to Criminal Justice (3)** The history, nature and function of the criminal justice system in America. Special attention is given to the philosophical basis underlying this system and to the problems associated with crime control in a democratic society. At each stage of the process, major issues confronting the system are examined.

CJ 2000 History of Corrections and Penal Institutions (3) Historical analysis of the development of corrections and penal institutions and the influence of social thought and philosophy on this development. Prerequisite: CJ 1000 or consent.

CJ 3006 Corrections (3) An overview course in correctional theory and practice. Traces the historical development of corrections with emphasis on changing social standards and philosophies. Examines the various types of correctional institutions, their mission, physical structure, management, and problems. Also examines probation and parole, including theory, practice and major issues confronting these correctional alternatives. Prerequisite: CJ 1000.

**CJ 3010 Policing a Democratic Society (3)** An in-depth look at the relationship between law enforcement and American society. Focus is on police-community relations, the police sub-culture, and the need for police objectives to conform to constitutional procedures. Prerequisite: CJ 1000.

**CJ 3020 Comparative Justice Systems (3)** An examination of comparative crime rates among nations and the world's major models of justice systems.

CJ 4000 Special Projects in Criminal Justice Administration (1-3) Individual or group study of problems in special areas of interest. *May be repeated.* 

CJ 4006 Probation, Parole and Community Corrections (3) An examination of the roles of probation, parole and other community correctional methods as they relate to other elements of the criminal justice system. Prerequisite: CJ 3006

**CJ 4015 The Criminal Court System (3)** An overview of the goals, functions, and processes of the criminal court system with an examination of current legal issues and trends. Prerequisite: CJ 1000 or consent.

## Administration

CJ 2101 Police Organization and Management (3)

The principles and practices common to the effective management of American law enforcement agencies. Prerequisite: CJ 1000.

**CJ 2102 Jail Management (3)** An in-depth study of jail operations and procedural guidelines which define the role, duties and responsibilities of jail personnel.

**CJ 3104 Institutional Operations (3)** An examination of the procedures of correctional institutions and of the problems encountered in the classification, care and treatment of incarcerated offenders. Prerequisite: CJ 3006.

**CJ 4101 Criminal Justice Planning (3)** Planning concepts and development of comprehensive criminal justice plans; their integration into meaningful crime reduction and resistance programs; and their influence on the operations of judicial agencies.

#### Law

CJ 2300 Criminal Law (3) Origin, development, and classification of the substantive criminal law, defenses, and criminal responsibility. Prerequisite: CJ 1000 or consent. CJ 3303 Criminal Procedure (3) Selected constitutional aspects of law enforcement including the law of arrest, search and seizure. Students are encouraged to take CJ 2300 prior to taking CJ 3303. Prerequisite: CJ 1000. CJ 3310 Law of Corrections and Prisoners' Rights (3) An examination of federal and state laws and resultant judicial interpretation regarding the substantive and procedural protections applied in the correctional setting with regard to the rights of the confined. Only offered Spring semester. Prerequisite: CJ 3303 or consent.

CJ 3398 International Human Rights and Criminal Justice (3) A presentation of the legal standards of international human rights for criminal justice and their comparison with and impact upon national criminal justice systems.

CJ 4300 Case Preparation and Courtroom Procedure (3)

Criminal procedure from arrest through trial. Preparation for and participation in mock trial. Recommended that students complete CJ 3303 Criminal Procedure before this course.

CJ 4302 Criminal Evidence (3) Rules of evidence as they relate to the prosecution and defense of criminal cases. It is recommended that students complete CJ 2300.

CJ 4321 Civil Remedies in Criminal Justice (3) State and federal legal liabilities and remedies in criminal justice and policy implications. Prerequisite: CJ 3303 or consent.

CJ 4330 Criminal Justice and the Mental Health Systems (3) The relation of the criminal justice system and the mental health process; legal concepts regarding the mentally disabled. Prerequisite: CJ 1000 or consent.

CJ 4352 International Criminal Law (3) Survey of international criminal law examining responsibilities of

nation-state and individual, international cooperative efforts and tribunals, and various international crime and defenses, including international terrorism.

#### Investigation

- CJ 2405 International Policing (3) Overview of international policing operations includes an examination of organizational and administrative operations, duties of various police organizations, police relations with the public.
- CJ 3400 Criminal Investigation (3) Principles involved in the investigation of crimes with particular attention given to its historical origins, the investigator, organization and management of the investigative function, and investigative methods; including crime scene processing, suspect identification and use of information sources. Consideration is also given to the investigation of specific crimes.
- CJ 3405 Homicide Investigation (3) Study of homicide investigation including tactics, procedures, problems, forensic techniques, and legal issues. Recommended that students complete CJ 3400 Criminal Investigation prior to taking this course.
- CJ 4403 Sexual Assault and the Criminal Justice System (3) In-depth study of sexual assault and sex offenders. Investigation into the motivation of sex offenders, the victim's responses to assault, and investigative procedures.
- CJ 4420 Organized Crime (3) An analysis of both the historical development of organized crime and its current impact on society. The enforcement, prosecutorial, judicial, and legislative actions utilized to combat organized crime will be examined
- CJ 4444 Terrorism (3) Study of violent political and religious movements around the world and the difficulties they pose to the institutions of justice in a democratic society.

#### **Problems and Research**

- CJ 3600 Introduction to Criminal Justice Research (3) An introductory examination of the research methods with application most commonly utilized in criminological and criminal justice research.
- CJ 4601 Directed Studies\* (1-6) Individual research and study in student's field of interest as approved and directed by major professors. May be repeated for a maximum of 6 semesters hours. Prerequisite: consent. \*Not available for graduate credit.
- CJ 4602 Internship in Criminal Justice (1-6) Practical experience in the operation of various components of the criminal justice system. May be repeated for a maximum of 12 semester hours. Prerequisite: consent.
- CJ 4605 Senior Seminar in Criminal Justice\* (3) Current issues and trends in criminal justice with emphasis on group discussion. Each student will be required to prepare, submit and defend a senior thesis. Successful completion of the thesis is mandatory. Prerequisite: senior major in Criminal Justice. \*Not available for graduate credit.

#### Juvenile Justice

- CJ 2700 Introduction to Juvenile Justice (3) An examination of the origins, philosophy and objectives of the juvenile justice system. Focus is on the operation, legal processes, current trends and roles of the various actors within the juvenile justice system.
- CJ 4701 The Juvenile and the Law (3) The jurisdiction of juvenile courts, role of law enforcement agents, judicial process, fact-finding hearings, dispositions, waivers, appeals, philosophy of the juvenile court with attention to the legal rights of children, and comparative analyses of juvenile codes.

- CJ 4702 Juvenile Corrections (3) An analysis of the theories, concepts, practices and special problems of juvenile corrections, including a review of contemporary juvenile correctional systems and discussion of recent research concerning the juvenile institution and the various field services.
- CJ 4703 International Juvenile Justice (3) An overview of international juvenile justice, through a examination of how the international society reacts to juvenile misbehavior and various juvenile justice models.

# **Teacher Education Policies and Procedures**

#### CERTIFICATION

The teacher certification program offered by CMSU is accredited nationally by the National Council for Accreditation of Teacher Education. Programs in education also meet certification requirements set by the Missouri Department of Elementary and Secondary Education.

Missouri state regulations stipulate these basic requirements for students seeking initial teacher certification (or extended certification in some instances): (1) for admission to teacher education programs, passing all sections of the College Basic Academic Subjects Examination (C-BASE) and receiving a grade of "C" or better in an oral communications class; (2) a minimum cumulative grade-point average of 2.50 on a 4-point scale on all college work attempted prior to initial certification; (3) a minimum grade-point average of 2.50 on a 4-point scale in each initial certificate subject area, and any additional area of endorsement for extended certification; (4) a minimum grade-point average in professional education courses of 2.50, with no grade lower than "C"; "professional education courses" are defined as those listed in the state certificate requirements as (a) Foundations of Teaching, (b) Teaching Methods, and (c) Clinical Experiences; (5) completion of a PRAXIS II subject assessment with a score no lower than a minimum determined by the state of Missouri for each test ("exit test"); (6) completion of a student performance portfolio addressing state standards; (7) for all persons seeking school administrator certification, satisfactory appraisal upon completion of the state Administrator Assessment Center program.

Initial teacher certification may be earned at CMSU via completion of the Bachelor of Science in Education degree, the Bachelor of Music Education degree and in certain instances the Bachelor of Science degree. Students may apply for certification upon completion of degrees with major and minor programs that are designated as meeting certification guidelines of the state of Missouri. The degree earned, however, does not automatically lead to certification; failing to complete satisfactorily the "exit test" requirement with the portfolio (see above) does not prevent the awarding of the degree but will be cause for non-issuance of the certificate. Initial teacher certification may also be obtained through a post-baccalaureate program. In addition, CMSU has instituted an alternative program for certification for people with degrees not in education who are otherwise eligible for immediate employment in a school position. See the Director of Clinical Services and Certification for further information about both of these special programs.

CMSU offers undergraduate majors in the following fields which lead to initial teacher certification: Agriculture Education (Vocational) **Business Education** Early Childhood Education **Elementary Education** English Family and Consumer Science Mathematics Middle School-Junior High School Education Modern Languages (French, German, or Spanish)

Music, Instrumental and/or Vocal

Physical Education

Sciences (Biology, Chemistry, Earth Science, Physics) Social Studies

Special Education (Cross-Categorical, Severely Developmentally Disabled, Early Childhood Special Education)

Speech Communication and Theatre **Technology Education** 

Other certification programs are available that require initial certification or graduate degrees. See the Graduate Catalog for further information.

CMSU offers minor programs in many of the above areas that may provide teacher certification for grades 5-9 or K-9. In addition, the following minors, all requiring completion

of a major teaching program, are available: **Driver Education** Health Education Journalism Science Education 5-9

#### ADMISSION TO THE TEACHER EDUCATION PROGRAM

Students seeking an initial teaching certificate (as candidates for the Bachelor of Science in Education, the Bachelor of Science, or the Bachelor of Music Education degrees, or as post-baccalaureate students) must gain admission to the Central Missouri State University Teacher Education Program.

Admission to Teacher Education is required before enrolling in courses identified as PROFESSIONAL EDUCATION REQUIREMENTS (with the exception of the courses listed below) as well as those courses identified by departments representing the major area of study in the preparation for teaching.

- Application for admission. 1.
- Evidence of having completed a minimum of 48 semester hours of college credit (with at least six (6) hours from CMSU), earned a minimum cumulative GPA 2.50 overall and at CMSU. (If a Post-Baccalaureate applicant graduates with a GPA of 2.50 or higher, he/she is exempt from the 6-hour rule.)
- Completion of the following courses with a grade of C or higher:
  - A. EDCI 2100, Foundations of Education and Field Experience.
  - В. EDCI 2240, Educational Psychology (or equivalent
  - ENGL 1020, Composition I (or approved equivalent course emphasizing writing skills.)
  - College-level mathematics course (at the level of MATH 1101, 1111, or 1620)
  - An oral communication course (COMM 1000 or equivalent course)
- Recommendation for admission from the department representing the major area of study in the preparation for teaching (interviews or other means of assessment as determined by individual departments).
- Evidence of having passed all sections of the C-BASE (undergraduates only - Post-Baccalaureate students are
- Satisfactory criminal history background check. No student will be admitted to teacher education if he/she has been convicted of a felony. (Post-Baccalaureate students may contact the Office of Clinical Services and Certification to clarify admission requirements.)

NOTE:

Any appeal regarding denial of Admission to the Teacher Education Program should be addressed in writing to the chair of the Teacher Education Council. Further appeal should be directed to the Dean of the College of Education and Human Services.

# ADMISSION TO THE PROFESSIONAL EDUCATION SEMESTER AND STUDENT TEACHING

The professional education semester is generally the final semester of the program, and student teaching is the primary component.

Approval for admission to the professional education semester, including student teaching, involves meeting or completing the following minimum requirements:

- 1. Admission to the Teacher Education Program.
- Submission of a completed request by December 1 for the Fall Semester, or May 1 for the Spring Semester.
- Completion of a minimum of 90 semester hours of university credit prior to the beginning of student teaching; meeting all prerequisites for professional semester courses and student teaching.
- 4. A minimum cumulative grade-point average of 2.50 on all university work attempted, on all courses taken at CMSU, and in the field or fields for which teacher certification is being sought (determined on the basis of courses approved for the teaching area, whether taken at CMSU or elsewhere).
- A satisfactory appraisal for student teaching from each department or area in which student teaching placement is requested.
- Evidence of computer proficiency. (A computer course may be taken for credit or the requirement may be met by other coursework.)
- A doctor's certificate or other evidence of good health, if required by the school system where the student is placed for student teaching.
- Students using CMSU for certification must have earned a minimum of six semester hours of credit at CMSU before qualifying for student teaching.

NOTE: Students who are deficient in one or more of the requirements for Admission may petition the Teacher Education Council for permission to enroll in the Professional Education Semester. This petition privilege does <u>not</u> include C-BASE.

NOTE: The Teacher Education Council requires the PRAXIS II be taken prior to receiving a grade for student teaching.

All requirements set by the state of Missouri for certification following completion of university requirements must be met prior to endorsement for certification by the appropriate university official, including the following: (1) minimum overall GPA of 2.50; (2) minimum GPA of 2.50 in the certificate subject area and in professional education courses; (3) no grade lower than "C" in professional education courses; (4) minimum score on the specialty test of the PRAXIS II specialty subject assessment that is applicable to the initial certificate endorsement being requested.

### FEDERAL FINANCIAL AID

Students completing initial teacher certification as part of completion of the first bachelors or graduate degree may receive federal and state grant, loan and employment

assistance in accordance with their calculated eligibility. Students pursuing teacher certification after completion of the first bachelors degree may receive only federal loan and work assistance. In both circumstances, the Free Application for Federal Student Aid (FAFSA) must be submitted to determine the student's eligibility for aid.

## **Curriculum and Instruction**

In the Department of Curriculum and Instruction, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 2--Reading, 3--Curriculum and Instruction, 4--Elementary Education, 5--Secondary Education, 6--Adult Education, 7--Special Methods, 8--Early Childhood Education, 9--Individual Study and Research.

#### Accreditation

The Curriculum and Instruction programs are accredited by the National Council for Accreditain of Teacher Education located at 2010 Massachusetts Ave. NW, Suite 500, Washington, DC 20036; phone 202-466-7496; email ncate@ncate.org.

## EARLY CHILDHOOD EDUCATION Minor, B.S. in Ed. Degree

(Certification to teach grades B-3 only with an elementary education functional major; available with no certification when used with other major areas.) (000723)

|         |         | `                             | ,    |      | Sem. Hours                      |
|---------|---------|-------------------------------|------|------|---------------------------------|
| MINOR F | REQUIRE | EMENTS                        |      |      | 28                              |
| EDCI    | 2830    | Early Childhood Principles 3  | EDSP | 4370 | Screening, Diagnosing &         |
| EDCI    | 2850    | Dev. & Learning Through Play3 |      |      | Prescribing Instructions3       |
| EDCI    | 4830    | Early Childhood Curriculum3   | CFD  | 1220 | Child Development3              |
| PE      | 2410    | Movement Skills & Activities  | CFD  | 2230 | Pract. in Child Development1    |
|         |         | for Primary Grades2           | CFD  | 3250 | Org. & Adm. of Programs         |
| EDSP    | 3150    | Community & Family Resources2 |      |      | for Young Children3             |
| EDSP    | 3151    | Community & Family Resources  | D&N  | 2310 | Early Childhood Nutr. & Health2 |
|         |         | Practicum1                    | CD   | 2000 | The Bases of Speech & Lang2     |

#### **Clinical Experiences for Teacher Education Students**

### **Clinical Experiences for Teacher Education Students**

## **Early Field Experience**

Education students are required to participate in early field/ clinical experiences prior to student teaching. All education majors enroll in a six-hour block of educational foundations courses, scheduled to provide flexibility for off-campus time in field experiences, typically taken at the sophomore level. The field experience portion of this block is incorporated in EDCI

Early childhood, elementary and middle school majors have a field experience in EDCI 3210 (Methods of Reading Instruction). Early childhood majors have additional field experiences in EDSP 3151 (Community and Family Resources Practicum), EDCI 4830 (Early Childhood Curriculum) and EDCI 4400 (Classroom Management and Interactions). Elementary education majors have additional field experiences in EDCI 4250 (Practicum in Reading) and EDCI 4400 (Classroom Management and Interactions). Middle school majors have additional field experience in EDCI 4130 (The Middle School) and EDCI 4340 (Middle School Curriculum and Instruction).

Secondary majors, after EDCI 2100 complete their second field experience in EDCI 3550 (Practicum in Secondary Instruction) and their third in Secondary Field Experience II in their major field which is offered in conjunction with the special methods course in the Professional Education Semester.

## **Professional Education Semester**

Early childhood, elementary and middle school majors using this catalog are required to student teach for 14 weeks, earning 12 semester hours during the Professional Education Semester.

Majors in special education using this catalog are required to student teach for a minimum of 12 weeks (usually 14), earning 12 semester hours during the Professional Education Semester. Secondary and K-12 education majors must

plan for a senior semester in which they enroll full-time in a professional block of courses which includes student teaching. The 16-week semester consists of two parts--four weeks on campus in 3-4 semester hours of course work and twelve weeks of student teaching (all day, five days a week in a school setting). Secondary and K-12 majors customarily enroll in Secondary Field Experience II in their major field, and EDCI 4595 and ICAP 4468. See the appropriate department program listing for any variations in this requirement. Students following programs not clearly covered by these general statements or the department program listing should see the Director of Clinical Services and Certification for information. Elementary majors with a special education area of concentration/minor will be assigned two additional hours of student teaching.

Attendance at all professional education semester activities is required. Any exceptions must be approved by the Director of Clinical Services and Certification.

## Clinical Faculty for the Teacher Education Program

CMSU's education majors participate in a field experience with one of the Professional Development School partners. The Teacher Education Program has formal partnership agreements with Warrensburg, Crest Ridge and Holden School Districts. Additional districts may be added to the PDS program over time. Many of the public school faculty from the two districts serve as clinical faculty for CMSU, and work with interns in the P-12 classrooms or present on educational issues in the university courses.

All teacher education students seeking initial certification will be able to demonstrate the knowledge and skills obtained in the program to meet the outcomes of Missouri Standards for Teacher Education Programs (MoSTEP). The graduate of a teacher education program will use the knowledge and skills obtained in the program to::

- Understand the central concepts, tools of inquiry and structures of the discipline(s) within the context of a global society and create learning experiences that make these aspects of subject matter meaningful for students.
- Understand how students learn and develop, and provide learning opportunities that support the intellectual, social, and personal development of all students.
- Understand how students differ in their approaches to learning and create instructional opportunities that are adapted to diverse
- Recognize the importance of long-range planning and curriculum development and develop, implement, and evaluate curriculum based upon student, district, and state performance standards.
- Use a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance
- Use an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.
- Model effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
- Understand and use formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.
- Be a reflective practitioner who continually assesses the effects of choices and actions on others. This reflective practitioner actively seeks out opportunities to grow professionally and utilizes the assessment and professional growth to generate more learning for more students.
- Foster relationships with school colleagues, parents, and educational partners in the larger community to support student learning and well-being.
- Understand theories and applications of technology in educational settings and has adequate technological skills to create meaningful learning opportunities for all students.

## **ELEMENTARY EDUCATION Functional Major, B.S. in Ed. Degree**

Elementary teacher certification in Missouri is available at two levels--for Grades 1-6 and for early childhood education Birth-Grade 3. Careful program planning could lead to certification in both of these levels, or for elementary with special education certification. Students interested in two levels of certification should see the Director of Clinical Services and Certification.

|           |        |                                    |                    |           | Sem. Hours                          |
|-----------|--------|------------------------------------|--------------------|-----------|-------------------------------------|
| CORE RE   | QUIREM | ENTS                               |                    |           | 28                                  |
| EDCI      | 3210   | Methods of Reading Instruction3    | HED                | 4330      | First Aid & CPR for Educators1      |
| EDCI      | 3220   | Teaching of the Language Arts3     | ART                | 3910      | Art for Elementary Schools2         |
| EDCI      | 2310   | Computer/Technology in Ed2         | MATH               | 1800      | Introduction to Teaching Elementary |
| EDCI -    | 4350   | Elem. Science Tchg. Strategies3    |                    |           | & Middle School Mathematics2        |
| EDCI      | 3410   | Children's Literature2             | MATH               | 2801      | Concepts & Methods in               |
| EDCI      | 3420   | Tchg. Social Studies & Economics   |                    |           | Elementary School Mathematics3      |
|           |        | in Elementary & Middle Schools3    | MUS                | 3301      | Music for Elementary Schools2       |
| HED :     | 3310   | Meth. in Elem. School Health2      |                    |           |                                     |
| GENERAL   | EDUCA  | TION REQUIREMENTS (page 49)48 s.h. | (In the functional | major, HE | D 3310 and HED 4330 will be allowed |
|           |        |                                    |                    |           | Div. II B (required)                |
| COMM      | 1000   |                                    | POLS               | 1510      | Div. II B (required)3               |
| MATH      | 1620   | Div. I C (required)3               | HIST               | 1350      | Div. II B or                        |
| Science ( | Choice | Group I or Group II of Div. II A7  | HIST               | 1351      | Div. II B (required)3               |
| Group I   |        |                                    | GEOG               | 2212      | Div. II B (required)3               |
| EDCI      | 1320   | Biology for Teachers3              | ART                | 1800      | Div. II C or                        |
| EASC      | 1004   | Div. II A or                       | MUS                | 1210      | Div. II C (required)3               |
| CHEM      | 1104   | Div. II A or                       | Modern             | (Foreign) |                                     |
| PHYS      | 1104   | Div. II A (required)4              | languag            | ge        | Div. II C (required)3               |
|           |        | or                                 | EDCI               | 2110      | Div. II D (required)3               |
| Group II  |        |                                    |                    |           |                                     |
| EDCI      | 1310   | Physics for Teachers3              |                    |           |                                     |
| BIOL      | 1004   | Div. II A (required)4              |                    |           |                                     |
|           |        |                                    |                    |           |                                     |

Elementary Education functional majors will be allowed to substitute EDCI 1310 or EDCI 1320 to fulfill 3 s.h. of Div. II A.

(Continued on next page)

# GRADES 1-6 Functional Major Option, B.S. in Ed. Degree (41 000720)

(Certification to teach elementary education in grades 1-6)

| (Ooranoaaorr    | to todoir olomontary oddoddon in graddo'r o',        |                  |            | Sou                                    | m. Hours  |
|-----------------|--|------------------|------------|--|-----------|
| FUNCTIONAL N    | MAJOR REQUIREMENTS                                   |                  |            |  |           |
|                 | nents28  | EDCI             | 4250       | Practicum in Reading                   |           |
| EDCI 3215       | Tchg. Reading in Content Fields3                     | PE PE            | 3420       | Elem. School Phys. Ed. Activities .    |           |
| EDCI 4220       |  | . –              |            |  | _         |
|                 | CENTRATION REQUIREMENTS                              |                  |            |  | 21        |
|                 | ninor/area of concentration in a teaching/specialty  |                  |            |  |           |
|                 | proved minor/area of concentration from the follow   |                  |            |  | r         |
|                 | h.) French (21 s.h.), German (21 s.h.), Health Edu   |                  |            |  |           |
|                 | 24-25 s.h.), Science (24 s.h.), Social Studies (26-2 |                  |            |  | s/Theatre |
| (21 s.h.), Spar |  | ,,               |            | (                                      |           |
|                 | ry majors with special education minor/area of cor   | ncentration will | l be assig | ned two additional hours of student te | aching.   |
| GENERAL EDU     | ICATION REQUIREMENTS (page 48 and listed for         | or this progran  | n)         |  | 42        |
|                 | AL EDUCATION REQUIREMENTS                            |                  |            |  |           |
| EDCI 2100       | Foundations of Education                             | IGEN             |            | Community, School &                    |           |
|                 | & Field Experience3                                  |                  |            | Family Connections                     | 3         |
| EDCI 2101       | Models of Teaching2                                  | EDCI             | 2240       | Educational Psychology                 | 3         |
| EDCI 4400       | Classroom Mgt. & Interactions3                       | PSY              | 2220       | Child Psychology, 3 or                 |           |
| EDCI 4495       | Student Tchg. Elementary I6                          | PSY              | 3220       | Lifespan Development, 3                | 3         |
| EDCI 4496       | Student Tchg. Elementary II6                         | EDSP             | 2100       | Ed. of the Exceptional Child, 2 or     |           |
|                 |  | PSY              | 4200       | Psy. of Exceptional Children, 2        | 2         |
| MINIMUM TOTA    | AL   |                  |            |  | 130       |
|                 |  |                  |            |  |           |
|                 | HOOD, Birth-Grade 3 Functional Major Option,         |                  |            |  |           |
| (Certification  | to teach early childhood education and elementar     | y education, B   | Birth-Grad |  |           |
| FUNCTIONAL      | AA IOD DEGLIDEMENTO                                  |                  |            |  | m. Hours  |
|                 | MAJOR REQUIREMENTS                                   |                  |            |  | 28        |
| Core Requiren   | nents28 CENTRATION REQUIREMENTS28                    |                  |            |  | 20        |
|                 |  |                  |            |  | 20        |
| EDCI 2830       | Early Childhood Principles                           | PE               | 2410       | Movement Skills & Activities           | 0         |
| EDCI 2850       | Dev. & Learning Through Play3                        | EDOD             | 0.450      | for Primary Grades                     |           |
| EDCI 4830       | Early Childhood Curriculum3                          | EDSP             | 3150       | Community & Family Resources           | 2         |
| CFD 1220        | Child Development3                                   | EDSP             | 3151       | Community & Family Resources           |           |
| CFD 2230        | Pract. in Child Development1                         | EDOD             | 4070       | Practicum                              | 1         |
| CFD 3250        | Org. & Adm. of Programs                              | EDSP             | 4370       | Screening, Diagnosing &                | 0         |
| D0N 0040        | for Young Children                                   | 0.0              | 0000       | Prescribing Instructions               |           |
| D&N 2310        | Early Childhood Nutr. & Health2                      | CD               | 2000       | The Bases of Speech & Lang             |           |
|                 | ICATION REQUIREMENTS (page 49 and listed for         |                  |            |  |           |
|                 | AL EDUCATION REQUIREMENTS                            |                  |            |  | 31        |
| EDCI 2100       | Foundations of Education                             | IGEN             | 3468       | Community, School &                    |           |
|                 | & Field Experience3                                  |                  |            | Family Connections                     |           |
| EDCI 2101       | Models of Teaching2                                  | EDCI             | 2240       | Educational Psychology                 | 3         |
| EDCI 4400       | Classroom Mgt. & Interactions3                       | PSY              | 2220       | Child Psychology, 3 or                 |           |

## MIDDLE SCHOOL-JUNIOR HIGH SCHOOL Major, B.S. in Ed. Degree

**PSY** 

**PSY** 

**EDSP** 

3220

2100

4200

Lifespan Development, 3 ......3

Psy. of Exceptional Children, 2 ......2

Ed. of the Exceptional Child, 2 or

(Certification to teach language arts, grades 5-9, and selected area(s) of concentration/endorsement, grades K-9 or 5-9) (41 000840)

|         |         |                                   |      |      | Sem. Hours                          |
|---------|---------|-----------------------------------|------|------|-------------------------------------|
| MAJOR F | REQUIRE | MENTS                             |      |      | 38                                  |
| EDCI    | 4130    | The Middle School3                | HED  | 4310 | Drugs & Youth3                      |
| EDCI    | 3210    | Methods of Reading Instruction3   | HED  | 4320 | Teaching Sexuality Education in     |
| EDCI    | 3220    | Teaching of the Language Arts3    |      |      | the School3                         |
| EDCI    | 3230    | Content Area Literacy in the      | HED  | 4330 | First Aid & CPR for Educators1      |
|         |         | Middle School3                    | ENGL | 1020 | Composition I3                      |
| EDCI    | 4220    | Analysis & Corr. of Rdg. Disabil2 | ENGL | 1030 | Composition II3                     |
| EDCI    | 4250    | Practicum in Reading1             | MATH | 3812 | Mathematics in the Integrated       |
| EDCI    | 2310    | Computer/Technology in Ed2        |      |      | Middle School Curriculum3           |
| EDCI    | 3440    | Literature for the Middle Level2  | ENGL | 2205 | American Lit. 1865 to Present, 3 or |
|         |         |                                   | ENGL | 2220 | World Masterpieces, 33              |

A student with a math minor will not enroll in MATH 3812, see minor advisor.

Student Tchg. Early Childhood I ......6

Student Tchg. Elementary II ......6

(Continued on next page)

**EDCI** 

**EDCI** 

4493

4496

| (Continued from pr | revious page)   |             |               |   |
|--------------------|---|-------------|---------------|---|
| MINOR REQUIRE      | MENTS   |             |               | 21-27                                     |
| Select one area of | of concentration from the following list: Art (27 s.h.),  | Business    | Education     | (21 s.h.), English (24 s.h.), Family and  |
| Consumer Science   | ce (30 s.h.), French (21 s.h.), Health Education (22      | s.h.), Math | ematics (     | 24-25 s.h.), Science (24 s.h.),           |
| Social Studies (26 | 6-27 s.h.), Speech Communication & Theatre (21 s.         | h.), Spani  | sh (21 s.h    | .), Technology Education (21 s.h.)        |
| GENERAL EDUCA      | ATION REQUIREMENTS (page 49)48 s.h. (In the               | major, EN   | GL 1020 a     | and ENGL 1030 fulfill 6 s.h. of Div. I A; |
|                    | NGL 2220 fulfills 3 s.h. of Div. II C; IGEN 3468 fulfills |             |               |   |
| MATH 1620          | Div. I C (required)3                                      | POLS        | 1510          | Div. II B (required)3                     |
| Science Choice     | Group I or Group II of Div. II A7                         | GEOG        | 2212          | Div. II B (required)3                     |
| Group I            |   | HIST        | 1350          | Div. II B or                              |
| EDĊI 1320          | Biology for Teachers3                                     | HIST        | 1351          | Div. II B (required)3                     |
| EASC 1004          | Div. II A or  |             |               | Modern (Foreign) language                 |
| CHEM 1104          | Div. II A or  |             |               | Div. II C (required)3                     |
| PHYS 1104          | Div. II A (required)4                                     | EDCI        | 2110          | Div. II D (required)3                     |
| or                 |   | PSY         | 4230          | Psy. of Adolescence, 3 or                 |
| Group II           |   | PSY         | 3220          | Lifespan Development, 33                  |
| EDCI 1310          | Physics for Teachers3                                     |             |               |   |
| BIOL 1004          | Div. II A (required)4                                     |             |               |   |
| Middle School ma   | ajors will be allowed to substitute EDCI 1310 or EDC      | CI 1320 to  | fulfill 3 s.h | n. of Div. II A and                       |
| to substitute PSY  | 4230 to fulfill 3 s.h. in Div. III.                       |             |               |   |
|                    | EDUCATION REQUIREMENTS                                    |             |               | 32-33                                     |
| EDCI 2100          | Foundations of Education                                  | IGEN        | 3468          | Community, School &                       |
| & Field Experience | 3   | •           |               | s3  |
| EDCI 2101          | Models of Teaching2                                       | EDCI        | 2240          | Educational Psychology3                   |
| EDCI 4300          | Ed. Measurement & Evaluation2                             | EDSP        | 2100          | Ed. of the Exceptional Child, 2 or        |
| EDCI 4340          | Tchg. Strategies in the Middle School3                    | PSY         | 4200          | Psy. of Exceptional Children, 22          |
| EDCI 4497          | Student Tchg. Middle School I6                            |             | •             | ds course is required for each area       |
| EDCI 4498          | Student Tchg. Middle School II6                           |             |               | or area of endorsement2-3                 |
| MINIMUM TOTAL      |   |             |               | 127                                       |

# **SECONDARY EDUCATION** B.S. in Ed. and B.M.E. Degrees

Bachelor of Science in Education and Bachelor of Music Education degree programs include the following professional education components toward the total of a minimum of 124 semester hours required. A teaching degree shall include a major and a minor, two teaching majors, or a functional major. (Minors need not be in a teaching field.) Majors, functional majors, and minors leading to certification to teach are listed in the respective departments or service fields with teaching programs. Professional education requirements listed here apply to each secondary or K-12 program, with exceptions as noted in certain majors.

Before being admitted to the Professional Education Semester, secondary education candidates must have completed a course in adolescent psychology (PSY 4230 or PSY 3220, Lifespan Development).

|        |            |  |                |           |                                    | em. Hours |
|--------|------------|--|----------------|-----------|------------------------------------|-----------|
| MAJOR  | OR FUNC    | TIONAL MAJOR REQUIREMENTS  |                |           |                                    | 30-67     |
|        |            | ification as indicated under Certification (see pag  |                |           |                                    | 0.05      |
|        |            | MENTS  |                |           |                                    | 0-25      |
|        |            | ification as indicated under Certification (see pag<br>ATION REQUIREMENTS (page 49)48 s.h. (In the |                |           |                                    |           |
|        |            |  |                |           |                                    |           |
| PROFFS | SSIONAI    | )EDUCATION REQUIREMENTS  |                |           |                                    | 28-29     |
| EDCI   | 2100       | Foundations of Education   | EDCI           | 4595      | Student Teaching Secondary I       |           |
|        |            | & Field Experience3  | EDCI           | 2240      | Educational Psychology             |           |
| EDCI   | 4210       | Tchg. of Rdg. in the Sec. School2  | PSY            | 4200      | Psy. of Exceptional Children, 2 or |           |
| EDCI   | 4300       | Ed. Measurement & Evaluation2  | EDSP           | 2100      | Ed. of the Exceptional Child, 2    | 2         |
| EDCI   | 3500       | Sec. Tchg. & Behavioral Mgt3   | ICAP           | 4468      | Student Teaching Secondary II      | 4         |
| EDCI   | 3550       | Practicum in Secondary Instruction1  | Special        | methods   | in major field                     | 2-3       |
| Second | lary Field | Experience II in major field1  |                |           |                                    |           |
|        |            | r literacy and proficiency in media technology are   |                |           | ŭ .                                |           |
| •      | •          | DCI 2310 - 2 hours. Majors in Business Education   |                | ,,        |                                    | on,       |
|        | •          | Iture, and Vocational Family and Consumer Scien  | nce satisfy co | omputer p | roficiency through their programs, |           |
|        |            | o-visual requirements through EDCI 3500.   |                |           |                                    |           |
|        |            | S  |                |           |                                    | 0-11      |
|        | •          | ngs as indicated above for number of hours avail   |                |           |                                    |           |
| MINIMU | M TOTAL    |  |                |           |                                    | 124       |

## SCIENCE Minor, B.S. in Ed. Degree

(Certification available to teach science in grades 5-9 for elementary/middle school-junior high school functional majors only. Elementary education functional majors 1-6 may use this as an area of concentration. This minor is not available for secondary or K-12 education majors.)

(000821)

| MINOR | REQUIRE | NENTS                            | <i>,</i> |      |      | Sem. Hours                         |
|-------|---------|----------------------------------|----------|------|------|------------------------------------|
| EDCI  |         | Physics for Teachers3            |          |      |      | Meteorology3                       |
| EDCI  | 1320    | Biology for Teachers3            |          | BIOL | 1004 | Intro. to the Sciences: Ecology4   |
| EASC  | 1004    | Intro. to the Sciences: Geology4 |          | CHEM | 1104 | Intro. to the Sciences: Chemistry4 |
| EASC  | 3010    | Environmental Geology3           |          |      |      |                                    |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, BIOL 1004 and CHEM 1104 fulfill 7 s.h. of Div. II A)

#### **Special Projects**

**EDCI 4000 Special Projects in Education (1-6)** Individual or group study of problems in special areas of interest. *May be repeated for a maximum of 6 semester hours.* 

### **Foundations**

#### **EDCI 2100 Foundations of Education and Field**

Experience (3) An overview of the American public school; its nature, purpose, history, philosophy, organization and administration; contemporary issues and trends. Includes 30 hours of public school classroom observation. Prerequisites: should be taken concurrently with EDCI 2240 during the sophomore year. In addition, should be taken concurrently with EDCI 2101 by early childhood, elementary, and middle school majors. An additional fee is assessed for this course. EDCI 2101 Models of Teaching (2) Furnishes the preservice teacher models of teaching and an orientation to the Teacher Education Program. Prerequisites: should be taken concurrently with EdCI 2100 and EdCI 2240 during the sophomore year by early childhood, elementary, and middle school majors.

**EDCI 2110 World Diversity and America (3)** Provides an analysis of global interdependence with an emphasis in cultural interaction to better understand human diversity issues, diverse perspectives, one another, and one's own place in the world and America.

**EDCI 2150 Introductory Field Experience (1)** Introductory experiences in the classroom that provide opportunities for becoming involved with students and professional teachers in the school setting. Prerequisite: This course is intended ONLY for transfer students who have taken Foundations of Education at another institution that did not include field experience. Should be taken concurrently with EdCI 2240 during the sophomore year. An additional fee is assessed for this course.

**EDCI 4130 The Middle School (3)** An exploratory course which includes an introduction to philosophy, organization, curriculum and instructional strategies appropriate to the middle school learner. Field experience in a middle school is required for initial certification students. An additional fee is associated with this course.

**EDCI 4150 Summative Seminar\* (1)** A culminating experience for elementary education majors which will provide an opportunity for students to synthesize the learnings from their program. Prerequisites: admission to Teacher Education Program. \*Not available for graduate credit

## Reading

**EDCI 2240 Educational Psychology (3)** Furnishes the prospective teacher with the psychological concepts, principles, theories, research findings, and techniques that are relevant to guiding the educative process. Prerequisites: should be taken concurrently with EDCI 2100 during the

sophomore year. In addition, should be taken concurrently with EDCI 2101 by early childhood, elementary, and middle school majors.

**EDCI 3210 Methods of Reading Instruction (3)** Fundamental concepts, skills, attitudes and methods of developing, promoting and managing reading instruction. The course includes tutoring and teacher-aide field experiences outside of class hours. Prerequisites: 2.5 cumulative GPA; EDCI 2100 and EDCI 2240; EDCI 2101 for early childhood, elementary, and middle school majors. EDCI 3215 Teaching Reading in Content Fields (3) An examination of reading comprehension strategies, study skills, concept development, and critical thinking, especially with regard to the reading demands of content subjects and the needs of typical and atypical learners. Prerequisite: 2.5 cumulative GPA; EDCI 3210 or equivalent; EDCI 2101 for Early Childhood, Elementary, and Middle School Majors. EDCI 3220 The Teaching of Language Arts (3) An integrative approach to teaching the communication arts of reading, writing, listening, and speaking in the elementary curriculum. Prerequisites: 2.5 cumulative GPA; EDCI 2100 and EDCI 2240; EDCI 2101 for Early Childhood, Elementary, and Middle School Education majors.

EDCI 3230 Content Area Literacy in the Middle School (3) An examination of reading needs common to content areas and a general reading program at the middle school level. Prerequisites: 2.5 cumulative GPA; EDCI 3210 or equivalent; EDCI 2101 for Early Childhood, Elementary, and Middle School majors.

**EDCI 4210** The Teaching of Reading in the Secondary School (2) Designed to prepare both the regular secondary teacher to handle reading problems common to his/her special subject matter area and the reading teacher to carry out a general reading program in the high school. Prerequisites: admission to Teacher Education Program; EDCI 2100 and EDCI 2240, or equivalent.

EDCI 4220 Analysis and Correction of Reading Disabilities\* (2) A focus on assessment of students' reading abilities and selecting appropriate teaching methods and materials to meet individual needs in reading instruction. The course includes a practicum, or field experience component, which permits application of learning and instructional decision-making. Prerequisites: admission to Teacher Education Program; EDCI 3215 or EDCI 3230 or EDCI 4210; EDCI 4220 must be taken concurrently with EDCI 4250. \*Not available for graduate credit.

**EDCI 4250 Practicum in Reading\* (1)** A supervised field experience in the assessment of reading, analysis of reading difficulties, and educational decision-making in planning and teaching appropriate lessons. Prerequisites: admission to Teacher Education Program, EDCI 3215 or EDCI 3230 or EDCI 4210; must be taken concurrently with EDCI 4220. \*Not available for graduate credit.

#### **Curriculum and Instruction**

EDCI 1310 Physics for Teachers (3) A demonstration,

laboratory, lecture and discussion course in physics designed for elementary and nonscience secondary teachers. Credit earned in this course may not be substituted for any courses required for a secondary major or minor in the sciences.

EDCI 1320 Biology for Teachers (3) A demonstration, laboratory, lecture, and discussion course in biology designed for elementary and nonscience secondary teachers. Credit earned in this course may not be substituted for any courses required for a secondary major or minor in the sciences.

EDCI 2310 Computer/Technology in Education (2) Provides pre-service teachers with basic knowledge and skill in microcomputer and instructional media operation for instructional purposes in schools. Meets the proficiency requirement for microcomputer/audiovisual equipment that is a prerequisite for student teaching.

**EDCI 4300 Educational Measurement and Evaluation (2)** Instruction in the use and interpretation of standardized tests, the construction of classroom tests, and the interpretation of test results.

**EDCI 4314 Integration of Technology in Instruction (3)** Establishes and advances the use of computer technology for both teacher productivity and instructional integration into P-12 classrooms. Prerequisite: EDCI 2310 or consent of

**EDCI 4340 Teaching Strategies in the Middle School** (3) Middle school teaching strategies building upon middle level organization and curriculum, with particular emphasis on integration and interdisciplinary teaming. Prerequisites: admission to Teacher Education Program, PSY 4230 and EDCI 4130. An additional fee is assessed for this course. **EDCI 4350 Elementary Science Teaching Strategies (3)** Science concepts commonly developed in the elementary grades, with special emphasis on objective materials, field trips, experiments, laboratory and other activities. Enrollment is limited to students preparing to become elementary teachers. Prerequisites: admission to Teacher Education Program; completion of a physical science and biological science, each with labs, (EDCI 1310 and BIOL 1004) or (EDCI 1320 and EASC 1004 or CHEM 1104 or PHYS 1104).

## **Elementary Education**

See information beginning on page 201 for specific policies and procedures governing the administration of the Teacher Education Program, and for requirements for eligibility for student teaching.

EDCI 3410 Children's Literature (2) Familiarity with various types of literature for children, principles for selection of children's books, and methods of presentation for integration of children's literature into the total elementary curriculum. Prerequisites: 2.5 cumulative GPA; EDCI 2100, EDCI 2101 and EDCI 2240.

**EDCI 3420 Teaching Social Studies and Economics in** Elementary and Middle Schools (3) Social studies and economics education competencies are developed. These are related to teaching methods; content, skills, and attitudes; and evaluative devices and assessments. Prerequisites: 2.5 cumulative GPA, EDCI 2100 and EDCI 2240; EDCI 2101 for Early Childhood, Elementary, and Middle School majors. EDCI 3440 Literature for the Middle Level (2) Familiarity with various types of literature for middle level children, principles for selection of books, and methods of presentation for integration of literature into the middle school curriculum. Prerequisites: 2.5 cumulative GPA; EDCI 2100, EDCI 2101 and EDCI 2240.

EDCI 4400 Classroom Management and Interactions\* (3) Helps pre-service teachers advance their knowledge and skills using general, age appropriate classroom management techniques, integrating them with developmentally appropriate teaching strategies. Prerequisites: admission to Teacher Education Program and should be taken the semester just prior to student teaching. \*Not available for graduate credit.

EDCI 4493 Student Teaching Early Childhood\* (6) To be taken in the Professional Semester for early childhood majors and double majors in elementary education. Prerequisites: Admission to Teacher Education Program; 2.5 cumulative GPA; EDCI 4400. Should be taken concurrently with EDCI 4496 or EDSP 4395, depending on the sequence followed. (See description of Professional Education Semester.) \*Not available for graduate credit.

EDCI 4495 Student Teaching Elementary I\* (3, 5, 6, 8) To be taken in the Professional Semester. For elementary majors, double majors in elementary education and special education, K-12 majors and elementary physical education. Prerequisites: admission to Teacher Education Program; EDCI 4400. Should be taken concurrently with EDCI 4496 or EDCI 4498 or ICAP 4468 or EDSP 4395, depending on the sequence followed. (See description of Professional Education Semester.) \*Not available for graduate credit. EDCI 4496 Student Teaching Elementary II\* (4, 6, 8) To be taken in the Professional Semester. For elementary classroom majors and majors which provide K-12 certification (except speech pathology). Prerequisites: admission to Teacher Education Program; must be taken concurrently with EDCI 4495 or EDCI 4595. \*Not available for graduate credit. EDCI 4497 Student Teaching Middle School I\* (6) To be taken in the Professional Semester. For middle school majors, double majors in elementary education, special education, or secondary education. Prerequisites: admission to Teacher Education Program; EDCI 4340; should be taken concurrently with EDCI 4498 or ICAP 4468 or EDCI 4496 or EDSP 4395, depending on sequence followed. \*Not available for graduate credit.

EDCI 4498 Student Teaching Middle School II\* (6) To be taken in the Professional Semester. For middle school majors. Prerequisites: admission to Teacher Education Program; should be taken concurrently with EDCI 4497 or EDCI 4495 or EDCI 4595 or EDSP 4395. \*Not available for graduate credit.

## **Secondary Education**

See information beginning on page 201for specific policies and procedures governing the administration of the Teacher Education Program, and for requirements for eligibility for student teaching.

**EDCI 3500 Secondary Teaching and Behavioral** Management (3) An analysis of the teaching/learning process with emphasis on instructional planning, component teaching skills and adolescent behavior management. This course should be taken no earlier than one semester prior to student teaching. Analysis of the teaching/learning process with emphasis on instruction and adolescent behavior management. Practical experience of 25 hours at a secondary public school is required. Prerequisites: must be taken concurrently with EDCI 3550 and admission to Teacher Education Program. Should be taken no earlier than one semester prior to student teaching. Occupational Education majors need consent of T&OE to enroll. An additional fee is assessed for this course.

**EDCI 3550 Practicum in Secondary Instruction (1)** Requires a minimum of 50 hours of co-teaching with a public school classroom teacher. Prerequisites: admission to Teacher Education Program and must be taken concurrently with EDCI 3500. Should be taken no earlier than one

semester prior to student teaching.

**EDCI 4595 Student Teaching Secondary I\* (3, 5-6)** To be taken in the Professional Semester. For secondary and modern language majors. Prerequisites: admission to Teacher Education Program; EDCI 3500. Should be taken concurrently with ICAP 4468 or EDCI 4496 or EDCI 4498, depending on the sequence followed. (See description of Professional Education Semester.) \*Not available for graduate credit.

#### **Early Childhood Education**

**EDCI 2830 Early Childhood Principles (3)** Provides students a critical understanding concerning the application of educational principles in order to make professional decisions about young children (birth-8). Requires a minimum of 30 hours of practical experience. Prerequisite: CFD 1220.

**EDCI 2850 Development and Learning Through Play (3)** Provides theoretical and empirical perspectives connecting play to young children's learning and development. Develops knowledge and skills to implement play-based curriculum in diverse settings. Prerequisite: CFD 1220, EDCI 2830 for students seeking certification in early childhood education. Must be taken concurrently with CFD 2230.

**EDCI 4830 Early Childhood Curriculum (3)** Provides students with the theories and principles of curriculum development, knowledge, and skills of implementing integrated (developmentally and culturally appropriate) curriculum in early childhood (birth-8). Prerequisites: admission to Teacher Education Program and EDCI 2830 for undergraduates.

**EDCI 4850 The Child's Physical and Social World (3)** Experiences with materials, techniques, and resources for broadening the child's awareness and understanding of his/her physical and social environment. Prerequisites: admission to Teacher Education Program; EDCI 2240 or equivalent.

## **Integrative Studies Capstone**

ICAP 4468 Student Teaching Secondary II\* (4) To be taken in the Professional Semester. For all secondary majors, all K-12 majors, and K-9 majors in elementary physical education. Prerequisites: admission to Teacher Education Program; must be taken concurrently with EDCI 4495 or EDCI 4595 or EDSP 4395. \*Not available for graduate credit.

## **Integrative Studies General**

**IGEN 3468 Community, School and Family Connections** (3) Focuses on the interactions among community, school and family systems relative to existing and emerging paradigms.

## Child and Family Development

In the section of Child and Family Development, the second digit in a course number stands for the following: 0BGeneral, 2BDevelopment, 7BProfessional.

## CHILD AND FAMILY DEVELOPMENT Functional Major, B.S. Degree

(43 000121)

#### Students will be:

- Able to think critically about problems and issues facing children and families.
- Prepared to use developmentally appropriate practices to promote the optimal development of diverse children and families.
- Competent to assume leadership roles in programs providing direct and support services to children and families.
- Articulate advocates for justice for families and children in both public and private arenas.
- Aware of and sensitive to ethical implications in their professional relationships with diverse families and children.

|           |               | ·                        | ·  |           | •           |                               | Sem. Hours |
|-----------|---------------|--------------------------|--|-----------|-------------|-------------------------------|------------|
| MAJOR REC | QUIREMENTS    |                          |  |           |             |                               | 55-61      |
| CFD 12    | 20 Child E    | Development              | 3  | EDCI      | 2310        | Computer/Technology in Ed.    | 2          |
| CFD 12    | 30 Observ     | ation of Children        | 2  | EDSP      | 2100        |                               |            |
| CFD 22    | 30 Pract. i   | in Child Development     | 1  | EDSP      | 3150        | Community & Family Resource   | es2        |
| CFD 32    | 30 Family     | Sys. & Lifespan Develop  | oment3   | ΑE        | 1450        | Valuing Differences: Discover | ing        |
| CFD 32    | 40 Parent     | -Child Interaction       | 3  |           |             | Common Ground                 | 1          |
| CFD 47    | 10 Interns    | hip                      | 3-6  | Departr   | mentally ap | pproved electives from one    |            |
| CFD 47    | 45 Senior     | Seminar                  | 3  | of the fo | ollowing ar | reas                          | 25-28      |
| D&N 23    | 10 Early C    | Childhood Nutr. & Health | 2  |           | Area 1      | Child Development             |            |
| FACS 21   | 10 Consu      | mer Problems             | 3  |           | Area 2      | Family Development            |            |
| MINOR NOT | REQUIRED      |                          | 55-61   55-6 |           |             |                               |            |
| GENERAL E | DUCATION R    | EQUIREMENTS (page 4      | 9)   |           |             |                               |            |
| PSY 11    | 00 Div. II I  | B (required)             | 3  | EDCI      | 2110        | Div. II D (required)          | 3          |
| SOC 18    | BOO Div. II I | B (required)             | 3  | CFD       | 1010        | Div. III (required )          | 3          |
| FREE ELEC | TIVES         |                          |  |           |             |                               | 15-21      |
| MINIMUM T | OTAL          |                          |  |           |             |                               | 124        |

#### General

#### CFD 1010 Individual and Family Relationships (3)

Focus on family relationships and personal development including topics of self-esteem, informed decision making, gender roles, love and mate selection, stress and crisis management, communication and conflict resolution, domestic violence, sexuality, parenting and human diversity. CFD 4000 Special Projects in Child and Family Development (1-3) Investigation of contemporary problems and issues in Child and Family Development. May be repeated for a maximum of 6 semester hours.

#### Development

CFD 1220 Child Development (3) An introduction to the field of child development. Emphasis is on dynamic forces underlying growth and change. Techniques in the study and observation of children. Prerequisite: A criminal background check is required in this course. An additional fee is associated with the course.

CFD 1230 Observation of Children (2) Techniques of observation and actual observation of children. Only offered Fall semester.

CFD 2230 Practicum in Child Development (1) Student observation and participation with preschool children. Students work with 2, 3 and 4-year old children. Prerequisite: CFD 1220. An additional fee is associated with this course.

CFD 2240 Field Experience in Early Childhood (3) Supervised training and work experience in an approved child

care establishment with emphasis on guiding young children in all aspects of development within the group setting. Only offered Fall semester. Prerequisites: consent of instructor and 30 semester hours completed in program.

CFD 3222 Early Childhood (3) The physical, motor, intellectual, social, and emotional development of the child. Development of an intelligent philosophy of adult-child

relationships. Only offered Fall semester. Prerequisite: CFD

CFD 3230 Family Systems and Lifespan Development (3) Family relationships and human development with focus on change over the course of the family life cycle. CFD 3240 Parent-Child Interaction (3) Development and understanding of adult-child interaction in the family setting. CFD 3250 Organization and Administration of Programs for Young Children (3) Methods and procedures for setting up and administering a variety of programs for young children. Includes study of state licensing. Prerequisite: CFD 2230 or consent of instructor.

CFD 4250 Special Problems in Family and Individual Development (2-3) A supervised individual study or group examination of selected recent trends in family or individual development. May include reports, discussions, bibliographies, research, and experiments. May be repeated for a maximum of 6 semester hours. Prerequisite: CFD 2230 or equivalent.

#### **Professional**

CFD 4710 Internship (3-6) Provides experience for students in cooperating businesses, agencies and organizations. May be repeated for a maximum of 12 semester hours. Prerequisites: 20 semester hours of courses in the major, 2.0 GPA and advance departmental approval.

CFD 4745 Senior Seminar (3) Philosophy, current issues and trends in Child and Family relationships related to occupations. Focus on problem-solving styles leading to group and individual research problems. Prerequisites: senior standing, approval of department advisor.

## **Educational Leadership and Human Development**

## Counselor Education

In the section of Counselor Education, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 2--Career Guidance, 3--Group Guidance, 4--School Counseling, 5--Secondary Counseling, 6--Testing, 7--Administration, 8--Techniques and Theories, 9--Individual Study and Research.

NOTE: For information regarding School Counseling certifications and programs, see the Graduate Catalog.

#### **Special Projects**

COUN 4000 Special Projects in Counseling (1-5) Individual or group study of complex problems or issues in special areas of interest. May be repeated for a maximum of 5 semester hours. Prerequisite: consent of program coordinator.

#### **Foundations**

COUN 4120 Foundations of Program Services (3) An overview of school guidance programs and counseling services in community settings. History, philosophy, leadership/management skills, program planning, implementation, and collaboration are studied.

## Instructional Technology

In the section of Instructional Technology, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 3--Instructional Technology, 4--Production, 9--Individual Study and Research.

## INSTRUCTIONAL MEDIA TECHNOLOGY Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor. Preparation for teaching computer/technology literacy in schools.) (000781)

|                    |                          |                                |      |      | Sem. Hours                        |  |  |  |
|--------------------|--------------------------|--------------------------------|------|------|-----------------------------------|--|--|--|
| MINOR REQUIREMENTS |                          |                                |      |      |                                   |  |  |  |
| INST               | 3100                     | Mediating Instruction3         | INST | 4920 | Practicum in Instructional Tech1  |  |  |  |
| INST               | 4300                     | Prin. of Instructional Dev3    | INST | 4318 | Telecommunications in Education3  |  |  |  |
| INST               | 4330                     | Technology Troubleshooting for | EDCI | 2310 | Computer/Technology in Ed2        |  |  |  |
|                    |                          | Educators2                     | LIS  | 4230 | Sel. & Acquisition of Materials3  |  |  |  |
| INST               | 4400                     | Design & Production            | LIS  | 4740 | Adm. of the Library Media Center3 |  |  |  |
| of Media           | of Media for Instruction |                                |      |      |                                   |  |  |  |

## **Special Projects**

**INST 4005 Special Projects in Instructional Technology** (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours

#### **Foundations**

INST 3100 Mediating Instruction (3) The application of technology to the instructional development and delivery process. The selection, utilization, and evaluation of various media forms are studied. Laboratory experience includes preparation of instructional materials, equipment operation, and field experiences. A charge is made for expendable materials. Prerequisite: EDCI 2310.

#### Instructional Technology

**INST 4300 Principles of Instructional Development (3)** 

Analysis and application of systematic approaches to the development of technology-based instruction. Includes the development of knowledge and skill in using hypermedia and multimedia technology. Only offered Fall semester. Prerequisite: INST 3100 or consent of instructor. INST 4318 Telecommunications in Education (3) Provides students in education with the concepts and skills needed in using telecommunications networks for instructional purposes, research, and information access and delivery.

Prerequisite: EDCI 2310 or equivalent experience. **INST 4330 Technology Troubleshooting for Educators** (2) Provides pre-service and in-service educators with the knowledge and skill to operate, maintain and troubleshoot (service) the various hardware devices and software found in schools. Prerequisite: EDCI 2310 or consent of the instructor.

#### **Production**

INST 4400 Design and Production of Media for Instruction (3) Design and production of print-based, computer-based, and video-based instructional materials that are related to subject areas or grade levels. Includes application of hypermedia and multimedia technology to the design and production of educational materials. A charge is made for expendable materials. Prerequisite: INST 4300 (Instructional Technology minors) or LIS 4200 (Library Science majors) or consent of instructor.

## Individual Study and Research

INST 4920 Practicum in Instructional Technology (1) Participation in field experiences that provide practice with teaching methodology applicable specifically to the problems and procedures encountered when working with instructional technology. May be repeated for a maximum of 4 semester hours. Prerequisites: INST 4400 and LIS 4740.

## Library Science and Information Services

In the section of Library Science and Information Services, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 2--Librarianship, 3--Internet, 6--Library Literature, 7--Administration, 8--Technical Processes, 9--Individual Study and Research.

NOTE: For information regarding Library Science and Information Services certifications and programs, see the Graduate Catalog.

#### **Special Projects**

LIS 4000 Special Projects in Library Science (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours.

#### Librarianship

LIS 4200 Libraries and Librarianship (2) Introduces the student to the development of the library as an institution and to the role of the library and the librarian in today's society. Prerequisite: Undergraduates require consent of Program Coordinator.

#### LIS 4230 Selection and Acquisition of Materials (3) Critical analysis of selection tools in developing a

comprehensive media collection with emphasis on selection for small to medium sized libraries and media centers.

#### **Electronic Resources**

LIS 4300 Introduction to the Internet Via Internet (3) An examination and evaluation of the structure and function of the Internet and its use as a tool for communication, collaboration, and commerce.

LIS 4320 Creating Web-Based Internet Sources (3) An indepth examination and evaluation of theoretical and practical principles, along with the development of skills necessary to create and provide resources on the Internet. Prerequisites: LIS 4300 or consent of instructor.

#### **Library Literature**

LIS 1600 Information Resources (2) Freshman-level course introduces traditional and computer-based resources and services available in academic libraries and strategies for locating, evaluating and using information.

#### Administration

LIS 4740 Administration of the Library Media Center (3) Principles of organization and administration of the library and media center and its relationship to its many publics.

Sem. Hours

## Special Education

In the section of Special Education, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 3--Curriculum and Instruction, 4--Special Methods, 6--Testing, 7--Administration, 9--Individual Study and Research.

#### Accreditation

The Special Education program is accredited by the Council for Exceptional Children (CEC). The Council for Exceptional Children (CEC) is located at 1110 North Glebe Road, Suite 300, Arlingong, VA 22201; phone 703-620-3660; email service@cec.sped.org; webpage http://www.cec.sped.org.

## SPECIAL EDUCATION Functional Major, B.S. in Ed. Degree

(Certification to teach cross-categorical disabilities K-12; severely developmentally disabled K-12; or early childhood special education Birth-Grade 3)

(41 000784)

The graduate with a Bachelor of Science in Special Education will apply knowledge and skills obtained in the program to:

- Understand the philosophical, historical, and legal foundations of the field of special education.
- Identify the characteristics of exceptional learners in order to provide for accurate selection of programs and learning opportunities.
- Become proficient in the use of assessment devices enabling effective diagnosis, evaluation and programming for exceptional learners.
- Develop a thorough understanding of instructional content and best practices for children and youth with exceptional learning needs.
- Plan and manage the teaching and learning environment for students with disabilities in a variety of educational settings.
- Understand the causes of student behavior and social interaction skills.
- Develop effective communication and collaborative partnerships among educational professionals, parents, and stakeholders in the education of children and youth with exceptional learning needs
- Practice in the field of special education using established professional and ethical practices and resources for the enhanced learning of all children.

| FUNCTIO | ONAL MAJ | OR REQUIREMENTS                   |      |       |                                 | 52-57 |
|---------|----------|-----------------------------------|------|-------|---------------------------------|-------|
| CORE RI | EQUIREM  | ENTS All Certification Areas26    |      | Sever | ely Developmentally Disabled28  | 3     |
| EDSP    | 4140     | Collaborating With Families of    | HED  | 1350  | Responding to Emergencies       | 3     |
|         |          | Exceptional Children3             | HED  | 3310  | Meth. in Elem. School Health    | 2     |
| EDSP    | 4360     | Behavioral Mgt. Techniques2       | EDSP | 4310  | Intro. to Students with Severe  |       |
| EDSP    | 4361     | Practicum in Behav. Mgt. Tech1    |      |       | Developmental Disabilities      | 2     |
| EDSP    | 4620     | Eval. of Abilities & Achievement3 | EDSP | 4330  | Ed. & Training of Students with |       |
| EDSP    | 4700     | IEP & the Law3                    |      |       | Severe Dev. Disabilities        |       |
| HED     | 4330     | First Aid & CPR for Educators1    | PE   | 4340  | Adapted Physical Education      | 3     |
| EDCI    | 3210     | Methods of Reading Instruction3   | EDSP | 4350  | Augmentative & Alter. Com       | 3     |
| EDCI    | 2310     | Computer/Technology in Ed2        | EDSP | 4370  | Screening, Diagnosing &         |       |
| EDCI    | 1310     | Physics for Teachers, 3 or        |      |       | Prescribing Instruction         | 3     |
| EDCI    | 1320     | Biology for Teachers, 33          | CD   | 4402  | Language Acquisition for        |       |
| ART     | 3910     | Art for Elementary Schools2       |      |       | Children with Dev. Disabilities | 2     |
| MATH    | 3890     | Concepts & Methods of Teaching    | EDSP | 4450  | Curr. & Meth. for Tchg. the     |       |
|         |          | for Special Education3            |      |       | Student with SDD                | 3     |
| Area of |          | n Requirements26-31               | EDSP | 4470  | Perceptual Motor Training for   |       |
|         |          | ss-Categorical Disabilities26     |      |       | Students with Disabilities      |       |
| EDCI    | 3215     | Teaching Reading in               | MATH |       | Math. for Special Education     |       |
|         |          | Content Fields3                   |      |       | Childhood Special Education31   |       |
| HED     | 3310     | Meth. in Elem. School Health2     | EDSP |       | Community & Fam. Resources      | 2     |
| EDSP    | 4150     | Career Development for            | EDSP | 3151  | Community & Fam. Resources      |       |
|         |          | Students with Disabilities2       |      |       | Practicum                       |       |
| EDCI    | 4220     | Analysis & Correction of          | EDSP |       | Intro. to Early Child. Spec. Ed |       |
|         |          | Reading Disabilities2             | EDSP |       | Augmentative & Alter. Com       | 3     |
| EDCI    | 4250     | Practicum in Reading1             | EDSP | 4370  | Screening, Diagnosing &         |       |
| EDSP    | 4385     | Introduction to Cross-Categorical |      |       | Prescribing Instruction         | 3     |
|         |          | Special Education3                | EDSP | 4440  | Curriculum & Methods in Tchg.   |       |
| CD      | 4402     | Language Acquisition for Children |      |       | Early Childhood Special Ed      | 3     |
|         |          | with Developmental Disabilities2  | EDSP | 4470  | Perceptual Motor Training for   |       |
| EDSP    |          | Methods of Cross-Cat I: MR/OHI3   |      |       | Students with Disabilities      |       |
| EDSP    |          | Methods of Cross-Cat II: LD 3     | CD   | 2000  | The Bases of Speech & Lang      |       |
| EDSP    |          | Methods of Cross-Cat III: E/BD3   | CFD  | 1220  | Child Development               |       |
| MATH    | 4890     | Math. for Special Education 2     | CFD  | 1230  | Observation of Children         |       |
|         |          |                                   | D&N  | 2310  | Early Childhood Nutr. & Health  |       |
|         |          |                                   | EDCI | 3220  | Teaching of the Language Arts   |       |
|         |          |                                   | EDCI | 3410  | Children's Literature           | 2     |

MINOR NOT REQUIRED (Continued on next page)

| (Continued from previous page)  |   |                                     |                |                |             |   |  |
|---|---|-------------------------------------|----------------|----------------|-------------|---|--|
|   | GENERAL EDUCATION REQUIREMENTS (page 49)48 s.h. Early Childhood Special Education (In the functional major, |                                     |                |                |             |   |  |
|   |   |                                     |                |                |             | Div. IV A)42                              |  |
| Students must have one course in a physical or earth science and one course in a biological science in Div. II A, each must |   |                                     |                |                |             |   |  |
|   |   | (total of 7 hours).                 |                |                |             |   |  |
| MATH  | 1620  | Div. I C (required)                 | 3              | POLS           |             | Div. II B (required)3                     |  |
| HIST  | 1350  | Div. II B or                        |                | GEOG           | 2212        | Div. II B (required)3                     |  |
| HIST  | 1351  | Div. II B (required)                |                |                |             |   |  |
|   |   |                                     |                |                | ities and   | Severely Developmentally Disabled (In the |  |
|   |   | DCI 1310 or EDCI 1320 is allowe     |                |                |             |   |  |
| HED   | 3310 and 4  |                                     |                | 468 fulfills 3 | s.h. of Div | /. IV B)39                                |  |
| MATH  | 1620  | Div. I C (required)                 | 3              | POLS           | 1510        | Div. II B (required)3                     |  |
| HIST  | 1350  | Div. II B or                        |                | GEOG           | 2212        | Div. II B (required)3                     |  |
| HIST  | 1351  | Div. II B (required)                | 3              |                |             |   |  |
|   |   | EDUCATION REQUIREMENTS-             | Early Childhoo | •              |             | 23-25                                     |  |
| EDSP  | 2100  | Ed. of the Exceptional Child        |                | EDCI           | 2100        | Foundations of Education                  |  |
| EDSP  | 4395  | Student Tchg. in Spec. Ed. I        |                |                |             | & Field Experience3                       |  |
| EDSP  | 4396  | Student Tchg. in Spec. Ed. II       | 6              | EDCI           | 2240        | Educational Psychology3                   |  |
|   |   |                                     |                | IGEN           | 3468        | Community, School &                       |  |
|   |   |                                     |                |                |             | Family Connections3                       |  |
| PROFES  | SSIONAL E   | <b>DUCATION REQUIREMENTS-</b>       | Cross-Categori | cal Disabilit  | ties and S  | Severely Developmentally Disabled 26      |  |
| EDSP  | 2100  | Ed. of the Exceptional Child        | 2              | PSY            | 2220        | Child Psychology3*                        |  |
| EDSP  | 4395  | Student Tchg. In Spec. Ed. I        | 8              | EDCI           | 2240        | Educational Psychology3                   |  |
| EDCI  | 2100  | Foundations of Education            |                | PSY            | 4230        | Psychology of Adolescence3*               |  |
|   |   | & Field Experience                  | 3              | ICAP           | 4468        | Student Tchg. Secondary II4               |  |
| Students  | may selec   | ct certification in elementary educ |                | e Director of  | Clinical S  |   |  |
|   |   |                                     |                |                |             | 0-7                                       |  |
| MINIMUI   | M TOTAL .   |                                     |                |                |             | 124                                       |  |
|   |   |                                     |                |                |             | gy for PSY 2220 and PSY 4230.             |  |
|   | •   | •                                   |                | •              | •           | <del></del>                               |  |

## SPECIAL EDUCATION/ELEMENTARY EDUCATION Minor, B.S. in Ed. Degree

(Elementary education majors only.) (000854)

|         |          |                                 |   |      |      | Sem. Hours                      |
|---------|----------|---------------------------------|---|------|------|---------------------------------|
| MINOR F | REQUIREN | MENTS                           |   |      |      | 27                              |
| EDSP    | 4140     | Collaborating With Families of  |   | EDSP | 4385 | Intro. to Cross Categorical     |
|         |          | Exceptional Children            | 3 |      |      | Special Education3              |
| EDSP    | 4150     | Career Development for Students |   | EDSP | 4420 | Methods of Cross-Categorical    |
|         |          | With Disabilities               | 2 |      |      | Special Education3              |
| EDSP    | 4360     | Behavioral Mgt. Techniques      | 2 | CD   | 4402 | Language Development for        |
| EDSP    | 4361     | Practicum in Behavioral         |   |      |      | the Handicapped2                |
|         |          | Management Techniques           | 1 | MATH | 4890 | Math for Special Education2     |
| EDSP    | 4620     | Evaluation of Abilities and     |   | PSY  | 4230 | Psychology of Adolescence, 3 or |
|         |          | Achievements                    | 3 | PSY  | 3220 | Lifespan Development, 3,3       |
| EDSP    | 4700     | IEP and the Law                 | 3 |      |      |                                 |

NOTE: Student teaching hours are not part of a minor program, but for informational purposes students will need to enroll in EDCI 4495 for 8 semester hours and EDSP 4396 for 6 semester hours. The student teaching placement for special education will be at the secondary level (grades 5-12).

#### **Special Projects**

EDSP 4000 Special Projects in Special Education (1-5) Individual or group study of problems in special areas of interest. May be repeated for maximum of 5 semester hours.

## **Foundations**

EDSP 2100 Education of the Exceptional Child (2) Identification of exceptional children, methods and techniques for teaching them, as well as possible sources of referral which may be of assistance to teachers and parents of these children.

EDSP 3150 Community and Family Resources (2) Early clinical observations and experiences using community and family resources concerned with various kinds of exceptionality. May be repeated for a maximum of 6 semester hours. Prerequisite: EDSP 2100 or PSY 4200 and must be taken concurrently with EDSP 3151.

#### **EDSP 3151 Community and Family Resources Practicum (1)**

Provides opportunities for preservice teachers to evaluate how community and family resources impact directly/indirectly on the lives of children. Prerequisite: EDSP 2100 or PSY 4200 and must be taken concurrently with EDSP 3150.

**EDSP 4140 Collaborating With Families of Exceptional** Children (3) A study of the impact of exceptionality on family systems and how empowerment and community resources can strengthen the school-family partnership. Prerequisite: EDSP 2100 or PSY 4200.

EDSP 4150 Career Development for Students with Disabilities (2) Supportive services to students with disabilities within a career development context. Prerequisite: EDSP 2100 or PSY 4200.

## **Curriculum and Instruction**

**EDSP 4310 Introduction to Students with Severe** Developmental Disabilities (2) Basic information pertaining to the characteristics and care of students with severe developmental disabilities. Prerequisite: EDSP 2100 or PSY 4200.

**EDSP 4320 Introduction to Early Childhood Special Education (3)** Basic information pertaining to the characteristics, care, treatment, and education of young children with special needs. Only offered Fall semester. Prerequisite: EDSP 2100 or PSY 4200.

EDSP 4330 Education and Training of Students with Severe Developmental Disabilities (3) The treatment and training strategies used in teaching students with severe developmental disabilities. Prerequisites: EDSP 4310 and EDSP 4370.

#### **EDSP 4350 Augmentative and Alternative**

**Communication (3)** Study and application of communication options, including manual sign language and communication devices. Prerequisite: EDSP 2100 or PSY 4200 or consent of instructor.

**EDSP 4360 Behavioral Management Techniques** (2) Practical approaches to behavior management for the classroom teacher, special educator, or clinician. Prerequisite: EDSP 2100 or PSY 4200.

**EDSP 4361 Practicum in Behavioral Management Techniques (1)** Practical experience in designing behavioral management programs and environments under supervision. Prerequisite: EDSP 4360 or concurrently. An additional fee is assessed for this course.

EDSP 4370 Screening, Diagnosing and Prescribing Instruction (3) Case finding, screening, diagnostic and assessment procedures to be utilized in prescriptive educational planning for infants and preschool-aged children. Prerequisite: EDSP 2100 or PSY 4200.

EDSP 4385 Introduction to Cross-Categorical Special Education (3) Information about the characteristics and education of children with mild/moderate disabilities. Prerequisite: EDSP 2100 or PSY 4200.

EDSP 4390 Introduction to Teaching the Gifted/Talented/Creative Student (3) Definitions, identification procedures, the nature and needs, concepts and issues concerning the gifted, talented, creative child. Not open to those who have had EDSP 4421 (prior to 2001). Prerequisite: EDSP 2100 or PSY 4200.

**EDSP 4395 Student Teaching in Special Education I\* (5, 6, 8)** Application for Student Teaching must be made with the Director of Clinical Services and Certification. Prerequisites: special methods course in special education in one or more certification areas (EDSP 4423, EDSP 4440, or EDSP 4450). Should be taken with EDSP 4396 or ICAP 4468 or EDCI 4495. \*Not available for graduate credit.

**EDSP 4396 Student Teaching in Special Education II\* (5, 6, 8)** Prerequisite: must be taken concurrently with EDSP 4395. \*Not available for graduate credit.

#### **Special Methods**

**EDSP 4420 Methods of Cross-Categorical Special Education (3)** Teaching methods, materials and curricula for educating students with mild/moderate disabilities. Prerequisite: EDSP 4385.

**EDSP 4421 Methods of Cross-Categorical Disabilities I: Mental Retardation/Other Health Impaired (3)** Strategies for addressing general problems in teaching students with mental retardation and other health impairments in crosscategorical and other settings including planning, materials and methods used. Prerequisites: Admission to Teacher Education Program and EDSP 4385.

EDSP 4422 Methods of Cross Categorical Disabilities II: Learning Disabilities (3) Characteristics, etiologies, definitions, legislation and issues related to the identification of and educational planning for individuals with learning disabilities. Prerequisites: Admission to Teacher Education Program and EDSP 4385.

EDSP 4423 Methods of Cross-Categorical Special Education III: Emotional/Behavioral Disorders (3)

Strategies for addressing general problems in teaching students with emotional and/or behavioral disorders in crosscategorical and other settings including planning, materials

categorical and other settings including planning, material and methods used. Prerequisites: Admission to Teacher Education Program and EDSP 4385.

**EDSP 4440 Curriculum and Methods for Teaching Early Childhood Special Education (3)** The teaching methods and curricula used for educating young children with special needs. Prerequisites: Admission to Teacher Education Program and EDSP 4320 and EDSP 4370.

EDSP 4450 Curriculum and Methods for Teaching the Student with Severe Developmental Disabilities (3)
Teaching methodologies and curricula used in programming for students with severe developmental disabilities.
Prerequisites: Admission to Teacher Education Program and EDSP 4330.

**EDSP 4470 Perceptual Motor Training for Students** with Disabilities (2) Theories, assessment, instructional procedures, materials, and equipment adaptations for early childhood special education and students with severe developmental disabilities. Prerequisite: EDSP 2100 or PSY 4200

EDSP 4480 Curriculum and Methods for the Teaching of Gifted/Talented/Creative Students (3) Teaching methods and curricula used for educating students who are gifted/talented/creative. Prerequisite: EDSP 4390 or consent of instructor.

#### **Testing**

EDSP 4620 Evaluation of Abilities and Achievement (3) Instruction in interpretation of individualized intelligence tests, formal and informal diagnostic procedures, and in prescriptive instruction. A directed clinical experience in the diagnostic assessment process for Individual Education Programs is required. Prerequisite: EDSP 2100 or PSY 4200. An additional fee is assessed for this course.

## Administration

**EDSP 4700 IEP and the Law (3)** Administrative procedures and policies needed in establishing a program of special education. Special emphasis is given to compliance with state and federal law. A directed clinical experience in the theory, process, and practice of IEP writing is included. Prerequisite: EDSP 4620 and Admission to the Special Ed Program or Graduate Standing.

## **Health and Human Performance**

## ATHLETIC TRAINING

In the section of Athletic Training, the second digit in the course number stands for the following: 6--Athletic Training.

Admission to the Athletic training Major is a competitive process and not all who apply are admitted. The application process for the major in Athletic training is separate from the application process for admission to the University. Both applications must be followed by students interested in the major. Currently, CMSU is in the Candidacy phase of accreditation through CAAHEP. Upon accreditation and completion of this degree program, the student will be eligible to sit for the NATABOC Certification Examination.

Admission into CMSU, essay of career goals, 3 letters of recommendation, completed application, overall GPA of 2.75 or higher, a "core" GPA of 3.0 or higher, successful completion of PE 1610, 1611, and 3610, completed competencies in PE 1610, 1611, and 3610, 100 clinical clock hours as a Level I student, successful completion of interview with athletic training education program committee, CPR and First aid certified, completed physical examination with appropriate immunization record and Hepatitis B vaccination.

#### ATHLETIC TRAINING Functional Major, B.S. Degree (43 000853)

| FUNCTIO  | DNIAL NAA I      | IOD DECLUDEMENTS                      |              |          |            |                                      | Hours |
|----------|------------------|---------------------------------------|--------------|----------|------------|--------------------------------------|-------|
| PE       | JNAL MAJ<br>1610 | IOR REQUIREMENTS                      |              | <br>PE   | 3631       | Therese tis Debelikation Leb         |       |
| PE<br>PE | 1611             | Introduction to Athletic Training     |              | PE<br>PE |            | Therapeutic Rehabilitation Lab       |       |
|          |                  | Introduction to Athletic Training Lab |              |          | 3640       | Athletic Training Lab II             |       |
| PE       | 1620             | Responding to Emergencies             |              | PE       | 4610       | Athletic Training Lab III            |       |
| PE       | 2320             | Analysis & Tchg. of Weight Training   |              | PE       | 4620       | Athletic Training Lab IV             |       |
| PE       | 2600             | Medical Terminology                   |              | PE<br>   | 4630       | Org. & Admin. of Athletic Training   | 3     |
| PE       | 2610             | Orthopedic Assessment: Lower          |              | PE       | 4740       | Legal Liability in Fitness/Wellness, |       |
|          |                  | Extremity                             | 2            |          |            | Physical Education, Recreation,      |       |
| PE       | 2611             | Orthopedic Assessment: Lower          |              |          |            | & Sports Settings                    |       |
|          |                  | Extremity Lab                         | 1 I          | PE       | 4830       | Psychological Aspects of PE          | 2     |
| PE       | 2620             | Orthopedic Assessment: Upper          | I            | PE       | 2800       | Human Anatomy                        | 3     |
|          |                  | Extremity                             | 2 I          | PE       | 2850       | Found. of Exercise Physiology        | 3     |
| PE       | 2621             | Orthopedic Assessment: Upper          |              | PE       | 3800       | Kinesiology                          | 3     |
|          |                  | Extremity Lab                         | 1 I          | HED      | 4300       | Nutrition & Human Performance        | 2     |
| PE       | 2630             | Therapeutic Modalities                |              | HED      | 4370       | Human Diseases                       | 3     |
| PE       | 2631             | Therapeutic Modalities Lab            | 1 1          | NUR      | 3010       | Nursing Pharmacology                 | 3     |
| PE       | 3610             | Care and Prevention of Ath. Injuries  |              | BIOL     | 2401       | Anatomy &Physiology I                |       |
| PE       | 3620             | Athletic Training Lab I               |              | BIOL     | 2402       | Anatomy &Physiology II               |       |
| PE       | 3630             | Therapeutic Rehabilitation            |              | PSY      | 4520       | Statistics for Behavioral Sciences   |       |
|          | NOT REQU         |                                       |              |          | .020       |                                      |       |
|          |                  | TION REQUIREMENTS (page 49) 48 s      | h (In the ma | aior BIO | )I 2401 an | d BIOL 2402 are allowed to           |       |
|          |                  | II A)                                 |              |          |            |                                      | 45-48 |
| COMM     |                  | Div. I B (required)                   |              | PSY      | 1100       | Div. II B (required)                 |       |
| MATH     | 1111             | Div. I C (required)                   | 3 1          | PE       | 1206       | Div. III (required)                  |       |
| CHEM     | 1104             | Div. II A (required)                  | ا<br>ا       | IGEN     | 3472       | Div. IV (required)                   |       |
|          |                  |                                       |              |          |            |                                      |       |
| UPPER L  | EVEL FR          | EE ELECTIVES                          |              |          |            |                                      | 5     |
| FREE EL  | <b>ECTIVES</b>   |                                       |              |          |            |                                      | 9     |
| MINIMUN  | И TOTAL .        |                                       |              |          |            |                                      | 124   |

Athletic Training course descriptions are listed with the PE prefix courses.

Sem. Hours

## **DIETETICS AND NUTRITION**

In the section of Dietetics and Nutrition, the second digit in a course number stands for the following: 3--Foods and Nutrition.

#### **DIETETICS Functional Major, B.S. Degree**

(Registration as a dietitian requires internship beyond B.S. degree. Fulfills the "Didactic Program in Dietetics Academic Requirements" of the American Dietetic Association.) (43 000116)

The graduate with a Bachelor of Science degree in Dietetics will qualify for a post-baccalaureate internship program. Student outcome goals:

- Solve service-oriented problems utilizing knowledge of nutritional assessment, intervention and evaluation skills.
- Utilize current knowledge, technology, and research to enhance the practice of dietetics.
- Exhibit behaviors consistent with attitudes based on beliefs that an understanding/appreciation of global concerns and the diversity of humankind.
- Attend professional dietetic meetings at the local, state, and/or the national level.
- Acquire the knowledge and skills for the successful participation in a supervised dietetics program, employment related to foods and nutrition, or graduate study.
- Acquire the knowledge, skills, professionalism and ethical conduct needed to become a competent entry-level dietitian.
- Apply scientific knowledge and principles to food service systems in the practice of dietetics.
- Apply scientific knowledge and principles related to nutrition needs and processes through the life cycle in health and disease.
- Generate, interpret, and use research and knowledge of foods and nutrition in clinical dietetics, community nutrition, and food service.
- Participate in activities that promote public awareness of nutrition and advance the profession of dietetics.

| FUNCTI     | ONAL MA        | JOR REQUIREMENTS                      |      |      |                               | 63  |  |  |
|------------|----------------|---------------------------------------|------|------|-------------------------------|-----|--|--|
| FOOD       | 2322           | Food Preparation3                     | D&N  | 4345 | Senior Dietetics Seminar      |     |  |  |
| FOOD       | 3332           | Quantity Food Prod. & Service3        | BIOL | 2401 | Anatomy & Physiology I        | 4   |  |  |
| FOOD       | 3333           | Food Systems Management3              | BIOL | 2402 | Anatomy & Physiology II       | 4   |  |  |
| FOOD       | 3334           | Food Service Equip. & Purch3          | BIOL | 3611 | Microbiology                  | 4   |  |  |
| FOOD       | 4326           | Experimental Foods3                   | CHEM | 2650 | Elem Organic and Biochemistry | 5   |  |  |
| D&N        | 1300           | Introduction to Dietetics1            | ACCT | 2100 | Survey of Accounting          | 3   |  |  |
| D&N        | 3340           | Nutrition3                            | MGT  | 3310 | Principles of Management      | 3   |  |  |
| D&N        | 3350           | Community Nutrition3                  | HRM  | 3920 | Human Resource Management     | 3   |  |  |
| D&N        | 4340           | Advanced Nutrition3                   | PSY  | 4520 | Statistics for the            |     |  |  |
| D&N        | 4342           | Diet Therapy3                         |      |      | Behavioral Sciences           | 3   |  |  |
| D&N        | 4343           | Medical Nutrition3                    |      |      |                               |     |  |  |
|            | NOT REQI       |                                       |      |      |                               |     |  |  |
|            |                | ATION REQUIREMENTS (page 49)48 s.h. ( |      |      |                               |     |  |  |
| to fulfill | 3 s.h. of D    | 0iv. II A)                            |      |      |                               | 45  |  |  |
| CHEM       | 1104           | Div. II A (required)4                 | SOC  | 1800 | Div. II B (required)3         |     |  |  |
| PSY        | 1100           | Div. II B (required)3                 |      |      |                               |     |  |  |
| FREE EI    | FREE ELECTIVES |                                       |      |      |                               |     |  |  |
| MINIMU     | M TOTAL        |                                       |      |      |                               | 124 |  |  |

**D&N 1300 Introduction to Dietetics (1)** Overview dietetics and nutrition including history, current trends and career opportunities. **D&N 2310 Early Childhood Nutrition and Health (2)** Application of principles of nutrition, significance of food habits, including the influences of family living, cultural patterns, and commercialization in relation to the health of young children.

**D&N 3340 Nutrition (3)** Digestive process and fundamental principles of nutrition and their application to the feeding of individuals. Prerequisite: CHEM 1103 or CHEM 1104.

**D&N 3350 Community Nutrition (3)** Public health nutrition and nutrition care delivery in community programs. Only offered Spring semester. Prerequisite: D&N 3340.

**D&N 3360 Entrepreneurship for Dietetics Professionals (3)** Identifies and develops dietetic entrepreneurial opportunities in a rapidly changing employment environment. Prerequisites: FOOD 3333 and D&N 3340.

**D&N 4340 Advanced Nutrition (3)** An in-depth study of human nutrition and the evaluation of nutritional status. Prerequisites: BIOL 2402, D&N 3340 and CHEM 2650 (or CHEM 2652 from old catalog) or CHEM 4421.

**D&N 4341 Child Nutrition (2)** Nutritive requirements of mothers during pregnancy and lactation and of children during early childhood. Bases of determining reliability of nutrition information. Prerequisite: D&N 3340.

**D&N 4342 Diet Therapy (3)** Role of nutrition in the prevention and dietary treatment of disease. Only offered Fall semester. Prerequisites: BIOL 2402, D&N 3340 and CHEM 2650 (or CHEM 2652 from old catalog) or CHEM 4421.

**D&N 4343 Medical Nutrition\* (3)** A case study oriented approach to nutritional medicine with an in-depth emphasis on pathophysiology and the nutritional care plan in the prevention and treatment of disease. Only offered Spring semester. Prerequisite: D&N 4342 or concurrently. \*Not available for graduate credit. **D&N 4345 Senior Dietetics Seminar\* (3)** Philosophy and current

issues and trends in dietetics. Group and individual problems which will lead to investigation of individual research problem. Prerequisites: PSY 4520 or equivalent and senior class standing. \*Not available for graduate credit.

**D&N 4350 Special Problems in Foods and Nutrition (2-3)**An in-depth study of human nutrition; some foods emphasis.
Group and/or individual problems including reports, discussion, bibliographies, research, and experiments. *May be repeated for a maximum of 6 semester hours*. Prerequisites: D&N 3340 or consent.

**D&N 4351 Geriatric Nutrition (2)** Dietary needs and feeding of the elderly. Prerequisite: D&N 3340 or consent.

Som Hours

## **FOOD**

In the section of Food, the second digit in a course number with a FOOD prefix stands for the following: 3--Foods and Nutrition.

## FOODS Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000124)

|         |         |                                |      |      | Seili. Houis                 |
|---------|---------|--------------------------------|------|------|------------------------------|
| MINOR F | REQUIRE | MENTS                          |      |      | 21                           |
| FACS    | 2110    | Consumer Problems3             | FOOD | 3333 | Food Systems Management3     |
| FOOD    | 2322    | Food Preparation3              | FOOD | 3334 | Food Service Equip. & Purch3 |
| FOOD    | 3332    | Quantity Food Prod. & Service3 | D&N  | 3340 | Nutrition3                   |
|         |         |                                | ACCT | 2100 | Survey of Accounting3        |

GENERAL EDUCATION REQUIREMENTS (page 49) (CHEM 1104 Div. II A is required)

FOOD 1310 Introduction to Foods and Nutrition (3) A composite course including selection, planning, and nutritional content of food. Not open to foods and nutrition or dietetics majors.

FOOD 2322 Food Preparation (3) Properties and preparation of grains, fruits, vegetables, milk products, protein foods, fats, sugar products, and flour mixtures through demonstrations and laboratory experiences. Prerequisite: grade of C or better in CHEM 1104 or equivalent. An additional fee is associated with this course.

FOOD 3332 Quantity Food Production and Service (3)

Principles and standard methods of quality food production, menus, and service in institutions and their application in work experience. Prerequisite: FOOD 2322.

FOOD 3333 Food Systems Management (3) Organization and management in food service areas including administrative responsibilities, qualifications, personnel management, and cost control. Prerequisite: ACCT 2100.

FOOD 3334 Food Service Equipment and Purchasing (3) Selection, layout and maintenance of equipment in large quantity food service areas. Also a study of food purchasing for institutions. Only offered Spring semester. Prerequisite: FOOD 3332 or concurrently.

FOOD 4326 Experimental Foods (3) An experimental approach to the study of factors which influence the behavior of foods. Group and individual experiments. Prerequisite: FOOD 2322 or equivalent. An additional fee is associated with this course.

## **HEALTH EDUCATION**

In the section of Health Education, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 3--Curriculum and Instruction, 7--Administration.

## **HEALTH EDUCATION Minor, B.S. in Ed. Degree**

(Recommendation for certification to teach health education for grades PK-9 requires 29 semester hours, 30 semester hours for teaching grades 9-12, and 32 semester hours for grades PK-12. The additional classes needed for certification are HED 4320, HED 4390, and health electives. Elementary Education Functional Majors (grades 1-6) may use this as an area of concentration. See Director of Clinical Services and Certification for current requirements.) (000804)

The student will demonstrate a knowledge and/or competencies in the following areas:

- The structures, functions, and interrelationships of body systems as they apply to improving and maintaining healthful living.
- The principles of nutrition and their application to maintaining good health and preventing health problems.
- The use and abuse of legal and illegal drugs and their effects on the human body and society.
- The prevention and management of communicable and chronic diseases and related health care.
- The consumer health issues related to the marketing, selection, and use of health products and services.
- The attaining and maintaining good mental health and its effects on the health of the body.
- The dynamics of interpersonal relationships as related to family life, human sexuality, and growth and development.
- The process of behavior change that favorably affect personal health.
- The expanded model of the Comprehensive School Health Program and the interrelationships of its components.
- The basic concepts of injury prevention both intentional and unintentional, first aid, emergency systems, and the effects of trauma.

| MINOR   | REQUIRE    | EMENTS                                |     |      | Sem. Hours                     |  |
|---------|------------|---------------------------------------|-----|------|--------------------------------|--|
| HED     | 1100       | Personal Health3                      | HED | 4310 | Drugs & Youth3                 |  |
| HED     | 1350       | Responding to Emergencies3            | PE  | 2800 | Human Anatomy3                 |  |
| HED     | 3360       | Meth. in Secondary School Health2     | PE  | 2850 | Found. of Exercise Physiology3 |  |
| HED     | 4300       | Nutrition & Human Performance2        | PSY | 4230 | Psy. of Adolescence3           |  |
| Biology | / majors n | nay substitute BIOL 2401 for PE 2850. |     |      |                                |  |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, HED 1100 fulfills 3 s.h. of Div. III; PSY 4230 fulfills 3 s.h. of Div. II B)

#### **Special Projects**

HED 4000 Special Projects in Health Education (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours

#### **Foundations**

HED 1100 Personal Health (3) Health issues in today's society with special reference and application to the present and future life of the student.

#### **Curriculum and Instruction**

HED 1350 Responding to Emergencies (3) The first aid practice and theory for common emergencies. Certification for the American Red Cross Responding to Emergencies course may be earned upon completion of all specific

HED 3310 Methods in Elementary School Health (2) Curriculum and lesson plan development, basic health concepts, and methodology of teaching elementary health education

HED 3360 Methods in Secondary School Health (2) Explores the current trends in curriculum development in health education and the legal aspects of school health. Only offered Fall semester. Prerequisite: EDCI 2240. HED 4300 Nutrition and Human Performance (2) Nutrition as it applies to athletics, physical exercise, and health. Only offered Fall semester. Prerequisites: PE 2800 and PE 2850 or equivalent.

HED 4310 Drugs and Youth (3) Use and abuse of alcohol and drugs; current problems relative to drug use, abuse, and control; programs in education, law enforcement, and community agencies.

#### **HED 4320 Teaching Sexuality Education in the School (3)**

Prepares the teacher for course development, instruction and integration of sexuality education into the school curriculum. HED 4330 First Aid and CPR for Educators\* (1) Skills and principles of first aid and accident prevention in the schools. Students may receive American Red Cross first aid and CPR certification. \*Not available for graduate credit.

HED 4350 Advanced First Aid and Emergency Care (3) Emphasizes the essential knowledge and skills needed to develop the functional first aid capabilities required by policemen, firemen, emergency squad and rescue squad members, ambulance attendants, and other special interest groups. Students taking this course may complete requirements for the American Red Cross Advanced First Aid and Emergency Care Certificate.

HED 4360 CPR Instructors Training (1) Procedures, theories, and techniques involved in the teaching of the American Red Cross CPR Modular System course. Students may complete requirements for the Red Cross CPR Modular System Instructor Certificate. Prerequisite: current Red Cross CPR Modular System Certificate.

HED 4370 Human Diseases (3) An overview of the agents of disease, the processes of contagion, and the effects on humans. Prerequisites: PE 2850 or BIOL 2401 or equivalent. HED 4390 Community Health Education (2) Various types of health programs conducted by private, volunteer, and official agencies are explored.

## Administration

HED 4760 Organization and Administration of the School Health Program (2) The organization and administration of the school health program emphasizing the areas of healthful school living, health services, and health instruction. Prerequisites: HED 3310 or HED 3360.

Sem. Hours

## HOSPITALITY MANAGEMENT

In the section of Hospitality Management, the second digit in a course number stands for the following: 7--Professional, 8--Hospitality.

#### HOTEL AND RESTAURANT ADMINISTRATION Functional Major, B.S. Degree (43 000205)

The graduate with a Bachelor of Science degree in Hotel and Restaurant Administration will:

- Exhibit professional hotel or restaurant management knowledge and skills.
- Interact with diverse environments.
- Apply scientific principles to hospitality entrepreneurship.
- Demonstrate knowledge and skills of organizational hierarchy systems and tasks within those systems.
- Use critical thinking, problem solving, communication and investigative skills specific to hotel and restaurant management.
- Gain information of professional organizations and attend meetings in the hospitality industry.

|             |          |                                  |      |      | 00                                 |
|-------------|----------|----------------------------------|------|------|------------------------------------|
| FUNCTIO     | DNAL MAJ | IOR REQUIREMENTS                 |      |      | 65                                 |
| FACS        | 2110     | Consumer Problems3               | HM   | 3844 | Dining Room Management3            |
| FOOD        | 2322     | Food Preparation3                | HM   | 3850 | Plant Operation & Maint. Mgt2      |
| FOOD        | 3332     | Quantity Food Prod. & Service3   | HM   | 3860 | Beverage Mgt. & Marketing3         |
| FOOD        | 3333     | Food Systems Management3         | HM   | 4800 | Hotel & Restaurant Management3     |
| FOOD        | 3334     | Food Service Equip. & Purch3     | HM   | 4840 | Legal Aspects of Hotel & Res. Mgt3 |
| HM          | 1800     | Intro. to Hospitality3           | ACCT | 2100 | Survey of Accounting3              |
| HM          | 4710     | Internship5                      | MGT  | 3310 | Principles of Management3          |
| HM          | 4720     | Hospitality Technology2          | MGT  | 3325 | Business Communications3           |
| HM          | 4745     | Senior Seminar3                  | HRM  | 3920 | Human Resource Management3         |
| HM          | 2830     | Hotel-Res. Sanitation & Safety2  | TOUR | 4720 | Tourism Planning & Development3    |
| HM          | 3800     | Front Office Oper. & Management3 | TOUR | 4730 | Tourism Marketing3                 |
| MINOR N     | NOT REQU | JIRED                            |      |      |                                    |
| GENERA      | L EDUCA  | TION REQUIREMENTS (page 49)      |      |      | 48                                 |
| CHEM        | 1104     | Div. II A (required)4            | BE&O | 1210 | Div. II A or                       |
| <b>ECON</b> | 1010     | Div. II B (required)3            | LIS  | 1600 | Div. II A (required)2              |
| FRFF FI     | ECTIVES  |                                  |      |      |                                    |
| MINIMUN     |          |                                  |      |      | 124                                |
|             |          |                                  |      |      |                                    |

#### **Professional**

HM 4710 Internship (3-6) Provides experience for students in cooperating businesses and agencies/organizations. May be repeated for a maximum of 12 semester hours with no more than 6 semester hours graduate credit. Prerequisites: 20 semester hours of major course offerings; undergraduate grade-point average of C or above; departmental approval. HM 4720 Hospitality Technology (2) Hotel, restaurant, and industry specific global technologies for management, employees and quests. Prerequisite: BE&O 1210 or LIS 1600 or consent of instructor.

HM 4745 Senior Seminar\* (3) Philosophy, current issues and trends in hospitality management. Focus on problemsolving styles leading to group and individual research problems. Prerequisites: senior standing and approval of Department Advisor. \*Not available for graduate credit.

#### Hospitality

HM 1800 Introduction to Hospitality (3) Hospitality industry overview including history, current ventures and career opportunities.

HM 2830 Hotel-Restaurant Sanitation and Safety (2) Sanitation and safety procedures, laws and policies for operations in the hotel-restaurant industry.

HM 3800 Front Office Operation and Management (3) Function, procedures, systems and management of the front office within the lodging industry. Delineation of relationships between front office and other hotel department functions. HM 3844 Dining Room Management (3) Develop knowledge and skills necessary for managing the frontof-house areas of food service operations. Prerequisite: FOOD 2322

**HM 3850 Plant Operation and Maintenance Management** (2) Problems relating to building and plant maintenance. Maintenance and engineering management, organization problems, physical plant maintenance and mechanical maintenance topics as they relate to institutional management are developed.

HM 3860 Beverage Management and Marketing (3) An historic perspective of alcoholic beverages and operations. Management's rights, obligations and duties to guests, employees and the public. Merchandising techniques, target marketing and point of sale opportunities for the beverage operation. Only offered Spring semester. An additional fee is associated with this course.

HM 4800 Hotel and Restaurant Management (3) Specialized managerial functions involved in operation of hotels, restaurants, and other facilities in the hospitality

HM 4840 Legal Aspects of Hotel and Restaurant Management (3) Examination of federal and state laws, including judicial interpretations relevant to hotel and restaurant operations, as well as tort, negligence and criminal liability. Methods for prevention of legal action will be investigated.

## PHYSICAL EDUCATION

In the section of Physical Education, the second digit in the course number stands for the following: 0--Special Projects, 1--Foundations, 2--Applied Physical Education, 3--Curriculum and Instruction, 4--Elementary and Secondary Physical Education, 5--Coaching, 6--Athletic Training, 7--Administration and Supervision, 8--Professional Physical Education, 9--Individual Study and Research.

#### PHYSICAL EDUCATION Functional Major, B.S. Degree (43 000817)

The graduate with a Bachelor of Science degree with a functional major in Physical Education will:

- Develop a foundation for a professional philosophy based on both historical and current knowledge of physical education, physical activity, and fitness/wellness.
- Understand physical activity through the use of knowledge of human anatomy, kinesiology, physiology and analysis of movement
- Expand his/her skills, knowledge and understanding in a variety of physical activities including games, sports, rhythms, and fitness skills.
- Understand and apply first aid procedures, safety factors and risk management involved in physical activity settings.
- Gain an awareness of administering physical education and fitness/wellness programs for diverse populations.
- Properly apply measurement and evaluation in the assessment of physical education and fitness/wellness programs.
- Develop an appreciation for the benefits of an active, healthy lifestyle.

|             |                  |  |                |         |                                   | Sem. Hours             |
|-------------|------------------|--|----------------|---------|-----------------------------------|------------------------|
| FUNCT<br>PE | IONAL MA<br>1100 | AJOR REQUIREMENTS1  Orientation to Physical Education1 |                |         |                                   | 48-60                  |
| PE          | 1120             | Microcomputer Applications in                          | Aroa 2         | Fitnoss | /Wellness I (Corporate Fitness) - | 34-36                  |
| 1 -         | 1120             | Physical Education, Exercise &                         | PE PE          | 1204    | Stress Management                 |                        |
|             |                  | Sport Science2   | PE PE          | 4341    | Physical Activity & Older Adult . |                        |
| PE          | 2303             | Analysis & Tchg. of Aerobic Cond2                      | PE             | 4765    | Internship                        |                        |
| PE          | 2320             |  | PE             | 4860    | •                                 | 2-4                    |
|             |                  | Analysis & Tchg. of Weight Training1                   | PE             | 4000    | Fitness Programming &             | 2                      |
| PE          | 2800             | Human Anatomy3   | LIED           | 4050    | Implementation                    |                        |
| PE          | 2850             | Foundations of Exercise Physiology3                    | HED            | 1350    | Responding to Emergencies         | 3                      |
| PE          | 3610             | Care & Prevention of Injuries2                         | HED            | 4300    | Nutrition & Human                 |                        |
| PE          | 3800             | Kinesiology3   |                |         | Performance                       |                        |
| PE          | 4110             | History & Philosophy of Phys. Ed2                      | HED            | 4310    | Drugs & Youth                     |                        |
| PE          | 4340             | Adapted Physical Education3                            | ACCT           |         | Principles of Financial Acct      |                        |
| PE          | 4740             | Legal Liability in Fitness/Wellness,                   | BLAW           | 2720    | Legal Environment of Business     |                        |
|             |                  | Physical Education, Recreation,                        | MKT            | 3400    | Principles of Marketing           |                        |
|             |                  | & Sports Settings2                                     | MKT            | 3420    | Principles of Advertising         | 3                      |
| PE          | 4390             | Eval. Procedures in Physical Ed.                       | MKT            | 3430    | Personal Selling                  | 3                      |
|             |                  | (Area 1), 3 or   | PSY            | 1100    | General Psychology                | 3                      |
| PE          | 4850             | Assessment & Evaluation of                             |                |         |                                   |                        |
|             |                  | Fitness/Wellness (Areas 2 & 3), 33                     | Area 3         | Fitness | /Wellness II (Exercise Science)   | -36-40                 |
| Depar       | tmentally a      | approved electives from one of the                     | PE             | 1204    | Stress Management                 |                        |
|             |                  | see departmental advisor) 31-40                        | PE             | 4341    | Physical Activity & Older Adult . |                        |
|             |                  | ntary - Secondary certification K-12 - 31              | PE             | 4765    | Internship                        |                        |
| PE          | 1450             | Growth & Dev. in Elem. PE3                             | PE             | 4860    | Fitness Programming &             | ······· <del>-</del> · |
| PE          | 2240             | A&T of Ind/Dual Activities3                            | . –            | 1000    | Implementation                    | 3                      |
| PE          | 2290             | A&T of Innovative Activities2                          | PSY            | 4520    | Statistics for Behavioral         |                        |
| PE          | 3280             | A&T of Team Activities                                 | 101            | 4020    | Sciences                          | 3                      |
| PE          | 3300             | Teaching of Dance2                                     | HED            | 1350    | Responding to Emergencies         |                        |
| PE          | 3315             | A&T Outdoor Leisure Skills1                            | HED            | 4300    | Nutrition & Human                 |                        |
| PE          | 3430             |  | ПЕВ            | 4300    | Performance                       | 2                      |
| PE          | 3430             | Creative Dance/Rythms for Elem.                        | LIED           | 1210    |                                   |                        |
| DE          | 2450             | School Touch & Flag Football2                          | HED            | 4310    | Drugs & Youth                     |                        |
| PE          | 3450             | Techniques of Teaching PE                              | D&N            | 3340    | Nutrition                         | 3                      |
| 55          | 0.400            | Activities in Elem. School3                            | CHEM           | 2050    | Elementary Organic &              |                        |
| PE          | 3460             | Techniques of Teaching PE                              | 51.040         |         | Biochemistry 5, or                |                        |
|             |                  | Activities in Mid/High School3                         | PHYS           |         | Intro to Sciences: Physics 4, or  |                        |
| PE          | 3850             | Motor Learning & Control3                              | EDCI           | 1310    | Physics for Teachers 3,           |                        |
| PE          | 4830             | Psychological Aspects of PE2                           | BIOL           | 2401    | Anatomy & Physiology I            |                        |
| PE          | 4840             | Social Aspects of Phys. Activity2                      | BIOL           | 2402    | Anatomy & Physiology II           |                        |
| PE          | 4760             | Physical Education Curriculum2                         | SOC            | 1800    | General Sociology                 | 3                      |
| MINOR       | NOT REC          | QUIRED   |                |         |                                   |                        |
| GENER       | RAL EDUC         | ATION REQUIREMENTS (page 49) 48 s.h. (Ir               | the major, ICA | AP 4468 | fulfills 3 s.h. of Div. III B)    | 45-48                  |
| PE          | 1206             | Div. III (required) OR                                 | PE             | 1203    | Div. III and                      |                        |
|             |                  | , ,  | PE             | 1204    | Div. III and                      |                        |
|             |                  |  | PE             | 2200    | Div. III                          | 3                      |
| EDEE E      | I ECTIVE         | S (Professional Education courses may be requi         |                |         |                                   |                        |
|             |                  |  |                |         |                                   |                        |
| IVIIIVIIVIU | JIVI TOTAL       |  |                |         |                                   | 124                    |

Students may earn teacher certification through careful choice of electives. See the Director of Clinical Services and Certification (Lov 2176) and departmental advisor for specific course work in both General Education and major requirements.

#### **COACHING Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor. Certification to coach is not required in the state of Missouri.) (000731)

|         |              |                                     |         |             | Sem. Hours                     |
|---------|--------------|-------------------------------------|---------|-------------|--------------------------------|
| MINOR   | REQUIRE      | MENTS                               |         |             | 25                             |
| PE      | 2303         | Analysis & Tchg. Aerobic Condition2 | Electiv | es from the | e following4                   |
| PE      | 2320         | Analysis & Tchg. Weight Training1   | PE      | 4520        | Theory & Coaching of           |
| PE      | 2800         | Human Anatomy3                      |         |             | Basketball2                    |
| PE      | 2850         | Foundations of Exercise Physiology3 | PE      | 4530        | Theory & Coaching of           |
| PE      | 3610         | Care & Prevention of Injuries2      |         |             | Track & Field2                 |
| PE      | 3800         | Kinesiology3                        | PE      | 4541        | Theory & Coach. of Football2   |
| PE      | 4740         | Legal Liabilities2                  | PE      | 4550        | Theory & Coach. of Volleyball2 |
| PE      | 4830         | Psychological Aspects of            | PE      | 4551        | Theory & Coach. of Wrestling2  |
| Physica | al Education | 1 2                                 | PE      | 4560        | Theory & Coaching of           |
| Electiv | es from the  | e following3                        |         |             | Softball and Baseball2         |
| PE      | 2240         | Analysis & Tchg. Individual         | PE      | 4561        | Theory & Coach. of Soccer2     |
|         |              | & Dual Activities, 3 or             |         |             | ·                              |
| PE      | 3280         | Analysis & Tchg. of Team            |         |             |                                |
|         |              | Activities 3,3                      |         |             |                                |

## FITNESS/WELLNESS Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor.) (000841)

| MINOR REQUIR | EMENTS                               |    |      |                               | Sem. Hours23-24 |
|--------------|--------------------------------------|----|------|-------------------------------|-----------------|
| PE 1204      | Stress Management1                   | PE | 3800 | Kinesiology                   | 3               |
| PE 1206      | Lifetime Fitness3                    | PE | 4850 | Assessment & Evaluation of    |                 |
| PE 2303      | Analysis & Tchg. of Aerobic Cond2    |    |      | Fitness/Wellness              | 3               |
| PE 2320      | Analysis & Tchg. of Weight Training1 | PE | 4340 | Adapted Physical Education, 3 | or              |
| PE 3610      | Care & Prevention of Injuries2       | PE | 4341 | Physical Activity &           |                 |
| PE 2800      | Human Anatomy3                       |    |      | the Older Adult, 2            | 2-3             |
| PE 2850      | Foundations of Exercise Physiology3  |    |      |                               |                 |

GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, PE 1206 fulfills 3 s.h. of Div. III)

PE 1100 Orientation to Physical Education (1) Orients students to the profession of physical education and to the physical education program at CMSU.

PE 1120 Microcomputer Applications in Physical Education, Exercise and Sport Science (2) Prepares the undergraduate physical education major to develop and use microcomputer multi-media applications specific to the discipline of physical education, exercise/sport science.

PE 1200 Fitness Through Activity and Sport (1) Develops concepts of personal physical fitness as they relate to optimal healthful living.

PE 1203 Aerobic Conditioning (1) Preventive and corrective cardiovascular activities and programs.

PE 1204 Stress Management (1) Causes, effects and coping techniques vital to living successfully with personal stress and tension.

PE 1205 Aerobic Dance for Fitness (1) Aerobic routines for cardiovascular fitness.

PE 1206 Lifetime Fitness (3) Developing a healthy lifestyle through exercise and diet. Includes assessment of status, planning, and participating in a program based on the student's needs.

PE 1210 Badminton (1)

PE 1220 Beginning Bowling (1) Fundamentals and participation in bowling. (Recommended for the handicapped.)

PE 1230 Beginning Golf (1) An additional fee is associated with this course.

PE 1241 Beginning Tennis (1)

PE 1251 Beginning Swimming (1)

PE 1255 Jazz Dance (1) Basic jazz dance technique, warm-ups and variety of jazz movement phases.

PE 1260 Modern Dance I (1) Basic modern dance technique and incorporation into dance phrases.

PE 1270 Ballroom Dance I (1) Techniques in leading/ following, basic positions and steps in the American waltz, fox trot, Lindy (single, double, triple), polka, and schottische.

PE 1271 Volleyball (1)

PE 1273 Ballroom Dance II (1) Techniques in leading/ following, basic steps and positions in the cha-cha-cha, rhumba, samba, tango, and mambo. Prerequisite: PE 1270 or consent.

PE 1280 Basketball (1)

PE 1450 Growth and Development in Elementary

Physical Education (3) The sequential and developmental phases of children and the relationship of movement to growth and development.

PE1610 Introduction to Athletic Training (2) Introduction to clinical athletic training for first year athletic training majors. Emphasis on clinical education competencies, athletic training staff policies/procedures and entry-level taping skills. Prerequisite: PE 1611 concurrently.

PE 1611 Introduction to Athletic Training Lab (1)

Introduction to clinical athletic training for the first year athletic training major. Students must complete 50 clinical hours required for the application process to the athletic training education program. Prerequisite: PE 1610 concurrently.

PE 1620 Responding to Emergencies (3) Familiarity with accident, injury, and illness situations for immediate

first aid, and legal parameters involved in emergency care. Certification in Adult APR/First Aid is attained.

#### PE 2200 Weight Training (1)

**PE 2220 Weight Control (1)** The relationship between diet, exercise, and weight and the planning of weight control programs based on individual needs.

## PE 2230 Beginning Fencing (1)

PE 2240 Analysis and Teaching of Individual and Dual Activities (3) Knowledge, skill development, teaching cues, skills analyses and teaching skills of individual and dual activities.

PE 2290 Analysis and Teaching of Innovative Activities (2) Knowledge, skill development, teaching cues, skill analyses and teaching skills of innovative activities.

PE 2303 Analysis and Teaching of Aerobic Conditioning (2) Basic skills to participate in and instruct in the area of aerobic conditioning.

**PE 2314 Analysis and Teaching of Recreational Sports (1)** Four square, floor table tennis, horseshoes, table tennis, wall paddle tennis, croquet.

PE 2320 Analysis & Teaching of Weight Training (1) PE 2360 Basic Dance Skills (1) An introduction to dance through basic steps and rythmical analysis.

PE 2410 Movement Skills and Activities for Primary Grades (2) Knowledge, understanding, and applications in teaching motor skills.

**PE 2600 Medical Terminology (1)** Terminology, note writing, and documentation techniques in sports medicine. A treatment cycle will be introduced.

PE 2610 Orthopedic Assessment: Lower Extremity (2) Common types of orthopedic/sports dysfunction's to the lower extremity. Viewpoints include: etiology and mechanism of injury, pathology, recognition and evaluation techniques, protocols, and prevention. Prerequisite: PE 2621 concurrently.

PE 2611 Orthopedic Assessment: Lower Extremity Lab (1) Techniques used to evaluate orthopedic injuries occurring to the lower extremity. Emphasis on orthopedic assessment, goniometry, manual muscle testing techniques, and on gait evaluations. Prerequisite: PE 2610 concurrently.

PE 2620 Orthopedic Assessment: Upper Extremity (2) Common types of orthopedic/sports dysfunction's to the upper extremity will be discussed including mechanism of injury, pathology, recognition and evaluation techniques, protocols, and prevention. Prerequisite: PE 2621 concurrently.

PE 2621 Orthopedic Assessment: Upper Extremity Lab (1) Techniques used to evaluate orthopedic and sports injuries occurring to the upper extremity. Emphasis on orthopedic assessment, goniometry, manual muscle testing, and gait evaluations. Prerequisite: PE 2620 concurrently. PE 2630 Therapeutic Modalities (2) The theoretical knowledge for the clinical application of therapeutic modalities. Principles of the physiological effects and therapeutic indications and contraindications with application of these modalities. Prerequisite: PE 2631 concurrently. PE 2631 Therapeutic Modalities Lab (1) Techniques and clinical skills relating to the rehabilitation of injuries. 100 documented clinical hours give the opportunity to apply knowledge, skills, and techniques learned. Prerequisite: PE 2630 concurrently.

**PE 2800 Human Anatomy (3)** Detailed study of the structure of the human body. Emphasis on gross and microscopic anatomy of the musculoskeletal, cardiovascular-respiratory, and nervous systems.

**PE 2850 Foundations of Exercise Physiology (3)** The study of cardiovascular, muscle, and nerve physiology. Prerequisite: PE 2800.

**PE 3200 Intermediate Bowling (1)** More advanced fundamentals and participation in bowling.

PE 3220 Advanced Beginning/Intermediate Swimming (1) PE 3260 Modern Dance II (1) A continuation of PE 1260 at a more advanced dance technique level. Prerequisite: PE 1260 or consent.

**PE 3270 Intermediate Golf (1)** Advanced skills instruction in putting, approach shots, wood shots and playing experience. Prerequisite: PE 1230. An additional fee is associated with this course.

**PE 3280 Analysis and Teaching of Team Activities (3)** Knowledge, skill development, teaching cues, skills analyses and teaching skills of team activities. Prerequisite: PE 2240 or PE 2290.

**PE 3300 Teaching of Dance (2)** Rhythmical analysis of dance forms and methods for teaching them.

**PE 3315 Analysis and Teaching of Outdoor Leisure Skills** (1) Introduction to orienteering and angling. Prerequisite: physical education functional majors only.

PE 3420 Elementary School Physical Education Activities (2) Theory and practice in stunts and tumbling, self-testing activities, rhythms, skills, and games.

**PE 3430 Creative Dance and Rhythms for the Elementary School (2)** Rhythmical activities in the elementary school, emphasizing basic movement and movement exploration. Prerequisite: 1 semester hour of dance.

PE 3450 Techniques of Teaching Physical Education Activities in the Elementary Schools (3) Effective teaching knowledge, skill, and techniques for physical education programs at the elementary level. Prerequisite: admission to Teacher Education Program.

PE 3460 Techniques of Teaching Physical Education Activities in Middle Schools and High Schools (3)
Effective teaching knowledge, skill and techniques for physical education programs at the middle and high school levels. Prerequisite: admission to Teacher Education

PE 3610 Care and Prevention of Injuries (2) Accepted athletic training procedure in the care and prevention of athletic injuries. Prerequisite: PE 2800.

PE 3620 Clinical Athletic Training Lab I (2) Application of athletic training practices in clinical/educational/sport assignments. Completing clinical proficiencies with a AB@ minimum and 225 documented clinical hours is required for advancement.

PE 3630 Therapeutic Rehabilitation (2) Theoretical knowledge in the clinical application of rehabilitation programs, physical examinations, therapeutic exercises, open and closed chain exercises, muscle reeducation, special therapeutic techniques including aquatic therapy. Prerequisites: PE 2800, PE 3610. PE 3631 concurrently. PE 3631 Therapeutic Rehabilitation Lab (1) Clinical skills relating to the rehabilitation of athletic injuries. 100 documented clinical hours will afford the opportunity to use the knowledge and techniques from the course. Prerequisite: PE 3630 concurrently.

PE 3640 Clinical Athletic Training II (2) Application of athletic training practices in clinical/educational/sport assignments. Completing clinical proficiencies with a AB@ minimum and 225 documented clinical hours is required for advancement. Prerequisite: PE 3620.

PE 3800 Kinesiology (3) Intensive investigation and analysis of human movements. The basic mechanical principles of force, motion, and aerodynamics as related to fundamental physical skills and their application to sports and dance. Prerequisite: PE 2800 and MATH 1111 or MATH 1620. PE 3850 Motor Learning and Control (3) Parameters which influence the acquisition and control of movement skills.

Conditions of practice as well as those predominant

factors which effect motor learning, i.e., feedback, transfer, motivation, memory and attention.

PE 4000 Special Projects in Coeducational Physical Education (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours.

PE 4110 History and Philosophy of Physical Education\* (2) An investigation of the historical and philosophical development of physical education. \*Not available for graduate credit. \*Not available for graduate credit. PE 4320 Choreography (2) Basic choreography as to forms, formations, lines, qualities, relationships, choreographic styles, choreographers of renown and their works, constructive criticism, notation. Prerequisite: consent. PE 4340 Adapted Physical Education (3) A study whereby the full educational services of physical education may be made available to atypical students on all school levels. PE 4341 Physical Activity and the Older Adult (2) Principles of activity applicable to older adults, including recommended programs and evaluations.

PE 4350 Physical Education for Special Education (2) Activities and program development as an integral tool in the physical education of the mentally retarded, learning disabled, and emotionally disturbed.

PE 4390 Evaluation Procedures in Physical Education (3) The theory of measurement in health and physical education, including the selection, administration, and evaluation of appropriate tests and the interpretation of the results. PE 4500 Football Officiating\* (1) Lectures, readings, class discussions, and field experience in the officiating of intramural, school, and college football games. \*Not available for graduate credit.

PE 4510 Basketball Officiating\* (1) Lectures, readings, class discussions, and field experience in the officiating of intramural, school, and college basketball games. \*Not available for graduate credit.

PE 4520 Theory and Coaching of Basketball (2) Coaching aids, techniques, strategy, and systems of the activity. Prerequisite: PE 3310.

PE 4530 Theory and Coaching of Track and Field (2) Coaching aids, techniques, strategy, and systems of training. PE 4541 Theory and Coaching of Football (2) Coaching aids, techniques, strategy, and systems of the activity. Elective.

PE 4550 Theory and Coaching of Volleyball (2) Coaching theory and techniques, aids, strategy, and systems of volleyball. Prerequisite: PE 3331.

PE 4551 Theory and Coaching of Wrestling (2) Squad and practice organization, techniques, budget, equipment, match management, and strategy.

PE 4560 Theory and Coaching of Softball and Baseball (2) Coaching aids, techniques, strategy, and systems of softball and baseball.

PE 4561 Theory and Coaching of Soccer (2) Coaching theory and techniques, aids, strategy, and systems of soccer. Prerequisite: PE 2300.

PE 4590 Administration of Interscholastic Athletics (2) Organization and management of a program of competitive athletics for schools and colleges.

PE 4610 Clinical Athletic Training Lab III\* (2) Application of athletic training practices in clinical/educational/sport assignments. Completing clinical proficiencies with a AB@ minimum and 225 documented clinical hours is required for advancement. Prerequisites: PE 3620, PE 3640. \*Not available for graduate credit.

PE 4620 Clinical Athletic Training IV\* (2) Application of athletic training practices in clinical/educational/sport assignments. Completing clinical proficiencies with a AB@ minimum and 225 documented clinical hours is required for advancement. \*Not available for graduate credit.

Prerequisites: PE 3620, PE 3640, PE 4610. PE 4630 Organization and Administration of Athletic Training\* (3) Legal liabilities, budget/inventory management, facility designs, and maintenance will be addresses. Additionally, discussions on daily supervision, scheduling, and administration of the athletic training room. Not available for graduate credit.

PE 4740 Legal Liability in Fitness/Wellness, Physical Education, Recreation and Sport Settings (2) Acquaints the student with legal research and basic concepts of negligence in governing the school sport and fitness

PE 4760 Physical Education Curriculum\* (2) Problems involved in organization and design of physical education curricula. Prerequisite: admission to Teacher Education Program. \*Not available for graduate credit.

PE 4765 Internship\* (2-4) Practical experience in fitness/ wellness programs in community centers, corporation settings, or businesses. Prerequisite: PE 4850 and approval of department. \*Not available for graduate credit.

PE 4830 Psychological Aspects of Physical Education (2) An application of psychological principles to physical education. PE 4840 Social Aspects of Physical Activity (2) The application of sociological concepts and theories to the study of physical education and sport in American society.

PE 4850 Assessment and Evaluation of Fitness/ Wellness\* (3) The selection, administration, and interpretation of test and protocols for fitness assessment. Prerequisite: PE 2850. \*Not available for graduate credit. PE 4860 Fitness Programming and Implementation\* (3) Planning, developing and implementing a fitness/wellness program. \*Not available for graduate credit.

PE 4880 Methods of Teaching Physical Education\* (2) Prerequisites: admission to Teacher Education Program; double majors must take a methods course for each major; methods should be taken concurrently with PE 4885 during the Professional Semester. \*Not available for graduate credit

PE 4885 Secondary Field Experience II\* (1) Experiences in the secondary school classroom that provide the teacher candidate more advanced involvement in the teachinglearning process. Prerequisites: admission to Teacher Education Program; should be taken concurrently with PE 4880 during the Professional Semester. \*Not available for graduate credit.

## **Integrative Studies General**

IGEN 3472 Sport in American Life (3) Provides for an understanding and appreciation of the role of sport in American life.

Sem Hours

## RECREATION

In the section of Recreation, the second digit in a course number stands for the following: 0BSpecial Projects, 1--Foundations, 2BLeadership, 5BCamping and Outdoor Education, 7BAdministration and Supervision, 8BLeisure Education, 9--Individual Study and Research.

## GENERAL RECREATION Major, B.S. Degree\*

(43000814)

The graduate with a Bachelor of Science degree in General Recreation will:

- Impart an understanding of the benefits and impacts of leisure to patrons of his/her community, based on a sound understanding of the conceptual foundations of leisure.
- Develop and implement recreation programs in a range of activity content areas for various populations, marshaling diverse community and human services resources.
- Use diverse community, institutional, natural, cultural, and human service resource to promote and enhance the leisure experience, thus
  improving the quality of life for all populations.
- Assess goals and objectives for groups and individuals within the leisure service.
- Utilize sound managerial, marketing, and financial processes in the administration/management of leisure service delivery.
- Utilize diverse communication, interaction and facilitation techniques, including leadership, instructional strategies, and emergency management.
- Demonstrate knowledge and use of legal concepts and legislative processes as applied to leisure services, including implementation of risk management plans.

|          |                  |  |              |             | Seili. Houis                             |
|----------|------------------|--|--------------|-------------|--|
| MAJOR    | REQUIRE          | MENTS  |              |             | 41                                       |
| REC      | 1100             | Introduction to Recreation3                          | REC          | 4740        | Seminar2                                 |
| REC      | 2200             | Developing Rec. & Tourism Prog3                      | REC          | 4850        | Leisure Education3                       |
| REC      | 3210             | Leadership & Group Dynamics                          | REC          | 4980        | Internship6                              |
|          |                  | in Recreation & Tourism Services3                    | TR           | 2200        | Implications of Disabling Conditions     |
| REC      | 3530             | Outdoor Rec. Skills & Adventure3                     |              |             | for Therapeutic Recreation3              |
| REC      | 4710             | Managing Recreation & Tourism                        | TOUR         | 3500        | Microcomputer Applications               |
|          |                  | Enterprises3   |              |             | for Tourism & Recreation3                |
| REC      | 4720             | Financing Recreation & Tourism                       | TOUR         | 4720        | Tourism Planning & Development3          |
|          |                  | Enterprises3   | TOUR         | 4730        | Tourism Marketing3                       |
| Studen   | ts should s      | see the Program Coordinator for certification requir | rements in s | specific ar | reas of interest. Prior to enrollment in |
| REC 49   | 980, the st      | udent must complete a 500-hour field work experie    | ence in an a | approved:   | setting, have a minimum of 2.50 grade-   |
| point av | verage in t      | he major, and a minimum overall grade-point avera    | age of 2.25  |             |  |
| MINOR    | REQUIRE          | MENTS  |              |             | 18-25                                    |
| GENER/   | AL EDUC <i>A</i> | ATION REQUIREMENTS (page 49)                         |              |             | 48                                       |
|          | LECTIVES         |  |              |             |  |
| MINIMU   | M TOTAL          |  |              |             | 124                                      |

<sup>\*</sup>May lead to Missouri Park and Recreation Association Leader Certification and/or National Council on Therapeutic Recreation Certification as a Certified Therapeutic Recreation Specialist.

#### **GENERAL RECREATION Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor; Missouri Park and Recreation Association certification is not available with this minor.)

|       |         | 3000)                            | 302) |      | Sem. Hours                           |
|-------|---------|----------------------------------|------|------|--------------------------------------|
| MINOR | REQUIRE | MENTS                            |      |      | 24                                   |
| REC   | 1100    | Introduction to Recreation3      | REC  | 4720 | Financing Recreation & Tourism       |
| REC   | 2200    | Developing Rec. & Tourism Prog3  |      |      | Enterprises3                         |
| REC   | 3210    | Leadership & Group Dynamics in   | TR   | 2200 | Implications of Disabling Conditions |
|       |         | Recreation & Tourism Services3   |      |      | for Therapeutic Recreation3          |
| REC   | 3530    | Outdoor Rec. Skills & Adventure3 | TOUR | 3500 | Microcomputer Applications           |
| REC   | 4710    | Managing Recreation & Tourism    |      |      | for Tourism & Recreation3            |
|       |         | Enterprises3                     |      |      |                                      |

#### **Special Projects**

**REC 4000 Special Projects in Recreation and Tourism\*** (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours. \*Not available for graduate credit.

## **Foundations**

**REC 1100 Introduction to Recreation (3)** Designed to introduce the student of recreation and leisure services to the philosophy, history, and significant social forces inherent in the growth and development of the leisure services field.

REC 2150 Leisure Enhancement (2) The presentation of theories, concepts, and data from the field of leisure to students with no previous background in this area.

REC 4100 Selected Topics in Recreation and Tourism\*
(1) An in-depth investigation of selected topics in leisure services. May be repeated for a maximum of 5 semester hours. \*Not available for graduate credit.

#### Leadership

**REC 2200 Developing Recreation and Tourism Programs** (3) Provides an overview and practical experience with the program planning process for recreation and tourism

services. Only offered Spring semester. Prerequisite: REC 1100 or TOUR 1900.

REC 3210 Leadership and Group Dynamics in Recreation and Tourism Services (3) The basics of group dynamics and leadership as applied to techniques in recreation tourism environments. Prerequisite: REC 1100 or TOUR 1900.

## **Camping and Outdoor Education**

#### REC 3530 Outdoor Recreation Skills and Adventure (3) An introduction to experiential education through outdoor recreation adventure programs.

#### **Administration and Supervision**

#### **REC 4710 Managing Recreation and Tourism**

Enterprises\* (3) Basic functions, management techniques, and operations procedures currently practiced in providing recreation and tourism related services. Only offered Spring semester. Prerequisite: REC 3210. \*Not available for graduate credit.

## **REC 4720 Financing Recreation and Tourism**

Enterprises\* (3) Covers the basic methods and problems of financing public and private recreation and tourism services. Prerequisite: REC 4710. \*Not available for graduate credit. REC 4740 Seminar (2) Covers new and significant publications in the recreation and tourism industry and provides the student with an opportunity to develop basic research skills. Prerequisite: Consent of instructor.

#### Leisure Education

REC 4850 Leisure Education\* (3) Theory, concepts and techniques of leisure education as applied in recreation services. The examination of leisure education models and instruments applicable to individuals in institutions and community based settings. Only offered Spring semester. Prerequisite: REC 3210. \*Not available for graduate credit.

## Individual Study and Research

REC 4980 Internship\* (6) Experience in recreation or tourism services while working in an approved agency under qualified and experienced supervision. Prerequisites: REC 4740 and approval of the internship coordinator. \*Not available for graduate credit.

## THERAPEUTIC RECREATION

In the section of Therapeutic Recreation, the second digit in a course number with a TR prefix stands for the following: 2BIntroductory, 4BProgramming, 6BClinical/Facilitation Skills, 8BManagement Skills, 9BProfessional Development/Field Work.

#### Introductory

TR 2200 Implications of Disabling Conditions for Therapeutic Recreation (3) Skills for awareness of and service to individuals with disabilities.

TR 2250 Foundations in Therapeutic Recreation (3) Leisure theory, philosophy, history, service models, ethics, credentials, professional conduct and principles of therapeutic recreation. Only offered Spring semester. Prerequisite: TR 2200.

#### **Programming**

TR 3400 Program Design and Evaluation in Therapeutic Recreation (3) Knowledge and skills to design, develop, implement and evaluate client-centered therapeutic recreation programs. Prerequisites: grade of AC@ or better in TR 2250 and admission to program.

#### Clinical/Facilitation Skills

#### TR 2600 Modalities in Therapeutic Recreation (3)

Knowledge and practice of specific treatment modalities in therapeutic recreation and their application to specific diagnostic groups.

TR 3600 Intervention and Facilitation Techniques in Therapeutic Recreation (3) Practical application and mastery of the techniques/interventions for the provision of quality therapeutic recreation services. Only offered Spring semester. Prerequisite: grade of AC@ or better in TR 2250 and admission to program.

TR 4600 Assessment and Documentation in Therapeutic Recreation (3) Skills to assess and document the impact of cognitive, physical, psychological or social limitations on an individual's functional ability. Only offered Spring semester. Prerequisites: TR 3400 and admission to program.

#### **Management Skills**

TR 4800 Management, Administration and Funding in Therapeutic Recreation Services (3) Current information and techniques for inclusive management of therapeutic recreation services. Prerequisites: grade of AC@ or better in TR 2250 and admission to program.

## Professional Development/Field Work

TR 3901 Clinical Therapeutic Recreation Practicum in Physical Rehabilitation (1) Field-based course with hands-on experience in the delivery of therapeutic recreation services in a physical rehabilitation setting. Prerequisites: grade of AC@ or better in TR 2250 and admission to program.

TR 3902 Clinical Therapeutic Recreation Practicum in Mental Health (1) Field-based course with hands-on experience in the delivery of therapeutic recreation services in a mental health/psychiatric setting. Prerequisites: grade of AC@ or better in TR 2250 and admission to program. TR 3903 Clinical Therapeutic Recreation Practicum in Specified Settings/Diagnostic Groups (1) Field-based course with hands-on experience in the delivery of therapeutic recreation services in a specified setting or with a

specific population. Prerequisites: grade of AC@ or better in TR 2250 and admission to program.

TR 4900 Seminar in Therapeutic Recreation (3) Recreation therapy internship application, interview, service and termination process; exploration of professional issues and basic research skills. Prerequisites: grade of AC@ or better in TR 2250 and admission to program.

**TR 4950 Trends and Issues in Therapeutic Recreation\* (3)** Critical issues of therapeutic recreation and knowledge of the trends in techniques of practice, research methods, evaluation and professional concepts. Only offered Spring semester. Prerequisites: TR 3400 and admission to program. \*Not available for graduate credit.

TR 4990 Internship in Therapeutic Recreation (6)
Supervised field work blending academic preparation (theory, concepts, models, clerical and technical skills) with practical application. Prerequisites: approval by instructor and admission to program.

## **TOURISM**

In the section of Tourism, the second digit in a course number stands for the following: 1--Foundations, 2BLeadership, 3BInternational, 5BTechnology, 7BAdministration and Supervision, 9BProfessional.

## **TOURISM Major, B.S. Degree**

 $(43\ 000843)$ 

The graduate with a Bachelor of Science degree in Tourism will:

- Interact with a variety of clients and consumers.
- Understand perspectives of potential employers and customers.
- Solve service-oriented problems utilizing appropriate concepts, principles, theories and technology.
- Exhibit an understanding/appreciation of global concerns, the diversity of humankind, risk assessment, professional ethics, and legal environments.
- Obtain knowledge related to professional organizations, service learning, and other external sources of professional enrichment.
- Obtain skills needed for professional management within the tourism sector.

|            |            |   |             |            | Sem. Hours                          |
|------------|------------|---|-------------|------------|-------------------------------------|
| MAJOR      | REQUIRE    | MENTS   |             |            | 44-50                               |
| TOUR       | 1900       | Introduction to Tourism3                            | TOUR        | 4740       | Special Events Planning3            |
| TOUR       | 3300       | Tourism Destinations3                               | TOUR        | 4920       | Senior Seminar2                     |
| TOUR       | 3500       | Microcomputer Applications                          | TOUR        | 4980       | Internship6                         |
|            |            | for Tourism & Recreation3                           | REC         | 2200       | Developing Rec. & Tourism Prog3     |
| TOUR       | 3710       | Group Tour Operations3                              | ACCT        | 2101       | Principles of Financial Acct3       |
| TOUR       | 4310       | International Tourism3                              | HM          | 4800       | Hotel & Restaurant Management3      |
| TOUR       | 4700       | Conf. & Convention Planning3                        | Modern      | language   | requirement, minimum proficiency of |
| TOUR       | 4720       | Tourism Planning & Development3                     | the sec     | ond colleg | e course in a selected language 0-6 |
| TOUR       | 4730       | Tourism Marketing3                                  |             |            |                                     |
| Prior to 6 | enrollment | in TOUR 4980, the student must complete a 500-h     | our field w | ork experi | ence in an approved                 |
| setting,   | have a m   | inimum of 2.5 grade-point average in the major, and | d a minimu  | m overall  | grade-point average of 2.25.        |
|            |            | MENTS   |             |            |                                     |
| GENERA     | AL EDUCA   | ATION REQUIREMENTS (page 49)                        |             |            | 48                                  |
| COMM       | 1000       | Div. I B (required)3                                | <b>ECON</b> | 1010       | Div. II B (required)3               |
| BE&O       | 1210       | Div. II A or  | GEOG        | 2212       | Div. II B (required)3               |
| LIS        | 1600       | Div. II A (required)2                               | GEOG        | 3201       | Div. II D (required)3               |
| BIOL       | 1004       | Div. II A (required)4                               |             |            | , ,                                 |
| FREE EL    | ECTIVES    | )   |             |            | 1-14                                |
| MINIMUI    | M TOTAL    |   |             |            | 124                                 |

#### TOURISM MANAGEMENT Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000822)

| MINOR F | REQUIRE | MENTS                      |    |      |      | Sem. Hours24                      |
|---------|---------|----------------------------|----|------|------|-----------------------------------|
| TOUR    | 1900    | Introduction to Tourism    | 3  | REC  | 2200 | Developing Rec. & Tourism Prog3   |
| TOUR    | 3300    | Tourism Destinations       | .3 | HM   | 4800 | Hotel & Restaurant Management3    |
| TOUR    | 4310    | International Tourism      | .3 | TOUR | 3710 | Group Tour Operations, 3 or       |
| TOUR    | 3500    | Microcomputer Applications |    | TOUR | 4740 | Special Events Planning, 33       |
|         |         | for Tourism & Recreation   | 3  | TOUR | 4700 | Conf. & Convention Planning, 3 or |
| GENERA  | AL EDUC | ATION REQUIREMENTS         |    | TOUR | 4730 | Tourism Marketing, 33             |
| BE&O    | 1210    | Div. II A or               |    |      |      |                                   |
| LIS     | 1600    | Div. II A (required)       | 2  |      |      |                                   |

#### International

TOUR 3300 Tourism Destinations (3) Includes the description of tourism related attributes of various countries. TOUR 4310 International Tourism\* (3) A presentation of the phenomena and relationships arising from the interaction of international tourists, business suppliers, host governments, and host communities in the process of attracting and hosting international tourists. Only offered Spring semester. Prerequisite: TOUR 1900 or HM 1800. \*Not available for Graduate Credit.

#### **Technology**

**TOUR 3500 Microcomputer Applications for Tourism** and Recreation (3) Assists the student in becoming literate in the use of microcomputers in the tourism and recreation field. Prerequisite: BE&O 1210 or LIS 1600 or consent of instructor.

#### **Administration and Supervision**

TOUR 3710 Group Tour Operations (3) Provides an overview of the group travel industry and the role of group tour operators in providing travel opportunities. Only offered Spring semester. Prerequisite: TOUR 1900.

**TOUR 4700 Conference and Convention Planning\*** (3) Provides an insight into the planning techniques and management strategies used in conference and convention operations. Prerequisite: TOUR 1900 or HM 4800. \*Not available for graduate credit.

TOUR 4720 Tourism Planning and Development\* (3) The processes involved in planning quality recreation and tourism destination areas. Only offered Spring semester. \*Not available for graduate credit. Prerequisite: HM 1800 or REC 1100 or TOUR 1900.

**TOUR 4730 Tourism Marketing (3)** An examination of the procedures involved in planning, developing, and implementing a tourism and recreation marketing campaign. Only offered Spring semester. Prerequisite: HM 1800 or REC 1100 or TOUR 1900.

**TOUR 4740 Special Events Planning\* (3)** Presents an overview of the special events field and the current practices in event planning and management. \*Not available for graduate credit Prerequisite: TOUR 1900

#### **Professional**

**TOUR 1900 Introduction to Tourism (3)** The course presents a basic understanding of travel and tourism and provides insight into the development and operations of the various components of the travel industry.

**TOUR 4920 Senior Seminar\* (2)** Develop skills necessary to to be prepared for addressing current issues/trends in the tourism industry. Prerequisite: Consent of instructor. \*Not available for graduate credit.

**TOUR 4980 Internship\* (6)** Experience in tourism services while working in an approved agency under qualified and experienced supervision. Prerequisites: TOUR 4920 and approval of internship coordinator. \*Not available for graduate credit.

**TOUR 4900 Special Projects in Tourism\* (1-5)** Individual or group study of problems in special areas of interest. *May be repeated for a maximum of 5 semester hours*. Prerequisite: Consent of Instructor \*Not available for graduate credit.

## **Psychology**

In the Department of Psychology, the second digit in the course number stands for the following: 0--Special Projects, 1--General-Experimental Psychology, 2--Developmental, 3--Personality-Social Psychology, 4--Clinical Psychology, 5--Psychometrics, 6--Industrial Psychology, 7--Rehabilitation.

# PSYCHOLOGY Major, B.A. Degree (42 000746)

The graduate with a Bachelor of Arts degree in Psychology will use the knowledge and skills obtained in the program to:

- Demonstrate and integrate knowledge of the major concepts, theoretical perspectives, empirical findings, and historical trends in
- Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.
- Value and use critical and creative thinking, including the scientific method, to address problems related to behavior and mental processes.
- Appropriately apply knowledge and skills acquired in the psychology curriculum to personal, social, and organizational issues.
- Value and apply empirical evidence, cope with ambiguity, and behave legally and ethically in research and applied settings.
- Understand and apply the language of the science of psychology, through effective speaking, reading and writing.
- Demonstrate the ability to acquire and disseminate information and use computers and other technology for a variety of purposes.
- Recognize, understand, and respect individual differences and the complexity of sociocultural and international diversity. Demonstrate knowledge about how these factors affect applied and scholarly work.
- Demonstrate knowledge about realistic occupational, career, and advanced educational opportunities appropriate to the discipline and develop a feasible plan to pursue those opportunities.

|        |           |  |                   |            |  | Sem. Hours |
|--------|-----------|--|-------------------|------------|--|------------|
| MAJOR  | REQUIR    | EMENTS   |                   |            |  | 33         |
| PSY    | 1100      | General Psychology3                                | PSY               | 4110       | Systems of Psychology                  | 3          |
| PSY    | 2110      | Research Design & Analysis I4                      | PSY               | 3220       | Lifespan Development                   | 3          |
| PSY    | 2120      | Research Design & Analysis II4                     | PSY               | 3340       | Social Psychology                      | 3          |
| PSY    | 2130      | Learning3  | PSY               | 4310       | Theories of Personality                |            |
| PSY    | 3130      | Physiological Psychology4                          | PSY               | 4440       | Abnormal Psychology                    | 3          |
| MINOR  | REQUIRE   | EMENTS   |                   |            |  | 18-25      |
| GENER  | AL EDUC   | CATION REQUIREMENTS (page 49)48 s.h.               | (In the major, PS | SY 1100 fu | Ifills 3 s.h. of Div. II B; the Modern | ก          |
| Langua | age Requi | irement fulfills 3 s.h. of Div. II C)              |                   |            |  | 42         |
| MODEF  | rň Langi  | JAGE REQUIREMENT                                   |                   |            |  | 3-9        |
| (Refer | to Bachel | lor's Degree Requirements section for fulfillments | ent options.)     |            |  |            |
| FREE E | LECTIVE   | 'S   |                   |            |  | 12-25      |
| MINIML | JM TOTAL  |  |                   |            |  | 124        |

## **PSYCHOLOGY Major, B.S. Degree**

 $(43\ 000747)$ 

The graduate with a Bachelor of Science degree in Psychology will use the knowledge and skills obtained in the program to:

- Demonstrate and integrate knowledge of the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.
- Value and use critical and creative thinking, including the scientific method, to address problems related to behavior and mental processes.
- Appropriately apply knowledge and skills acquired in the psychology curriculum to personal, social, and organizational issues.
- Value and apply empirical evidence, cope with ambiguity, and behave legally and ethically in research and applied settings.
- Understand and apply the language of the science of psychology, through effective speaking, reading and writing.
- Demonstrate the ability to acquire and disseminate information and use computers and other technology for a variety of purposes.
- Recognize, understand, and respect individual differences and the complexity of sociocultural and international diversity. Demonstrate knowledge about how these factors affect applied and scholarly work.
- Demonstrate knowledge about realistic occupational, career, and advanced educational opportunities appropriate to the discipline and develop a feasible plan to pursue those opportunities.

| MAJOR  | REQUIRE  | EMENTS                                      |             |            | Sem. Hours<br>42              |
|--------|----------|---|-------------|------------|-------------------------------|
| PSY    | 1100     | General Psychology3                         | Elective    | es from th | ne following9                 |
| PSY    | 2110     | Research Design & Analysis I4               | PSY         |            | Sensation & Perception3       |
| PSY    | 2120     | Research Design & Analysis II4              | PSY         | 4150       | Cognitive Psychology3         |
| PSY    | 2130     | Learning3                                   |             |            |                               |
| PSY    | 3130     | Physiological Psychology4                   | PSY         | 4230       | Psychology of Adolescence3    |
| PSY    | 4110     | Systems of Psychology3                      | PSY         | 4240       | Psychology of Aging3          |
| PSY    | 3220     | Lifespan Development3                       | PSY         | 4320       | Psychology of Women2          |
| PSY    | 3340     | Social Psychology3                          | PSY         | 4500       | Intro. to Psy. Measurement3   |
| PSY    | 4310     | Theories of Personality3                    | PSY         | 4600       | Industrial Psychology3        |
| PSY    | 4440     | Abnormal Psychology3                        | PSY         | 4740       | Assessment and Intervention   |
|        |          |   |             |            | with Law Offenders3           |
|        |          |   | PSY         | 4000       | Special Projects in Psy 1-3   |
|        |          |   | PSY         | 4180       | Seminar in Psychology 1-3     |
| MINOR  | REQUIRE  | MENTS                                       |             |            | 18-25                         |
| GENER  | AL EDUC  | ATION REQUIREMENTS (page 49)48 s.h. (In the | e major, PS | Y 1100 fu  | Ifills 3 s.h. of Div. II B)45 |
|        | LECTIVES | " " , ,                                     |             |            | 12-19                         |
| MINIMU | IM TOTAL |   |             |            | 124                           |

## **PSYCHOLOGY Minor for a Bachelor's Degree**

(CMSU does not confer teacher certification for this minor) (000748)

| MINOR  | REQUIRE | :MENTS                      |                  | ,        |               |                         | Sem. Hours21 |
|--------|---------|-----------------------------|------------------|----------|---------------|-------------------------|--------------|
|        | 1100    | General Psychology          |                  | PSY      |               | Theories of Personality |              |
| PSY    | 2130    | Learning                    | 3                | Elective | es in psyc    | hology                  | 12           |
| GENER. | AL EDUC | ATION REQUIREMENTS (page 49 | ) (In the minor, | PSY 110  | 00 fulfills 3 | s.h. of Div. II B)      |              |

## **Special Projects**

**PSY 4000 Special Projects in Psychology (1-3)** Individual or group study of problems in special areas of interest. *May be repeated for a maximum of 5 semester hours.* Prerequisites: PSY 1100 and junior standing.

## General-Experimental Psychology

PSY 1100 General Psychology (3) A general introduction to the science of behavior, surveying the broad field of psychology and the methods of investigation.

PSY 2110 Research Design and Analysis I (4) Rationale and methods for designing, conducting, and analyzing research. PSY 2120 must be taken the following semester. Includes scheduled lab. Prerequisite: PSY 1100.

PSY 2120 Research Design and Analysis II (4) Rationale and methods for designing, conducting, and analyzing research. Continuation of PSY 2110. Includes scheduled lab. Prerequisite: PSY 2110.

**PSY 2130 Learning (3)** A basic course for students planning to major in psychology. Emphasis on fundamental concepts and theoretical approaches to learning. Prerequisite: PSY 1100

**PSY 3110 Motivation (3)** Consideration of the causal factors of human and animal behavior that impel organisms to persist in goal-seeking behavior. Attention is given to the physiological and psychological motives, and the various theoretical positions. Prerequisite: PSY 2130.

**PSY 3130 Physiological Psychology (4)** A survey of the relationship between physiological mechanisms and behavior. Course includes scheduled laboratory. Prerequisite: PSY 1100 and junior standing. An additional fee is associated with this course.

**PSY 4110 Systems of Psychology\* (3)** Capstone course for Psychology majors, including assessment of outcomes for the major. Various systems of Psychology as they affect contemporary Psychology. Prerequisites: PSY 1100 and senior standing. \*Not available for Graduate Credit.

PSY 4130 Sensation and Perception (3) Relationship between sensory occurrences and the experiences of the person. Prerequisite: PSY 1100 and junior standing. PSY 4150 Cognitive Psychology (3) An overview of current theories of processes involved in human thinking with emphasis on models of memory, information processing, language and mental representations. Only offered Spring semester. Prerequisites: PSY 1100 and junior standing. PSY 4180 Seminar in Psychology (1-3) Selected issues not covered in theory-practicum courses. May be repeated for a maximum of 6 semester hours. Prerequisites: PSY 1100 and junior standing.

#### Developmental

PSY 2220 Child Psychology (3) Interaction of biological and environmental factors in the growth of the child from conception to maturity. Prerequisite: PSY 1100 or EDCI 2240.

PSY 3220 Life-Span Development (3) Theories of development, universal features of human development and its individual variations throughout the life-span of the individual. Prerequisite: PSY 1100 or EDCI 2240. PSY 4200 Psychology of Exceptional Children (2) The identification, care, treatment, and guidance of exceptional

children. Prerequisite: EDCI 2240.

PSY 4230 Psychology of Adolescence (3) Developmental factors and problems common to the period from puberty to adulthood with emphasis upon conditions leading to optimal development. Prerequisites: PSY 1100 or PSY 2240; and junior standing.

PSY 4240 Psychology of Aging (3) Introduces psychological problems of aged population including: physical functioning, age changes in perception, memory, learning, problem solving, personality, environmental influences, death and dying. Prerequisites: PSY 1100 and junior standing.

#### Personality-Social Psychology

PSY 1320 Psychology of Personal Adjustment (3) A general overview of major theories, concepts, and principles in psychology that can be applied to issues of personal and social adjustment.

PSY 3340 Social Psychology (3) Analysis of individual behavior in the social setting. Prerequisite: PSY 1100 and iunior standing.

PSY 4310 Theories of Personality (3) Major theories of personality, past and present. Prerequisite: PSY 1100 and senior standing.

PSY 4320 Psychology of Women (2) An overview of the theories of personality as applied to women, biological determinants of feminine behavior, the dynamics of sex-role development, and the psychological implications of traditional versus modern roles for women. Prerequisites: PSY 1100 and junior standing.

PSY 4330 Multicultural Psychology (3) This knowledgebased course is an introduction to cultural and minority status issues in psychology and the role of multicultural issues in mainstream research.

## **Clinical Psychology**

PSY 4440 Abnormal Psychology (3) A descriptive course dealing with the etiology, diagnosis, and treatment of mental disorders of functional and organic origin. Prerequisite: PSY 1100 and junior standing.

#### **Psychometrics**

PSY 4500 Introduction to Psychological Measurement (3) An introduction to the basic psychometric theory, concepts, and procedures; familiarization with the major instruments in the field. Course includes scheduled laboratory. Only offered Spring semester. Prerequisites: PSY 2110 and junior standing.

PSY 4520 Statistics for the Behavioral Sciences (3) Basic statistical methods. The techniques used to analyze frequency distributions, correlations, and tests of significance. Course includes scheduled laboratory.

#### **Industrial Psychology**

PSY 4600 Industrial Psychology (3) Application of psychological principles and methods to the industrial setting. Only offered Spring semester. Prerequisites: PSY 1100 and junior standing.

#### Rehabilitation

PSY 4720 Rehabilitation of the Mentally Retarded and Emotionally Disturbed (3) Basic principles and practical approaches to the rehabilitation of mentally retarded or handicapped and emotionally disturbed clients. Prerequisites: PSY 1100 and 6 semesters hours of psychology.

PSY 4730 Cognitive-Behavioral Intervention (3) Psychological, social, and vocational characteristics of the human services client with special attention to counseling theory and effective communication techniques. Only offered Spring semester. Prerequisite: PSY 1100 and junior standing.

PSY 4740 Assessment and Intervention with Law Offenders (3) History and philosophy of penology, theories of criminal personality, and rehabilitation procedures; course will include theory and practical work experience. Prerequisites: PSY 1100 or CJ 1000 or SOC 3890; and junior standing. PSY 4770 Medical Aspects of Disability (3) A basic medical information course which examines various disabling conditions as they relate to vocational placement and the rehabilitation process.

## Sociology and Social Work

In the Department of Sociology and Social Work, the second digit in the course number stands for the following: 6--Social Work, 8--Sociology.

## Sociology

## SOCIOLOGY Major, B.A. Degree

(42 000755)

The graduate with a Bachelor of Arts degree in Sociology will use the knowledge and skills obtained in the program to:

- Develop an awareness of personal assumptions, as well as basic American assumptions in analyzing positions on social issues.
- Discern the basic components of culture including group diversity, socialization, identity, and cultural symbols.
- Delineate the basic process and consequences of stratification across social categories including ethnicity, race, social class, gender,
- Recognize how social institutions operate organizationally within society and how they vary over time and space.
- Create reasonable linkages between empirical evidence and theory utilizing both inductive and deductive forms of logic.
- Develop effective ways of communicating in professional contexts.
- Understand basic research procedures in accord with the scholarly practices of the discipline of Sociology including the utilization of research journals and their documentation, construction of a research document to report findings, and the proper citation of sources.
- Critically evaluate the relative strengths and weaknesses of competing theoretical views and everyday frameworks of understanding, recognizing the complexity and uncertainty that are always present.

|        |                |   |              |           |  | Sem. Hours |
|--------|----------------|---|--------------|-----------|--|------------|
| MAJOR  | <b>REQUIRI</b> | EMENTS  |              |           |  | 33         |
| SOC    | 1800           | General Sociology3                                  | SOC 4        | 1890      | Methods of Social Research             | 3          |
| SOC    | 2805           | Introduction to Social Research3                    | SOC 4        | 1895      | Sociology Capstone Seminar             | 3          |
| SOC    | 3800           | History of Social Thought3                          | Electives i  | in socio  | logy                                   | 4-6        |
| SOC    | 3870           | Personality & Society3                              | Departme     | ntally a  | pproved electives in SOC               |            |
| SOC    | 3885           | Globalization & the Future3                         | or in one    | of the fo | ollowing areas: ANTH,                  |            |
| SOC    | 4860           | Contemporary Sociological Thought3                  | SOWK, P      | SY, or c  | orrections                             | 3-5        |
| MINOR  | <b>REQUIRE</b> | EMENTS  |              |           |  | 18-25      |
| GENER  | AL EDUC        | ATION REQUIREMENTS (page 49)48 s.h. (In the         | e major, SOC | 1800 fu   | Ifills 3 s.h. of Div. II B; the Moderr | 1          |
| Langua | age Requi      | rement fulfills 3 s.h. of Div. II C)                |              |           |  | 42         |
| MODER  | RÑ LANGL       | JAGE REQUIREMENT                                    |              |           |  | 3-9        |
| (Refer | to Bachel      | or's Degree Requirements section for fulfillment op | tions.)      |           |  |            |
|        |                | S   |              |           |  | 18-31      |
| MINIMU | IM TOTAL       |   |              |           |  | 124        |

## SOCIOLOGY Major, B.S. Degree

(43 000756)

The graduate with a Bachelor of Science degree in Sociology will use the knowledge and skills obtained in the program to:

- Develop an awareness of personal assumptions, as well as basic American assumptions in analyzing positions on social issues.
- Discern the basic components of culture including group diversity, socialization, identity, and cultural symbols.
- Delineate the basic process and consequences of stratification across social categories including ethnicity, race, social class, gender, and societies.
- Recognize how social institutions operate organizationally within society and how they vary over time and space.
- Create reasonable linkages between empirical evidence and theory utilizing both inductive and deductive forms of logic.
- Develop effective ways of communicating in professional contexts.
- Understand basic research procedures in accord with the scholarly practices of the discipline of Sociology including the utilization of research journals and their documentation, construction of a research document to report findings, and the proper citation of sources.
- Critically evaluate the relative strengths and weaknesses of competing theoretical views and everyday frameworks of understanding, recognizing the complexity and uncertainty that are always present.

| NAA 100 | DEOLUD  | EMENTO                                  |   | n. Hours |  |
|---------|---------|---|---|----------|--|
|         |         |   |   |          |  |
| SOC     | 1800    | General Sociology3                      | SOC 4890 Methods of Social Research               | 3        |  |
| SOC     | 2805    | Introduction to Social Research3        | SOC 4895 Sociology Capstone Seminar               |          |  |
| SOC     | 3800    | History of Social Thought3              | Electives in sociology                            | 7-10     |  |
| SOC     | 3870    | Personality & Society3                  | Departmentally approved electives in SOC          |          |  |
| SOC     | 3885    | Globalization & the Future3             | or in one of the following areas: ANTH,           |          |  |
| SOC     | 4860    | Contemporary Sociological Thought3      | SOWK. PSY, or corrections                         |          |  |
| MINOR   | REQUIRE | EMENTS                                  |   | 18-25    |  |
| GENER.  | AL EDUC | ATION REQUIREMENTS (page 49)48 s.h. (In | the major, SOC 1800 fulfills 3 s.h. of Div. II B) | 45       |  |
| FREE E  | LECTIVE | S                                       |   | 11-18    |  |
| MINIMU  | M TOTAL |   |   | 124      |  |

## SOCIOLOGY Minor for a Bachelor's Degree

(CMSU does not confer teacher certification for this minor) (000757)

|         |   |                              | ` | ,        |            | Sem. Hours                          |  |
|---------|---|------------------------------|---|----------|------------|-------------------------------------|--|
| MINOR F | REQUIRE   | EMENTS                       |   |          |            | 21                                  |  |
| SOC     | 1800  | General Sociology            | 3 | SOC      | 3870       | Personality & Society3              |  |
| SOC     | 3800  | Hist. of Soc. Thought, 3 or  |   | SOC      | 3885       | Globalization & the Future3         |  |
| SOC     | 4860  | Contemporary Soc. Thought, 3 | 3 | Elective | es in soci | ology, may include 3 hours of ANTH9 |  |
| GENERA  | GENERAL EDUCATION REQUIREMENTS (page 49) (In the minor, SOC 1800 fulfills 3 s.h. of Div. IIB) |                              |   |          |            |                                     |  |

SOC 1800 General Sociology (3) Explores the relationships of individuals, groups, and society in the context of changing social institutions. Addresses basic concepts and subfields in sociology.

SOC 1830 Social Problems (3) The sociology of social problems; background and analysis of selected social problems such as race, crime, population, civil rights, poverty; social changes in light of social controls and democratic values.

SOC 2805 Introduction to Social Research (3) An overview of the concepts and practice of research including measurement, sampling, design, basic descriptive statistics and ethics. Attention to both qualitative and quantitative

SOC 2825 Marriage and Family Relations (3) Theory and research on husband and wife and parent-child relations are examined. Other topics include dating, cohabitation, and blended families. Prerequisite: SOC 1800.

SOC 2830 Demography (3) Examine patterns of population change over time and across cultures. Students will engage in applied demographic coursework.

SOC 3800 History of Social Thought (3) Development of social origins of sociology; analysis and evaluation of social thought patterns as they relate to contemporary social problems. Prerequisite: 3 semester hours of sociology or consent of instructor.

SOC 3810 Culture and Society (3) Examines culture including art, popular culture, folk/ethnic culture, consumer culture, and postmodern culture. Emphasis on meaning and power. Prerequisites: 3 semester hours of sociology or consent of instructor.

SOC 3825 Race and Ethnic Relations (3) The study of principles, processes and consequences of interracial and ethnic group relations. Emphasis on the social construction of ethnicity, ethnic stratification, and ethnic movements. Prerequisite: 3 semester hours of sociology or consent of instructor.

SOC 3845 Social Inequality (3) A theoretical and methodological examination of the relationships between social class, inequality, and mobility. Prerequisite: 3 semester hours of sociology or consent from instructor.

SOC 3870 Personality and Society (3) Emphasizes theories of micro-sociological principles. Focuses on interpersonal relationships and how issues such as socialization and identity impact human behavior and views of the self. Prerequisite: 3 semester hours of sociology or consent from instructor.

SOC 3885 Globalization and the Future (3) This course explores the impact of the globalization phenomenon upon the future development of the world's economic, political and socio-cultural aspects. Prerequisite: three semester hours of sociology or consent of instructor.

SOC 3890 Criminology (3) The nature and characteristics of crime and criminals; the historical perspectives of criminology; theoretical analysis of criminal behavior. Prerequisite: 3 semester hours of sociology or consent from instructor.

SOC 4810 Urban Sociology (3) Urbanization, rise and growth of cities; attention to demography, ecology and

changes in urban society: social problems such as land utilization, housing, slums, politics, crime, and living standards. Prerequisite: 6 semester hours of sociology, graduate standing or consent of instructor.

SOC 4815 Special Projects in Sociology (1-6) Study, interpretation, and discussion of special topics and problems in sociology. May be repeated for a maximum of 6 semester

SOC 4820 Collective Behavior (3) An application of social-psychological principles to various forms of collective phenomena, including cults, civil disturbances, and social movements. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4825 Sociology of Education (3) Education as a social institution; its relationship to other institutions and the community. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4830 Media, Culture, and Society (3) The purpose of this course is to provide students with a critical political economy framework for understanding the effects of mass media on society. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4840 Sociology of Sport (3) An investigation and analysis of the relationships between sport and society. Focus will be upon the development and changing nature of sport as an institution in modern society.

SOC 4845 Juvenile Delinquency (3) The nature, extent, and causes of juvenile delinquency; types of juvenile offenders and their career patterns; institutional controls and treatment programs. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4846 Corrections and Preventions (3) Views and methods of dealing with criminals and juvenile delinquents; types of correctional systems and prevention programs. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4850 Work and the Modern Society (3) Critical inquiry into the workings of modern society and its cultures and subcultures, ideologies, institutions, elites, classes, and the processes of power relations. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4855 Sociology of Gender (3) Explores impact of gender stratification and roles on the attitudes and behavior of women and men, gender and social institutions, theories of gender, and sexuality. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4860 Contemporary Sociological Thought (3) Assessment of current sociological thought as it is reflected by outstanding scholars in the field. Prerequisite: SOC 3800 and 3 additional semester hours of sociology, graduate standing, or consent of instructor.

SOC 4865 Family Diversity (3) Focus on the institutional implications of the family. Diversity in ethnicity, sexuality, and class are emphasized. Intersection of work and family is explored. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4872 Sociology of Organizations (3) A systematic study of the structural and interactional processes of work related organizations. Prerequisite: 6 semester hours of

sociology, graduate standing, or consent of instructor. **SOC 4875 Medical Sociology (3)** Social factors and institutional settings for physical and mental health care; public needs and medical services; research in medical sociology. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

**SOC 4880 Sociology of Law (3)** The development of legal institutions; law as a system of social control; law and social change. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

**SOC 4885 Religion and Society (3)** The structure and function of religion in society; social sources of religions; religion and the individual. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4890 Methods of Social Research (3) Major concepts in research and methodology; the structure of research design, methods of data collection in quantitative research, statistical inferences and computer applications. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor

**SOC 4894 Sociology of Aging (3)** The aging process and its consequences for the individual and society; an examination of the problem of aging in terms of demographic, economic, psychologic and sociologic implications; and emphasis on sociological principles and perspectives. Prerequisite: 6 semester hours of sociology, graduate standing, or consent of instructor.

SOC 4895 Sociology Capstone Seminar\* (3) Focus on the history and trajectory of sociology as a discipline, demonstrate professional ethics, and develop a career plan in the discipline. Prerequisite: Sociology major and senior standing or consent of department chair. \*Not available for graduate credit.

#### **Integrative Studies General**

**IGEN 3472 Sport in American Life (3)** Provides for an understanding and appreciation of the role of sport in American life.

#### Social Work

#### Social Work Statement of Policy

#### **Admission Policy**

Students entering CMSU as freshmen should indicate a pre-social work functional major. Transfer students must meet all requirements. Admission to the social work program is conditional upon the successful completion of all necessary requirements.

#### Requirements for Admission to the Social Work Program

- Completion of General Education courses listed as requirements of the social work functional major.
- Cumulative grade-point average of 2.00.
- 3. A minimum grade of C for courses listed as curriculum requirements of the social work functional major.
- Completion of SOWK 2600, SOWK 2611, SOWK 3600, and SOWK 3612.
- Students must complete a social work prefix course in residence prior to applying for admission into the social work program.
- Submission of:
  - a. Application for Admission to social work program.
  - Transcript of all university work.
  - c. A minimum of three references.
  - Autobiographical statement.

The necessary Application for Admission Forms and Reference Forms will be available in the student handbook obtained from the social work adviser.

- Successful completion of an interview with Social Work Admissions Committee.
- Provisional admission to the program requires the student to successfully complete a plan of corrective action and a subsequent interview with the Admissions Committee.

#### **Criteria for Retention**

After admission, students will be permitted to continue in the Social Work functional major program by meeting certain "Criteria for Retention" as established by the department.

- An earned grade of C or above in all courses listed as requirements of the social work functional major.
- 2. Adherence to the National Association of Social Workers' Code of Ethics.
- 3. Maintenance of social functioning that allows for effective beginning level professional social work practice. (Social functioning refers to the students' ability to cope with the demands generated by their interaction with their environment including areas such as school, work, family, and personal relationships.)
- Demonstration of effective verbal and written communication skills.
- Continued enrollment as a student in good standing at CMSU.

#### Accreditation

The principal educational objective of the BSW Social Work program is to prepare students for generalist social work practice. The BSW program is accredited by the Council on Social Work Education, a specialized accrediting body recognized by the Council for Higher Education Accreditation (CHEA). The Council on Social Work Education (CSWE) is located at 1725 Duke Street, Suite 500, Alexandria, VA 22314-3457; phone 703-683-8080; email info@cswe.org.

## **SOCIAL WORK Functional Major, B.S.W. Degree**

 $(48\ 000847)$ 

The graduate with a Bachelor of Social Work degree will use the knowledge and skills obtained in the program to:

- Apply critical thinking skills within the context of professional social work practice.
- Practice within the values and ethics of the social work profession and with an understanding of and respect for the positive value of diversity.
- Demonstrate the professional use of self.
- Understand the forms and mechanisms of oppression and discrimination and the strategies of advocacy and social change that advance social and economic justice.
- Understand the history of the social work profession and social welfare policy and their current structures and issues.
- Apply the knowledge and skills of generalist social work practice with systems of all sizes.
- Apply the knowledge of bio-psycho-social variables that affect individual development and behavior, and use theoretical frameworks to understand the interactions among individuals and between individuals and social systems (i.e., families, groups, organizations, and communities).
- Understand how to formulate, analyze, and demonstrate influence on social policies.
- Evaluate research studies and apply findings to practice, and, under supervision, to evaluate his/her own practice interventions and those of other relevant systems.
- Use oral and written communication skills differentially and effectively with a variety of client populations, colleagues, and members of the community.
- Use supervision appropriate to generalist practice.
- Function within the structure of organizations and service delivery systems, and under supervision, seek necessary organizational
- Demonstrate a commitment to continue his/her own professional growth and development

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|                |              |   |               |            |            | Sem. Hours                         |   |
|----------------|--------------|---|---------------|------------|------------|------------------------------------|---|
| <b>FUNCTIO</b> | DNAL MAJ     | OR REQUIREMENTS                                 |               |            |            | 65                                 |   |
| SOWK           | 2600         | Intro. to Soc. Welfare & Social Work3           |               | SOWK       | 4630       | Social Work Practice: Intervention |   |
| SOWK           | 2611         | Social Work Field Observation                   |               |            |            | with Families & Groups3            |   |
|                |              | & Participation2                                |               | SOWK       | 4640       | Social Work Practice: Intervention |   |
| SOWK           | 3600         | Intro. to Social Work Practice3                 |               |            |            | with Communities & Org3            |   |
| SOWK           | 3605         | Methods of Inquiry & Evaluation for             |               | SOWK       | 4650       | Social Policy & Economic Justice3  |   |
|                |              | Social Workers3                                 |               | SOWK       | 4660       | Field Practicum9                   |   |
| SOWK           | 3610         | Social Work Practice: Basic Skills3             |               | SOC        | 1800       | General Sociology3                 |   |
| SOWK           | 3612         | Human Behavior in the Social                    |               | SOC        | 2805       | Introduction to Social Research3   |   |
|                |              | Environment I3                                  |               | SOC        | 3825       | Race & Ethnic Relations3           |   |
| SOWK           | 3625         | Populations at Risk3                            |               | PSY        | 1100       | General Psychology3                |   |
| SOWK           | 4610         | Special Topics in Social Work 3, or             |               | PSY        | 4440       | Abnormal Psychology3               |   |
| SoWK           | 4620         | Social Services and the Elderly, 33             |               | BIOL       | 2010       | Human Biology3                     |   |
| SOWK           | 4612         | Human Behavior in the Social                    |               | ICAP       | 4478       | Integrative Social Work            |   |
|                |              | Environment II3                                 |               |            |            | Practicum Seminar3                 |   |
| MINOR N        | NOT REQU     | JIRED   |               |            |            |                                    |   |
| <b>GENERA</b>  | L EDUCA      | TION REQUIREMENTS (page 49)48 s.h.              | . (In the fur | nctional r | major, SO0 | C 1800 and PSY 1100                |   |
| fulfill 6 s    | s.h. of Div. | II B; ICAP 4478 fulfills 3 s.h. of Div. IV B) . |               |            |            | 39                                 | í |
|                |              | ·   |               |            |            | 20                                 |   |
| NAINIINALIN    | 4 TOTAL      |   |               |            |            | 124                                |   |

#### SOWK 2600 Introduction to Social Welfare and Social

**Work (3)** An overview of income maintenance and services to families, children, adolescents, aged and the mentally and physically challenged. Open to nonmajors.

## SOWK 2611 Social Work Field Observation and

**Participation (2)** Observation and participation in the fields of social work practice, under the direction of faculty and agency supervision. For social work majors only. Prerequisites: SOWK 2600.

## SOWK 3600 Introduction to Social Work Practice (3)

Presents a generalist framework for practice with individuals, families, groups, organizations, and communities. Open to social work majors only. Prerequisite: SOWK 2600.

# SOWK 3605 Methods of Inquiry and Evaluation for Social Workers (3) Advanced research methods course for undergraduate social work majors, including quantitative and qualitative methods and data analysis and case/program-level evaluation. Open to social work majors only. Prerequisite: SOC 2805.

#### SOWK 3610 Social Work Practice: Basic Skills

(3) Development of interpersonal skills and interviewing techniques for micro, mezzo, and macro levels of generalist practice. Open to social work majors only. Prerequisite: SOWK 3600 and must be taken concurrently with SOWK 4612

# SOWK 3612 Human Behavior in the Social Environment I (3) Examines human development and behavior across the

life span, studying essential biophysical, psychological and social dimensions, emphasizing the fundamental reciprocity between persons and society/culture. Prerequisites: BIOL 2010 or concurrently, SOWK 3600 or concurrently, PSY 1100 and SOC 1800.

**SOWK 3625 Populations at Risk (3)** Prepares the generalist social worker with skills for sensitive practice with oppressed peoples and other vulnerable populations. Open to social work majors only. Prerequisite: SOC 3825.

**SOWK 4610 Special Topics in Social Work (3)** Selected Topics of contemporary interest in social work or specialized fields of practice; variable content. *May be repeated for a maximum of 9 semester hours*. Prerequisite: 9 semester hours of social work, graduate standing or consent of instructor.

**SOWK 4612 Human Behavior in the Social Environment II\* (3)** Utilizes a social systems approach to examine the processes of human behavior within groups, organizations, communities and societies/cultures. Prerequisites: SOWK

3612 and must be taken concurrently with SOWK 3610. \*Not available for graduate credit.

#### SOWK 4620 Social Services and the Elderly (3)

Development of public policy and social service programming. Present and potential utility of individual, group and community intervention modalities as they relate to both the private troubles and public issues of aging. Prerequisite: 9 semester hours of social work, graduate standing or consent of instructor.

SOWK 4630 Social Work Practice: Intervention with Families and Groups\* (3) Integrates knowledge, theory, values and interviewing skills for practice of primary intervention skills with individuals, families and groups. Open to social work majors only. Prerequisite: SOWK 3610. \*Not available for graduate credit.

SOWK 4640 Social Work Practice: Intervention with Communities and Organizations\* (3) In-depth application of the generalist model of social work practice with an emphasis on macro-level skills. Open to social work majors only. Prerequisite: SOWK 3610. \*Not available for graduate credit.

#### SOWK 4650 Social Policy and Economic Justice\* (3)

Develops an operational and critical understanding of the relationships among social welfare policy, social and economic justice issues, and social work practice. Open to social work majors only. Prerequisites: SOWK 2600 and consent of instructor. \*Not available for graduate credit. SOWK 4660 Field Practicum\* (9) Educationally directed 500-hour field experience in a social service agency under qualified agency supervision. Open to social work majors only. Prerequisites: SOWK 4650 or concurrently, ICAP 4478 concurrently, all other required major courses must be completed and consent of Coordinator of Field Education. \*Not available for graduate credit.

## **Integrative Studies Capstone**

ICAP 4478 Integrative Social Work Practicum Seminar\* (3) Integration of classroom knowledge with 500 hours in social service agency practicum. Open to social work majors only. Prerequisites: SOWK 4650 or concurrently, SOWK 4630, SOWK 4640, PSY 4440, and must be taken concurrently with SOWK 4660. \*Not available for graduate credit.

## Office of Undergraduate Studies

## Academic Enrichment

In the Department of Academic Enrichment, the second digit in the course number stands for the following: 0-General, 1-TRIO Student Support Services, 2-Test Preparation, 4-Orientation, 6-Technology, 8-Learning Techniques and Special Projects, 9-Research.

Academic Enrichment students will develop and demonstrate knowledge and skills needed to:

- Meet and exceed CMSU's academic standards through introductory college courses in composition, mathematics and reading.
- Function successfully at CMSU through courses designed to orient students to the university environment, college studies and diversity.

#### General

AE 0020 Suspension Prevention (2) A self-awareness course required for first-time, full-time freshmen with semester grade-point averages below 1.20. Topics include self-management skills, goal setting, and career exploration. One-to-one mentoring conferences are part of the course requirements.

AE 1000 Introduction to College Writing (3) Classroom and tutorial instruction in the process of developing paragraphs and longer essays with emphasis placed on mechanics, usage, and sentence structure.

AE 1010 Textbook Reading Techniques (3) This course will introduce students to various strategies useful in reading and studying college textbooks. Paired with a general education course, most activity will be focused on the transference of reading skills appropriate for success in the paired course. Supplemental instruction for the paired course is included in the lab.

AE 1012 Speed Reading (1) Principles and applications of speed reading and comprehension techniques to textbooks and other types of reading materials. Recommended: Nelson Denny Reading est score of 12th grade level or better. Inquire at AE Learning Center, Humphreys 110. AE 1020 College Study Skills (2) Principles of time management, note taking, memory, and test taking techniques applied to studying for college courses. AE 1030 Introductory Algebra (3) Designed to review or improve basic algebra skills. Includes integers, equations, inequalities, polynomials, factoring, quadratic equations, graphing linear equations and work with word problems.

#### **TRIO Student Support Services**

AE 0101 Fundamentals of Writing I SSS (3) Review and application of English grammar and basic writing techniques. Prerequisite: acceptance into TRIO Student Support Services. Not applicable to graduation requirements. AE 0111 Fundamentals of Reading I SSS (3) Review and application of methods for vocabulary, comprehension, and reading rate development. Prerequisite: acceptance into TRIO Student Support Services. Not applicable to graduation requirements.

AE 0131 Fundamentals of Math I SSS (3) Review of fractions and decimals with an introduction to negative numbers and linear equations. Prerequisite: acceptance into TRIO Student Support Services. Not applicable to graduation requirements.

AE 1102 Fundamentals of Writing II SSS (3) Continuation and further application of grammar and writing techniques through paragraph and essay development. Prerequisite: acceptance into TRIO Student Support Services and AE 0101 or demonstrated skill level. This course substitutes for AE 1000

AE 1112 Fundamentals of Reading II SSS (3) Continuation and further application of vocabulary, comprehension, and reading rate development, in addition to flexibility and methods for reading college textbooks. Prerequisite: acceptance into TRIO Student Support Services and AE 0111 or demonstrated skill level. This course substitutes for AE

AE 1125 College Success Strategies SSS (1) Focus on personal responsibility to enhance academic achievement. Prerequisite: acceptance into TRIO Student Support Services and AE 1400 or consent.

AE 1132 Fundamentals of Math II SSS (3) Continuation and further application of math skills through an introduction to algebra, including properties of numbers, linear equations, graphing, polynomials, factoring, and quadratic equations. Prerequisite: acceptance into TRIO Student Support Services and AE 0131 or demonstrated skill level. This course substitutes for AE 1030.

#### **Test Preparation**

AE 1200 C-BASE Review - English (1) This course is a review of the basic concepts of English (reading and literature, and writing) to assist the student in preparing to take the English section of the College Base Academic Subjects Examination (C-BASE)

AE 1210 C-BASE Review - Social Studies (1) This course is a review of the basic concepts of social studies (history and the social sciences) to assist the student in preparing to take the social studies section of the College Base Academic Subjects Examination (C-BASE).

AE 1220 C-BASE Review - Science (1) This course is a review of the basic concepts of science (life, earth, and physical) to assist the student in preparing to take the science section of the College Base Academic Subjects Examination (C-BASE).

AE 1230 C-BASE Review - Mathematics (1) This course is a review of the basic concepts of mathematics (general mathematics, algebra, and geometry) to assist the student in preparing to take the mathematics section of the College Base Academic Subjects Examination (C-BASE).

AE 1240 LSAT Test Preparation (1) This course provides students with information about and practice with the types of questions asked on the LSAT. Strategies for successfully taking this test are also presented.

AE 1250 GRE Test Preparation (1) This course is designed to help students prepare to take the GRE by becoming more familiar with the adaptive test format used by GRE. Students will be provided with tips and strategies for answering the antonym, analogy, and reading comprehension questions. Time will also be spent practicing for the two writing samples now added to the GRE.

#### Orientation

AE 1400 Student Development Seminar (1) An introduction to university academics and university life. Intended for all new students at CMSU. Course topics include an introduction to university services, study skills, meeting people, time management, health issues, money management and goal setting. Open only to students with fewer than 25 Central Missouri State University credits. AE 1450 Valuing Differences: Discovering Common Ground (1) Explores personal, experiential, and interactive issues relating to race, gender, class, and culture including ways that culturally diverse populations enrich society through differences and similarities.

#### **Technology**

AE 1620 MS Office Word (0.5) An individualized, arranged course designed to teach basic word processing in order to help students achieve their academic and personal technology goals.

**AE 1630 MS Office PowerPoint (0.5)** An individualized, arranged course that teaches the process for creating interactive presentations in order to help students achieve their academic and personal technology goals.

**AE 1640 MS Office Excel (0.5)** An individualized, arranged course that teaches the process of creating spreadsheets, tables, and charts in order to help students achieve their academic and personal technology goals.

**AE 1650 MS Office Access (1.0)** An individualized, arranged course that teaches the process for creating database tables, forms and queries in order to help students achieve their academic and personal technology goals.

#### **Learning Techniques and Special Projects**

**AE 0800 Special Projects (0.5, 1, 1.5, 2, 3)** Individual or group study of material in special areas of interest. May be repeated for a maximum of 6 semester hours.

**AE 1800 Special Projects (0.5, 1, 1.5, 2, 3)** Individual or group study of material in special areas of interest. May be repeated for a maximum of 6 semester hours.

**AE 1820 Learning Strategies (2)** Part of the ELO block. Note taking, textbook study, memory improvement, time management, exam preparation and test taking strategies are utilized for succeeding in the ELO block courses.

AE 1825 ELO Supplemental Instruction Lab (1) Supplemental Instruction and structured learning lab for the designated ELO block courses. Prerequisite: Concurrently enrolled in AE 1820.

**AE 1826 Supplemental Instruction Lab (1)** Supplemental Instruction and structured learning lab for the designated course(s) in which the student is concurrently enrolled. *May be repeated for a total of 6 semester hours.* 

**AE 4800 Special Projects (0.5. 1.0, 1.5, 2.0, 3.0)** Individual or group study of material in special areas of interest. *May be repeated for a maximum of 6 semester hours.* 

#### Research

**AE 3900** Introduction to Research Methods and Design (2) Examines methods for planning and conducting academic research, analyzing and interpreting data, and evaluating existing research in a variety of academic disciplines. Particular attention is given to hypothesis development, operationalization, and data collection techniques.

## **Integrative Studies**

In the section of Integrative Studies, the second digit identifies the college or area as follows: 1-Applied Sciences and Technology, 2-Arts and Sciences, 3-Harmon College of Business Administration, 4-Education and Human Services, 5-Library Science & Information Services, 6-Academic Enrichment, 7-Honors Program, and 8-International Studies.

The third and fourth digits represent the discipline: 01-Agriculture, 09-Manufacturing, 10-Construction, 11-Nursing, 12-Automotive Technology, 13-Aviation Technology Management, 15-Safety Science & Technology, 16-Graphics, 21-Art, 22-Biology, 24-Communication, 31-History, 32-Mass Communication, 34-Music, 35-Philosophy, 36-Physics, 44-College of Arts & Sciences, 57-Management, 68-Curriculum and Instruction, 72-Physical Education, 78-Social Work, 96-International Studies.

#### Integrative Studies Capstone

ICAP 4101 Agricultural Capstone Experience\* (3) Integration of agricultural knowledge and problem solving skills using case studies in a seminar forum. Prerequisites: 24 semester hours of agriculture courses and senior standing. \*Not available for graduate credit.

ICAP 4109 Construction Operations\* (3) A detailed study of the knowledge, processes and operational procedures involved in a commercial construction project. Prerequisites: CMGT 2310, CMGT 2325, CMGT 3320 and CMGT 3355 and senior standing. \*Not available for graduate credit.

ICAP 4110 Industrial Problem Solving\* (3) Designed for students preparing for careers in manufacturing management. Student teams will analyze manufacturing problems, propose solutions, and present recommendations. Prerequisite: senior standing. \*Not available for graduate credit.

ICAP 4111 Socio-Economic Factors Impacting Health\* (3) Examines selected socio-economic issues and their impact on health. \*Not available for graduate credit.

**ICAP 4112 Automotive Systems for Contemporary** Society\* (3) Integration of communication, technology, sociology, economics, and ecology with automotive engineering, management and service, emphasizing their reciprocal effects on each other. Prerequisite: senior standing in automotive technology. \*Not available for graduate credit.

ICAP 4113 Air Operations Management\* (3) Challenges the student to perform as an effective member of an air operations management team using critical thinking, decision making and ethics. Prerequisite: senior standing in aviation technology. \*Not available for graduate credit.

ICAP 4115 Safety and Health Management\* (3) Integration of safety information using conceptual and technical data to resolve safety and health issues. The case study approach will be emphasized. Prerequisites: admission to program, 27 semester hours of SAFE courses and senior standing. \*Not available for graduate credit.

ICAP 4221 Artists in Contemporary Society\* (3) Artists examine diverse theories of art and ethics as it impacts their careers in a global society. Prerequisite: Consent to enroll, based on the following conditions: all general studies completed; art major; scheduled for graduation the semester enrolled (or the following semester if an art education major). \*Not available for graduate credit.

ICAP 4222 The Biological Perspective\* (3) An examination of current issues from a biological perspective including the impact of biology on history and culture. For biology majors. Prerequisite: 22 semester hours of biology. \*Not available for graduate credit.

ICAP 4225 Computer Science Capstone Experience\* (3) Integration of computer science topics from other disciplines, including studies in computer ethics, the social impact of computing, and the psychological issues of computer/human interfaces. Prerequisite: Senior standing in Computer Science. \*Not available for graduate credit.

ICAP 4233 The Scientific, Historical, and Sociological Impact of Mathematics\* (3) Provides an opportunity to experience and understand the importance of mathematics in human development. Prerequisite: 15 semester hours of college mathematics. \*Not available for graduate credit. ICAP 4245 Actuarial Science Capstone Experience\*

(3) Integration of actuarial science topics and skills with topics from various other disciplines, including actuarial ethics, social roles, and the Code of Professional Conduct. Prerequisite: MATH 4520, FIN 3850, MGT 3315, MGT 3325, MKT 3405, and senior standing. \*Not available for graduate credit.

ICAP 4357 Business Policy\* (3) Capstone course requiring integration of business functional knowledge using conceptual, communication, interpersonal, and technical skills applied to environmental analysis and strategic management. Case method is used. Prerequisites: Admission to the B.S.B.A. program, FIN 3850, MGT 3315, MGT 3325, MKT 3405, and senior standing. \*Not available for graduate credit

ICAP 4468 Student Teaching Secondary II\* (4) To be taken in the Professional Semester. For all secondary majors, all K-12 majors, and K-9 majors in elementary physical education. Prerequisites: admission to Teacher Education Program; must be taken concurrently with EDCI 4495 or EDCI 4595 or EDSP 4395. \*Not available for graduate credit. ICAP 4478 Integrative Social Work Practicum Seminar\* (3) Integration of classroom knowledge with 500 hours in social service agency practicum. Open to social work majors only. Prerequisites: SOWK 4650 or concurrently, SOWK 4630, SOWK 4640, PSY 4440, and must be taken concurrently with SOWK 4660. \*Not available for graduate credit

#### Integrative Studies General

IGEN 3116 Creative Problem Solving (3) A broad approach to formal techniques in creative problem solving applicable to any field of endeavor and interest.

IGEN 3224 Critical Thinking (3) Provides insight into and application of the skills needed to think critically about interpersonal and media messages, as well as analyze information.

IGEN 3232 Media Literacy (3) Explores the relationships between media, its consumers, and producers. Integrates cultural, technological, and economic perspectives on mass media and visual communication.

IGEN 4224 Communication, Science and Technology (3) Students will focus on the interactions among science, technology and society by examining scientific

communication and scientific and technological controversies. Prerequisite: completion of General Education Div. II A. **IGEN 4235 Cognitive Science\* (3)** Studies the nature and structure of the human mind from the interdisciplinary perspective derived of philosophy, psychology, computer science, linguistics, and neurobiology. \*Not available for graduate credit.

IGEN 4236 Science and Religion: From Conflict to Dialogue\* (3) A clarification of the historical and philosophical issues that arise in the relationship between science and religion. The course emphasizes a variety of interpretive viewpoints. \*Not available for graduate credit.

**IGEN 4231 Myth, Memory and Realities\* (3)** Examines a selected topic in American or World history and literature to understand how interpretations of the past have been constructed to explain the present. \*Not available for graduate credit.

**IGEN 4244 Comparative Cross-Cultural Cinema\* (3)** Comparison of films with various sub-themes relating to cross-cultural topics such as internationalism, racism and gender. \*Not available for graduate credit.

**IGEN 3468 Community, School and Family Connections** (3) Focuses on the interactions among community, school and family systems relative to existing and emerging paradigms.

**IGEN 3472 Sport in American Life (3)** Provides for an understanding and appreciation of the role of sport in American life.

**IGEN 3896 Assessing Global Change for the Information Age (3)** Challenges students to assess present and future trends, evaluate what is desirable, and reflect on their responsibility for the quality of life in the information age.

## **International Programs**

## **Intensive English Program**

The Intensive English Program provides students the opportunity to improve their English skills and become accustomed to a university setting in the United States. The courses are designed to help non-native English speaking students build on their existing language skills. The IEP offers courses at a variety of proficiency levels in reading, writing, grammar, speaking, listening, vocabulary, accent reduction, American culture, academic preparation and testing skills. These courses are credit bearing but do not count toward completion of an academic degree. A course may be repeated for up to 12 credit hours.

## International Studies

In the area of International Studies, the second digit in the course number stands for the following: 0--General.

**ISP 4000 Study Abroad (3-4)** This course allows students to enroll at Central Missouri State University while attending classes in a sponsored study abroad program. The variable credits are based on the number of credit hours the student plans to complete at the foreign institutions. The actual credit recorded represent those credits completed by the student and transferred back to CMSU. *May be repeated for a total of 12-16 semester hours in one semester.* Prerequisite: approval of the Director of International Programs.

## **Integrative Studies General**

IGEN 3896 Assessing Global Change for the Information Age (3) Challenges students to assess present and future trends, evaluate what is desirable, and reflect on their responsibility for the quality of life in the information age.

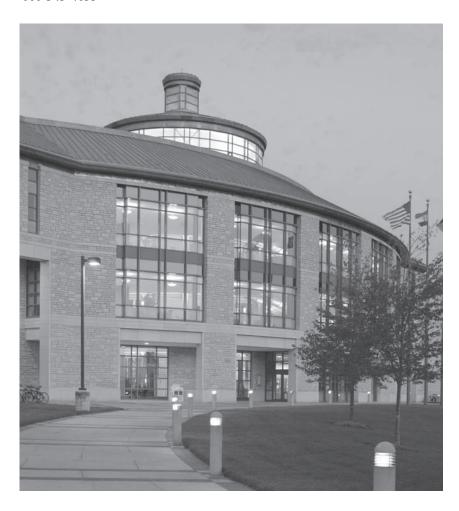
## **SECTION III**

## **Four-Year Academic Plans**

To assist students in their course planning, Central Missouri academic departments have developed four-year plans to illustrate how students majoring in specific areas of study might organize their courses so that they may finish their degree program in four years. Obviously, every student's situation is unique and an individual's four-year plan will vary. For example, there may be course prerequisites that may need to be satisfied before a specific course is taken. In addition, a student may already have college credit for certain courses and that might change the sequence of courses the student takes.

Please keep in mind that these four-year plans are illustrative and not legally binding. An academic department may or may not be able to offer a particular course in every semester. Curricular offerings and requirements do change over time and the Central Missouri State University Board of Governors reserves the right to make necessary changes in the curriculum at any time.

Peter L. Viscusi, Ph.D. Assistant Provost for Undergraduate Studies James C. Kirkpatrick Library 1450 660-543-4633



#### Accounting Functional Major, B.S.B.A. Degree

1/2005

This is the recommended program of study for the Accounting Functional Major, B.S.B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Accounting for further information or guidance.

| Freshman Year - First Semester MATH 1111 College Algebra* BE&O 1210 Essentials of Managing Info.* ENGL 1020 Composition I PSY 1100 General Psychology or SOC 1800 General Sociology General Education Semester Total AE 1400 Student Development Seminar** | Hrs. 3 2 3 3 3 14     | Freshman Year - Second Semester<br>ECON 1010 Principles of Macroeconomics*<br>ENGL 1030 Composition II<br>COMM 1000 Public Speaking<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Semester Total   | Hrs. 3 3 3 3 15   |
|--|-----------------------|--|-------------------|
| Sophomore Year - First Semester ECON 1011 Principles of Microeconomics* ACCT 2101 Principles of Financial Accounting* FIN 2801 Business Statistics I* General Education Science General Education Semester Total Note: Apply for B.S.B.A. Admission*       | Hrs. 3 3 3 3 3-4 3 16 | Sophomore Year - Second Semester ACCT 2102 Principles of Managerial Accounting* BLAW 2720 Legal Environment of Business* ACCT 2110 Microcomputer Applications General Education Semester Total Note: Complete all B.S.B.A. admission requirements*       | Hrs. 3 3 6 15     |
| Junior Year - First Semester ACCT 3111 Inter. Financial Accounting I ACCT 3120 Cost & Managerial Accounting MGT 3315 Management of Organizations MKT 3405 Marketing Policy FIN 3801 Business Statistics II Free Choice Elective Semester Total             | Hrs. 3 3 3 3 1 16     | Junior Year - Second Semester ACCT 3112 Intermediate Financial Accounting II ACCT 3130 Introduction to Income Tax MGT 3325 Business Communications FIN 3850 Principles of Finance Accounting or Business Elective*** Free Choice Elective Semester Total | Hrs. 3 3 3 3 1 16 |
| Senior Year - First Semester ACCT 4100 Advanced Accounting I MGT 3360 Production/Operations Management ACCT 3160 Accounting Information Systems Accounting or Business Elective*** General Education Non-Business Elective Semester Total                  | Hrs. 3 3 3 3 1 16     | Senior Year - Second Semester<br>BLAW 3721 Law of Business Transactions<br>ICAP 4357 Organizational Policy and Strategy<br>ACCT 4105 Auditing<br>Non-Business Electives<br>Semester Total  | Hrs. 3 3 7 16     |

## Accounting Major, B.S.B.A. Degree - 124 Hours

- \*All B.S.B.A majors in the Harmon College of Business Administration must complete a preadmission sequence of courses, with a 2.25 GPA overall, at Central Missouri, and in these specific courses, before admission to their major. These courses are recommended for completion during the freshman and sophomore years, and are indicated on the plan with an (\*).
- \*\*AE 1400 (1 hr.) is highly recommended for academic success. AE 1400 counts as a free choice, non-business elective.
- \*\*\*Electives require approval of Department Chair. At least one course must be outside accounting.
- Grade of "C" required for sophomore and junior level Accounting courses.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in bold italics.
- A 2.25 GPA on all coursework is required for graduation.
- See current catalog for complete statement of academic policies, leveling, and prerequisites.

## Actuarial Science and Mathematics Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Actuarial Science and Mathematics Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Mathematics and Computer Science for further information or guidance.

| Freshman Year - First Semester  MATH 1151 Calc. & Analytic Geom. I  CS 1100 Intro to Computing I  ECON 1010 Prin of Macroeconomics  ENGL 1020 Composition I  Semester Total  AE 1400 Student Development Seminar* | Hrs.<br>5<br>3<br>3<br>14        | Freshman Year - Second Semester MATH 1152 Calc. & Analytic Geom. II CS 1110 Introduction to Computing II MATH 2410 Discrete Mathematics ENGL 1030 Composition II HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs. 5 3 3 3 3 17                     |
|---|----------------------------------|--|---------------------------------------|
| Sophomore Year - First Semester MATH 2153 Calc. & Analytic Geom. III MATH 2310 Applied Statistics** MATH 3311 Introduction to Math Statistics** General Education Science General Education Semester Total        | Hrs. 3 3 3 3 4 3 15-16           | Sophomore Year - Second Semester MATH 4501 Actuar. Exam. Rev. Prob. Set I*** MATH 4510 Mathematics of Finance*** MATH 4312 Probability Models*** General Education Semester Total                              | Hrs. 1 3 9 16                         |
| Junior Year - First Semester MATH 3710 Linear Algebra ECON 3010 Intermediate Macroeconomics General Education Semester Total  | Hrs.<br>3<br>3<br>9<br><b>15</b> | Junior Year - Second Semester<br>FIN 3861 Financial Management I<br>FIN 4803 Principles of Insurance<br>General Education<br>Major elective<br>Semester Total  | Hrs.<br>3<br>3<br>6<br>3<br><b>15</b> |
| Senior Year - First Semester MATH 4520 Life Contingencies** MATH 4511 Actuar. Exam. Rev. Prob. Set II** FIN 4817 Managing Fin. Derivatives** Free Choice Elective Semester Total                                  | Hrs. 3 1 3 9 16                  | Senior Year - Second Semester<br>CS 4410 Operations Research***<br>ICAP 4245 Actuarial Sci. Capstone Exp.***<br>Free Choice Elective<br>Major Elective<br>Semester Total                                       | Hrs.<br>3<br>3<br>6<br>3<br><b>15</b> |

## Actuarial Science and Mathematics Functional Major, B.S. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- \*\*Fall only course.
- \*\*\*Spring only course.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Agriculture Business Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Agriculture Business Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Agriculture for further information or quidance.

| Freshman Year - First Semester AGRI 1110 Introduction to Agriculture AGRI 1420 Animal Husbandry CHEM 1104 Intro. to Sciences: Chem. (Lab) ENGL 1020 Composition I COMM 1000 Public Speaking AGRI 1300 Introductory Plant Science Semester Total          | Hrs.  1  3  4  3  1  1  1  1  1  1  1  1  1  1  1  1 | Freshman Year - Second Semester AGRI 2425 Livestock Evaluation (Lab) ECON 1011 Principles of Microeconomics ENGL 1030 Composition II MATH 1111 College Algebra AGRI 1600 Intro to Horticulture Science Semester Total              | Hrs. 3 3 3 3 1 5                           |
|--|--|--|--|
| Sophomore Year - First Semester AGRI 2010 Comp. Apps. for Agriculturalists FIN 1820 Personal Finance AGRI 2330 Introduction to Soil Science (Lab) AGRI 1200 Agriculture Mechanics (Lab)* HIST 1350 or 1351 or POLS 1510 General Education Semester Total | Hrs. 3 3 3 3 3 18                                    | Sophomore Year - Second Semester<br>AGRI 2315 Agronomy II: Forages**<br>ACCT 2101 Principles of Financial Acct***<br>ECON 1010 Principles of Macroeconomics<br>AGRI 2130 Global Agriculture<br>General Education<br>Semester Total | Hrs.<br>2<br>3<br>3<br>3<br>6<br><b>17</b> |
| Junior Year - First Semester AGRI 3140 Agri. Analysis and Statistics AGRI 3110 Agriculture Business Management MKT 3430 Personal Selling AGRI 3420 Animal Nutrition ECON 3030 Intermediate Microeconomics Semester Total                                 | Hrs. 3 3 3 3 1 5                                     | Junior Year - Second Semester AGRI 4110 Agricultural Futures Trading AGRI 2331 Soils AGRI 4140 Agricultural Policy General Education Semester Total  | Hrs. 3 3 3 5-6 14-15                       |
| Senior Year - First Semester AGRI 4340 Agri. Sprays and Chemicals (Lab)**** AGRI 4820 Agriculture Safety BLAW 2720 Legal Environment of Business AGRI 3120 Distrib. and Marketing Agri. Products General Education Semester Total                        | Hrs. 3 3 3 3 1 5                                     | Senior Year - Second Semester ICAP 4101 Agriculture Capstone Experience AGRI 4150 Natural Resources Econ. for Agri. AGRI 4120 International Agriculture General Education Free Choice Electives Semester Total                     | Hrs. 3 3 3 3 15                            |

# Agriculture Technology - Business Functional Major, B.S. Degree - 124 hours

- \*AGRI 3200 Farm Power and Machinery may be taken instead of AGRI 1200.
- \*\*AGRI 1310 Agronomy I: Row Crops (Lab) may be taken instead of AGRI 2315.
- \*\*\*ACCT 2100 Survey of Accounting may be taken instead of ACCT 2101.
- \*\*\*\*AGRI 3610 Agricultural Insect Control (Lab) may be taken instead of AGRI 4340.
- Your four-year plan will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites. Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Agriculture Technology - Agriculture Mechinization Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Agriculture Technology- Agronomic Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Agriculture for further information or guidance.

| Freshman Year - First Semester AGRI 1100 Introduction to Agriculture AGRI 1200 Agriculture Mechanics (Lab) CHEM 1104 Intro. to Sciences: Chem (Lab) ENGL 1020 Composition I COMM 1000 Public Speaking AGRI 1300 Introductory Plant Science Semester Total | Hrs.  1 3 4 3 1 15       | Freshman Year - Second Semester AGRI 1600 Intro. to Hort. Science (Lab) ECON 1011 Principles of Microeconomics ENGL 1030 Composition II MATH 1111 College Algebra HIST 1350 or 1351 or POLS 1510 General Education Semester Total            | Hrs. 3 3 3 3 3 2-3 17-18 |
|---|--------------------------|--|--------------------------|
| Sophomore Year - First Semester AGRI 1420 Animal Husbandry AGRI 2330 Introduction to Soil Science (Lab) AGRI 2010 Comp. Applications for Agriculturalists AGRI 2130 Global Agriculture ET 1010 Applied Electricity Semester Total                         | Hrs. 3 3 3 3 3 <b>15</b> | Sophomore Year - Second Semester AGRI 2315 Agronomy II: Forages* AGRI 2425 Livestock Evaluation (Lab) CHEM 2650 Elem. Organic & Biochem. (Lab) GRAP 1110 Fundamentals of Drafting GRAP 2170 Intro. to Computer-Aided Drafting Semester Total | Hrs. 2 3 5 3 3 16        |
| Junior Year - First Semester AGRI 3120 Dist. and Marketing Agri. Products** AGRI 1610 Est.& Care of Greenhouse Plants (Lab AGRI 3140 Agricultural Analysis and Statistics AGRI 3610 Agriculture Insect Control (Lab) General Education Semester Total     | Hrs. 3 )3 3 3 15         | Junior Year - Second Semester AGRI 4300 Soil Fertility and Fertilizers AGRI 3200 Farm Power and Machinery AGRI 4410 General Veterinary Science General Education Semester Total  | Hrs. 3 3 6 15            |
| Senior Year - First Semester AGRI 4340 Agri. Sprays and Chemicals (Lab) AGRI 4310 Plant Improvement (Lab) PR&T 4032 Hydraulics & Pneumatics PR&T 3140 Transmissions & Drive Lines*** General Education Semester Total                                     | Hrs. 3 3 3 3 1 5         | Senior Year - Second Semester PR&T 3150 Diesel Technology (Lab) General Education ICAP 4101 Agricultural Capstone Experience Free Choice Elective**** Semester Total   | Hrs. 3 9 3 1 16          |

# Agriculture Technology - Agricultural Mechanization Functional Major, B.S. Degree - 124 hours

- \*AGRI 1310 Agronomy I: Row Crops (Lab) may be taken instead of AGRI 2315.
- \*\*AGRI 3110 Agri-Business Management may be taken instead of AGRI 3120
- \*\*\*PR&T 3110 Auto. Engine Overhaul may be taken instead of PR&T 3140.
- \*\*\*\*The above plan includes 36 hours of upper-level credit. A minimum of 40 must be earned to meet graduation requirements. Students may either choose upper-level general education course work (COMM 3000 and COMM 3010) or choose upper-level free choice electives.
- Your four-year plan will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Agriculture Technology - Agronomic Technology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Agriculture Technology- Agronomic Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Agriculture for further information or quidance.

| Freshman Year - First Semester AGRI 1100 Introduction to Agriculture AGRI 1300 Introductory Plant Science AGRI 1310 Agronomy I: Row Crops* CHEM 1104 Intro. to Sciences: Chem. (Lab) ENGL 1020 Composition I COMM 1000 Public Speaking General Education Semester Total | Hrs. 1 1 2 4 3 3 2-3 16-17 | Freshman Year - Second Semester AGRI 1600 Intro to Horticulture Science (Lab) BIO 1111 Biology I (General Botany) (Lab) ENGL 1030 Composition II MATH 1111 College Algebra HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs. 3 4 3 3 16                  |
|---|----------------------------|--|----------------------------------|
| Sophomore Year - First Semester AGRI 1420 Animal Husbandry AGRI 2330 Introduction to Soil Science (Lab) AGRI 1200 Agriculture Mechanics (Lab) EASC 1004 Introduction to Geology (Lab) ECON 1011 Principles of Microeconomics Semester Total                             | Hrs. 3 3 4 3 16            | Sophomore Year - Second Semester AGRI 2010 Comp. Apps. for Agriculturalists AGRI 2130 Global Agriculture AGRI 2425 Livestock Evaluation (Lab) CHEM 2650 Elem. Organic & Biochem. (Lab) General Education Semester Total  | Hrs. 3 3 5 3 17                  |
| Junior Year - First Semester AGRI 3120 Dist. and Marketing Agri. Products** AGRI 1610 Est. & Care of Greenhouse Plants (Lab) AGRI 3140 Agriculture Analysis and Statistics AGRI 4610 Turfgrasses AGRI 3610 Agriculture Insect Control (Lab) Semester Total              | Hrs. 3 3 3 3 3 15          | Junior Year - Second Semester AGRI 4300 Soil Fertility and Fertilizers AGRI 2331 Soils General Education Semester Total  | Hrs. 3 9 15                      |
| Senior Year - First Semester BIOL 3611 Microbiology AGRI 4320 Agriculture Plant Diseases (Lab) AGRI 4340 Agriculture Sprays and Chemicals (Lab) AGRI 4310 Plant Improvement (Lab) General Education Semester Total  | Hrs. 4 3 3 6 16            | Senior Year - Second Semester AGRI 4410 General Veterinary Science ICAP 4101 Agriculture Capstone Experience Free Choice Electives*** Semester Total   | Hrs.<br>3<br>3<br>7<br><b>13</b> |

# Agriculture Technology - Agronomic Technology Functional Major, **B.S. Degree - 124 hours**

- \*AGRI 2315 Agronomy II: Forages (Lab) may be taken instead of AGRI 1310.
- \*\*AGRI 3110 Agri-Business Management may be taken instead of AGRI 3120.
- \*\*\*The above plan includes 34 hours of upper-level credit. A minimum of 40 upper-level hours must be earned to meet graduation requirements. Students may either choose upper-level general education course work (COMM 3000 and COMM 3010) or choose upper-level free choice electives.
- Your four-year plan will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information. Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Agriculture Technology - Animal Technology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Agriculture Technology: Animal Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Agriculture for further information or guidance.

| Freshman Year - First Semester AGRI 1100 Introduction to Agriculture AGRI 1420 Animal Husbandry CHEM 1104 Intro. to Sciences: Chemistry ENGL 1020 Composition I COMM 1000 Public Speaking AGRI 1300 Introductory Plant Science Semester Total             | Hrs.  1 3 4 3 1 15             | Freshman Year - Second Semester AGRI 2425 Livestock Evaluation (Lab) AGRI 1600 Intro. Horticulture Science (Lab) BIOL 1111 Biology I (General Botany) (Lab) ENGL 1030 Composition II MATH 1111 College Algebra Semester Total                | Hrs. 3 4 3 16     |
|---|--------------------------------|--|-------------------|
| Sophomore Year - First Semester AGRI 3410 Animal Breeding AGRI 2330 Introduction to Soil Science (Lab) AGRI 2130 Global Agriculture AGRI 1200 Agriculture Mechanics (Lab) HIST 1350 or 1351 or POLS 1510 Semester Total                                   | Hrs. 3 3 3 3 3 <b>15</b>       | Sophomore Year - Second Semester AGRI 2010 Comp. Apps. for Agriculturalists AGRI 2315 Agronomy II: Forages* CHEM 2650 Elem. Organic & Bio. Chem. (Lab) ECON 1011 Principles of Microeconomics General Education Semester Total               | Hrs. 3 2 5 3 3 16 |
| Junior Year - First Semester AGRI 3120 Distribution & Mktg. Agri. Products** AGRI 1610 Est. & Care of Greenhouse Plants (Lab) AGRI 4415 Reproduction of Farm Animals (Lab) AGRI 3140 Agriculture Analysis and Statistics General Education Semester Total | Hrs. 3 3 3 3 3 15              | Junior Year - Second Semester AGRI 4300 Soil Fertility and Fertilizers AGRI 4435 Animal Science: Pork AGRI 4410 General Veterinary Science General Education Semester Total  | Hrs. 3 3 3 6 15   |
| Senior Year - First Semester AGRI 4000 Spec Projects - Meat Technology AGRI 3610 Agricultural Insect Control (Lab) AGRI 3420 Animal Nutrition General Education Semester Total  | Hrs.<br>2<br>3<br>3<br>8<br>16 | Senior Year - Second Semester AGRI 4430 Animal Science - Beef (Lab) AGRI 4110 Agricultural Futures Trading AGRI 4310 Plant Improvement (Lab) ICAP 4101 Agriculture Capstone Experience General Education Free Choice Elective Semester Total | Hrs. 3 3 3 3 1 16 |

# Agriculture Technology - Animal Technology Functional Major, **B.S. Degree - 124 hours**

- \*AGRI 1310 Agronomy I: Row Crops (Lab) may be taken instead of AGRI 2315.
- \*\*AGRI 3110 Agri-Business Management may be taken instead of AGRI 3120
- Your four-year plan will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Agriculture Technology - Horticultural Technology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Agriculture Technology- Horticultural Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Agriculture for further information or guidance.

| Freshman Year - First Semester AGRI 1100 Introduction to Agriculture AGRI 1610 Est & Care of Greenhouse Plants (Lab) CHEM 1104 Intro to Sciences Chem. (Lab) ENGL 1020 Composition I AGRI 1420 Animal Husbandry AGRI 1300 Introductory Plant Science Semester Total | Hrs. 1 3 4 3 1 15   | Freshman Year - Second Semester AGRI 2425 Livestock Evaluation (Lab) AGRI 1600 Intro. Horticulture Science (Lab) ECON 1011 Principles of Microeconomics ENGL 1030 Composition II MATH 1111 College Algebra General Education Semester Total | Hrs. 3 3 3 3 3 2-3 17-18 |
|---|---------------------|---|--------------------------|
| Sophomore Year - First Semester AGRI 2010 Comp. Applications for Agriculturalists AGRI 2330 Introduction to Soil Science (Lab) AGRI 1200 Agriculture Mechanics (Lab) BIO 1111 Biology I (General Botany) (Lab) HIST 1350 or 1350 or POLS 1510 Semester Total        | Hrs. 3 3 4 3 16     | Sophomore Year - Second Semester AGRI 2315 Agronomy II Forages* AGRI 2130 Global Agriculture CHEM 2650 Elem. Organic & Biochemistry (Lab) COMM 1000 Public Speaking General Education Semester Total  | Hrs. 2 3 5 3 3 16        |
| Junior Year - First Semester AGRI 3140 Agri. Analysis and Statistics AGRI 4310 Plant Improvement (Lab) AGRI 4000 Sp. Proj. Comm. Greenhse. & Nurs. Mgmt. AGRI 4000 Sp. Proj. Hort. Plants II Herbaceous General Education Semester Total                            | Hrs. 3 3 2 2 3 6 17 | Junior Year - Second Semester AGRI 4300 Soil Fertility and Fertilizers AGRI 3640 Hort. Propagation Materials (Lab) AGRI 4410 General Veterinary Science General Education Semester Total  | Hrs. 3 3 3 3 15          |
| Senior Year - First Semester AGRI 4320 Agri. Plant Diseases (Lab) AGRI 4610 Turfgrasses (Lab) AGRI 3610 Agricultural Insect Control (Lab) AGRI 3120 Distribution & Marketing Agri. Products** General Education Semester Total                                      | Hrs. 3 3 3 3 15     | Senior Year - Second Semester AGRI 4600 Horticulture Plants I Woody (Lab) AGRI 3620 Residential Landscape Design (Lab) ICAP 4101 Agricultural Capstone Experience General Education Free Choice Elective*** Semester Total                  | Hrs. 3 3 3 1 13          |

# Agriculture Technology - Horticultural Technology Functional Major, B.S. Degree - 124 hours

- \*AGRI 1310 Agronomy I: Row Crops may be taken instead of AGRI 2315 Agronomy II: Forages
- \*\*AGRI 3110 Agri-Business Management may be taken instead of AGRI 3120.
- You will not need 1 hour of free choice elective if you choose a technology course that is worth 3 credit hours.
- Your four-year plan will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Art Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Art Functional Major, B.S. in Ed. at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Art for further information or guidance.

| Freshman Year - First Semester ART 1110 Drawing I ART 1315 Design I ART 1800 Ideas and the Visual Arts ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*  | Hrs. 3 3 3 3 3 15   | Freshman Year - Second Semester ART 1120 Drawing II ART 1325 Design II ENGL 1030 Composition II General Education Math HIST 1350 or 1351 US History Semester Total   | Hrs. 3 3 3 3 15        |
|---|---------------------|--|------------------------|
| Sophomore Year - First Semester EDCI 2100 Found of Educ. & Field Experience EDCI 2240 Ed. Psy. ART 2412 Ceramics ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring) POLS 1510 American Government General Education Semester Total                | Hrs. 3 3 3 3 3 3 18 | Sophomore Year - Second Semester ART 2710 Intro to Printmaking ART 1825 Art History Survey II ART 2420 Sculpture I General Education Science** General Education Semester Total  | Hrs. 3 3 3 6 18        |
| Junior Year - First Semester ART 3314 Fibers ART 2511 Painting I PSY 4200 Psy. of the Exceptional Child or EDSP 2100 Ed. of the Exceptional Child General Education Semester Total  | Hrs. 3 3 2 9 17     | Junior Year - Second Semester ART 4850 20th Century Art and Arch (fall) or ART 4860 Contemp. Art & Design (spring) ART 3209 Figure Construction ART 3915 Problems in Elementary Art Ed. PSY 4230 Psy. of Adolescence EDCI 4210 Teaching Reading in Secondary Upper Level Studio Concentration Semester Total | Hrs.  3 3 3 2 3 17     |
| Senior Year - First Semester ART 3920 Problems in Sec. Art Ed. EDCI 3500 Sec. Teaching and Behavior Mgmt. EDCI 3550 Practicum in Sec. Institution EDCI 4300 Ed. Measures & Evaluation Upper Level Studio Concentration ICAP 4221 Artists in Contemporary Society Semester Total | Hrs. 3 3 1 2 3 3 15 | Senior Year - Second Semester EDCI 4595 Student Teaching Elementary I ART 4930 Secondary Field Exp.II ART 4920 Art Spec. Methods ICAP 4468 Student Tch. Secondary II Semester Total  | Hrs. 5 1 2 4 <b>12</b> |

## Art Education Major, B.S. in Ed. Degree - 127 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Students pursuing a B.S. in Ed. must take a biology prefix.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Athletic Training Major, B.S. Degree

1/2005

This is the recommended program of study for the Athletic Training Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester COMM 1000 Public Speaking ENGL 1020 Composition I PE 1610 Introduction to Athletic Training PE 1611 Introduction to Athletic Training Lab PE 2600 Medical Terminology PE 1620 Responding to Emergencies PE 2800 Human Anatomy Semester Total AE 1400 Student Development Seminar*  | Hrs. 3 3 2 1 1 3 3 16   | Freshman Year - Second Semester CHEM 1104 Intro to Sciences: Chemistry ENGL 1030 Composition II PSY 1100 General Psychology PE 3610 Care & Prevention of Injuries MATH 1111 College Algebra Semester Total                            | Hrs. 4 3 3 2 3 <b>15</b>                   |
|---|-------------------------|---|--|
| Sophomore Year - First Semester BIOL 2401 Anatomy & Physiology I HIST 1350 or 1351 or POLS 1510 PE 1206 Lifetime Fitness PE 2320 Analysis & Teaching Weight Training PE 2610 Orthopedic Assessment Lower Ext. PE 2611 Orthopedic Assessment Lower Ext. Lab PE 2850 Foundations Exercise Physiology Semester Total | Hrs. 4 3 3 1 2 1 3 17   | Sophomore Year - Second Semester BIOL 2402 Anatomy & Physiology II PE 2620 Orthopedic Assessment: Upper Ext. PE 2621 Orthopedic Assessment: Upper Ext. Lab PE 3800 Kinesiology General Education Semester Total                       | Hrs. 4 2 1 3 6 <b>16</b>                   |
| Junior Year - First Semester HED 4300 Nutrition & Human Performance NUR 3010 Nursing Pharmacology PE 2630 Therapeutic Modalities PE 2631 Therapeutic Modalities Lab PE 3620 Clinical Athletic Training Lab I General Education Free Choice Electives Semester Total   | Hrs. 2 3 2 1 2 3 3 3 16 | Junior Year - Second Semester PE 3630 Therapeutic Rehabilitation PE 3631 Therapeutic Rehabilitation Lab PE 3640 Clinical Athletic Training Lab II PE 4630 Org. & Administration Of Athletic Training General Education Semester Total | Hrs.<br>2<br>1<br>2<br>3<br>6<br><b>14</b> |
| Senior Year - First Semester HED 4370 Human Diseases PE 4610 Clinical Athletic Training Lab III PE 4740 Legal Liability in F/W, PE Settings PE 4830 Psychological Aspects in PE PSY 4520 Statistics for the Behavioral Sciences General Education Semester Total  | Hrs. 3 2 2 2 3 3 15     | Senior Year - Second Semester IGEN 3472 Sport in American Life PE 4620 Clinical Athletic Training Lab IV Upper-Level Free Choice Electives Free Choice Electives Semester Total   | Hrs.<br>3<br>2<br>3<br>7<br><b>15</b>      |

## Athletic Training Major, B.S. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- Admission to the Athletic Training major is a competitive process and not all who apply are admitted. The application process for the major is separate from the application process for admission to the University. Currently, Central is in the Candidacy phase of accreditation through CAAHEP. Upon accreditation and completion of this degree program, the student will be eligible to sit for the NATABOC Certification Examination.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Automotive Technology Management Functional Major, B.S. Degree

1/2005

#### **Automotive Technology Option**

This is the recommended program of study for the Automotive/Power Technology Functional Major (Automotive Technology Option), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester PR&T 1010 Power Mechanics ET 1026 DC Circuit Analysis MATH 1111 College Algebra ENGL 1020 Composition I BE&O 1210 Ess. Of Managing Information or LIS 1600 Information Resources Semester Total AE 1400 Student Development Seminar* | Hrs. 3 4 3 3 7 15                     | Freshman Year - Second Semester<br>GRAP 1110 Fundamentals of Drafting<br>PR&T 2110 Engine Theory<br>ECON 1010 Principles of Macroeconomics<br>ENGL 1030 Composition II<br>MATH 1112 College Trigonometry<br>Semester Total           | Hrs. 3 4 3 2 15                  |
|---|---------------------------------------|--|----------------------------------|
| Sophomore Year - First Semester PR&T 2130 Automotive Electrical Systems PHYS 1104 Intro to Sciences: Physics ACCT 2100 Survey of Accounting T&OE 3060 Technical Report Writing HIST 1350 or 1351 or POLS 1510 Semester Total  | Hrs. 4 4 3 2 3 16                     | Sophomore Year - Second Semester<br>PR&T 2132 Fuel Systems & Emission Controls<br>PSY 1100 General Psychology<br>General Education<br>Semester Total   | Hrs.<br>4<br>3<br>9<br><b>16</b> |
| Junior Year - First Semester PR&T 3120 Steering and Suspension Systems PR&T 3124 Automotive Braking Systems MKT 3400 Principles of Marketing or HRM 3920 Human Resource Management CHEM 1103 Intro to Sciences: Chemistry General Education Semester Total          | Hrs. 4 4 3 3 3 17                     | Junior Year - Second Semester PR&T 3150 Diesel Technology PR&T 3130 Computerized Engine Diagnostics PR&T 4032 Hydraulics & Pneumatics General Education MMGT 2530 Machine Tool Technology Semester Total                             | Hrs. 3 4 3 3 3 16                |
| Summer – Between Junior & Senior Year<br>T&OE 3022 Internship in Technology**<br>Semester Total   | <b>Hrs.</b><br>5<br><b>5</b>          |  |                                  |
| Senior Year - First Semester<br>BLAW 2720 Legal Environment of Business<br>PR&T 3134 Advanced Eng. Control<br>PR&T 2150 Mobile HVAC<br>General Education<br>Semester Total  | Hrs.<br>3<br>4<br>3<br>6<br><b>13</b> | Senior Year - Second Semester PR&T 3140 Transmission & Drivelines INDM 4210 Industrial Management or MGT 3310 Principles of Management ICAP 4112 Automotive Systems for Cont. Soc. Free Choice Elective (Upper Level) Semester Total | Hrs. 4 3 3 3 13                  |

## Automotive/Power Technology Functional Major, B.S. Degree - 126 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*T&OE 3022 Internship (3 hours) should be done during the summer of junior/senior year.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Automotive Technology Management Functional Major, B.S. Degree

1/2005

## **Design Technology Option**

This is the recommended program of study for the Automotive/Power Technology Functional Major (Design Technology Option), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester PR&T 1010 Power Mechanics ET 1026 DC Circuit Analysis MATH 1111 College Algebra ENGL 1020 Composition I BE&O 1210 Ess. Of Managing Information or LIS 1600 Information Resources Semester Total AE 1400 Student Development Seminar* | Hrs. 3 4 3 3 2 15     | Freshman Year - Second Semester GRAP 1110 Fundamentals of Drafting PR&T 2110 Engine Theory ECON 1010 Principles of Macroeconomics ENGL 1030 Composition II MATH 1112 College Trigonometry Semester Total                        | Hrs. 3 4 3 2 15   |
|---|-----------------------|---|-------------------|
| Sophomore Year - First Semester PR&T 2130 Autorotive Electrical Systems Phys 1104: Intro to Sciences: Physics ACCT 2100 Survey of Accounting T&OE 3060 Technical Report Writing General Education Semester Total  | Hrs. 4 4 3 2 3 16     | Sophomore Year - Second Semester PR&T 2132 Fuel Systems PSY 1100 General Psychology HIST 1350 or 1351 or POLS 1510 General Education Semester Total   | Hrs. 4 3 3 6 16   |
| Junior Year - First Semester PR&T 3120 Steering and Suspension Systems PR&T 3124 Automotive Braking Systems MKT 3400 Principles of Marketing or HRM 3920 Human Resource Management CHEM 1103 Intro to Sciences: Chemistry General Education Semester Total          | Hrs. 4 4 3 3 3 17     | Junior Year - Second Semester PR&T 3150 Diesel Technology PR&T 4032 Hydraulics & Pneumatics PR&T 3130 Computer Diagnostics MMGT 2530 Machine Tool Technology General Education Semester Total                                   | Hrs. 3 4 3 4 3 16 |
| Summer – Between Junior & Senior Year<br>T&OE 3022 Internship in Technology**<br>Semester Total   | Hrs.<br>3<br><b>3</b> |   |                   |
| Senior Year - First Semester<br>GRAP 2170 Intro. to CAD<br>PR&T 3134 Advanced Engine Performance<br>BLAW 2720 Legal Environment of Business<br>Major Option Area 2 Elective***<br>General Education<br>Semester Total   | Hrs. 3 4 3 3 16       | Senior Year - Second Semester ICAP 4112 Automotive Systems for Cont. Soc. INDM 4210 Industrial Management or MGT 3310 Principles of Management Upper Level Free Choice Elective Major Option Area 2 Elective *** Semester Total | Hrs. 3 3 3 12     |

## Automotive/Power Technology Functional Major, B.S. Degree - 126 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*T&OE 3022 Internship (3 hours) should be done during the summer of junior/senior year.
- \*\*\*See departmental advisor for a listing of the approved elective courses within Area 2.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Automotive Technology Management Functional Major, B.S. Degree

1/2005

#### Management Technology Option

This is the recommended program of study for the Automotive/Power Technology Functional Major (Management Technology Option), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester PR&T 1010 Power Mechanics ET 1026 DC Circuit Analysis MATH 1111 College Algebra ENGL 1020 Composition I BE&O 1210 Ess. Of Managing Information or LIS 1600 Information Resources Semester Total AE 1400 Student Development Seminar* | Hrs. 3 4 3 3 2 15            | Freshman Year - Second Semester<br>GRAP 1110 Fundamentals of Drafting<br>PR&T 2110 Engine Theory<br>ENGL 1030 Composition II<br>ECON 1010 Principles of Macroeconomics<br>MATH 1112 College Trigonometry<br>Semester Total | Hrs. 3 4 3 2 15                  |
|---|------------------------------|--|----------------------------------|
| Sophomore Year - First Semester PR&T 2130 Automotive Electrical Systems Phys 1104: Intro to Sciences: Physics ACCT 2100 Survey of Accounting T&OE 3060 Technical Report Writing HIST 1350 or 1351 or POLS 1510 Semester Total                                       | Hrs. 4 4 3 2 3 16            | Sophomore Year - Second Semester<br>PR&T 2132 Fuel Systems<br>PSY 1100 General Psychology<br>General Education<br>Semester Total   | Hrs.<br>4<br>3<br>9<br><b>16</b> |
| Junior Year - First Semester PR&T 3120 Steering and Suspension PR&T 3124 Automotive Braking Systems CHEM 1103 Intro to Sciences: Chemistry MKT 3400 Principles of Marketing or HRM 3920 Human Resources Mgmt General Education Semester Total                       | Hrs. 4 4 3 3 3 17            | Junior Year - Second Semester PR&T 3150 Diesel Technology PR&T 4032 Hydraulics & Pneumatics PR&T 3130 Computerized Engine Diagnostics MMGT 2530 Machine Tool Technology General Education Semester Total                   | Hrs. 3 4 3 16                    |
| Summer – Between Junior & Senior Year<br>T&OE 3022 Internship in Technology**<br>Semester Total   | <b>Hrs.</b><br>3<br><b>3</b> |  |                                  |
| Senior Year - First Semester PR&T 3134 Advanced Engine Performance BLAW 2720 Legal Environment of Business Major Option Area 3 Elective*** General Education Semester Total   | Hrs. 4 3 6 3 16              | Senior Year - Second Semester ICAP 4112 Automotive Systems for Cont. Soc INDM 4210 Industrial Management or MGT 3310 Principles of Management Option Area 3 Elective*** Free Choice Elective (Upper Level) Semester Total  | Hrs. 3 3 3 12                    |

## Automotive Technology Management Functional Major, B.S. Degree - 126 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*T&OE 3022 Internship (3 hours) should be done during the summer of junior/senior year.
- \*\*\*See departmental advisor for a listing of the approved elective courses within Area 3.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites. Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Aviation Technology: (Airport Management) Functional Major, B.S. Degree

1/2005

## Airport Management Area of Concentration (Area 3)

This is the recommended program of study for the Aviation Technology: (Airport Management) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Aviation for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  MATH 1111 College Algebra  AVIA 1020 Aeronautics (2) or  AVIA 1310 FAA Private Requirements (4)  General Education  Semester Total  AE 1400 Student Development Seminar* | Hrs. 3 3 2-4 6 14-16 | Freshman Year - Second Semester GRAP 1110 Fundamentals of Drafting AVIA 1320 Private Flight A ENGL 1030 Composition II PHYS 1104 Intro to Sciences: Physics General Education Semester Total   | Hrs. 3 1 3 4 6 17      |
|---|----------------------|--|------------------------|
| Sophomore Year - First Semester PR&T 3010 Transportation Systems ACCT 2100 Survey of Physics MATH 1131 Business Calculus BLAW 2720 Legal Environment of Business General Education Semester Total                                 | Hrs. 3 3 3 3 3 15    | Sophomore Year - Second Semester MCOM 2320 Public Relations FIN 2801 Business Statistics I T&OE 3060 Technical Report Writing LIS 1600 Information Resources or BE&O 1210 Impact of Computer Based Tech. HIST 1350 or 1351 or POLS 1510 General Education Semester Total | Hrs. 3 3 2 2 2 3 3 16  |
| Junior Year - First Semester ECON 1010 Principles of Macroeconomics MKT 3400 Principles of Marketing AVIA 4040 Aviation Management GRAP 2170 Introduction to CAD General Education Semester Total                                 | Hrs. 3 3 3 3 15      | Junior Year - Second Semester MGT 3310 Principles of Management FIN 3850 Principles of Finance GRAP 4570 Computer Graphics AVIA 4010 Aerodynamics Free Choice Elective General Education Semester Total  | Hrs. 3 3 3 0-1 3 15-16 |
| Summer – Between Junior/Senior Year<br>T&OE 3022 Internship<br>Semester Total   | Hrs.<br>3<br>3       |  |                        |
| Senior Year – First Semester<br>AVIA 4500 Aviation Safety<br>AVIA 4310 Air Traffic Control<br>HRM 3920 Human Resource Mgmt<br>GEOG 4265 Urban Geography<br>SAFE 3000 Prin. of Accid. Causation & Prevent.<br>Semester Total       | Hrs. 3 2 3 3 14      | Senior Year - Second Semester AVIA 4090 Aviation Law AVIA 4420 Air Transportation AVIA 4045 Airport Management AVIA 4330 Sport Aviation ICAP 4113 Air Operations Management Semester Total   | Hrs. 3 3 3 2 14        |

# Aviation Technology: (Airport Management) Functional Major, **B.S. Degree - 124-125 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Aviation Technology: (Avionics Management) Functional Major, B.S. Degree

1/2005

## **Avionics Area of Concentration (Area 4)**

This is the recommended program of study for the Aviation Technology: (Avionics Management) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Aviation for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  MATH 1111 College Algebra  AVIA 1020 Aeronautics or  AVIA 1310 FAA Private Ground  ET 1026 DC Circuit Analysis  GRAP 1110 Fundamentals of Drafting  Semester Total  AE 1400 Student Development Seminar* | Hrs. 3 3 2-4 4 3 15-17 | Freshman Year - Second Semester  ENGL 1030 Composition II  ET 1027 AC Circuit Analysis  AVIA 2230 Aircraft Electrical Systems  BE&O 1210 Essentials of Managing Info. or  LIS 1600 Information Resources  ECON 1010 Principles of Macroeconomics  Semester Total | Hrs. 3 4 3 2 3 <b>15</b> |
|---|------------------------|--|--------------------------|
| Sophomore Year - First Semester<br>ET 2048 Active Electrical Devices<br>ET 1050 Digital Principles & Applications<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Semester Total  | Hrs. 3 4 3 6 16        | Sophomore Year - Second Semester PHYS 1104 Intro to Sciences: Physics ET 2058 Operational Amps Theory & Appl. ET 2060 Microprocessors: Theory & Appl. AVIA 3260 Aircraft Radio Install & Operations General Education Semester Total                             | Hrs. 4 4 1 3 16          |
| Junior Year - First Semester<br>T&OE 3060 Technical Report Writing<br>ET 3014 Analog Digital Circuitry<br>AVIA 3262 Aircraft Comm. & Navigation Sys.<br>AVIA 4010 Aerodynamics<br>General Education<br>Semester Total   | Hrs. 2 4 4 3 3 16      | Junior Year - Second Semester<br>AVIA 3264 Aircraft Pulse & Related Sys.<br>ET 3041 Communication Systems<br>MATH 1131 Calculus for Business & Economics<br>AVIA 4040 Aviation Management<br>General Education<br>Semester Total                                 | Hrs. 4 3 3 3 16          |
| Senior Year - First Semester MGT 3310 Principles of Management or INDM 4210 Industrial Management AVIA 4500 Aviation Safety AVIA 4090 Aviation Law General Education Semester Total   | Hrs. 3 3 6 15          | Senior Year - Second Semester<br>AVIA 4420 Air Transportation<br>ICAP 4113 Air Operations Management<br>General Education<br>Free Choice Electives<br>Semester Total   | Hrs. 3 3 4-6 13-15       |

## Aviation Technology: (Avionics) Functional Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Aviation Technology: (Flight Operations Management) Functional Major, B.S. Degree 1/2005

## Flight Operations Management Area of Concentration (Area 6)

This is the recommended program of study for the Aviation Technology (Flight Operations Management) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Aviation for further information or guidance.

| Freshman Year - First Semester AVIA 1020 Aeronautics or AVIA 1310 FAA Private Requirement AVIA 1320 Private Flight A AVIA 1321 Private Flight B ENGL 1020 Composition I BE&O 1210 Essentials of Managing Info or LIS 1600 Information Resources General Education Semester Total AE 1400 Student Development Seminar* | Hrs. 2-4 1 1 3 2 3 12-14 | Freshman Year - Second Semester AVIA 3310 FAA Commercial Flight A AVIA 3311 FAA Commercial Flight B AVIA 3312 FAA Commercial Flight C AVIA 3325 FAA Instrument Requirement MATH 1111 College Algebra ECON 1010 Principles of Macroeconomics ENGL 1030 Composition II Semester Total                           | Hrs. 1 1 4 3 3 3 16                   |
|---|--------------------------|---|---------------------------------------|
| Sophomore Year - First Semester PR&T 3010 Transportation Systems AVIA 3313 Instrument Flight A AVIA 3314 Instrument Flight B AVIA 3305 FAA Commercial Requirements HIST 1350 or 1351 or POLS 1510 ACCT 2100 Survey of Financial Accounting General Education Semester Total   | Hrs. 3 1 1 3 3 3 1 1 7   | Sophomore Year - Second Semester AVIA 3315 Commercial Flight D AVIA 3316 Commercial Flight E AVIA 3317 Commercial Flight F AVIA 4350 Aviation Weather or EASC 3114 Meteorology T&OE 3060 Technical Report Writing BLAW 2720 Legal Environment of Business PHYS 1104 Intro to Sciences: Physics Semester Total | Hrs.  1  1  1  3  2  3  4  15         |
| Junior Year - First Semester<br>AVIA 4010 Aerodynamics<br>HRM 3920 Human Resource Management<br>MKT 3400 Principles of Marketing<br>MATH 1131 Business Calculus<br>General Education<br>Semester Total  | Hrs. 3 3 3 3 15          | Junior Year - Second Semester<br>AVIA 4040 Aviation Management<br>AVIA 4500 Aviation Safety<br>AVIA 4320 Physiology & Flying<br>FIN 2801 Business Statistics<br>General Education<br>Semester Total   | Hrs. 3 3 2 3 6 17                     |
| Senior Year - First Semester AVIA 4310 Air Traffic Control AVIA 4420 Air Transportation AVIA 4090 Aviation Law MGT 3310 Principles of Management or INDM 4210 Industrial Management AVIA 4430 Corporate Aviation Management General Education Semester Total  | Hrs. 2 3 3 3 3 3 3 17    | Senior Year - Second Semester<br>FIN 3850 Principles of Finance<br>ICAP 4113 Air Operations Management<br>AVIA 4380 Flight Operations Management<br>General Education<br>Semester Total   | Hrs.<br>3<br>3<br>3<br>6<br><b>15</b> |

# Aviation Technology: (Flight Operations Management) Functional Major, **B.S. Degree - 124-126 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Aviation Technology: (Maintenance Management) Functional Major, B.S. Degree

1/2005

# Maintenance Management Area of Concentration (Area 2)

This is the recommended program of study for the Aviation Technology: (Maintenance Management) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Aviation for further information or guidance.

| Freshman Year - First Semester ET 1010 Applied Electricity MMGT 1120 Welding Math 1111 College Algebra AVIA 4080 Non-Destructive Test AVIA 1200 General Mechanics AVIA 4000 A&P Blueprint Reading Semester Total AE 1400 Student Development Seminar*                                      | Hrs. 3 2 3 3 3 17    | Freshman Year - Second Semester AVIA 1255 Basic Airframe AVIA 3210 Aircraft Hydraulic Systems AVIA 2230 Aircraft Electrical Systems AVIA 4210 Aircraft Insp., Weight & Balance AVIA 3255 Metal Airframe General Education Semester Total   | Hrs. 3 3 3 3 3 18       |
|--|----------------------|--|-------------------------|
| Sophomore Year - First Semester AVIA 3230 Aircraft Ignition & Starter Systems AVIA 4230 Aircraft Instrument Systems AVIA 3250 Complex Aircraft Systems AVIA 3240 Aircraft A/C & Pressure AVIA 3260 Aircraft Radio Inst. & Operation AVIA 2220 Aircraft Carb. & Lube Systems Semester Total | Hrs. 3 3 3 2 1 4 16  | Sophomore Year - Second Semester<br>AVIA 1210 Aircraft Reciprocating Power Plants<br>AVIA 3220 Aircraft Engine Testing<br>AVIA 3225 Propellers & Components<br>AVIA 3215 Gas Turbine Engines<br>AVIA 4240 Aircraft Engine Instr. & Systems<br>Semester Total                                     | Hrs. 3 3 3 3 15         |
| Junior Year - First Semester AVIA 1020 Aeronautics or AVIA 1310 FAA Private Requirements ENGL 1020 Composition I ECON 1010 Principles of Macroeconomics General Education Semester Total   | Hrs. 2-4 3 3 9 17-19 | Junior Year - Second Semester PHYS 1104 Intro to Sciences: Physics ENGL 1030 Composition II AVIA 4010 Aerodynamics MGT 3310 Principles of Management or INDM 4210 Industrial Management LIS 1600 Information Resources or BE&O 1210 Essentials of Managing Info General Education Semester Total | Hrs. 4 3 3 3 3 4 2 3 18 |
| Senior Year - First Semester HIST 1350 or 1351 US History AVIA 4040 Aviation Management MATH 1131 Calculus General Education Semester Total  | Hrs. 3 3 6 15        | Senior Year - Second Semester AVIA 4500 Aviation Safety AVIA 4090 Aviation Law AVIA 4420 Air Transportation T&OE 3060 Tech Report Writing ICAP 4113 Air Operations Management General Education Semester Total   | Hrs. 3 3 3 2 3 17       |

# Aviation Technology (Maintenance Management) Functional Major, B.S. Degree - 133-135 hrs.

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective; however, this major does not require free choice electives.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Aviation Technology: (Professional Pilot) Functional Major, B.S. Degree

1/2005

## **Professional Pilot Area of Concentration (Area 1)**

This is the recommended program of study for the Aviation Technology: (Professional Pilot) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Aviation for further information or guidance.

| Freshman Year - First Semester PR&T 1010 Power Mechanics AVIA 1310 FAA Private Requirements AVIA 1320 Private Flight A ET 1010 Applied Electricity ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar*  | Hrs. 3 4 1 3 3 14      | Freshman Year - Second Semester AVIA 1321 Private Flight B AVIA 3313 FAA Instrument Flight A AVIA 3325 FAA Instrument Requirements MATH 1111 College Algebra ECON 1010 Principles of Macroeconomics ENGL 1030 Composition II Semester Total      | Hrs. 1 1 4 3 3 1 15    |
|---|------------------------|--|------------------------|
| Sophomore Year - First Semester BE&O 1210 Impact of Comp. Based Tech. or LIS 1600 Information Resources AVIA 2310 Propulsion Systems AVIA 3310 FAA Commercial Flight A AVIA 3314 Instrument Flight B AVIA 3305 FAA Commercial Regulations HIST 1350 or 1351 or POLS 1510 General Education Semester Total | Hrs.  2 3 1 1 3 3 3 16 | Sophomore Year - Second Semester AVIA 3340 Aircraft Systems & Computers AVIA 3311 Commercial Flight B AVIA 3312 Commercial Flight C T&OE 3060 Technical Report Writing PHYS 1104 Intro to Sciences: Physics General Education Semester Total     | Hrs. 3 1 1 2 4 6 17    |
| Junior Year - First Semester AVIA 4010 Aerodynamics AVIA 3020 Digital Controls or PR&T 4032 Hydraulics/Pneumatics MATH 1131 Business Calculus AVIA 3315 Commercial Flight D AVIA 3316 Commercial Flight E EASC 3114 Meteorology or AVIA 4350 Aviation Weather General Education Semester Total            | Hrs. 3 3 1 1 1 3 3 17  | Junior Year - Second Semester AVIA 3330 Multi-Engine Certification AVIA 4040 Aviation Management AVIA 4500 Aviation Safety AVIA 4220 Transport Aircraft Systems AVIA 3317 Commercial Flight F Aviation elective General Education Semester Total | Hrs.  1 3 3 2 1 3 3 16 |
| Senior Year - First Semester<br>AVIA 4370 Advanced Flight Crew Management<br>AVIA 4420 Air Transportation<br>MGT 3310 Principles of Management<br>General Education<br>Semester Total   | Hrs. 3 3 3 6 15        | Senior Year - Second Semester<br>AVIA 4390 Part 135 OPS<br>AVIA 4090 Aviation Law<br>ICAP 4113 Air Operations Management<br>Aviation Electives<br>General Education<br>Semester Total  | Hrs. 3 3 3 3 15        |

# Aviation Technology (Professional Pilot) Functional Major, **B.S. Degree - 125 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Aviation Technology: (Systems Design Technology) Functional Major, B.S. Degree

1/2005

## Systems Design Technology Area of Concentration (Area 5)

This is the recommended program of study for the Aviation Technology: (Systems Design Technology) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Aviation for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  MATH 1111 College Algebra  AVIA 1020 Aeronautics or  AVIA 1310 FAA Private Requirements  PR&T 1010 Power Mechanics  GRAP 1110 Fundamentals of Drafting  Semester Total  AE 1400 Student Development Seminar*                           | Hrs. 3 3 2 4 3 3 14-16 | Freshman Year - Second Semester ET 1026 DC Circuit Analysis or ET 1010 Applied Electricity AVIA 2310 Propulsion Systems CMGT 2020 Mechanics of Materials ENGL 1030 Composition II General Education Semester Total    | Hrs.  3-4 3 3 3 15-16 |
|---|------------------------|---|-----------------------|
| Sophomore Year - First Semester MATH 1131 Calculus for Business/Economics ECON 1010 Principles of Macroeconomics GRAP 2170 Intro. to Computer Aided Drafting MMGT 2040 Materials Test HIST 1350 or 1350 or POLS 1510 General Education Semester Total   | Hrs. 3 3 3 3 3 18      | Sophomore Year - Second Semester PHYS 1104 Intro to Sciences: Physics AVIA 3340 Aircraft Systems & Components GRAP 3170 Computer Drafting Systems T&OE 3060 Technical Report Writing General Education Semester Total | Hrs. 4 3 3 2 3 15     |
| Junior Year - First Semester MGT 3310 Principles of Management or INDM 4210 Industrial Management LIS 1600 Information Resources or BE&O 1210 Essentials of Managing Info AVIA 4220 Transportation Aircraft Systems GRAP 4170 Computer Aided Drafting & Design General Education Semester Total | Hrs. 3 2 2 3 6 16      | Junior Year - Second Semester AVIA 3020 Digital Control of Power Systems AVIA 4040 Aviation Management AVIA 4500 Aviation Safety PR&T 4032 Hydraulics & Pneumatics General Education Semester Total                   | Hrs. 3 3 3 3 3 15     |
| Senior Year - First Semester AVIA 4090 Aviation Law AVIA 4420 Air Transportation AVIA 4010 Aerodynamics PR&T 4038 Advanced Hydraulics General Education Semester Total  | Hrs. 3 3 3 3 15        | Senior Year - Second Semester MMGT 4520 Robotics & Automation ICAP 4113 Air Operations Mgmt AVIA 4080 Non-Destructive Testing General Education Free Choice Electives Semester Total                                  | Hrs. 3 3 3 1-4 13-17  |

# Aviation Technology: (Systems Design Technology) Functional Major, **B.S. Degree - 124 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Biology Major, B.A. Degree

1/2005

This is the recommended program of study for the Biology Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I w/lab ENGL 1020 Composition I General Education Modern Language Requirement* Semester Total | Hrs 0.5 4 3 3 3 13.5 | Freshman Year -Second Semester<br>BIOL 1112 Biology II w/lab<br>ENGL 1030 Composition II<br>General Education<br>Modern Language Requirement*<br>Semester Total       | Hrs 4 3 5-6 3 15-16   |
|--|----------------------|---|-----------------------|
| Sophomore Year - First Semester BIOL 2512 Cell Biology BIOL 2511 Genetics General Education Math General Education Modern Language Requirement* Semester Total                 | Hrs 3 4 3 3 16       | Sophomore Year - Second Semester<br>BIOL 2020 Gen. Ecology<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Coursework for Minor<br>Semester Total           | Hrs 3 3 6 3 <b>15</b> |
| Junior Year - First Semester Upper-level Electives in BIOL General Education Coursework for Minor Free Choice Elective Semester Total  | Hrs 4 6 3 3 16       | Junior Year - Second Semester Upper-level Electives in BIOL General Education Coursework for Minor Free Choice Elective Semester Total                                | Hrs 4 3 6 3 16        |
| Senior Year - First Semester<br>BIOL 4000 Biology Colloquium<br>Upper-level Electives in BIOL<br>Coursework for Minor<br>Free Choice Electives<br>Semester Total               | Hrs 0.5 4 6 6 16.5   | Senior Year - Second Semester<br>ICAP 4222 Biological Perspective<br>Upper-level Electives in BIOL<br>Coursework for Minor<br>Free Choice Electives<br>Semester Total | Hrs 3 4 3 5-6 15-16   |

## Biology Major, B.A. Degree -124 hours

- \*Refer to the Bachelor's Degree Requirements section of the catalog for the B.A. Modern Language requirement. This plan is based on 9 hours of modern language.
- This plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Biology Major, B.S. Degree

1/2005

This is the recommended program of study for the Biology Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I w/lab ENGL 1020 Composition I General Education Semester Total      | Hrs 0.5 4 3 6 13.5                | Freshman Year -Second Semester<br>BIOL 1112 Biology II w/lab<br>ENGL 1030 Composition II<br>General Education<br>Semester Total                                      | Hrs<br>4<br>3<br>9<br><b>16</b> |
|--|-----------------------------------|--|---------------------------------|
| Sophomore Year - First Semester BIOL 2512 Cell Biology BIOL 2511 Genetics General Education Math General Education Free Choice Elective Semester Total | Hrs 3 4 3 3 16                    | Sophomore Year - Second Semester<br>BIOL 2020 General Ecology<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Coursework for Minor<br>Semester Total       | Hrs 3 6 3 <b>15</b>             |
| Junior Year - First Semester Department-Approved Electives General Education Free Choice Elective Semester Total                                       | Hrs<br>6<br>6<br>3<br><b>15</b>   | Junior Year - Second Semester<br>Department-Approved Electives<br>Coursework for minor<br>Free Choice Elective<br>Semester Total                                     | Hrs<br>8<br>6<br>3<br><b>17</b> |
| Senior Year - First Semester BIOL 4000 Biology Colloquium Department-Approved Electives Coursework for Minor Free Choice Elective Semester Total       | Hrs<br>0.5<br>4<br>6<br>6<br>16.5 | Senior Year - Second Semester<br>ICAP 4222 Biological Perspective<br>Department-Approved Electives<br>Coursework for Minor<br>Free Choice Elective<br>Semester Total | Hrs 3 4 6 2 15                  |

# Biology Major, B.S. Degree - 124 hours

- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- The above degree plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Biology Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Biology Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology and Earth Science for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I w/lab EASC 1004 Intro. to Sciences: Geology General Education MATH HIST 1350 or 1351 US History ENGL 1020 Composition I Semester Total                              | Hrs 0.5 4 4 3 3 17.5 | Freshman Year -Second Semester<br>BIOL 1112 Biology II w/lab<br>CHEM 1131 Chemistry I w/lab<br>POLS 1510 American Government<br>ENGL 1030 Composition II<br>General Education<br>Semester Total  | Hrs 4 5 3 3 3 18                |
|--|----------------------|--|---------------------------------|
| Sophomore Year - First Semester<br>BIOL 2512 Cell Biology<br>BIOL 2511 Genetics<br>EDCI 2100 Found. of Educ. & Field Experience<br>EDCI 2400 Educational Psychology<br>Major Elective*<br>Semester Total   | Hrs 3 4 3 4 17       | Sophomore Year - Second Semester<br>BIOL 2020 General Ecology<br>PHYS 1101 Physics I w/lab (4) or<br>PHYS 1104 Intro. to Sciences: Physics (4) or<br>PHYS 2121 University Physics (5)<br>PSY 4230 Psychology of Adolescence<br>General Education<br>Semester Total | Hrs 3 4-5 3 6 16-17             |
| Junior Year - First Semester BIOL 3611 Microbiology w/lab BIOL 3712 Field & Natural History Major Elective* EDSP 2100 Educ. of the Exceptional Child or PSY 4200 Psyc. of Exceptional Children EDCI 4300 Educ. Measurement & Evaluation Semester Total | Hrs 4 4 3 2 2 15     | Junior Year - Second Semester BIOL 3431 Animal Physiology w/lab or BIOL 4411 Plant Physiology w/lab T&OE 2000 Technology & Change General Education Major Elective* EDCI 4210 Teaching Reading in Sec. Schools Semester Total                                      | Hrs 4 3 6 3 2 18                |
| Senior Year - First Semester BIOL 4810 Curriculum Dev. in Biological Sci. BIOL 4811 Investigative Lab EDCI 3500 Secondary Teach. & Behav. Mgt. EDCI 3550 Practicum in Secondary Instruction Major Elective* General Education Semester Total           | Hrs 2 2 3 1 4 3 15   | Senior Year - Second Semester<br>EDCI 4595 Student Teaching Secondary I<br>ICAP 4468 Student Teaching Secondary II<br>BIOL 4520 Secondary Field Experience II<br>Semester Total  | Hrs<br>5<br>4<br>3<br><b>12</b> |

## Biology Functional Major, B.S. in Ed. - 128.5 hours

- \*See catalog for Unified Science Certification requirements.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Biology Functional Major (Biomedical/Molecular Studies), B.S. Degree

1/2005

This is the recommended program of study for the Biology Functional Major (Biomedical/Molecular Studies), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I ENGL 1020 Composition I General Education Math General Education Semester Total        | Hrs 0.5 4 3 5 15.5    | Freshman Year -Second Semester<br>BIOL 1112 Biology II<br>PHYS 1101 College Physics I<br>ENGL 1030 Composition II<br>General Education<br>Semester Total        | Hrs<br>4<br>4<br>3<br>3<br>14          |
|---|-----------------------|---|--|
| Sophomore Year - First Semester<br>BIOL 2512 Cell Biology<br>BIOL 2511 Genetics<br>CHEM 1131 General Chemistry I<br>HIST 1350 or 1351 or POLS 1510<br>Semester Total      | Hrs 3 4 5 3 <b>15</b> | Sophomore Year - Second Semester<br>BIOL 2020 General Ecology<br>CHEM 1132 General Chemistry II<br>General Education<br>Semester Total                          | <b>Hrs</b><br>3<br>5<br>9<br><b>17</b> |
| Junior Year - First Semester BIOL 3611 Microbiology Biomedical/Molecular Studies BIOL Elective ** Program Core Elective* General Education Semester Total                 | Hrs 4 4 4-5 3 15-16   | Junior Year - Second Semester<br>BIOL 3431 Animal Physiology or<br>BIOL 4411 Plant Physiology<br>Dept approved electives<br>General Education<br>Semester Total | <b>Hrs</b> 4 4 6 <b>14</b>             |
| Senior Year - First Semester BIOL 4000 Biology Colloquium Biomedical/Molecular Studies BIOL Elective** Department-Approved Electives Free Choice Electives Semester Total | Hrs 0.5 4 8 5 17.5    | Senior Year - Second Semester<br>ICAP 4222 Biological Perspective<br>Department-Approved Electives<br>Free Choice Electives<br>Semester Total                   | Hrs<br>3<br>8<br>4-5<br><b>15-16</b>   |

# Biology Functional Major (Biomedical/Molecular Studies), **B.S. Degree - 124 hours**

- \*Students can choose from the following: CHEM 2650, CHEM 3341 or BIOL 4414 and BIOL 4415.
- \*\*See the catalog for BIOL choices to fulfill this area.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Biology Functional Major (Conservation Enforcement), B.S. Degree

1/2005

This is the recommended program of study for the Biology Functional Major (Conservation Enforcement), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology and Earth Science for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I w/lab ENGL 1020 Composition I General Education Math General Education Semester Total                         | Hrs<br>0.5<br>4<br>3<br>5<br>15.5              | Freshman Year -Second Semester BIOL 1112 Biology II w/lab CHEM 1131 Chemistry I w/lab ENGL 1030 Composition II General Education Semester Total  | Hrs 4 5 3 1 15                       |
|--|--|--|--------------------------------------|
| Sophomore Year - First Semester<br>BIOL 2512 Cell Biology<br>BIOL 2511 Genetics<br>CHEM 1132 Chemistry II w/lab<br>General Education<br>Semester Total   | Hrs 3 4 5 3 <b>15</b>                          | Sophomore Year - Second Semester BIOL 2020 General Ecology CJ 1000 Introduction to Criminal Justice COMM 1520 Elements of News Reporting or COMM 4415 Screenplay Writing HIST 1350 or 1351 or POLS 1510 General Education Semester Total | Hrs 3 3 3 3 15                       |
| Junior Year - First Semester<br>COMM 2620 Public Relations<br>CJ 2300 Criminal Law<br>General Education<br>Program Core Elective*<br>Semester Total  | Hrs 3 3 6 4-5 16-17                            | Junior Year - Second Semester<br>CJ 3303 Criminal Procedure<br>General Education<br>Department-Approved Electives<br>Semester Total  | Hrs<br>3<br>6<br>6<br>15             |
| Senior Year - First Semester BIOL 4000 Biology Colloquium CJ 4302 Criminal Evidence Department-Approved Electives Conservation Enforcement BIOL elective ** Free Choice Electives Semester Total | Hrs<br>0.5<br>3<br>4<br>4<br>4<br>1 <b>5.5</b> | Senior Year - Second Semester<br>ICAP 4222 Biological Perspective<br>Department-Approved Electives<br>Free Choice Electives<br>Semester Total  | Hrs<br>3<br>8<br>5-6<br><b>16-17</b> |

# Biology Functional Major (Conservation Enforcement), B.S. Degree - 124 hours

- \*Students can choose from the following: CHEM 2650, CHEM 3341, or BIOL 4414 and 4415.
- \*\*See the catalog for BIOL choices to fulfill this area.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Biology Functional Major (Ecological Studies), B.S. Degree

1/2005

This is the recommended program of study for the Biology Functional Major (Ecological Studies), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I ENGL 1020 Composition I General Education Math General Education Semester Total                        | Hrs 0.5 4 3 6 16.5  | Freshman Year -Second Semester BIOL 1112 Biology II ENGL 1030 Composition II HIST 1350 or 1351 or POLS 1510 General Education Free Choice Electives Semester Total                        | Hrs 4 3 3 3 16 |
|---|---------------------|---|----------------|
| Sophomore Year - First Semester<br>BIOL 2511 Genetics<br>CHEM 1131 General Chemistry I<br>General Education<br>Semester Total   | Hrs 4 5 6 15        | Sophomore Year - Second Semester<br>BIOL 2020 Gen. Ecology<br>CHEM 1132 General Chemistry II<br>EASC 3010 Environmental Geology<br>General Education<br>Semester Total                    | Hrs 3 5 3 7 16 |
| Junior Year - First Semester<br>BIOL 2512 Cell Biology<br>BIOL 3711 Plant Identification<br>Major Core Elective*<br>General Education<br>Semester Total                                   | Hrs 3 4 4-5 3 14-15 | Junior Year - Second Semester<br>BIOL 4711 Animal Ecology<br>Department-Approved Electives<br>General Education<br>Free Choice Electives<br>Semester Total                                | Hrs 4 4 3 4 15 |
| Senior Year - First Semester<br>BIOL 4000 Biology Colloquium<br>Ecological Studies Elective**<br>Department-Approved Electives<br>GEOG 4220 Geog. Information Systems I<br>Semester Total | Hrs 0.5 4 8 3 15.5  | Senior Year - Second Semester<br>ICAP 4222 Biological Perspective<br>Department-Approved Electives<br>GEOG 4291 Conservation of Nat. Resources<br>Free Choice Electives<br>Semester Total | Hrs 3 7 3 3 16 |

## Biology Functional Major (Ecological Studies), B.S. Degree - 124 hours

- \*Students can choose from the following: CHEM 2650, CHEM 3341, or BIOL 4414 and 4415.
- \*\*See the catalog for BIOL choices to fulfill this area.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Broadcast Media Major, B.S. Degree

1/2005

This is the recommended program of study for the Broadcast Media Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester COMM 1000 Public Speaking COMM 1100 Introduction to Communication COMM 1110 Communication Skills Lab COMM 1200 Introduction to Mass Comm. ENGL 1020 Composition I General Education Science Semester Total | Hrs 3 1 1 3 3 3 4 14-15       | Freshman Year - Second Semester COMM 2100 Intro. to Comm .Theory COMM 2110 Intro. to Comm .Theory Lab COMM 2400 Foundations of Broadcasting ENGL 1030 Composition II General Education MATH General Education Semester Total | Hrs 3 1 3 3 3 2-3 15-16 |
|---|-------------------------------|--|-------------------------|
| Sophomore Year -First Semester COMM 2410 Multimedia I or COMM 2411 Audio Production I COMM 2415 Broadcast Copywriting Coursework in Minor HIST 1350 or 1351 or POLS 1510 General Education Semester Total                                 | Hrs 3 3 3 3 3 15              | Sophomore Year - Second Semester COMM 2410 Multimedia I or COMM 2411 Audio Production I COMM 3100 - Comm. Research Methods COMM 3110 Resource and Methods Lab Coursework in Minor General Education Semester Total           | Hrs 3 3 1 3 6 16        |
| Junior Year - First Semester COMM 2412 Video Production I COMM 3000 Film Appreciation COMM 3200 Practicum (or Internship)* Coursework in Minor General Education Semester Total   | Hrs 5 3 1 3 3 15              | Junior Year - Second Semester Production Elective *** COMM 3010 Interpersonal Communication Coursework in Minor General Education Free Choice Upper-Level Elective Semester Total  | Hrs 3 6 3 18            |
| Summer - Between Junior/Senior Year<br>COMM 4295 Internship (or Practicum)*<br>Semester Total   | Hrs<br>(1-3)<br>( <b>1-3)</b> |  |                         |
| Senior Year-First Semester IGEN 3224 or 3232 or 4224 GEOG 3201 The Cultural Landscape Production Elective*** Coursework for Minor Semester Total  | Hrs 3 3 6 15                  | Senior Year - Second Semester COMM 4250 Mass Communication Law COMM 4490 Senior Capstone Seminar** Industry Practice & Analysis Elective*** Theory & Criticism Elective*** Free Upper-Level Elective Semester Total          | Hrs 3 2 3-5 3-5 3-14-18 |

# Broadcast Media Major, B.S. Degree - 124 hours

- \*Students may take COMM 3200 or opt for the COMM 4295 (summer internship between Jr. & Sr. year) with department approval.
- \*\*COMM 4490 must be taken during the student's final semester.
- \*\*\*See catalog for the list of Major electives to fulfill the Production, Industry Practice and Analysis, and Theory and Criticism areas.
- See the catalog or the Department of Communication for the statement of policy for admission to the Broadcast Media program.
- The above degree plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Business Education Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Business Education Major, B. S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Career & Technology Education for further information or guidance.

| Freshman Year - First Semester  MATH 1111 College Algebra or  MATH 1620 Contemporary Math  BE&O 1210 Essentials of Managing Information  ENGL 1020 Composition I  BE&O 1510 Foundations of BE&O  BE&O 1535 Word Process I  Semester Total  AE 1400 Student Development Seminar* | Hrs. 3 2 3 3 3 14    | Freshman Year - Second Semester COMM 1000 Public Speaking ENGL 1030 Composition II ECON 1010 Principles of Macroeconomics BE&O 1536 Word Process II HIST 1350 or HIST 1351 U.S. History Semester Total  | Hrs. 3 3 3 3 15      |
|---|----------------------|---|----------------------|
| Sophomore Year - First Semester ACCT 2101 Principles of Financial Accounting BE&O 3501 Business and Ed. Technology EDCI 2100 Foundations of Ed. & Field Exp. EDCI 2240 Educational Psychology Coursework for Minor General Education Semester Total                             | Hrs. 3 3 3 3 3 3 18  | Sophomore Year - Second Semester BE&O 3510 Desktop Publishing/Business BLAW 2720 Legal Environment Business General Education Science POLS 1510 American Government Coursework for Minor Semester Total | Hrs. 3 3 3-4 3 15-16 |
| Junior Year - First Semester EDSP 2100 Education of Exceptional Child or PSY 4200 Psychology of Exceptional Child MKT 3400 Principles of Marketing General Education Coursework for Minor Semester Total  | Hrs. 2 3 6-7 6 17-18 | Junior Year - Second Semester PSY 4230 Psychology of Adolescence EDCI 4210 Teaching of Reading in Secondary BE&O 4550 Admin. Support Management General Education Coursework for Minor Semester Total   | Hrs. 3 2 3 3 6 17    |
| Senior Year - First Semester MGT 3325 Business Communication EDCI 4300 Education Measurement & Eval. EDCI 3500 Behavior Management EDCI 3550 Practicum in Secondary Instruction BE&O 4210 Method Teaching Business General Education Semester Total                             | Hrs. 3 2 3 1 3 1 5   | Senior Year - Second Semester<br>EDCI 4595 Student Teaching I<br>ICAP 4468 Student Teaching II<br>BE&O 4220 Secondary Field Experience II<br>BE&O 4230 Special Method/Technology Ed.<br>Semester Total  | Hrs. 5 4 1 2 12      |

## Business Education Major, B.S. in Ed. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- The above plan is based on an 18-hour minor.
- Recommended Electives: BE&O 4560 Info Design and Presentation, ACCT 2102 Principles Managerial Accounting, BLAW 3721 Law of Business Transactions, BE&O 4280 Implementing Vocational Business, FIN 1820 Personal Finance, INST 4330 Tech Troubleshooting for Educators. This listing shows planned changes in the program to reflect new state certification requirements. Course substitutions will be made in BE&O 1510 to bring the current catalog program in line with these changes.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Business Education Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Business Education Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Career & Technology Education for further information or guidance.

| Freshman Year - First Semester MATH 1111 College Algebra or MATH 1620 Contemporary Math BE&O 1210 Essentials of Managing Information ENGL 1020 Composition I BE&O 1510 Foundations of BE&O* BE&O 1535 Word Processing I Semester Total AE 1400 Student Development Seminar* | Hrs. 3 2 3 3 3 14      | Freshman Year - Second Semester COMM 1000 Public Speaking ENGL 1030 Composition II ECON 1010 Principles of Macroeconomics BE&O 1536 Word Processing II POLS 1510 American Government Semester Total   | Hrs. 3 3 3 3 1 5    |
|---|------------------------|---|---------------------|
| Sophomore Year - First Semester ACCT 2101 Principles of Financial Accounting BE&O 3501 Business & Education Technology General Education Science EDCI 2100 Found. of Educ. & Field Experience EDCI 2240 Educational Psychology Free elective Semester Total                 | Hrs. 3 3 3-4 3 1 16-17 | Sophomore Year - Second Semester BE&O 3510 Desktop Publishing for Business BLAW 2720 Legal Environment of Business FIN 1820 Personal Finance HIST 1350 or 1351 US History General Education Semester Total  | Hrs. 3 3 3 3 15     |
| Junior Year - First Semester MGT 3325 Business Communication EDSP 2100 Educ. of the Exceptional Child or PSY 4200 Psychology of Exceptional Children MKT 3400 Principals of Marketing BE&O 4560 Information Design & Presentation General Education Semester Total          | Hrs. 3 2 3 6-7 17-18   | Junior Year - Second Semester INST 4330 Technology Troubleshooting for Ed EDCI 4210 The Teaching of Read. in the Sec. BE&O 4280 Implementing Voc. Bus. Educ.** BE&O 4550 Administrative Support Mgmt. PSY 4230 Psychology of Adolescence General Education Semester Total | Hrs. 2 2 3 3 3 3 16 |
| Senior Year - First Semester EDCI 4300 Education Measures & Evaluation EDCI 3500 Behavioral Management EDCI 3550 Practicum in Secondary Instruction BE&O 4210 Method Teaching Business General Education Free Choice Electives*** Semester Total                            | Hrs. 2 3 1 3 6 18      | Senior Year - Second Semester<br>EDCI 4595 Student Teaching I<br>ICAP 4468 Student Teaching II<br>BE&O 4220 Secondary Field Experience II<br>BE&O 4230 Methods of Teaching Business<br>Semester Total   | Hrs. 5 4 1 2 12     |

## Business Education Functional Major, B.S. in Ed. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*BE&O 4280 is required for vocational certification.
- \*\*\*Recommended Electives: ACCT 2102 Principles in Managerial Accounting, BLAW 3721 Law of Business Transactions.
- This listing shows planned changes in the program to reflect new state certification requirements. Course substitutions will be made for BE&O 1510 to bring the current catalog program in line with these changes.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Chemistry Major, B.A. Degree

1/2005

This is the recommended program of study for the Chemistry Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Chemistry and Physics and for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I CHEM 1131 Gen Chemistry I Modern Language Requirement** MATH 1151 Calculus & Analytic Geometry I Semester Total AE 1400 Student Development Seminar* | Hrs. 3 5 3 7 16        | Freshman Year -Second Semester ENGL 1030 Composition II CHEM 1132 General Chemistry II Modern Language Requirement** General Education Semester Total                                  | Hrs.<br>3<br>5<br>3<br>6<br><b>17</b> |
|---|------------------------|--|---------------------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 CHEM 3341 Organic Chemistry I Coursework in Minor Modern Language Requirement** General Education Semester Total                             | Hrs. 3 4 3 3 16        | Sophomore Year - Second Semester<br>CHEM 3342 Organic Chemistry II<br>CHEM 3212 Quantitative Analysis****<br>General Education<br>Semester Total                                       | Hrs.<br>4<br>3<br>9<br><b>16</b>      |
| Junior Year - First Semester<br>CHEM 3111 Intermediate Inorganic Chemistry***<br>Coursework in Minor<br>Free Choice Electives<br>General Education<br>Semester Total  | Hrs. 4 3 4 3 14        | Junior Year - Second Semester<br>CHEM 3500 Elements of Physical Chemistry<br>CHEM 3920 Communication Skills in Chemistry<br>Coursework in Minor<br>General Education<br>Semester Total | Hrs. 4 2 6 3 <b>15</b>                |
| Senior Year - First Semester CHEM 4421 Biochemistry General Education Coursework in Minor Free Choice Electives Semester Total  | Hrs. 4 3 6 3 <b>15</b> | Senior Year - Second Semester<br>CHEM Elective<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total   | Hrs.<br>3-4<br>3<br>8-9<br><b>15</b>  |

# Chemistry Major, B.A. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on 2 modern language courses and ENGL 2220 for General Education Literature.
- \*\*\*CHEM 3111 offered odd Fall semesters (2005, 2007, etc.) and should be taken accordingly.
- \*\*\*\*CHEM 3212 is also offered during odd summers (2005, 2007, etc.).
- CHEM 4111 is offered even-numbered years and CHEM 4313 odd-numbered years.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Chemistry Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Chemistry Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Chemistry and Physics for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  CHEM 1131 General Chemistry I  MATH 1151 Calc. & Analytical Geometry I  PHYS 1101* or General Education  Semester Total  AE 1400 Student Development Seminar** | Hrs. 3 5 5 1-4 16-17                  | Freshman Year -Second Semester  ENGL 1030 Composition II  MATH 1152 Calc & Analytical Geometry II  CHEM 1132 General Chemistry II  PHYS 1102 or PHYS 2121 University Physics I*  Semester Total | Hrs. 3 5 5 4-5 17-18             |
|---|---------------------------------------|---|----------------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 CHEM 3341 Organic Chemistry I PHYS 2122 University Physics II or Elective General Education Semester Total   | Hrs.<br>3<br>4<br>5<br>3<br><b>15</b> | Sophomore Year - Second Semester<br>CHEM 3342 Organic Chemistry II<br>CHEM 3212 Quantitative Analysis****<br>General Education<br>Semester Total  | Hrs.<br>4<br>3<br>9<br><b>16</b> |
| Junior Year - First Semester<br>CHEM 3111 Intermediate Inorganic Chemistry***<br>General Education<br>Free Choice Elective<br>Semester Total  | Hrs.<br>4<br>9<br>3<br><b>16</b>      | Junior Year - Second Semester CHEM 4231 Instrumental Analysis*** CHEM 3920 Communication Skills in Chemistry General Education Free Choice Electives Semester Total                             | Hrs. 4 2 5 4 <b>15</b>           |
| Senior Year - First Semester CHEM 4421 Biochemistry CHEM 4910 Research in Chemistry CHEM 4531 Physical Chemistry I*** General Education Semester Total  | Hrs. 4 2 4 3 13                       | Senior Year - Second Semester<br>CHEM 4910 Research in Chemistry<br>CHEM 4532 Physical Chemistry II***<br>Free Choice Electives<br>Semester Total   | Hrs.<br>2<br>4<br>9<br><b>15</b> |

## Chemistry Functional Major, B.S. Degree -124 hours

- \*Students whose high school preparation is inadequate should take PHYS 1101 during their first year at Central Missouri. The department highly recommends PHYS 2121.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*\*Alternate-year courses: 5th semester begin 3111 or 4531; 6th semester take 4231 (4111 also offered as an elective) or 4532 (4313 also offered as an elective).
- \*\*\*\* CHEM 3212 is also offered during odd summers (2005, 2007...)
- For ACS-CPT approved degree take either CHEM 4111 or CHEM 4313.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Chemistry Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Biology Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your This is the recommended program of study for the Chemistry Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Chemistry and Physics for further information or guidance.

| Freshman Year - First Semester CHEM 1131 General Chemistry I BIOL 1111 Biology I ENGL 1020 Composition I T&OE 2000 Technology & Change Semester Total AE 1400 Student Development Seminar*                         | Hrs 5 4 3 15          | Freshman Year - Second Semester CHEM 1132 General Chemistry II BIOL 1005 Intro. to Environ. Sciences ENGL 1030 Composition II HIST 1350 or 1351 US History COMM 1000 Public Speaking Semester Total                      | Hrs 5 3 3 3 3 17                |
|--|-----------------------|--|---------------------------------|
| Sophomore Year - First Semester CHEM 3341 Organic Chemistry I MATH 1150 or MATH 1151 EDCI 2100 Found. of Ed. & Field Experience EDCI 2240 Educational Psychology General Education Semester Total                  | Hrs 4 4-5 3 3 2 16-17 | Sophomore Year - Second Semester PHYS 1101 or PHYS 2121 CHEM 3212 Quantitative Analysis*** EASC 1004 Intro to the Sciences: Geology PSY 4200 or EDSP 2100 Exceptional Child POLS 1510 American Government Semester Total | Hrs 4-5 3 4 2 3 16-17           |
| Junior Year - First Semester<br>CHEM 3111 Inter.Inorganic Chemistry**<br>Major Elective****<br>PSY 4230 Psychology of Adolescence<br>General Education<br>Semester Total   | Hrs 4 3-4 3 6 16-17   | Junior Year - Second Semester CHEM 3500 Elements of Physical Chemistry CHEM 4900 Chem. Research for Teachers EDCI 4210 Tchg. of Reading in Sec. Schools Major Elective**** General Education Semester Total              | Hrs 4 1-2 2 3-4 6 16-18         |
| Senior Year - First Semester CHEM 4421 Biochemistry** Major Elective**** EDCI 3500 Sec. Teaching & Behavioral Mgt. EDCI 3550 Practicum in Sec. Instruction EDCI 4300 Educ. Measurement & Evaluation Semester Total | Hrs 4 3-4 3 1 2       | Senior Year - Second Semester<br>CHEM 4011 Methods of Teaching Physical Sci.<br>EDCI 4595 Student Teaching Secondary I<br>ICAP 4468 Student Teaching Secondary II<br>Semester Total                                      | Hrs<br>3<br>5<br>4<br><b>12</b> |

## Chemistry Functional Major, B.S. in Ed. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*CHEM 3111 is offered during odd falls (2005, 2007, etc.) and should be taken accordingly.
- \*\*\*CHEM 3212 is also offered during odd summers (2005, 2007...)
- \*\*\*\*See catalog for major electives and Unified Science Certification requirements.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Child & Family Development Major (Child Development Option), B.S. Degree

1/2005

This is the recommended program of study for the Child Development Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Curriculum and Instruction for information or guidance.

| Freshman Year - ENGL 1020 Composition I General Education Math CFD 1010 Individual & Family Relationships PSY 1100 General Psychology AE 1450 Valuing Differences Semester Total AE 1400 Student Development Seminar*                                   | Hrs. 3 3 3 1 1            | Freshman Year - ENGL 1030 Composition II General Education Science CFD 1220 Child Development EDCI 2110 World Diversity & America SOC 1800 General Sociology Semester Total   | Hrs. 3 3-4 3 3 15-16     |
|---|---------------------------|---|--------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 U.S. History** CFD 1230 Observation of Children CFD 2230 Practicum in Child Development EDCI 2850 Dev. & Learning Trough Play D&N 2310 Early Childhood Nut. & Health General Education Semester Total | Hrs. 3 2 1 3 2 1 3 1 4    | Sophomore Year - Second Semester<br>EDCI 2310 Computer Tech. in Education<br>CD 2000 Bases of Speech & Language<br>ART 3910 Art for Elementary<br>PE 2410 Movement Skills & Act. for Primary<br>General Education<br>SOC 2805 Intro. to Social Research<br>Semester Total | Hrs. 2 2 2 2 6-7 3 17-18 |
| Junior Year - First Semester CFD 2240 Field Exp. in Early Childhood EDSP 2100 Ed. of the Exceptional Child CFD 3230 Family Systems & Life Span Dev. FACS 2110 Consumer Problems General Education Free Choice Electives Semester Total                  | Hrs. 3 2 3 3 3 17         | Junior Year - Second Semester CFD 3240 Parent-Child Interaction EDSP 3150 Community & Family Resources EDCI 3410 Children's Literature MUS 3301 Music for Elementary General Education Free Choice Electives Semester Total   | Hrs. 3 2 2 2 3 3 15      |
| Summer Semester CFD 4710 Internship*** Semester Total   | Hrs.<br>3-6<br><b>3-6</b> |   |                          |
| Senior Year - First Semester CFD 3222 Early Childhood CFD 3250 Org. & Admin. of Prog. for Child. CFD 4250 Spec. Prob. in Family & Ind. Dev. General Education Free Choice Electives**** Semester Total  | Hrs. 3 3 3 3 1 5          | Senior Year - Second Semester<br>CFD 4745 Senior Seminar<br>CFD 4250 Spec. Prob. in Family & Ind. Dev.<br>Free Choice Electives****<br>Semester Total   | Hrs. 3 3 10 16           |

## Child Development Functional Major, B.S. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*In addition to the Social Science requirement, students must also fulfill Missouri Legislative requirement and HIST prefix requirements. Since the Cultural Interaction requirement is specified in this major, students are encouraged to select HIST 1350 or 1351 in Social Sciences.
- \*\*\*Internship is to be completed during the summer semester before the Senior year.
- \*\*\*\*Students will need to select a certain number of 3000-4000 level free electives in order to reach the minimum 40 hours required for a degree.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Child and Family Development Functional Major (Family Option), B.S. Degree

1/2005

This is the recommended program of study for the Child and Family Development Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Curriculum and Instruction for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I General Education Math CFD 1010 Individual & Family Relations PSY 1100 General Psychology AE 1450 Valuing Differences Semester Total AE 1400 Student Development Seminar* | Hrs. 3 3 3 1 13                | Freshman Year - Second Semester ENGL 1030 Composition II General Education Science CFD 1220 Child Development EDCI 2110 World Diversity & America SOC 1800 General Sociology Semester Total  | Hrs. 3 3-4 3 3 15-16  |
|--|--------------------------------|--|-----------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 U.S. History** CFD 1230 Observation of Children CFD 2230 Practicum in Child Development D&N 2310 Early Childhood Nut. & Health General Education Semester Total                | Hrs. 3 2 1 2 6 <b>14</b>       | Sophomore Year - Second Semester<br>EDCI 2310 Computer Tech. in Education<br>WS 2000 Race, Class, and Gender<br>SOC 1830 Social Problems<br>SOC 2805 Introduction to Social Research<br>General Education<br>Free Choice Electives<br>Semester Total | Hrs. 2 3 3 3 3 3 3 16 |
| Junior Year - First Semester CFD 2240 Field Experience EDSP 2100 Ed. of the Exceptional Child CFD 3230 Family Systems & Life Span Dev. FACS 2110 Consumer Problems General Education Semester Total                              | Hrs. 3 2 3 3 6 17              | Junior Year - Second Semester<br>CFD 3240 Parent-Child Interaction<br>EDSP 3150 Community & Family Resources<br>FACS 3120 Family Resource Management<br>NUR 4030 Human Sexuality<br>General Education<br>Semester Total                              | Hrs. 3 2 3 2 6 16     |
| Summer Semester before Senior Year<br>CFD 4710 Internship***<br>Semester Total   | Hrs.<br>3-6<br><b>3-6</b>      |  |                       |
| Senior Year - First Semester  NUR 4020 Grief & Loss  General Education  CFD 4250 Spec. Prob. in Family & Ind. Dev.  Free Choice Electives ****  Semester Total   | Hrs.<br>2<br>3<br>3<br>9<br>14 | Senior Year - Second Semester CFD 4745 Senior Seminar CFD 4250 Spec. Prob. in Family & Ind. Dev. SOWK 2600 Intro. to Soc. Wel. & Soc. Work Free Choice Electives **** Semester Total   | Hrs. 3 3 6 15         |

## Child & Family Development Functional Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice
- \*\*In addition to the Social Science requirement, students must also fulfill Missouri Legislative requirement and HIST prefix requirements. Since the Cultural Interaction requirement is specified in this major, students are encouraged to select HIST 1350 or 1351 in Social Sciences.
- \*\*\*Internship is to be completed during the summer semester before the Senior year.
- \*\*\*\*Students will need to select a certain number of 3000-4000 level free electives in order to reach the minimum 40 hours required for a degree.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Commercial Art Functional Major (Graphic Design Option), B.F.A. Degree

1/2005

This is the recommended program of study for the Commercial Art Functional Major (Graphic Design Option), B.F.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Art for further information and guidance on pre-requisites and required course sequence in your area of emphasis.

| Freshman Year - First Semester ART 1110 Drawing I ART 1315 Design I ART 1800 Ideas & the Visual Arts ENGL 1020 Composition I General Education Math Semester Total AE 1400 Student Development Seminar*  | Hrs. 3 3 3 3 1 5               | Freshman Year - Second Semester ART 1120 Drawing II ART 1325 Design II ART 2511 Painting I GRAP 1010 Intro to Desktop Pub. & Printing ENGL 1030 Composition II Semester Total  | Hrs. 3 3 3 3 1 5                      |
|--|--------------------------------|--|---------------------------------------|
| Sophomore Year - First Semester ART 2335 Design III ART 2610 Introduction to Commercial Art Required course from area of emphasis ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring) HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs. 3 3 3 3 15                | Sophomore Year - Second Semester ART 2710 Introduction to Printmaking Required course from area of emphasis ART 1825 Art History Survey II General Education Science General Education Semester Total                      | Hrs. 3 3 3 3-4 5-6 18                 |
| Junior Year - First Semester Required course from area of emphasis ART 2412 Ceramics I or ART 2420 Sculpture I ART 3510 Watercolor Elective from area of emphasis General Education Semester Total   | Hrs. 3 3 6 3 18                | Junior Year - Second Semester ART 4850 20th Cent .Art & Architect. (fall) or ART 4860 Contemp. Art & Design (spring) Required course from area of emphasis Elective from area of emphasis General Education Semester Total | Hrs. 3 3 6 15                         |
| Senior Year - First Semester<br>Required course from area of emphasis<br>ART Elective<br>Electives from area of emphasis<br>General Education<br>Semester Total  | Hrs.<br>3<br>3<br>6<br>6<br>18 | Senior Year - Second Semester ART 4020 Studio Seminar Required course from area of emphasis ICAP 4221 Artists in Contemporary Society General Education Semester Total   | Hrs.<br>3<br>3<br>3<br>6<br><b>15</b> |

# Commercial Art Major (Graphic Design Option), B.F.A. Degree -129 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Commercial Art Functional Major (Illustration Option), B.F.A. Degree

1/2005

This is the recommended program of study for the Commercial Art Functional Major (Illustration Option), B.F.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Art for further information and guidance on pre-requisites and required course sequence in your area of emphasis.

| Freshman Year - First Semester ART 1110 Drawing I ART 1315 Design I ART 1800 Ideas & the Visual Arts ENGL 1020 Composition I General Education Math Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 3 15 | Freshman Year - Second Semester ART 1120 Drawing II ART 1325 Design II Elective from area of emphasis ENGL 1030 Composition II General Education Semester Total   | Hrs. 3 3 3 3 3 15 |
|---|-------------------|---|-------------------|
| Sophomore Year - First Semester ART 2335 Design III Required course from area of emphasis ART 2610 Introduction to Commercial Art ART 1815 Art History Survey I (fall ) or ART 1835 Survey of Non-West Art (spring) HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs. 3 3 3 3 15   | Sophomore Year - Second Semester ART 2511 Painting I Required course from area of emphasis ART 2710 Introduction to Printmaking ART 1825 Art History Survey II General Education science General Education Semester Total | Hrs. 3 3 3 3 3 18 |
| Junior Year - First Semester<br>Required courses in area of emphasis<br>ART 4850 20th Century Art and Arch. (fall) or<br>ART 4860 Contemp. Art & Design (spring)<br>General Education<br>Semester Total   | Hrs. 9 3 3 15     | Junior Year - Second Semester Required course from area of emphasis ART 3510 Watercolor ART 2412 Ceramics or ART 2420 Sculpture General Education Semester Total  | Hrs. 3 3 6 15     |
| Senior Year - First Semester Required course from area of emphasis Electives from area of emphasis Art Elective General Education Semester Total  | Hrs. 3 6 3 6 18   | Senior Year - Second Semester Required course from area of emphasis ART 4020 Studio Seminar Elective from area of emphasis ICAP 4221 Artists in Contemp. Society General Education Semester Total                         | Hrs. 3 3 3 6 18   |

## Commercial Art Functional Major (Illustration Option), B.F.A. Degree - 129 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Communication Major, B.A. Degree

1/2005

This is the recommended program of study for the Communication Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year – First Semester  ENGL 1020 Composition I  COMM 1000 Public Speaking  COMM 1100 Introduction to Communication  COMM 1110 Communication Skills Lab  COMM 1200 Intro. to Mass Communication  Modern Language Requirement*  Semester Total  | Hrs 3 3 1 1 3 3 14      | Freshman Year - Second Semester  ENGL 1030 Composition II  General Education Math  COMM 2100 Intro. to Communication Theory  COMM 2110 Intro. to Comm. Theory Lab  General Education  Modern Language Requirement*  Semester Total                  | Hrs 3 3 1 3 1 3 1 6         |
|--|-------------------------|---|-----------------------------|
| Sophomore Year – First Semester Gen Ed Science HIST 1350 or HIST 1351 or POLS 1510 COMM 2325 Improving Listening Skills COMM 1000-2000-level Elective from: Production, Survey, or Classical Coursework in Minor Modern Language Requirement* Semester Total   | Hrs 3-4 3 2 3 17-18     | Sophomore Year - Second Semester COMM 3100 Comm. Research Methods COMM 3110 Resource and Methods Lab General Education ANTH 1820 or GEOG 3201 or WS 2000 COMM 3000-Level Elective from: Criticism, Production, Survey, or Relational Semester Total | Hrs 3 1 5 3 2-3 14-15       |
| Junior Year – First Semester COMM 3000 Film Appreciation COMM 2000-4000-Level Elective from: Criticism, Relational, or Classical COMM 3000-4000-level Elective from: Criticism, Production, Survey, Relational, or Classical COMM 3200 or COMM 3390 Coursework in Minor General Education Semester Total | Hrs 3 3 2-3 1 3 3 15-16 | Junior Year - Second Semester COMM 3010 Interpersonal Communication COMM 3327 Improving Interviewing Skills Dept approved Upper-Level Elective in COMM Coursework in Minor General Education Semester Total   | Hrs 3 2 3 6 3 17            |
| Senior Year – First Semester IGEN 4224 or 3232 or 3224 COMM 4335 Gender Communication COMM 4350 Contemp. Public Communication Coursework in Minor Semester Total   | Hrs 3 3 2 6 14          | Senior Year – Second Semester COMM 3000-4000-Level Elective from: Criticism, Production, Survey, Relational, or Classical Dept approved Upper-level Elective in COMM Coursework in Minor Upper-level Free Choice Electives Semester Total           | 2-3<br>3<br>3<br>5<br>13-14 |

## Communication Major, B.A. Degree - 124 hours

- \*Refer to the Bachelor's Degree Requirements section for fulfillment options of the B.A. Modern Language requirements. This plan is based on 9 hours of modern language.
- This plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Computer-Aided Drafting & Design Technology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Computer-Aided Drafting & Design Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Graphic Imaging & Design Technology for further information or guidance.

| Freshman Year - First Semester GRAP 1100 Orientation of Drafting (Fall only) GRAP 1110 Fundamentals of Drafting General Education ENGL 1020 Composition I MATH 1111 College Algebra Semester Total                         | Hrs. 1 3 6 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Freshman Year - Second Semester GRAP 2170 Intro Computer-Aided Drafting GRAP 1120 Machine Drafting ENGL 1030 Composition II General Education Science non-lab (Chem 1103, Biol 1003 or 1005) General Education Semester Total   | Hrs. 3 3 3 3 15                  |
|--|--|---|----------------------------------|
| Sophomore Year - First Semester<br>GRAP 2130 Technical Illustration<br>GRAP 2150 Descr. Geometry for Eng. Tech.<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Math 1112 College Trigonometry<br>Semester Total | Hrs. 3 3 6 2 17                              | Sophomore Year - Second Semester<br>GRAP 2160 Structural Drafting<br>CMGT 2020 Mechanics of Materials<br>General Education<br>Semester Total  | Hrs.<br>3<br>3<br>9<br><b>15</b> |
| Junior Year - First Semester<br>GRAP 3150 Civil Drafting<br>GRAP 3170 Computer Drafting Systems<br>PHYS 1104 Intro to Sciences: Physics<br>IGEN 3116 Creative Problem Solving<br>General Education<br>Semester Total       | Hrs. 3 4 3 4 3 16                            | Junior Year - Second Semester<br>GRAP 3175 Managing Comp. Apps. For Draft.<br>Electives for Major*<br>MGT 3310 Principles of Management or<br>INDM 4210 Industrial Management**<br>Free Choice Elective*<br>Semester Total      | Hrs. 3 6 3 3 15                  |
| Senior Year - First Semester<br>GRAP 4170 Computer-Aided Drafting Design<br>Elective for Major*<br>T&OE 3060 Technical Report Writing<br>Free Choice Electives*<br>General Education<br>Semester Total                     | Hrs. 3 2 6 3 <b>17</b>                       | Senior Year - Second Semester MMGT 2530 Machine Tool Technology Electives for Major* GRAP 4180 Industrial Design HRM 3920 Human Resource Management or INDM 4260 Organizational Dynamics** Free Choice Elective* Semester Total | Hrs. 3 6 3 1 16                  |

# Computer-Aided Drafting & Design Technology Functional Major, **B.S. Degree - 124 hours**

- \*Forty hours of upper level credit must be earned to meet graduation requirements. Of the 26 hours of major electives and free choice electives, at least 14 must be upper level coursework.
- \*\*Students either take MGT 3310 and HRM 3920 OR INDM 4210 and INDM 4260.
- Summer Courses: GRAP 1110, GRAP 3160, IGEN 3116, GRAP 4500, General Education courses
- Required electives from major 15 hours
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Computer Information Systems Functional Major, B.S.B.A. Degree

1/2005

This is the recommended program of study for the Computer Information Systems Functional Major, B.S.B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Computer Information Systems for further information or guidance.

| Freshman Year - First Semester MATH 1111 College Algebra* PSY 1100 General Psychology or SOC 1800 General Sociology BE&O 1210 Essentials of Managing Info.* ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar** | Hrs. 3 3 2 3 14       | Freshman Year - Second Semester CIS 1605 Business Application Software ECON 1010 Principles of Macroeconomics* ENGL 1030 Composition II COMM 1000 Public Speaking General Education Semester Total  | Hrs. 2 3 3 6 17   |
|--|-----------------------|---|-------------------|
| Sophomore Year - First Semester ACCT 2101 Principles of Financial Accounting* ECON 1011 Principles of Microeconomics* CIS 2605 Visual Basic General Education Science HIST 1350 or 1351 or POLS 1510 Semester Total Note: Apply for B.S.B.A. Admission*    | Hrs. 3 3 3 3 3-4 3 16 | Sophomore Year - Second Semester ACCT 2102 Principles of Managerial Acct* BLAW 2720 Legal Environment of Business* FIN 2801 Business Statistics I* CIS 2615 Introduction to JAVA General Education Semester Total Note: Complete all B.S.B.A. Admission requirements* | Hrs. 3 3 3 3 1 15 |
| Junior Year - First Semester CIS 2655 Prin. of Data Comm. & LAN MGT 3315 Management of Organizations FIN 3801 Business Statistics II CIS 3650 Database Management Systems General Education Non-Business Elective Semester Total                           | Hrs. 3 3 3 3 1 16     | Junior Year - Second Semester MKT 3405 Marketing Policy CIS 3630 Management Information Systems MGT 3325 Business Communications CIS concentration course CIS 3660 Analysis and Design Non-Business Elective Semester Total   | Hrs. 3 3 3 3 1 1  |
| Senior Year - First Semester CIS concentration course FIN 3850 Principles of Finance MGT 3360 Production/Operations MGT CIS Elective (or software concent. course) General Education Semester Total  | Hrs. 3 3 3 3 15       | Senior Year - Second Semester CIS 4690 Sys Architecture and Development ICAP 4357 Organization Policy and Strategy CIS Elective (or network concentration course) Non-Business Electives Semester Total   | Hrs. 3 3 6 15     |

# Computer Information Systems Major, B.S.B.A. Degree - 124 Hours

- \*All B.S.B.A. majors in the Harmon College of Business Administration must complete a preadmission sequence of courses, with a 2.25 GPA overall, at Central Missouri, and in these specific courses, before admission to their major. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE 1400 (1 hr.) is highly recommended for academic success. AE 1400 counts as a free choice, non-business elective.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- A 2.25 GPA on all coursework is required for graduation.
- See current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Computer Science and Mathematics Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Computer Science and Mathematics Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Mathematics and Computer Science for further information or guidance:

| Freshman Year - First Semester MATH 1151 Calculus & Analytic Geom I CS 1100 Introduction to Computing I ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*         | Hrs. 5 3 3 1 14   | Freshman Year - Second Semester MATH 1152 Calculus & Analytic Geometry II CS 1110 Introduction to Computing II ENGL 1030 Composition II General Education Semester Total                 | Hrs. 5 3 3 6 17          |
|---|-------------------|--|--------------------------|
| Sophomore Year - First Semester MATH 2153 Calculus & Analytic Geometry III MATH 2410 Discrete Mathematics CS 2200 Intro. Comp. Sys. & Organ** HIST 1350 or 1351 or POLS 1510 General Education Semester Total | Hrs. 3 3 2 3 6 17 | Sophomore Year - Second Semester MATH 3710 Linear Algebra CS 2300 Data Structures*** CS 3310 Introduction to Combinatorics*** General Education Science General Education Semester Total | Hrs. 3 3 3 3 3-4 3 15-16 |
| Junior Year - First Semester MATH 3311 Introduction to Math Statistics** CS 3100 Programming Languages** CS 4400 Numerical Analysis I** General Education Semester Total                                      | Hrs. 3 3 6 15     | Junior Year - Second Semester<br>CS 4500 Operating Systems***<br>CS 4410 Operations Research***<br>Approved Elective in Major<br>General Education<br>Semester Total                     | Hrs. 3 3 3 6 15          |
| Senior Year - First Semester CS 4600 Database Theory and Apps.** CS 4900 Compiler Construction** Approved Elective in Major Free Choice Electives Semester Total  | Hrs. 3 3 3 6 15   | Senior Year - Second Semester<br>ICAP 4245 - Comp. Sci. Capstone Exp.***<br>Approved Elective in Major<br>Free Choice Electives<br>Semester Total  | Hrs. 3 3 9 15            |

# Computer Science and Mathematics Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Fall-only course.
- \*\*\*Spring-only course
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Construction Management Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Construction Management Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester CMGT 1300 Intro. to Construction Mgmt. CMGT 1301 Seminar GRAP 1110 Fundamentals of Drafting MATH 1111 College Algebra EASC 1004 Intro to Science: Geology ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar* | Hrs. 2 .5 3 3 4 3 15.5 | Freshman Year - Second Semester CMGT 1301 Seminar CMGT 2310 Construction Techniques MATH 1112 Trigonometry BE&O 1210 Essentials Of Managing Info. PHYS 1103 Physics ENGL 1030 Composition II General Education Semester Total | Hrs5 3 2 2 3 3 3 3 16.5    |
|--|------------------------|---|----------------------------|
| Sophomore Year - First Semester<br>CMGT 1301 Seminar<br>CMGT 2020 Mechanics of Material<br>CMGT 2325 Project Cost Estimating   | <b>Hrs.</b><br>.5<br>3 | Sophomore Year - Second Semester<br>CMGT 1301 Seminar<br>MMGT 2040 Engineering Material Science<br>GRAP 3160 Arch Drawing or GRAP 3150 Civil  | <b>Hrs.</b><br>.5<br>4     |
| CMGT 2340 Surveying & Construction Layout<br>MATH 1131 Calculus for Business & Economics<br>ACCT 2101 Principles of Financial Accounting<br>Semester Total   | 3<br>3<br>1 <b>5.5</b> | Drafting <b>or</b> GRAP 2160 Structural Drafting ECON 1010 Principles of Macroeconomics <b>HIST 1350 or 1350 or POLS 1510</b> EASC 2100 Engineering Geology <b>Semester Total</b>   | 3<br>3<br>4<br><b>17.5</b> |
| Junior Year - First Semester<br>MGT 3310 Principles of Management  | <b>Hrs.</b><br>3       | Junior Year - Second Semester<br>CMGT 3320 Principles of Construction Mgmt  | <b>Hrs.</b><br>3<br>3      |
| FIN 2801 Statistics for Business CMGT 3355 Scheduling for Mfg. & Construction CMGT 3330 Building Codes & Code Adm. General Education   | 3<br>3<br>3            | CMGT 4380 Heavy Equipment CMGT 3020 Applied Strength of Materials ACCT 2102 Principles of Managerial Acct. or MKT 3400 Principles of Marketing or   | 3                          |
| CMGT 3355 Scheduling for Mfg. & Construction   | 3                      | CMGT 3020 Applied Strength of Materials   |                            |
| CMGT 3355 Scheduling for Mfg. & Construction CMGT 3330 Building Codes & Code Adm. General Education  | 3<br>3<br>3            | CMGT 3020 Applied Strength of Materials<br>ACCT 2102 Principles of Managerial Acct. <b>or</b><br>MKT 3400 Principles of Marketing <b>or</b><br>BLAW 2720 Legal Environment of Business  | 3                          |

### Construction Management Functional Major, B.S. Degree - 132 hrs

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective; however, this program does not require free choice electives.
- \*\*T&OE 3022 Internship in Technology should be done during the summer of junior/senior year.
- General education courses (18 s.h. total) required by Construction Management Program are incorporated into the above plan.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Cooperative Engineering 3-2, B.A. Degree

1/2005

This is the recommended program of study for the Cooperative Engineering 3-2, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Physics for further information or guidance.

| Freshman Year - First Semester*          | Hrs | Freshman Year -Second Semester         | Hrs |
|--|-----|--|-----|
| CHEM 1131 General Chem. I                | 5   | PHYS 2121 University Physics I         | 5   |
| MATH 1151 Calc. & Analytic Geom.I        | 5   | CHEM 1132 General Chemistry II         | 5   |
| ENGL 1020 Composition I                  | 3   | MATH 1152 Calc. & Analytic Geom. II    | 5   |
| General Education                        | 3   | General Education                      | 2   |
| Semester Total                           | 16  | Semester Total                         | 17  |
| AE 1400 Student Development Seminar**    |     |  |     |
| Sophomore Year - First Semester          | Hrs | Sophomore Year - Second Semester       | Hrs |
| PHYS 2122 University Physics II          | 5   | PHYS 4212 Analytical Mechanics II      | 3   |
| PHYS 3211 Analytical Mechanics I         | 2   | COMM 1000 Public Speaking              | 3   |
| ENGL 1030 Composition II                 | 3   | ECON 1010 Principles of Macroeconomics | 3   |
| MATH 2153 Calc & Analytical Geometry III | 3   | HIST 1350 or 1351 or POLS 1510         | 3   |
| GRAP 1110 Fundamentals of Drafting       | 3   | General Education                      | 3   |
| Semester Total                           | 16  | Modern Languages requirement ***       | 3   |
|  |     | Semester Total                         | 18  |
| Junior Year - First Semester             | Hrs | Junior Year - Second Semester          | Hrs |
| CS 1100 Introduction to Computing I      | 3   | PHYS 3012 Electric Measurements Lab    | 2   |
| ECON 1011 Principles of Microeconomics   | 3   | PHYS 3311 Electric Circuit Theory      | 3   |
| General Education                        | 6   | MATH 3151 Differential Equations       | 3   |
| Modern Languages Requirement ***         | 3   | PHYS 4411 Thermodynamics               | 3   |
| Semester Total                           | 15  | General Education                      | 6   |
|  |     | Semester Total                         | 17  |

### Cooperative Engineering 3-2, B.A. Degree – 96 hours

- \*Students whose high school preparation is inadequate should take PHYS 1101 during their first year at Central.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*\*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on 2 modern language courses and ENGL 2220 for General Education Literature.
- Central Missouri State University, through the Department of Chemistry and Physics, offers a Cooperative Engineering 3-2 program in cooperation with the University of Missouri-Rolla, the University of Missouri-Columbia, and the University of Kansas. This program leads to a B.S. in Engineering from the cooperating institution and a B.A. degree in Physics from Central. Any student electing to enter the five-year program must apply for a degree audit at the close of the sophomore year indicating, upon application, plans to complete the cooperative plan at another institution and name the institution. For details, consult the Chair of the Chemistry and Physics Department. For the first three years, students should complete the above program.
- Please Note: To receive your physics degree from Central, you must notify the Registrar's Office upon graduation from your engineering institution. At that time, we will process your physics degree certificate.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Corporate Communication Major, B.S. Degree

1/2005

This is the recommended program of study for the Corporate Communication Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  COMM 1000 Public Speaking  COMM 1100 Introduction to Communication  COMM 1110 Communication Skills Lab  General Education  Semester Total   | Hrs. 3 3 1 1 6 14          | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math COMM 2330 Small Group Communication COMM 2380 Introduction to Organizational Com. General Education Semester Total   | Hrs. 3 3 3 3 1 5                 |
|--|----------------------------|---|----------------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 COMM 2100 Introduction Communication Theory COMM 2110 Introduction Comm. Theory Lab COMM 2325 Improving Listening Skills Coursework in Minor General Education Semester Total | Hrs. 3 3 1 2 3 3 <b>15</b> | Sophomore Year - Second Semester General Education Science COMM 2620 Public Relations COMM 3327 Improving Interview Skills ANTH 1820 or GEOG 3201 or WS 2000 Free Choice Electives Semester Total   | Hrs. 3-4 3 2 3 4 15-16           |
| Junior Year - First Semester COMM 3100 Com Research Methods COMM 3110 Resources & Methods Lab Coursework in Minor General Education Semester Total   | Hrs. 3 1 6 1               | Junior Year - Second Semester COMM 3010 Interpersonal Communication COMM 3730 Com Conflict Management COMM 4780 Advanced Theories of Org. Com. Coursework in Minor General Education Semester Total | Hrs. 3 3 3 3 15                  |
| Summer - Between Junior/Senior Year<br>COMM 4785 Internship<br>Semester Total  | Hrs.<br>3-6<br><b>3-6</b>  |   |                                  |
| Senior Year - First Semester COMM 3350 Prin of Presentational Speaking COMM 4475 New Media Technologies IGEN 3224 or 3232 or 4224 Coursework in Minor Upper-Level Elective Free Choice Elective Semester Total                               | Hrs. 3 2 3 3 3 2 16        | Senior Year - Second Semester<br>COMM 4783 Communication Training<br>Coursework in Minor<br>Upper-Level Elective<br>Semester Total  | Hrs.<br>3<br>6<br>5<br><b>14</b> |

# Corporate Communication Major, B.S. Degree -124 hours

- During the last semester of the senior year, all graduates must submit a portfolio following the internship and complete a knowledge exam. See department advisor for requirements.
- The plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Criminal Justice Major, B.S. Degree

1/2005

This is the recommended program of study for the Criminal Justice Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Criminal Justice for further information or guidance.

| Freshman Year - First Semester CJ 1000 Introduction to Criminal Justice ENGL 1020 Composition I General Education Math General Education Semester Total AE 1400 Student Development Seminar* | Hrs.<br>3<br>3<br>3<br>6<br><b>15</b> | Freshman Year - Second Semester CJ 3006 Corrections CJ 3010 Policing a Democratic Society ENGL 1030 Composition II General Education Science General Education Semester Total | Hrs. 3 3 3 3-4 3 15-16 |
|--|---------------------------------------|---|------------------------|
| Sophomore Year - First Semester CJ 2300 Criminal Law Criminal Justice Elective HIST 1350 or 1351 or POLS 1510 General Education Semester Total   | Hrs. 3 3 6 15                         | Sophomore Year - Second Semester CJ 2700 Introduction to Juvenile Justice CJ 3303 Criminal Procedure Coursework in Minor General Education Semester Total                     | Hrs. 3 3 6 15          |
| Junior Year – First semester<br>SOC 3890 Criminology<br>Criminal Justice Elective<br>Coursework in Minor<br>General Education<br>Semester Total  | Hrs. 3 3 6 6 18                       | Junior Year - Second Semester<br>Criminal Justice Elective<br>Coursework in Minor<br>General Education<br>Free Choice Elective<br>Semester Total                              | Hrs. 3 3 6 3 15        |
| Senior Year - First Semester<br>CJ 3600 Introduction to Criminal Justice Research<br>Criminal Justice Elective<br>Coursework in Minor<br>Free Choice Elective<br>Semester Total              | Hrs. 3 3 6 3 <b>15</b>                | Senior Year - Second Semester CJ 4605 Senior Seminar Criminal Justice Elective Coursework in Minor Free Choice Electives Semester Total                                       | Hrs. 3 6 3 4 16        |

# Criminal Justice Major, B.S. Degree- 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- Above degree plan is based on a 21 hour minor.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold**
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Dietetics Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Dietetics Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester D&N 1300 Introduction to Dietetics PSY 1100 General Psychology ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*              | Hrs. 1 3 9 16   | Freshman Year - Second Semester CHEM 1104 Intro. to Sciences: Chemistry SOC 1800 General Sociology General Education General Education Math ENGL 1030 Composition II Semester Total                     | Hrs. 4 3 3 3 3 16      |
|--|-----------------|---|------------------------|
| Sophomore Year - First Semester FOOD 2322 Food Preparation BIOL 2401 Anatomy & Physiology I ACCT 2100 Survey of Accounting HIST 1350 or 1351 or POLS 1510 General Education Semester Total               | Hrs. 3 4 3 3 16 | Sophomore Year - Second Semester<br>D&N 3340 Nutrition<br>BIOL 2402 Anatomy & Physiology II<br>General Education<br>Free Choice Electives<br>Semester Total   | Hrs. 3 4 6 3 <b>16</b> |
| Junior Year - First Semester FOOD 3332 Quantity Food Prod. & Service FOOD 3333 Food Systems Management BIOL 3611 Microbiology MGT 3310 Principles of Management Free Choice Electives Semester Total     | Hrs. 3 4 3 16   | Junior Year - Second Semester<br>FOOD 3334 Food Service Equip. & Purchasing<br>CHEM 2650 Elementary Organic & Biochem.<br>HRM 3920 Human Resource Management<br>Free Choice Electives<br>Semester Total | Hrs. 3 5 3 4 15        |
| Senior Year - First Semester D&N 4340 Advanced Nutrition D&N 4342 Diet Therapy D&N 4345 Senior Dietetics Seminar FOOD 4326 Experimental Foods PSY 4520 Stats. for the Behavioral Sciences Semester Total | Hrs. 3 3 3 3 15 | Senior Year - Second Semester<br>D&N 3350 Community Nutrition<br>D&N 4343 Medical Nutrition<br>General Education<br>Free Choice Electives<br>Semester Total   | Hrs. 3 3 6 15          |

# Dietetics Functional Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- Registration as a dietitian requires internship beyond BS degree. Fulfills the "Dietetic Program in Dietetics Academic Requirements" of the American Dietetic Association.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Early Childhood & Elementary Education Double Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Early Childhood and Elementary Education (Birth -Grade 6) Double Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Curriculum & Instruction for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  COMM 1000 Public Speaking  POLS 1510 American Government  ART 1800 Ideas & the Visual Arts or  MUS 1210 Experiencing Music  Mod. Lang Chin., French, German or Span.  Semester Total  AE 1400 Student Development Seminar*  | Hrs. 3 3 3 3 15       | Freshman Year - Second Semester ENGL 1030 Composition II HIST 1350 or 1351 U.S. History MATH 1620 Contemporary Math General Ed science (must have lab) T&OE 2000 Technology and Change or BE&O 1210 Essentials of Managing Info. Semester Total   | Hrs. 3 3 4 2-3 15-16    |
|--|-----------------------|---|-------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Ed. & Field Exp EDCI 2101 Models of Teaching EDCI 2240 Educational Psychology EDCI 2310 Computer/Technology in Education CFD 1220 Child Development MATH 1800 Intro. to Elementary & M.S. Math MATH 2801 Conc. & Meth. Elem. Math Semester Total                        | Hrs. 3 2 3 2 3 2 3 18 | Sophomore Year - Second Semester<br>Science for Teachers requirement<br>EDSP 2100 Ed. of Exceptional Child or<br>PSY 4200 Psych. of Exceptional Children<br>General Education Literature<br>PE 2410 Movement Skills & Activities<br>EDCI 3210 Meth. Reading Instruction.<br>EDCI 2830 Early Childhood Principles<br>CD 2000 Bases of Speech & Language<br>Semester Total            | Hrs. 3 2 3 2 3 2 18     |
| Junior Year - First Semester GEOG 2212 World Geography CFD 2230 Practicum in Child Development EDCI 2850 Development & Learning Thru Play EDCI 2110 World Diversity & America EDCI 3215 Teach. Reading in Content Fields EDCI 3220 Teaching Language Arts EDCI 3410 Children's Literature Semester Total                         | Hrs. 3 1 3 3 3 3 2 18 | Junior Year - Second Semester PSY 2220 Child Psychology or PSY 3220 Lifespan Development D&N 2310 Early Child Nutrition & Health CFD 3250 Org. & Adm Prog. Young Children HED 3310 Health Ed. in Elem. School EDSP 3150 Comm. & Fam. Resources EDSP 3151 Prac. Comm. & Fam. Resources EDCI 3420 Teach. Social Studies & Economics ART 3910 Art for Elementary School Semester Total | Hrs. 3 2 3 2 2 1 3 2 18 |
| Summer Semester After Junior Year<br>MUS 3301 Music for Elementary School<br>PE 3420 Elementary School PE Activities<br>EDSP 4370 Screen Diag. & Pres. Instr.<br>Semester Total  | Hrs. 2 2 3 7          |   |                         |
| Senior Year - First Semester IGEN 3468 Comm, School & Family Connect. EDCI 4350 Elem. Science Teaching Strategies EDCI 4220 Analysis & Corr. Reading Disab. EDCI 4250 Practicum in Reading EDCI 4400 Classroom Management & Interact. EDCI 4830 Early Childhood Curriculum HED 4330 First Aid & CPR for Education Semester Total | Hrs. 3 3 2 1 3 1 16   | Senior Year - Second Semester<br>EDCI 4493 Student Teaching ECE I<br>EDCI 4496 Student Teaching Elem. II<br>Semester Total  | Hrs.<br>6<br>6<br>12    |

# Early Childhood & Elem. Ed. Double Major, B.S. in Ed. Degree - 137 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Earth Science Major, B.A. Degree

1/2005

This is the recommended program of study for the Earth Science Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Earth Science for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I EASC 1004 Introduction to Science-Geology General Education Modern Language Requirement** Semester Total AE 1400 Student Development Seminar* | Hrs.<br>3<br>4<br>3<br>3<br>13 | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math EASC 2200 Historical Geology General Education Modern Language Requirement** Semester Total | Hrs. 3 3 4 3 16                  |
|--|--------------------------------|--|----------------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 EASC 3010 Environmental Geology General Education Modern Language Requirement** Semester Total  | Hrs. 3 3 5 14                  | Sophomore Year - Second Semester<br>EASC 3110 Structural Geology<br>General Education<br>Coursework in Minor<br>Semester Total   | <b>Hrs.</b> 4 9 3 <b>16</b>      |
| Junior Year - First Semester EASC Elective Coursework in Minor General Education Free Choice Elective Semester Total   | Hrs. 3 6 3 4 16                | Junior Year - Second Semester EASC 3320 or EASC 4301 EASC Elective Coursework in Minor General Education Semester Total  | Hrs. 4 4 6 3 <b>17</b>           |
| Senior Year - First Semester EASC 3501 Invertebrate Paleontology GEOG 4210 or GEOG 4220 or AGRI 2330 General Education Coursework in Minor Free Choice Electives Semester Total                      | Hrs. 4 3 3 3 3 4 16            | Senior Year - Second Semester<br>EASC Electives<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total  | Hrs.<br>6<br>3<br>7<br><b>16</b> |

### Earth Science Major, B.A. Degree- 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Refer to the catalog for the BA Degree Modern Languages requirements. This plan is based on 9 hours of modern language.
- This plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Earth Science Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Earth Science Functional Major, B.S. Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology and Earth Science for further information or guidance.

| Freshman Year - First Semester  BIOL 1004 Intro. to Science: Ecology  EASC 1004 Introduction to Science: Geology General Education  ENGL 1020 Composition I  Semester Total  AE 1400 Student Development Seminar *                 | Hrs 4 4 5 3 16   | Freshman Year -Second Semester EASC 2200 Historical Geology CHEM 1131 Chemistry I w/lab General Education Math ENGL 1030 Composition II Semester Total   | Hrs 4 5 3 15                       |
|--|------------------|--|------------------------------------|
| Sophomore Year - First Semester BIOL 1111 Biology I EASC 3320 Mineralogy or EASC 4301 Minerals & Rocks EDCI 2100 Foundations of Ed. and Field Exp. EDCI 2240 Educational Psychology T&OE 2000 - Technology & Change Semester Total | Hrs 4 4 3 3 3 17 | Sophomore Year - Second Semester PHYS 1101 Physics I w/lab or PHYS 1104 Intro to Science: Physics** or PHYS 2121 University Physics** POLS 1510 American Government General Education HIST 1350 or HIST 1351 U.S. History Semester Total | 4-5<br>3<br>6<br>3<br><b>16-17</b> |
| Junior Year - First Semester EASC 3010 Environment Geology Major Elective** EASC 3112 Astronomy EDSP 2100 Education of Exceptional Child or PSY 4200 Psychology of Exceptional Child General Education Semester Total              | Hrs 3 5 3 2 3 16 | Junior Year - Second Semester EASC 3111 Geomorphology PSY 4230 Psychology of Adolescence EDCI 4210 Tchng. Rdng. In Secondary EDCI 4300 Ed. Measurement & Evaluation Major Elective** General Education Semester Total                    | Hrs 3 3 2 2 3-4 3 16-17            |
| Senior Year - First Semester EASC 3501 Invert Paleontology EASC 3114 Meteorology EDCI 3500 Sec. Teaching & Behavioral Mgt. EDCI 3550 Practicum in Secondary Instruction Major Electives Semester Total                             | Hrs 4 3 1 4 15   | Senior Year - Second Semester<br>BIOL 4520 Sec. Field Exp. II<br>BIOL 4794 Methods of Teaching Science<br>EDCI 4595 Student Teaching Secondary I<br>ICAP 4468 Student Teaching Secondary II<br>Semester Total                            | Hrs 1 2 5 4 12                     |

# Earth Science Functional Major, B.S. in Ed. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Please see Catalog for Unified Science Certification requirements.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### **Economics Major, B.A. Degree**

1/2005

This is the recommended program of study for the Economics Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Economics and Finance for further information or guidance.

| Freshman Year - First Semester  MATH 1111 College Algebra  ECON 1010 Principles of Macroeconomics  ENGL 1020 Composition I  General Education  Semester Total  AE 1400 Student Development Seminar*        | <b>Hrs.</b> 3 3 3 6 <b>15</b> | Freshman Year - Second Semester ECON 1011 Principles of Microeconomics POLS 1510 American Government ENGL 1030 Composition II General Education Semester Total | Hrs. 3 3 6 15                         |
|--|-------------------------------|--|---------------------------------------|
| Sophomore Year - First Semester<br>ECON 2010 Orientation to Econ. (Fall only)<br>Modern Language Requirement**<br>Coursework for Minor<br>General Education Science<br>General Education<br>Semester Total | Hrs. 2 3 3 3-4 5-6 17         | Sophomore Year - Second Semester<br>Modern Language Requirement**<br>Free Choice Elective<br>Coursework for Minor<br>General Education<br>Semester Total       | Hrs. 3 3 6 15                         |
| Junior Year - First Semester ECON 3010 Intermediate Macroeconomics Modern Language requirement** Free Choice Elective Coursework for Minor Elective in Economics Semester Total                            | Hrs. 3 3 3 3 15               | Junior Year - Second Semester ECON 3030 Intermediate Microeconomics Coursework for Minor Electives in Economics Semester Total                                 | Hrs.<br>3<br>6<br>6<br>15             |
| Senior Year - First Semester<br>ECON 4000 Portfolio Assessment (Fall only)<br>Free Choice Elective<br>Coursework for Minor<br>Electives in Economics<br>Semester Total                                     | <b>Hrs.</b> 1 3 6 1           | Senior Year - Second Semester Coursework for Minor Free Choice Electives General Education Electives in Economics Semester Total                               | Hrs.<br>3<br>4<br>3<br>6<br><b>16</b> |

### **Economics Major, B.A. Degree - 124 Hours**

- \*AE 1400 (1 hr.) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Refer to the Bachelor's Degree Requirements section of the catalog for the B.A. Modern Language requirement. This plan is based on 9 hours of modern language.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- POLS 1510 is required for the major and fulfills the Missouri Constitution requirement. Students must also choose a history prefix course in Div. II Area B (HIST 1350 or 1351) or Area D (HIST 2402).
- The above plan is based on a 24-hour minor
- See current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Economics Major, B.S. Degree

1/2005

This is the recommended program of study for the Economics Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Economics and Finance for further information or guidance.

| Freshman Year - First Semester  MATH 1111 College Algebra  ECON 1010 Principles of Macroeconomics  ENGL 1020 Composition I  General Education  Semester Total  AE 1400 Student Development Seminar* | Hrs. 3 3 6 15       | Freshman Year - Second Semester ECON 1011 Principles of Microeconomics POLS 1510 American Government ENGL 1030 Composition II General Education Semester Total | Hrs. 3 3 3 6 15                       |
|---|---------------------|--|---------------------------------------|
| Sophomore Year - First Semester<br>ECON 2010 Orientation to Econ. (Fall only)<br>Free Choice Electives<br>General Education Science<br>General Education<br>Semester Total                          | Hrs. 2 2-3 3-4 9 17 | Sophomore Year - Second Semester<br>FIN 2801 Business Statistics I<br>Coursework for Minor<br>General Education<br>Semester Total                              | Hrs.<br>3<br>6<br>6<br>15             |
| Junior Year - First Semester ECON 3010 Intermediate Macroeconomics FIN 3801 Business Statistics II Free Choice Elective Coursework for Minor Elective in Economics Semester Total                   | Hrs. 3 3 3 3 3 15   | Junior Year - Second Semester<br>ECON 3030 Intermediate Microeconomics<br>Coursework for Minor<br>Free Choice Electives<br>Semester Total                      | Hrs.<br>3<br>6<br>6<br><b>15</b>      |
| Senior Year - First Semester ECON 4000 Portfolio Assessment (Fall only) ECON 4015 Math Economics I** Coursework for Minor Electives in Economics Semester Total                                     | Hrs. 1 3 6 1        | Senior Year - Second Semester Coursework for minor Free Choice Electives General Education Electives in Economics Semester Total                               | Hrs.<br>3<br>4<br>3<br>6<br><b>16</b> |

# **Economics Major, B.S. Degree - 124 Hours**

- \*AE 1400 (1 hr.) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students may choose to take MATH 1151 (5 hrs).
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- POLS 1510 is required for the major and fulfills the Missouri Constitution requirement. Students must also choose a history prefix course in Div. II Area B (HIST 1350 or 1351) or Area D (HIST 2402).
- The above plan is based on a 24-hour minor
- See current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Electronics Engineering Technology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Electronics Engineering Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester ET 1026 DC Circuit Analysis* ET 1050 Digital Principles & Applications* MATH 1111 College Algebra MMGT 2500 Applied Computer Technology** ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar*** | Hrs. 4 4 3 2 3 <b>16</b>    | Freshman Year - Second Semester ET 1027 AC Circuit Analysis* ET 2048 Active Electronic Devices* PHYS 1101 College Physics I T&OE 1042 Technical Mathematics II* ENGL 1030 Composition II Semester Total  | Hrs. 4 4 4 3 3 18                |
|--|-----------------------------|--|----------------------------------|
| Sophomore Year - First Semester<br>ET 2058 Operational Amplifiers*<br>ET 2060 Microprocessors**<br>PHYS 1102 College Physics II**<br>T&OE 2040 Calculus for Technology<br>Semester Total   | Hrs. 4 4 4 3 <b>15</b>      | Sophomore Year - Second Semester ET 2065 Comp. Prog. for Elect. Technology* EET 2300 Calculus for Elect. Eng. Technology* EET2320 Advanced Digital Circuitry* CHEM 1104 Intro to Sciences: Chemistry HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs. 4 3 4 4 3 17                |
| Junior Year - First Semester EET 2330 Transform Analysis* EET 3310 Microprocessor Systems Design* EET 3320 Introduction to Data Communications* T&OE 3060 Technical Report Writing** COMM 1000 Public Speaking Semester Total                          | Hrs. 3 3 3 2 3 14           | Junior Year - Second Semester EET 3330 Intro to Communication Systems* EET 3340 Control Systems Design* ECON 1010 Principles of Macroeconomics General Education Semester Total  | Hrs. 3 3 6 15                    |
| Senior Year - First Semester<br>EET 4310 Fuzzy Logic Systems Design*<br>EET 4320 Advanced Control Systems Design*<br>General Education<br>Semester Total   | <b>Hrs.</b> 3 3 9 <b>15</b> | Senior Year - Second Semester<br>EET 4330 Dig. Signal Processing Sys. Design*<br>EET 4340 Neural Network Systems Design*<br>General Education<br>Semester Total  | Hrs.<br>3<br>3<br>9<br><b>15</b> |

# Electronics Engineering Technology Functional Major, B.S. Degree - 124 hours

- \*Course ONLY available semester indicated
- \*\*Course(s) may be available summer semesters
- \*\*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### **Electronics Technology Functional Major, B.S. Degree**

1/2005

This is the recommended program of study for the Electronics Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester ET 1026 DC Circuit Analysis* ET 1050 Digital Principles & Applications* MATH 1111 College Algebra ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar**  | Hrs. 4 4 3 3 2 16                     | Freshman Year - Second Semester ET 1027 AC Circuit Analysis* ET 2048 Active Electronic Devices* T&OE 1042 Technical Mathematics II ENGL 1030 Composition II HIST 1350 or 1351 or POLS 1510 Semester Total        | Hrs. 4 4 3 3 3 17           |
|--|---------------------------------------|--|-----------------------------|
| Sophomore Year - First Semester<br>ET 2060 Microprocessors***<br>T&OE 2040 Calculus for Technology<br>CHEM 1104 Intro to Sciences: the Chemistry<br>Free Choice Elective<br>Semester Total                                       | Hrs.<br>4<br>3<br>4<br>3<br><b>14</b> | Sophomore Year - Second Semester<br>ET 2065 Computer Prog. for Electronic Tech.*<br>ET 3014 Analog-Digital Circuitry<br>PHYS 1104 Intro. to the Sciences: Physics<br>COMM 1000 Public Speaking<br>Semester Total | Hrs. 4 4 4 3 <b>15</b>      |
| Junior Year - First Semester T&OE 3060 Technical Report Writing*** ET 3041 Communication Systems MGT 3310 Principles of Management or INDM 4210 Industrial Management Department Approved Upper Level Elective*** Semester Total | Hrs. 2 4 3 6 15                       | Junior Year - Second Semester<br>ECON 1010 Principles of Macroeconomics<br>General Education<br>Management Elective***<br>Department Approved Upper Level Elective***<br>Semester Total                          | Hrs. 3 6 3 4 16             |
| Senior Year - First Semester General Education Management Elective*** Department Approved Upper Level Electives*** Free Choice Elective Semester Total   | Hrs.<br>6<br>3<br>3<br>15             | Senior Year - Second Semester<br>General Education<br>ICAP 4110 Industrial Problem Solving<br>Department Approved Upper Level Elective***<br>Semester Total  | <b>Hrs.</b> 6 3 7 <b>16</b> |

# Electronics Technology Functional Major, B.S. Degree - 124 hours

- \*Course ONLY available semester indicated
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective
- \*\*\*40 Hours of upper level credit must be earned to meet graduation requirements. Of the 26 hours of major electives needed (management and departmentally approved), at least 24 must be upper-level coursework.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Elementary Education Major (Grades 1-6), B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Elementary Education (grades 1-6) Functional Major, B.S.E. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Curriculum & Instruction for further information or quidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  COMM 1000 Public Speaking  POLS 1510 American Government  ART 1800 Ideas & the Visual Arts or  MUS 1210 Experiencing Music  Modern Language: Chin., Fren., Ger. or Span.  Semester Total  AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 15       | Freshman Year - Second Semester ENGL 1030 Composition II HIST 1350 or1351 U.S. History MATH 1620 Contemporary Math General Education Science (w/ lab) T&OE 2000 Technology and Change or BE&O 1210 Essentials of Managing Info. Semester Total                                 | Hrs. 3 3 4 2-3 15-16 |
|---|-----------------------|--|----------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Ed. & Field Exp. EDCI 2101 Models of Teaching EDCI 2240 Educational Psychology EDCI 2310 Computer/Technology in Education GEOG 2212 World Geography MATH 1800 Intro. to Elementary & M.S. Math MATH 2801 Conc. & Meth. Elem. Math** Semester Total   | Hrs. 3 2 3 2 3 2 3 18 | Sophomore Year - Second Semester<br>Science for Teachers requirement<br>PSY 2220 Child Psychology or<br>PSY 3220 Lifespan Development<br>General Education Literature<br>EDCI 3210 Methods of Reading Instruction<br>Teaching area of concentration*<br>Semester Total         | Hrs. 3 3 3 3 6 18    |
| Junior Year - First Semester EDSP 2100 Education of Exceptional Child or PSY 4200 Psychology of Exceptional Children EDCI 2110 World Diversity & America EDCI 3220 Teaching Language Arts EDCI 3215 Reading in the Content Fields EDCI 3410 Children's Literature HED 4330 First Aid & CPR for Education Teaching area of concentration* Semester Total | Hrs. 2 3 3 3 2 1 3 17 | Junior Year - Second Semester EDCI 3420 Teach Social Studies & Economics ART 3910 Art for Elementary School MUS 3301 Music for Elementary School IGEN 3468 Home/Sch./Comm. Relations HED 3310 Health Education in Elem. School Teaching area of concentration** Semester Total | Hrs. 3 2 2 3 2 6 18  |
| Senior Year - First Semester EDCI 4220 Analysis & Corr. Reading Instr. EDCI 4250 Practicum in Reading EDCI 4400 Classroom Management & Interac. EDCI 4350 Elementary Science Tch. Strat. PE 3420 Elementary School PE Activities Teaching area of concentration** Semester Total  | Hrs. 2 1 3 3 2 6 17   | Senior Year - Second Semester<br>EDCI 4495 Student Teaching I<br>EDCI 4496 Student Teaching II<br>Semester Total   | Hrs.<br>6<br>6<br>12 |

### Elementary Education Major, B.S. in Ed. Degree - 130 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students selecting a math minor must contact the math advisor before enrolling in Math 2801.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- A teaching area of concentration is a content area for which Central sponsors certification. For elementary education majors, these are: Art, English, French, Family and Consumer Sciences, German, Instructional Technology, Math, Science, Social Studies, Spanish, Special Education, and Speech Communication/Theatre. These range in hours from 21 to 27. The above plan is based on a 21 credit hour area of concentration.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Elementary Education Functional Major (Birth-Grade 3), B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Elementary Education (Birth - Grade 3) Functional Major, B.S. in Ed. Degree, at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Curriculum & Instruction for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  COMM 1000 Public Speaking  POLS 1510 American Government  ART 1800 Ideas & the Visual Arts or  MUS 1210 Experiencing Music  Modern Lang Chin., French, Ger. or Span.  Semester Total  AE 1400 Student Development Seminar*                   | Hrs. 3 3 3 3 15       | Freshman Year - Second Semester ENGL 1030 Composition II HIST 1350 or 1351 U.S. History MATH 1620 Contemporary Math General Ed. Science (must have lab) T&OE 2000 Technology and Change or BE&O 1210 Essentials of Managing Info. Semester Total  | Hrs. 3 3 4 2-3 15-16   |
|---|-----------------------|---|------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Ed. & Field Exp. EDCI 2101 Models of Teaching EDCI 2240 Educational Psychology EDCI 2310 Computer/Technology in Education CFD 1220 Child Development MATH 1800 Introduction to Elem. & M.S. Math MATH 2801 Conc.& Meth. Elem. Math           | Hrs. 3 2 3 2 3 2 3 18 | Sophomore Year - Second Semester<br>Science for Teachers requirement<br>EDSP 2100 Ed. of Exceptional Child or<br>PSY 4200 Psych of Exceptional Children<br>General Education Literature<br>PE 2410 Movement Skills & Act<br>EDCI 3210 Methods of Reading Instruction<br>EDCI 2830 Early Childhood Principles<br>CD 2000 Bases of Speech & Lang<br>Semester Total          | Hrs. 3 2 3 2 3 2 18    |
| Junior Year - First Semester GEOG 2212 World Geography CFD 2230 Practicum in Child Development EDCI 2850 Develop. & Learning through Play EDCI 2110 World Diversity & America EDCI 3220 Teaching Language Arts EDCI 3410 Children's Literature D&N 2310 Early Child Nutrition & Health Semester Total | Hrs. 3 1 3 3 3 2 2 17 | Junior Year - Second Semester EDCI 3420 Teach. Social Studies & Econ. PSY 2220 Child Psychology or PSY 3220 Lifespan Development MUS 3301 Music for Elem. School EDSP 3150 Comm. & Fam. Resources EDSP 3151 Prac. Comm. & Fam. Resources EDSP 4370 Screen Diag. & Pres. Instr. HED 3310 Health Ed. in Elementary School ART 3910 Art for Elementary School Semester Total | Hrs. 3 3 2 2 1 3 2 1 8 |
| Senior Year - First Semester IGEN 3468 Comm, Sch & Family Connect CFD 3250 Org. & Adm. Prog. For Yng. Children EDCI 4350 Elem. Science Teaching Strategies EDCI 4400 Classroom Management & Interact. EDCI 4830 Early Childhood Curriculum HED 4330 First Aid & CPR for Education Semester Total      | Hrs. 3 3 3 3 1 16     | Senior Year - Second Semester<br>EDCI 4493 Student Teaching ECE I<br>EDCI 4496 Student Teaching Elementary II<br>Semester Total   | Hrs.<br>6<br>6<br>12   |

# Elementary Education Major, B.S. in Ed. Degree - 129 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- · A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### English Major, B.A. Degree

1/2005

This is the recommended program of study for the English Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of English for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  General Education  Modern Language Requirement***  Free Choice Elective  Semester Total  AE 1400 Student Development Seminar*                             | Hrs 3 6 3 16      | Freshman Year - Second Semester ENGL 1030 Composition II General Education Math General Education Modern Language Requirement*** Semester Total   | Hrs 3 3 6 3 15                       |
|--|-------------------|---|--------------------------------------|
| Sophomore Year - First Semester<br>ENGL 2000 Orientation for the Major<br>ENGL 2210 or 2215 British Literature**<br>General Education<br>Free Choice Elective<br>HIST 1350 or 1351 or POLS 1510<br>Semester Total  | Hrs 1 3 6 3 1 1 6 | Sophomore Year - Second Semester<br>ENGL 2220 World Masterpieces***<br>ENGL 2200 or 2205 American Literature**<br>General Education Science<br>Coursework in Minor<br>General Education<br>Semester Total | Hrs 3 3 3-4 3 15-16                  |
| Junior Year - First Semester<br>ENGL 3000 Critical Studies<br>ENGL 3120 History of English Language<br>ENGL British Literature A or B Elective**<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total | Hrs 1 2 3 6 3 15  | Junior Year - Second Semester<br>ENGL 4360 Shakespeare<br>ENGL American Literature A or B Elective**<br>Coursework in Minor<br>General Education<br>Semester Total  | Hrs 3 3 6 3 <b>15</b>                |
| Senior Year - First Semester ENGL British Literature A or B Elective** ENGL American Lit A or B elective** Upper-level ENGL Elective Coursework in Minor General Education Free Choice Elective Semester Total     | Hrs 3 3 3 3 1 16  | Senior Year - Second Semester<br>ENGL 4000 Senior Seminar<br>Upper-Level ENGL Electives<br>Coursework in Minor<br>Free Choice Elective<br>Semester Total  | Hrs<br>1<br>6<br>3<br>6<br><b>16</b> |

# English Major, B.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*See the Undergraduate Catalog for the choices that fulfill this requirement.
- \*\*\*Refer to the Bachelor's Degree Requirements section of the catalog for the BA Modern Language requirements. This plan is based on 6 hours of modern language and 3 hours of ENGL 2220 World Masterpieces.
- This plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### English Education Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the English Major, B.S. in Ed. at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of English for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I General Education Science* General Education Semester Total AE 1400 Student Development Seminar**   | Hrs<br>3<br>3-4<br>9<br><b>15-16</b> | Freshman Year - Second Semester ENGL 1030 Composition II General Education Math POLS 1510 American Government General Education Semester Total  | Hrs 3 3 3 5-6 14-15 |
|--|--------------------------------------|---|---------------------|
| Sophomore Year - First Semester ENGL 2000 Orientation for the major ENGL 2210 or 2215 British Literature ENGL 2830 Literature for Adolescents EDCI 2240 Educational Psychology EDCI 2100 Foundations of Ed. and Field Exp. HIST 1350 or 1351 U.S. History Coursework in Minor Semester Total   | Hrs 1 3 2 3 3 3 18                   | Sophomore Year - Second Semester<br>ENGL 2200 or 2205 American Literature<br>ENGL 2220 World Masterpieces<br>ENGL 3120 History of the English Language<br>Coursework in Minor<br>Upper-Level English Elective<br>Semester Total   | Hrs 3 2 6 2-3 16-17 |
| Junior Year - First Semester ENGL 3000 Critical Studies ENGL 3110 English Grammar Upper-Level British Literature** Upper-Level American Literature** EDSP 2100 Ed. of the Exceptional Child or PSY 4200 Psy. of the Exceptional Child Coursework in Minor Semester Total   | Hrs 1 3 3 3 2 6 18                   | Junior Year - Second Semester<br>ENGL 4040 Advanced Rhetoric<br>Upper-Level British Literature***<br>PSY 4320 Psychology of Adolescence<br>Coursework in Minor<br>General Education<br>Semester Total   | Hrs 3 3 3 3 6 18    |
| Senior Year - First Semester ENGL 4000 Senior Seminar ENGL 3030 Composition and Evaluation EDCI 3500 Sec.Teaching and Behavioral Mgmt. EDCI 3550 Practicum in Sec. Instruction EDCI 4300 Ed. Measurement and Evaluation EDCI 4210 Teach., Reading in the Sec. School Upper-Level American Literature** Upper-Level English Elective Semester Total | Hrs 1 3 3 1 2 2 3 3 18               | Senior Year - Second Semester ENGL 4820 Secondary Field Experience II ENGL 4890 Methods of Teaching English EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total NOTE: The courses listed for this semester constitute the professional education block. The student should not take any other courses during this semester. | Hrs 1 2 5 4 12      |

# English Education Major, B.S. in Ed. Degree - 130 hours

- \*Students pursuing a B.S. in Ed. must complete a biology prefix.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this major does not require free choice electives.
- \*\*\*See the current catalog for other choices that fulfill this requirement.
- The above degree plan is based on an 18-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### English Education Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the English Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of English for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  General Education  Semester Total  AE 1400 Student Development Seminar*  | Hrs<br>3<br>11-12<br><b>14-15</b> | Freshman Year - Second Semester ENGL 1030 Composition II POLS 1510 American Government General Education Math General Education Semester Total  | Hrs 3 3 6 15     |
|---|-----------------------------------|---|------------------|
| Sophomore Year - First Semester ENGL 2000 Orientation for the major ENGL 2215 or 2210 British Literature ENGL 2830 Literature for Adolescents EDCI 2240 Educational Psychology EDCI 2100 Foundations of Ed. & Field Exp. General Education Science** Semester Total                           | Hrs 1 3 2 3 3 3 1 15-16           | Sophomore Year - Second Semester ENGL 2205 or 2200 American Literature ENGL 2220 World Masterpieces (General Ed.) ENGL 3120 History of the English Language PSY 4230 Psychology of Adolescence Course in Cognate Area***  HIST 1350 or 1351 U.S. History Semester Total   | Hrs 3 3 2 3 3 17 |
| Junior Year - First Semester ENGL 3000 Critical Studies ENGL 3110 English Grammar EDSP 2100 Education Of Except. Child or PSY 4200 Psychology of Exceptional Child Upper-Level American Literature*** General Education Upper-Level English Elective Course in Cognate Area*** Semester Total | Hrs 1 3 2 3 3 3 18                | Junior Year - Second Semester<br>ENGL 4040 Advanced Rhetoric<br>Upper level American Literature***<br>Upper level British Literature***<br>EDCI 4210 Teach. Reading in the Sec. School<br>Upper-Level English elective<br>Semester Total  | Hrs 3 3 2 6 17   |
| Senior Year - First Semester ENGL 4000 Senior Seminar ENGL 3030 Composition and Evaluation EDCI 3500 Sec.Tchg. and Behavioral Mgmt. EDCI 3550 Practicum in Sec. Instruction ENGL 4360 Shakespeare Upper-Level British Literature** EDCI 4300 Ed. Measurement and Evaluation Semester Total    | Hrs 1 3 3 1 3 2 16                | Senior Year - Second Semester ENGL 4820 Secondary Field Experience II ENGL 4890 Methods of Teaching English EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total NOTE: The courses listed for this semester constitute the professional education block. The student should not take any other courses during this semester. | Hrs 1 2 5 4 12   |

### English Education Functional Major, B.S. in Ed. Degree - 125 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students pursuing a B.S. in Ed. must complete a biology prefix.
- \*\*\*See the current catalog for other choices that fulfill this requirement and for Cognate course options.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Fashion: Textiles & Clothing in Business Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Fashion: Textiles & Clothing in Business Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Graphic Imaging & Design Technology for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I  FAME 1400 Intro. to Fashion Merchandising FAME 1420 Applied Design in FAME General Education General Education Math Semester Total AE 1400 Student Development Seminar* | Hrs. 3 3 3 2-3 3 14-15       | Freshman Year - Second Semester ENGL 1030 Composition II CHEM 1104 Intro to Sciences: Chemistry FAME 1450 Textile & Apparel Fabrications I ECON 1010 Principles of Macroeconomics General Education Semester Total | Hrs. 3 4 3 3 16 |
|---|------------------------------|--|-----------------|
| Summer – After Freshman or Soph. Year<br>FAME 2440 Fashion Merchandising Pract**<br>Semester Total  | <b>Hrs.</b><br>3<br><b>3</b> |  |                 |
| Sophomore Year - First Semester FAME 2442 Textiles AGRI 2130 Global Agriculture FAME 2430 Image Management for Fashion HIST 1350 or 1351 or POLS 1510 General Education Semester Total  | Hrs. 3 3 3 3 15              | Sophomore Year - Second Semester<br>General Education<br>ACCT 2101 Principles of Financial Accounting<br>MKT 3400 Principles of Marketing<br>Semester Total  | Hrs. 9 3 3 15   |
| Junior Year - First Semester FAME 3425 App. Performance Eval. (Fall only) General Education MGT 3310 Principles of Management MKT 3420 Principles of Advertising MKT 3410 Retail Management Semester Total                      | Hrs. 3 3 3 3 15              | Junior Year - Second Semester FAME 3440 Fashion Promotion FAME 3444 Fashion Products MKT 3430 Personal Selling MKT 3480 Consumer Behavior IGEN 3116 Creative Problem Solving Semester Total                        | Hrs. 3 3 3 3 15 |
| Summer – After Junior or Senior Year<br>FAME 4490 Intern in Fashion & Appl. Merch.**<br>Semester Total  | Hrs.<br>3<br><b>3</b>        |  |                 |
| Senior Year - First Semester FAME 4430 Merchandising Applications FAME 4444 Fashion Merchandising General Education FAME 4434 Fashion History FAME 4410 Architectural Interiors Semester Total                                  | Hrs. 3 3 3 3 15              | Senior Year - Second Semester FAME 4433 International Apparel Technology FAME 4442 Advanced Textiles FAME 4445 Senior Seminar in FAME Free Choice Elective Semester Total  | Hrs. 3 3 4 13   |

### Fashion: Textiles & Clothing in Business Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective
- \*\*Students should plan to complete FAME 2440 Fashion Merchandising Practicum during the summer after the freshman or sophomore year. Students should plan to complete FAME 4490 Internship in Fashion and Apparel Merchandising during the summer after the junior or senior year.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Finance Functional Major, B.S.B.A. Degree

1/2005

This is the recommended program of study for the Finance Functional Major, B.S.B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Economics & Finance for further information or guidance.

| Freshman Year - First Semester Math 1111 College Algebra* BE&O 1210 Essentials of Managing Information* ENGL 1020 Composition I PSY 1100 General Psychology or SOC 1800 General Sociology General Education Semester Total AE 1400 Student Development Seminar**  | Hrs. 3 2 3 3 14     | Freshman Year - Second Semester ECON 1010 Principles of Macroeconomics* ENGL 1030 Composition II CIS 1605 Business Application Software COMM 1000 Public Speaking General Education Semester Total       | Hrs. 3 2 3 6 17                  |
|---|---------------------|--|----------------------------------|
| Sophomore Year - First Semester ECON 1011 Principles of Microeconomics* ACCT 2101 Principles of Financial Accounting* FIN 2801 Business Statistics I* General Education Science HIST 1350 or 1351 or POLS 1510 Semester Total Note: Apply for B.S.B.A. Admission* | Hrs. 3 3 3 3 4 3 16 | Sophomore Year - Second Semester ACCT 2102 Principles of Managerial Acct.* BLAW 2720 Legal Environment of Business* General Education Semester Total Note: Complete all B.S.B.A. Admission requirements* | Hrs.<br>3<br>3<br>9<br><b>15</b> |
| Junior Year - First Semester ECON 3030 Intermediate Microeconomics ECON 3020 Money & Banking I FIN 3801 Business Statistics II FIN 3850 Principles of Finance Non-Business Electives Semester Total   | Hrs. 3 3 3 5 17     | Junior Year - Second Semester FIN 3861 Financial Management I FIN 3881 Financial Institutions & Markets FIN 3891 Security Analysis MGT 3315 Management of Organizations Business Elective Semester Total | Hrs. 3 3 3 3 15                  |
| Senior Year - First Semester CIS 3630 Management Information Systems MGT 3325 Business Communication MKT 3405 Marketing Policy Finance Electives*** Semester Total  | Hrs. 3 3 6 15       | Senior Year - Second Semester ACCT 4115 Financial Statement Analysis MGT 3360 Production/Operations Management ICAP 4357 Organizational Policy & Strategy Finance Electives*** Semester Total            | Hrs. 3 3 6 15                    |

# Finance Major, B.S.B.A. Degree - 124 Hours

- \*All B.S.B.A. majors in the Harmon College of Business Administration must complete a preadmission sequence of courses, with a 2.25 GPA overall, at Central Missouri, and in these specific courses, before admission to their major. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE 1400 (1 hr.) is highly recommended for academic success. AE 1400 counts as a free choice, non-business elective.
- \*\*\*Finance electives are: FIN 3835, FIN 4803, FIN 4804, FIN 4815, FIN 4817, FIN 4820, FIN 4862, FIN 4880.
- A minimum grade of C must be earned in FIN 3850, FIN 3861, FIN 3881, and FIN 3891 if they are to be applied toward the fulfillment of a Finance major or minor.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- A 2.25 GPA on all coursework is required for graduation.
- See current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### French Major, B.A. Degree

1/2005

This is the recommended program of study for the French Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Modern Languages Department for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I FREN 2201 Intermediate French I General Education Semester Total AE 1400 Student Development Seminar*                              | Hrs.<br>3<br>3<br>8-9<br><b>14</b> - <b>15</b> | Freshman Year -Second Semester ENGL 1030 Composition II Gen Ed Math FREN 2202 Intermediate French II General Education Coursework in minor Semester Total                                       | Hrs. 3 3 3 3 15 |
|---|--|---|-----------------|
| Sophomore Year - First Semester General Education Science FREN 3261 French Civilization & Literature I FREN 3243 French Conversation General Education Coursework in Minor Semester Total | Hrs. 3-4 3 3 3 15-16                           | Sophomore Year - Second Semester HIST 1350 or 1351 or POLS 1510 FREN 3262 French Civilization & Literature II FREN 3223 French Composition General Education Coursework in Minor Semester Total | Hrs. 3 3 3 3 15 |
| Junior Year - First Semester<br>FREN 4223 Advanced French Composition<br>Coursework in Minor<br>General Education<br>Semester Total   | Hrs.<br>3<br>6<br>6<br>15                      | Junior Year - Second Semester FREN 4243 Advanced French Conversation Coursework in Minor General Education Free Electives Semester Total  | Hrs. 3 6 3 3 15 |
| Senior Year - First Semester<br>FREN 4263 French Phonetics<br>FREN Electives 4000 level<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total                                 | Hrs. 3 3 6 15                                  | Senior Year - Second Semester FREN 4265 The Contemp. French Speaking. World FREN electives 4000 level Coursework in minor General Education Free Choice Electives Semester Total                | Hrs. 3 3 3 1 1  |

### French Major, B.A. Degree - 124 hours (118 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- Credits for French 1201 (Elementary French I) and French 1202 (Elementary French II): If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. If not, you will receive credit for these classes by completing French 2201 with a grade of "C" or higher (validated credit program).
- This plan is based on a 27-hour minor. Number of free choice electives needed depends on choice of minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### French Major, B.S. Degree

1/2005

This is the recommended program of study for the French Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Modern Languages Department for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I FREN 2201 Intermediate French I General Education Semester Total AE 1400 Student Development Seminar*                              | Hrs.<br>3<br>3<br>8-9<br><b>14-15</b> | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math FREN 2202 Intermediate French II General Education Coursework in Minor Semester Total                            | Hrs. 3 3 3 3 15 |
|---|---------------------------------------|---|-----------------|
| Sophomore Year - First Semester General Education Science FREN 3261 French Civilization & Literature I FREN 3243 French Conversation General Education Coursework in Minor Semester Total | Hrs. 3-4 3 3 3 15-16                  | Sophomore Year - Second Semester HIST 1350 or 1351 or POLS 1510 FREN 3262 French Civilization & Literature II FREN 3223 French Composition General Education Coursework in Minor Semester Total | Hrs. 3 3 3 3 15 |
| Junior Year - First Semester<br>FREN 4223 Advanced French Composition<br>Coursework in Minor<br>General Education<br>Semester Total   | Hrs.<br>3<br>6<br>6<br>15             | Junior Year - Second Semester FREN 4243 Advanced French Conversation Coursework in Minor General Education Free Choice Electives Semester Total   | Hrs. 3 6 3 15   |
| Senior Year - First Semester FREN 4263 French Phonetics FREN Electives 4000 level Coursework in Minor Free Choice Electives Semester Total  | Hrs. 3 3 6 15                         | Senior Year - Second Semester FREN 4265 The Contemp. French Speaking World FREN Electives 4000 Level General Education Coursework in Minor Free Choice Electives Semester Total                 | Hrs. 3 3 3 1 13 |

# French Major, B.S. Degree - 124 hours

(118 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- Credits for French 1201 (Elementary French I) and French 1202 (Elementary French II): If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. If not, you will receive credit for these classes by completing French 2201 with a grade of "C" or higher (validated credit program).
- This plan is based on a 27-hour minor. Number of free choice electives depends on minor chosen.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### French Education Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the French Education Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Modern Languages for further information or guidance:

| Freshman Year - First Semester ENGL 1020 Composition I POLS 1510 American Government FREN 2201 - Intermediate French I General Education Science* General Education Semester Total AE 1400 Student Development Seminar**                                     | Hrs. 3 3 3 3-4 2-3 15 | Freshman Year - Second ENGL 1030 Composition II FREN 2202 Intermediate French II General Education Math Coursework for Minor HIST 1350 or 1351 US History Semester Total   | Hrs. 3 3 3 3 1 15 |
|--|-----------------------|--|-------------------|
| Sophomore Year - First Semester EDCI 2100 Fnd. of Ed. & Field Experience EDCI 2240 Educational Psychology FREN 3261 French Civilization and Lit. I FREN 3243 French Conversation General Education Coursework for Minor Semester Total                       | Hrs. 3 3 3 3 3 18     | Sophomore Year - Second FREN 3262 French Civilization & Lit. II FREN 3223 French Composition FREN 4243 Advanced French Conversation Upper Level French Elective Coursework for Minor General Education Semester Total                                    | Hrs. 3 3 3 3 3 18 |
| Junior Year - First Semester FREN 4223 Advanced French Composition Upper Level French Elective Coursework for Minor General Education Semester Total   | Hrs. 3 3 6 15         | Junior Year - Second Semester FREN 4265 The Cont. French-Speak. World EDCI 4300 Educ. Measurement & Evaluation PSY 4200 Psych. of Exceptional Children or EDSP 2100 Educ. of the Exceptional Child General Education Coursework for Minor Semester Total | Hrs. 3 2 2 6 3 16 |
| Senior Year - First Semester FREN 4263 French Phonetics PSY 4230 Psychology of Adolescence EDCI 4210 Teaching Reading in Sec. Schools EDCI 3500 Secondary Tchg. & Behavioral Mgt. EDCI 3550 Practicum in Secondary Inst. Coursework for Minor Semester Total | Hrs. 3 3 2 3 1 3 15   | Senior Year - Second Semester ML 4020 Field Experience II ML 4054 Methods of Teaching Foreign Langs. EDCI 4495 Student Teaching Elementary I ICAP 4468 Student Teaching Secondary II Semester Total  | Hrs. 1 2 5 4 12   |

# French Education Major, B.S. in Ed. Degree - 130 hours (124 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*Students pursuing a B.S. in Ed. must complete a biology prefix.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this major does not require free choice electives.
- Credits for FREN 1201 (Elem French I) and FREN 1202 (Elem French II): If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. If not, you will receive credit for these classes by completing French 2201 with a grade of "C" or higher (validated credit program).
- The above degree plan is based on an 18-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### General Recreation Major, B.S. Degree

1/2005

This is the recommended program of study for the General Recreation Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester REC 1100 Introduction to Recreation ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*   | Hrs.<br>3<br>3<br>8-9<br><b>14-15</b> | Freshman Year - Second Semester REC 2200 Developing Rec. & Tour. Programs ENGL 1030 Composition II General Education Math General Education Semester Total  | Hrs. 3 3 6 15        |
|--|---------------------------------------|---|----------------------|
| Sophomore Year - First Semester REC 3530 Outdoor Rec. Skills & Adventures REC 3210 Leadership & Group Dynamics HIST 1350 or 1351 or POLS 1510 General Education Semester Total                                     | Hrs. 3 3 6 15                         | Sophomore Year - Second Semester TOUR 1500 Microcomp. App. for Tour. & Rec. General Education Science Coursework in Minor General Education Semester Total  | Hrs. 3 3-4 3 6 15-16 |
| Junior Year - First Semester TR 2200 Impl. of Dis. Cond. for Ther. Rec. REC 4710 Mng. Rec. & Tour. Enterprises.** or REC 4720 Fin. Rec. & Tour. Enterprises** Coursework in Minor General Education Semester Total | Hrs. 3 3 6 3 15                       | Junior Year - Second Semester<br>REC 4850 Leisure Education<br>Coursework in Minor<br>General Education<br>Free Choice Elective<br>Semester Total           | Hrs. 3 6 3 15        |
| Senior Year - First Semester REC 4740 Seminar REC 4710 Mnging Rec & Tour. Enterpr.** or REC 4720 Fin. Rec. & Tour. Enterprises** Coursework in Minor Free Choice Electives Semester Total                          | Hrs. 2 3 3 5 13                       | Senior Year - Second Semester TOUR 4720 Tourism Planning & Development TOUR 4730 Tourism Marketing Coursework in Minor Free Choice Electives Semester Total | Hrs. 3 3 6 15        |
| Summer Semester following Senior Year<br>REC 4980 Internship<br>Semester Total   | <b>Hrs.</b><br>6<br><b>6</b>          |   |                      |

### General Recreation Major, B.S. Degree- 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*REC 4710 is only offered during even years of the Fall semester and REC 4720 is only offered during odd years of the Fall semester.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- May lead to Missouri Park and Recreation Association Leader Certification and/or National Council on Therapeutic Recreation Certification as a Certified Therapeutic Recreation Specialist.
- Above degree plan is based on a 21 hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Geography Major, B.A. Degree

1/2005

This is the recommended program of study for the Geography Major, B.A. Degree at Central Missouri State University. Your schedule may

vary. Current or prospective Central Missouri students should contact the Department of Political Science and Geography for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  Modern Language Requirement* General Education  Semester Total  AE 1400 Student Development Seminar**  | Hrs. 3 3 9 15   | Freshman Year -Second Semester ENGL 1030 Composition II Gen Ed Math GEOG 2246 Economic Geography Modern Language Requirement* General Education Semester Total | Hrs. 3 3 3 3 15                  |
|---|-----------------|--|----------------------------------|
| Sophomore Year - First Semester<br>GEOG 2212 World Geography<br>HIST 1350 or 1351 or POLS 1510<br>Science General Education (EASC 1004)***<br>General Education<br>Modern Language Requirement*<br>Semester Total | Hrs. 3 3 4 3 16 | Sophomore Year - Second Semester<br>Elective in GEOG or approved EACS<br>General Education<br>Coursework in Minor<br>Semester Total                            | Hrs.<br>3<br>9<br>3<br><b>15</b> |
| Junior Year - First Semester<br>GEOG 3270 Research Methods<br>Coursework in Minor<br>Elective in GEOG or approved EASC<br>Free Choice Electives<br>Semester Total   | Hrs. 3 6 3 5 17 | Junior Year - Second Semester<br>GEOG 3275 Climatology<br>Upper-Level Elective in GEOG<br>Free Choice Elective<br>Coursework in Minor<br>Semester Total        | Hrs. 3 3 3 6 15                  |
| Senior Year - First Semester<br>GEOG 4201 Cartography<br>General Education<br>Coursework in Minor<br>Upper-Level Elective in GEOG<br>Free Choice Elective<br>Semester Total                                       | Hrs. 3 3 3 3 15 | Senior Year - Second Semester<br>Upper-level electives in GEOG<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total                               | Hrs.<br>6<br>3<br>7<br><b>16</b> |

# Geography Major, B.A. Degree - 124 hours

- \*Refer to the current catalog for fulfillment options for the B.A. Degree. This plan includes 9 hours of Modern Languages.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*\*If selected, EASC 1004 will fulfill 4 hours of General Education Div IIA and major electives.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Geography Major, B.S. Degree

1/2005

This is the recommended program of study for the Geography Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Political Science and Geography for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  General Education  Semester Total  AE 1400 Student Development Seminar*   | Hrs.<br>3<br>12<br><b>15</b> | Freshman Year -Second Semester GEOG 2246 Economic Geography ENGL 1030 Composition II General Education Math General Education Semester Total                               | Hrs.<br>3<br>3<br>6<br>15        |
|--|------------------------------|--|----------------------------------|
| Sophomore Year - First Semester<br>GEOG 2212 World Geography<br>HIST 1350 or 1351 or POLS 1510<br>Science General Education (EASC 1004)**<br>General Education<br>Free Course Elective<br>Semester Total | Hrs. 3 4 3 4 3 16            | Sophomore Year - Second Semester<br>Elective in GEOG<br>General Education<br>Coursework in Minor<br>Free Course Elective<br>Semester Total                                 | Hrs. 3 6 3 3 <b>15</b>           |
| Junior Year - First Semester<br>GEOG 3270 Research Methods<br>Coursework in Minor<br>Elective in GEOG (or approved EASC)<br>Free Choice Elective<br>Semester Total                                       | Hrs. 3 6 3 5 17              | Junior Year - Second Semester<br>GEOG 3275 Climatology<br>Upper-Level Elective in GEOG (or approved EASC)<br>Free Choice Elective<br>Coursework in Minor<br>Semester Total | Hrs. 3 3 6 15                    |
| Senior Year - First Semester<br>GEOG 4201 Cartography<br>General Education<br>Coursework in Minor<br>Upper-Level Elective in GEOG<br>Free Elective<br>Semester Total                                     | Hrs. 3 3 3 3 15              | Senior Year - Second Semester<br>Upper-level electives in GEOG<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total   | Hrs.<br>6<br>3<br>7<br><b>16</b> |

# Geography Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*If selected, EASC 1004 will fulfill 4 hours of General Education Div. II A and major electives.
- This plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Geology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Geology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Biology and Earth Science for further information or guidance.

| Freshman Year - First Semester  EASC 1004 Intro. to Sci. Geology  ENGL 1020 Composition I  General Education  Semester Total  AE 1400 Student Development Seminar* | Hrs<br>4<br>3<br>6<br><b>13</b> | Freshman Year -Second Semester EASC 2200 Historical Geology Math Option** ENGL 1030 Composition II General Education Semester Total       | Hrs 4 3-5 3 6 16-18        |
|--|---------------------------------|---|----------------------------|
| Sophomore Year - First Semester EASC 3320 Mineralogy GEOG 4220 Geography Information Systems Math Option EASC Elective**** Semester Total                          | Hrs 4 3 4-5 3 14-15             | Sophomore Year - Second Semester EASC 4325 Petrology EASC Elective**** HIST 1350 or 1351 or POLS 1510 General Education Semester Total    | Hrs 4 3-4 3 2-3 12-14      |
| Junior Year - First Semester<br>Physics Option<br>CHEM 1131 General Chemistry I<br>General Education<br>Semester Total   | Hrs 4-5 5 6 15-16               | Junior Year - Second Semester<br>EASC 3110 Structural Geology<br>CHEM 1132 General Chemistry II<br>General Education<br>Semester Total    | <b>Hrs</b> 4 5 6 <b>15</b> |
| Junior Year - Summer Semester<br>Field Course***   | <b>Hrs</b><br>6                 |   |                            |
| Senior Year - First Semester EASC Elective**** Physics Option Free Choice Electives Semester Total   | Hrs 3-4 4-5 9 16-18             | Senior Year - Second Semester<br>EASC 4420 Sedimentary Petr. & Strat.****<br>General Education<br>Free Choice Electives<br>Semester Total | Hrs<br>5<br>3<br>8<br>16   |

# Geology Functional Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*The Math Option for the major also fulfills the Gen Ed requirements, as well as the 15-hour block requirement for Math. See the current catalog for the Math Option choices.
- \*\*\*Must be taken at an approved university. See Department for more information.
- \*\*\*\*Students elect three courses from the following list: EASC 2100, EASC 3010, EASC 3111, EASC 3400, and EASC 3501.
- \*\*\*\*\*This course is offered Spring Semester only of even numbered years.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Graphic Arts Technology Management Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Graphic Arts Technology Management Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Graphic Imaging & Design Technology for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  GRAP 1000 Orientation to Graphic Arts GRAP 1010 Intro to Desktop Publishing & Printing  General Education Math  General Education  Semester Total  | Hrs. 3 1 3 5 15     | Freshman Year - Second Semester  ENGL 1030 Composition II  GRAP 2030 Desktop Publish for Printing Apps. GRAP 2032 Imaging Tech. for the Graphic Arts  HIST 1350 or 1351 or POLS 1510  General Education  Semester Total                         | Hrs. 3 3 3 3 15 |
|---|---------------------|---|-----------------|
| Sophomore Year - First Semester ACCT 2100 Survey of Accounting GRAP 2031 Electronic Publishing Systems GRAP 2035 Image Assembly GRAP 3045 Substrates & Inks PHYS 1104 Physics (Lab) or CHEM 1104 Chemistry (Lab) Semester Total   | Hrs. 3 3 3 3 3 4 16 | Sophomore Year - Second Semester<br>GRAP 3034 Offset Press Technology<br>Required elective (Choose GRAP 2610,<br>GRAP 3024, GRAP 3040, GRAP 3043,<br>GRAP 4045, or GRAP 4051)<br>General Education<br>Semester Total                            | Hrs. 3          |
| Junior Year - First Semester Required elective (Choose GRAP 2610, GRAP 3024, GRAP 3040, GRAP 3043, GRAP 4045, or GRAP 4051) Graphic Arts Technology Management Elective* General Education IGEN 3116 Creative Problem Solving Semester Total  Summer - Between Junior & Senior Year | Hrs.  3 3 6 3 15    | Junior Year - Second Semester<br>GRAP 3051 Graphic Arts Management<br>Graphic Arts Technology Management Elective*<br>MGT 3310 or INDM 4210<br>GRAP 4038 Principles of Color Reproduction<br>MGT 3325 Business Communications<br>Semester Total | Hrs. 3 3 3 3 15 |
| GRAP 3016 or T&OE 3022 Internship** Semester Total  | 3<br><b>3</b>       |   |                 |
| Senior Year - First Semester GRAP 4053 Graphic Arts Production Analysis GRAP 3057 Graphic Arts Quality Assurance GRAP 4095 Senior Seminar in Graphic Arts Graphic Arts Technology Management Elective General Education Free Choice Electives Semester Total                        | Hrs. 3 3 1 3 3 3 16 | Senior Year - Second Semester<br>GRAP 4055 Printing Estimating & Costing ++<br>Graphic Arts Technology Management Elective<br>General Education<br>Free Choice Electives***<br>Semester Total   | Hrs. 3 3 5 14   |

# Graphic Arts Technology Management Functional Major, **B.S. Degree - 124 hours**

- \*Graphic Arts Technology Management Elective courses (12 hrs) to meet Area requirements must be approved by a faculty advisor prior to registration. A list of acceptable "Suggested Electives" per Area is available from the Graphic Arts Technology Management Coordinator.
- \*\*GRAP 3016 or T&OE 3022 Internship may be in a Summer, Fall or Spring Semester
- \*\*\*40 hours of upper level credit must be earned to meet graduation requirements. Major electives and free choice electives should be chosen accordingly.
- ++It is recommended that students enroll in GRAP 4055, Printing Estimating and Costing, during the spring semester immediately prior to graduation.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### History Major, B.A. Degree

1/2005

This is the recommended program of study for the History Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of History and Anthropology for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I HIST 1350 U.S. History to 1877 General Education Semester Total AE 1400 Student Development Seminar*                                 | Hrs.<br>3<br>3<br>9<br><b>15</b> | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math(or Science) HIST 1351 U.S. History from 1877 HIST 2402 History of Modern World General Education Semester Total | Hrs. 3 3-4 3 3 15-16              |
|---|----------------------------------|--|-----------------------------------|
| Sophomore Year - First Semester<br>General Education Science (or Math)<br>HIST 2400 History of Early World<br>General Education<br>Modern Language Requirement**<br>Semester Total          | Hrs. 3-4 3 6 3 15-16             | Sophomore Year - Second Semester<br>HIST 2401 History of Early Modern World<br>General Education<br>Coursework in Minor<br>Modern Language Requirement**<br>Semester Total                     | Hrs. 3 6 3 15                     |
| Junior Year - First Semester<br>SOSC 3010 Writing in Social Sciences<br>Upper-Level Elective in American History<br>Coursework in Minor<br>Modern Language Requirement **<br>Semester Total | Hrs. 3 3 6 3 <b>15</b>           | Junior Year - Second Semester Upper-Level Elective in American History Upper-Level Elective in World History*** Coursework in Minor Free Choice Electives Semester Total                       | Hrs. 3 3 6 4 16                   |
| Senior Year - First Semester Upper-level elect in World History*** Upper-level elect in History Coursework in Minor Free Choice Electives Semester Total                                    | Hrs.<br>6<br>3<br>4<br>16        | Senior Year - Second Semester<br>IGEN 4231 Myth, Memories, and Realities<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total   | Hrs.<br>3<br>3<br>10<br><b>16</b> |

# History Major, B.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Refer to the Bachelor's Degree Requirements section of the catalog for the B.A. Modern Language requirements.
- \*\*\*A minimum of three hours of world history must be non-western history, or HIST 4452 or HIST 4453.
- In the major, HIST 1350 fulfills 3 semester hours of Division II B in the General Education Program and HIST 2402 fulfills 3 semester hours of Division II D. IGEN 4231 fulfills 3 semester hours of Division IV A.
- This plan is based on a 21-hour minor
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### History Major, B.S. Degree

1/2005

This is the recommended program of study for the History Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of History and Anthropology for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I HIST 1350 US History to 1877 General Education Semester Total AE 1400 Student Development Seminar*                          | Hrs.<br>3<br>3<br>9<br><b>15</b>      | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math (or Science) HIST 1351 U.S. History from 1877 HIST 2402 History of Modern World General Education Semester Total | Hrs. 3 3-4 3 3 15-16                  |
|--|---------------------------------------|---|---------------------------------------|
| Sophomore Year - First Semester<br>General Education Science (or Math)<br>HIST 2400 History of Early World<br>General Education<br>Semester Total                                  | Hrs.<br>3-4<br>3<br>9<br><b>15-16</b> | Sophomore Year - Second Semester<br>HIST 2401 History of Early Modern World<br>General Education<br>Coursework in Minor<br>Free Choice Elective<br>Semester Total                               | Hrs.<br>3<br>6<br>3<br>1 <b>5</b>     |
| Junior Year - First Semester<br>SOSC 3010 Writing in Social Sciences<br>Upper-Level Elective in American History<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total | Hrs. 3 3 6 3 <b>15</b>                | Junior Year - Second Semester Upper-Level Elective in American History Upper-Level Elective in World History** Coursework in Minor Free Choice Electives Semester Total                         | Hrs.<br>3<br>3<br>6<br>4<br><b>16</b> |
| Senior Year - First Semester Upper-Level Elective in World History** Upper-level Elective in History Coursework in Minor Free Choice Electives Semester Total                      | Hrs.<br>6<br>3<br>3<br>4<br><b>16</b> | Senior Year - Second Semester<br>IGEN 4231 Myth, Memories, and Realities<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total  | Hrs. 3 3 10 16                        |

### History Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*A minimum of three hours of world history must be non-western history, or HIST 4452 or HIST 4453.
- In the major, HIST 1350 fulfills 3 semester hours of Division II B in the General Education Program and HIST 2402 fulfills 3 semester hours of Division II D. IGEN 4231 fulfills 3 semester hours of Division IV A.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Hotel and Restaurant Administration Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Hotel and Restaurant Administration Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester HM 1800 Introduction to Hospitality ENGL 1020 Composition I General Education Math General Education Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 6 15                         | Freshman Year - Second Semester BE&O 1210 Essentials of Managing Info. or LIS 1600 Information Resources CHEM 1104 Intro. to Sciences: Chemistry ENGL 1030 Composition II ECON 1010 Principles of Macroeconomics Free Choice Elective Semester Total | Hrs.  2 4 3 3 15          |
|---|---------------------------------------|--|---------------------------|
| Sophomore Year - First Semester FACS 2110 Consumer Problems FOOD 2322 Food Preparation ACCT 2100 Survey of Accounting HIST 1350 or 1351 or POLS 1510 General Education Semester Total   | Hrs. 3 3 3 3 3 <b>15</b>              | Sophomore Year - Second Semester FOOD 3332 Quantity Food Production & Serv. General Education Free Choice Elective Semester Total  | Hrs.<br>3<br>6<br>6<br>15 |
| Junior Year - First Semester FOOD 3333 Food Systems Management HM 3800 Front Office Operations & Mgmt. HM 3850 Plant Operations & Management MGT 3310 Principles of Management MGT 3325 Business Communication General Education Semester Total | Hrs. 3 3 2 3 3 17                     | Junior Year - Second Semester<br>FOOD 3334 Food Service Equipment & Purch.<br>HM 3844 Dining Room Management<br>TOUR 4720 Tour. Planning & Dev (Spring only)<br>HRM 3920 Human Resource Management<br>General Education<br>Semester Total            | Hrs. 3 3 3 3 15           |
| Summer Semester following Junior Year<br>HM 4710 Internship<br>Semester Total   | <b>Hrs.</b><br>5<br><b>5</b>          |  |                           |
| Senior Year - First Semester HM 4720 Demonstration Techniques HM 4800 Hotel & Restaurant Management General Education Free Choice Electives Semester Total  | Hrs.<br>2<br>3<br>6<br>5<br><b>16</b> | Senior Year - Second Semester HM 3860 Beverage Management & Marketing HM 4745 Senior Seminar HM 4840 Legal Aspects of Hotel Rest. Mgmt. HM 2830 Hotel/Restaurant Sanitation & Safety TOUR 4730 Tourism Marketing (Spring only) Semester Total        | Hrs. 3 3 3 2 2 3 14       |

# Hotel and Restaurant Administration Functional Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Industrial Technology, B.S. Degree

1/2005

This is the recommended program of study for the Industrial Technology, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Industrial Technology for further information or guidance.

| Freshman Year - First Semester GRAP 1110 Fundamentals of Drafting MMGT 1510 Intro. Manufacturing Processes General Education Math ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar* | Hrs. 3 3 3 3 3 15           | Freshman Year - Second Semester<br>GRAP 1120 Machine Drafting (elective)<br>MMGT 1010 Materials for Mfg. & Construction<br>ENGL 1030 Composition II<br>General Education Science<br>PR&T 1010 Power Mechanics<br>Semester Total | Hrs. 3 3 3 3 3-4 3 15-16         |
|---|-----------------------------|---|----------------------------------|
| Sophomore Year - First Semester ET 1020 General Electronics MMGT 2530 Machine Tool Technology HIST 1350 or 1351 or POLS 1510 GRAP 1010 Intro. to Desktop Pub. & Printing Minor Coursework** Semester Total                      | Hrs. 3 3 3 3 15             | Sophomore Year - Second Semester MMGT 2515 Applied Manufacturing Processes GRAP 2170 Intro. to Computer-Aided Drafting General Education ET 1010 Applied Electricity or ET 2020 Industrial Electricity Semester Total           | Hrs. 3 3 8-9 3 17-18             |
| Junior Year - First Semester MMGT 3550 Principles of Numerical Control General Education Minor Coursework** Upper-level electives in ET, GRAP, MMGT, INDM, PR&T, or T&OE Semester Total   | Hrs. 3 6 3 4 16             | Junior Year - Second Semester INDM 4210 Industrial Management General Education Minor Coursework** Elective in Math and/or Physics** Semester Total   | Hrs. 3 6 3 3 <b>15</b>           |
| Senior Year - First Semester<br>General Education<br>Minor Coursework**<br>Elective in Math and/or Physics**<br>Semester Total  | <b>Hrs.</b> 6 6 3 <b>15</b> | Senior Year - Second Semester ICAP 4110 Industrial Problem Solving Minor Coursework** Free Choice Electives*** Semester Total   | Hrs.<br>3<br>6<br>7<br><b>16</b> |

# Industrial Technology, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Forty hours of upper level credit must be earned to meet graduation requirements. Of the 33 hours of minor requirements, major electives, and free choice electives, at least 27 must be upper level course work.
- \*\*\*The above plan is based on a 21-hour minor. The number of free choice electives will vary based on minor chosen.
- A minimum 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Industrial Technology Manufacturing Management Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Industrial Technology Manufacturing Management Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Industrial Technology for further information or quidance.

| Freshman Year - First Semester MMGT 1501 Seminar in Manufacturing GRAP 1110 Fundamentals of Drafting MMGT 1510 Intro. Mfg. Processes MATH 1111 College Algebra ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*      | Hrs5 3 3 3 3 15.5     | Freshman Year - Second Semester MMGT 1501 Seminar in Manufacturing GRAP 1120 Machine Drafting MATH 1112 College Trigonometry ENGL 1030 Composition II BE&O 1210 Essen of Managing Information CHEM 1103 Intro to Science: Chemistry General Education Semester Total | Hrs5 3 2 3 2 3 3 16.5 |
|---|-----------------------|--|-----------------------|
| Sophomore Year - First Semester MMGT 1501 Seminar in Manufacturing CMGT 2020 Mechanics of Materials MMGT 2530 Machine Tool Technology MMGT 2040 Engineering Material Science ECON 1010 Principles of Macroeconomics HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs5 3 3 4 3 3 16.5   | Sophomore Year - Second Semester<br>MMGT 1501 Seminar in Manufacturing<br>MMGT 2515 Applied Manufacturing Processes<br>PHYS 1104 Physics<br>GRAP 2170 Intro. to Computer-Aided Drafting<br>General Education<br>Semester Total                                       | Hrs5 3 4 3 6 16.5     |
| Junior Year - First Semester  MMGT 3510 Engineering Planning & Control  MMGT 3550 Principles of Numerical Control  SAFE 3120 Intro. to Industrial Hygiene or  SAFE 3430 Industrial Hazard Control  General Education  Major Electives  Semester Total             | Hrs. 3 3 3 3 1 5      | Junior Year - Second Semester INDM 4220 Human Factors Engineering MMGT 3530 Inspection & Quality Control MMGT 3562 Comp Numerical Control GRAP 4124 Geometric Dim. & Toler. Principles General Education Major Electives Semester Total                              | Hrs. 3 3 2 3 17       |
| Senior Year - First Semester MMGT 3520 Engineering Economy MMGT 4580 Quality Systems PR&T 4032 Hydraulics & Pneumatics MMGT 4520 Robotics & Automation General Education Semester Total   | Hrs. 3 3 3 3 1 5      | Senior Year - Second Semester<br>INDM 4240 Facilities Engineering<br>INDM 4260 Organizational Dynamics<br>ICAP 4110 Manufacturing Problems<br>Major Electives<br>Semester Total  | Hrs. 3 3 6 15         |
| Summer of Senior Year<br>T&OE 3022 Internship**<br>Semester Total   | Hrs.<br>3<br><b>3</b> |  |                       |

# Industrial Technology Manufacturing Management Functional Major, **B.S. Degree - 130 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective; however, this program does not require free choice electives.
- \*\*T&OE 3022 Internship in Technology will be completed summer of Senior year.
- A minimum 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Interior Design Functional Major, B.F.A. Degree

1/2005

This is the recommended program of study for the Interior Design Functional Major, B.F.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Art for further information or guidance.

| Freshman Year - First Semester ART 1110 Drawing I ART 1315 Design I ENGL 1020 Composition I GRAP 1110 Fundamentals of Drafting General Education Math Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 3 15     | Freshman Year - Second Semester ART 1120 Drawing II ART 1325 Design II ART 2310 Intro. to Interior Design GRAP 2170 Intro. to Computer Aided Drafting ENGL 1030 Composition II Art 1800 Ideas and Visual Arts Semester Total                           | Hrs. 3 3 3 3 3 18           |
|---|-----------------------|--|-----------------------------|
| Sophomore Year - First Semester ART 2320 Residential Interior Design ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring) ART 2335 Design III ART 3305 Int. Dsgn. Pres. Techniques ART 3800 History of Furniture & Interiors General Education Science Semester Total | Hrs. 3 3 3 3 3 3 3 18 | Sophomore Year - Second Semester ART 3310 Traditional Interiors ART 1825 Art History Survey II ART 2511 Painting I or ART 3510 Watercolor GRAP 3160 Residential Architectural Drawing FAME 2442 Textiles HIST 1350 or 1351 or POLS 1510 Semester Total | Hrs. 3 3 3 3 18             |
| Junior Year - First Semester ART 3330 Restaurant/Store Planning ART 2412 Ceramics I or ART 2420 Sculpture I ART 3340 Interior Detailing & Furn. Design FAME 4410 Architectural Interiors General Education Semester Total   | Hrs. 3 3 3 6 18       | Junior Year - Second Semester ART 4340 Corporate and Institutional Design ART 3320 Prof Practice ART 4850 20th Century Art & Arch. or ART 4860 Contemp. Art & Design General Education Semester Total  | Hrs. 3 3 6 15               |
| Senior Year - First Semester<br>ART 4020 Studio Seminar<br>ICAP 4221 Artists in Contemporary Society<br>Required Major Electives<br>General Education<br>Semester Total   | Hrs. 3 3 6 15         | Senior Year - Second Semester<br>Required Major Electives<br>General Education<br>Semester Total   | Hrs.<br>3<br>9<br><b>12</b> |

# Interior Design Functional Major, B.F.A. Degree - 129 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Journalism Major, B.S. Degree

1/2005

This is the recommended program of study for the Journalism Major, B.S. Degree at Central Missouri State University. Your schedule may vary.

Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester COMM 1100 Introduction to Communication COMM 1110 Communication Skills Lab COMM 1000 Public Speaking ENGL 1020 Composition I HIST 1350 or 1351 or POLS 1510 General Education Semester Total AE 1400 Student Development Seminar* | Hrs 1 1 3 3 3 3 14       | Freshman Year - Second Semester ENGL 1030 Composition II General Education Semester Total  | Hrs<br>3<br>12<br><b>15</b> |
|--|--------------------------|--|-----------------------------|
| Sophomore Year - First Semester COMM 1520 Elements of News Reporting COMM 2100 Intro. to Communication Theory COMM 2110 Intro. to Comm. Theory Lab Coursework in Minor Science General Education Semester Total  | Hrs 3 3 1 6 3-4 16-17    | Sophomore Year - Second Semester COMM 2520 Copy Editing & Layout COMM Elective** COMM 3200 Mass Media Practicum I Coursework in Minor General Education MATH General Education Semester Total            | Hrs 3 3 1 3 2-3 15-16       |
| Junior Year - First Semester COMM 3100 Comm. Research Methods COMM 3110 Comm. Research Methods Lab COMM 3525 Feature Writing General Education Coursework in Minor Semester Total  | Hrs 3 1 3 6 3 16         | Junior Year - Second Semester COMM 4500 Heritage of American Journalism COMM 4210 Mass Media Practicum II COMM 3010 Interpersonal Communication Coursework in Minor Free Choice Electives Semester Total | Hrs 3 1 3 6 3 16            |
| Summer- Between Junior & Senior Year<br>COMM 4295 Internship<br>Semester Total   | Hrs<br>1-3<br><b>1-3</b> |  |                             |
| Senior Year - First Semester<br>COMM 4250 Mass Communication Law<br>COMM Elective**<br>IGEN 3232 or 3224 or 4224<br>Coursework in Minor<br>Semester Total  | Hrs 3 3 6 15             | Senior Year - Second Semester<br>COMM 4535 Advanced News Reporting<br>COMM Elective**<br>Free Choice Electives<br>Semester Total   | Hrs 3 8-9 14-15             |

### Journalism Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students choose 9-12 hours from the following list: COMM 3530 Photojournalism (3); COMM 3535 Broadcast Journalism (3); COMM 4200 Special Topics (1-6); COMM 4260 Comparative Media Systems (2); COMM 4280 Criticism of Mass Media (2); COMM 4555 Advanced Editing (3). Students who want to concentrate in broadcast journalism or editing for newspapers and magazines should see a departmental advisor.
- During the last semester of their senior year, all graduates must submit a portfolio that reflects their abilities and accomplishments. See department advisor for requirements.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Management Functional Major, B.S. B. A. Degree

1/2005

This is the recommended program of study for the Management Functional Major, B.S.B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective students should contact the Department of Management and Business Communication for further information or guidance.

| Freshman Year - First Semester  MATH 1111 College Algebra* BE&O 1210 Essentials of Managing Information* PSY 1100 General Psychology or SOC 1800 General Sociology  ENGL 1020 Composition I General Education Semester Total AE 1400 Stud Dev Seminar** | Hrs. 3 2 3 3 3 14      | Freshman Year - Second Semester ECON 1010 Principles of Macroeconomics* CIS 1605 Business Application Software ENGL 1030 Composition II COMM 1000 Public Speaking General Education Semester Total   | Hrs. 3 2 3 3 6 17    |
|---|------------------------|--|----------------------|
| Sophomore Year - First Semester ACCT 2101 Prin of Fin Acct* FIN 2801 Business Statistics I* ECON 1011 Principles of Microeconomics* General Education Science General Education Semester Total  Note: Apply for BSBA Admission*                         | Hrs. 3 3 3 3-4 3 15-16 | Sophomore Year - Second Semester ACCT 2102 Principles of Managerial Accounting* BLAW 2720 Legal Environment of Business* HIST 1350 or 1351 or POLS 1510 General Education Semester Total Note: Complete all BSBA Admission requirements*                                 | Hrs. 3 3 3 6-7 15-16 |
| Junior Year - First Semester FIN 3850 Principles of Finance (IBE Block-below)*** MGT 3315 Management of Organizations*** MKT 3405 Marketing Policy*** CIS 3630 Management Information Systems*** MGT 3385 IBE Practicum*** Semester Total               | Hrs. 3 3 3 3 3 15      | Junior Year - Second Semester MGT 3360 Production Operations Management MGT 3320 System, Teams, & Organiz. Behavior MGT 3325 Business Communications HRM 3920 Human Resource Management FIN 3801 Business Statistics II MGT 3345 International Management Semester Total | Hrs. 3 3 3 3 3 3 18  |
| Senior Year - First Semester MGT 3370 Supply Chain Management MGT 4310 Total Quality Management MGT 4325 Management Communication Free Choice Electives Non-business electives Semester Total   | Hrs. 3 3 4 3 16        | Senior Year - Second Semester ICAP 4357 Org Policy and Strategy MGT 4320 Leading and Managing Teams & Org Non-Business Electives Free Choice Electives Semester Total  | Hrs. 3 3 6 15        |

# Management Major, B.S.B.A. Degree - 124 Hours

- \*All B.S.B.A. majors in the Harmon College of Business Administration must complete a preadmission sequence of courses, with a 2.25 GPA overall, at Central Missouri, and in these specific courses, before admission to their major. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE 1400 (1 hr.) is highly recommended for academic success. AE 1400 counts as a free choice, non-business elective.
- \*\*\*All BSBA Management functional majors must enroll in IBE Practicum (MGT3385, MKT3485 or CIS3685) concurrently with the IBE sections of MGT3315, MKT3405 and CIS3630.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- A 2.25 GPA on all coursework is required for graduation.
- See current catalog for complete statement of academic policies, leveling, and prerequisites.

### Marketing Functional Major, B.S.B.A. Degree

1/2005

This is the recommended program of study for the Marketing Functional Major, B.S.B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Marketing and Legal Studies for further information or guidance.

| Freshman Year - First Semester MATH 1111 College Algebra* BE&O 1210 Essentials of Managing Information* ENGL 1020 Composition I PSY 1100 General Psychology or SOC 1800 General Sociology MKT 1400 Orientation to Marketing** General Education Semester Total    | Hrs. 3 2 3 3 1 1 3 15 | Freshman Year - Second Semester<br>ECON 1010 Principles of Macroeconomics*<br>CIS 1605 Business Application Software<br>ENGL 1030 Composition II<br>COMM 1000 Public Speaking<br>General Education<br>Semester Total            | Hrs. 3 2 3 3 6 17    |
|---|-----------------------|---|----------------------|
| Sophomore Year - First Semester ACCT 2101 Principles of Financial Accounting* FIN 2801 Business Statistics I* ECON 1011 Principles of Microeconomics* HIST 1350 or 1351 or POLS 1510 General Education Science Semester Total Note: Apply for B.S.B.A. Admission* | Hrs. 3 3 3 3 4 16     | Sophomore Year - Second Semester<br>ACCT 2102 Principles of Managerial Accounting*<br>BLAW 2720 Legal Environment of Business*<br>General Education<br>Semester Total<br>Note: Complete all B.S.B.A. Admission<br>requirements* | Hrs. 3 3 9 <b>15</b> |
| Junior Year - First Semester MKT 3405 Marketing Policy MGT 3315 Management of Organizations FIN 3801 Business Statistics II FIN 3850 Principles of Finance CIS 3630 Management Information Systems Semester Total   | Hrs. 3 3 3 3 3 15     | Junior Year - Second Semester MKT 3480 Consumer Behavior MKT 3430 Personal Selling MGT 3325 Bus Communications MGT 3360 Production/Operation Management Non-Business Elective Free Choice Electives Semester Total              | Hrs. 3 3 3 2 2 16    |
| Senior Year - First Semester MKT 4460 International Marketing MKT 4470 Marketing Research Marketing Electives*** Non-Business Electives Semester Total  | Hrs. 3 3 6 3 15       | Senior Year - Second Semester<br>ICAP 4357 Organizational Policy and Strategy<br>MKT 4490 Marketing Management<br>Marketing Electives***<br>Non-Business Electives<br>Semester Total  | Hrs. 3 6 3 <b>15</b> |

## Marketing Major, B.S.B.A. Degree - 124 Hours

- \*All B.S.B.A. majors in the Harmon College of Business Administration must complete a preadmission sequence of courses, with a 2.25 GPA overall, at Central Missouri, and in these specific courses, before admission to their major. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*MKT 1400 (1 hr.) is highly recommended for academic success. MKT 1400 counts as a free choice elective.
- \*\*\* Marketing elective classes available are: MKT 3410, MKT 3420, MKT 4420, MKT 4430, MKT 4440, MKT 4450. See Department Chair for approval of major electives.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- A 2.25 GPA on all coursework is required for graduation.
- See current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Mathematics Major, B.A. Degree

1/2005

This is the recommended program of study for the Mathematics Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Mathematics and Computer Science for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I MATH 1151 Calculus I General Education Semester Total AE 1400 Student Development Seminar*                        | Hrs.<br>3<br>5<br>6<br><b>14</b> | Freshman Year -Second Semester  ENGL 1030 Composition II  MATH 1152 Calculus II  CS 1100 Introduction to Computing I  General Education  Semester Total                                 | Hrs. 3 5 3 7 16        |
|--|----------------------------------|---|------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 MATH 2153 Calculus III Coursework in Minor General Education Modern Language Requirement** Semester Total | Hrs. 3 3 3 6 3 18                | Sophomore Year - Second Semester<br>General Education Science<br>MATH 2410 Discrete Math<br>General Education<br>Coursework in Minor<br>Modern Language Requirement**<br>Semester Total | Hrs. 3-4 3 3 3 15-16   |
| Junior Year - First Semester MATH 3710 Linear Algebra Coursework in Minor General Education Modern Language Requirement** Semester Total                                 | Hrs. 3 3 6 3 <b>15</b>           | Junior Year - Second Semester MATH 3720 Algebraic Structures*** MATH 3221 College Geometry*** Coursework in Minor Free Choice Electives Semester Total                                  | Hrs. 2 3 6 4 <b>15</b> |
| Senior Year - First Semester MATH 4211 Introduction to Topology**** Coursework in Minor Free Choice Electives Semester Total   | Hrs.<br>3<br>3<br>9<br><b>15</b> | Senior Year - Second Semester IGEN 4233 Sci., Hist., Socio. Impact of Math*** Upper-Level Electives in MATH or CS Coursework in Minor Free Choice Electives Semester Total              | Hrs. 3 4 3 5           |

## Mathematics Major, B.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Refer to the Bachelor's Degree Requirements section for the B.A. Modern Language requirement. This plan is based on 9 hours of modern language.
- \*\*\*Spring only course.
- \*\*\*\*Fall Odd numbered years
- This plan is based on a 21-hour minor
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Mathematics Major, B.S. Degree

1/2005

This is the recommended program of study for the Mathematics Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Mathematics and Computer Science for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  MATH 1151 Calculus I  General Education  Semester Total  AE 1400 Student Development Seminar*                   | Hrs.<br>3<br>5<br>6<br><b>14</b> | Freshman Year -Second Semester CS 1100 Introduction to Computing I ENGL 1030 Composition II MATH 1152 Calculus II General Education Semester Total   | Hrs. 3 3 5 6 17      |
|--|----------------------------------|--|----------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 MATH 2153 Calculus III MATH 2221 Found of Geometry** Coursework in Minor General Education Semester Total | Hrs. 3 3 3 6 18                  | Sophomore Year - Second Semester<br>General Education Science<br>MATH 2410 Discrete Math<br>CS 1110 Introduction to Computing II<br>General Education<br>Coursework in Minor<br>Semester Total | Hrs. 3-4 3 3 3 15-16 |
| Junior Year - First Semester MATH 3710 Linear Algebra Upper-Level Elective in MATH or CS Coursework in Minor General Education Semester Total                            | Hrs. 3 3 6 15                    | Junior Year - Second Semester MATH 3720 Algebraic Structures*** Upper-Level Elective in MATH or CS Coursework in Minor General Education Semester Total  | Hrs. 2 3 6 3 14      |
| Senior Year - First Semester<br>Upper-Level elective in MATH or CS<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total                                     | Hrs.<br>3<br>3<br>9<br><b>15</b> | Senior Year - Second Semester IGEN 4233 Sci. Hist, Socio. Impact of Math*** Upper-Level Elective in MATH or CS Coursework in Minor Free Choice Electives Semester Total                        | Hrs. 3 2 3 7         |

# Mathematics Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Fall only course.
- \*\*\*Spring only course
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Mathematics Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Mathematics Functional Major, B.S.E. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Mathematics and Computer Science for further information or guidance.

| Freshman Year - First Semester  MATH 1151 Calculus & Analytic Geometry I CS 1100 Introduction to Computing I MATH 1850 Orientation Seminar**  ENGL 1020 Composition I Science General Education: BIOL 1003 or BIOL 1005 Semester Total AE 1400 Student Development Seminar* | Hrs. 5 3 0.5 3 14.5                     | Freshman Year - Second Semester MATH 1152 Calculus & Analytic Geometry II PHYS 1101 or 2121 Physics**** ENGL 1030 Composition II POLS 1510 American Government Semester Total  | Hrs. 5 4-5 3 3 15-16 |
|---|---|--|----------------------|
| Sophomore Year - First Semester MATH 2410 Discrete Mathematics MATH 2221**Foundations of Geometry MATH 2153 Calculus & Analytic Geometry II PHYS 1102 or 2122**** General Education Semester Total  | Hrs. 3 3 4-5 3 16-17                    | Sophomore Year - Second Semester<br>EDCI 2100 Foundations of Education & Field Exp.<br>EDCI 2240 Educational Psychology<br>MATH 3720 Algebraic Structures***<br>MATH 3221 College Geometry***<br>HIST 1350 or 1351 United States History<br>General Education<br>Semester Total                                  | Hrs. 3 3 2 3 3 17    |
| Junior Year - First Semester MATH 3850 Strat. in Teaching Secd. Math** MATH 4851 Prob./Stat. for Mid./High Sch. Math* PSY 4230 Adolescent Psychology General Education Semester Total   | Hrs.<br>3<br>**3<br>3<br>6<br><b>15</b> | Junior Year - Second Semester MATH 4710 Real Number Systems*** ICAP 4233 Sci., Hist., Soc. Impact of Math*** Upper-Level Elective in Major EDCI 4210 Teaching Reading In Secondary EDSP 2100 Education Of the Exceptional Child or PSY 4200 Psychology of the Exceptional Child General Education Semester Total | Hrs. 2 3 3 2 2 5 17  |
| Senior Year - First Semester EDCI 3500 Secondary Teaching & Behav. Mgmt. EDCI 3550 Practicum in Secondary Instruction EDCI 4300 Education Measures & Evaluation Upper-Level Elective in Major General Education Free Choice Electives Semester Total                        | Hrs. 3 1 2 2-4 3 2.5-3.5 13.5-16.5      | Senior Year - Second Semester MATH 4820 Secd Field Experience II MATH 4870 Methods of Teaching Math EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total  | Hrs. 1 2 5 4 12      |

# Mathematics Functional Major, B.S. in Ed. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective. however, this major does not require free choice electives.
- \*\*Fall only course.
- \*\*\*Spring only course
- \*\*\*\*\*To gain certification to teach Physics, a student must take PHYS 2121 and 2122.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Mathematics Education Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Mathematics Education Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Mathematics and Computer Science for further information or guidance:

| Freshman Year - First Semester MATH 1151 Calculus & Analytic Geometry I CS 1100 Introduction to Computing I MATH 1850 Orientation Seminar** ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar* | Hrs.<br>5<br>3<br>0.5<br>3<br>14.5 | Freshman Year - Second Semester MATH 1152 Calculus & Analytic Geometry II General Education ENGL 1030 Composition II HIST 1350 or 1351 U.S. History Semester Total   | Hrs. 5 3 3 3 14        |
|---|------------------------------------|--|------------------------|
| Sophomore Year - First Semester MATH 2410 Discrete Mathematics MATH 2221 Foundations of Geometry** EDCI 2100 Foundations of Education & Field Exp. EDCI 2240 Educational Psychology General Education Science*** Semester Total           | Hrs. 3 3 3 3 3 4 15-16             | Sophomore Year - Second Semester<br>MATH 3720 Algebraic Structures****<br>General Education<br>Coursework in Minor<br>POLS 1510 American Government<br>Semester Total  | Hrs. 2 6 6 3 <b>17</b> |
| Junior Year - First Semester MATH 3850 Strategies in Teaching Sec. Math** MATH 4851 Prob./Stat., Mid./High School Math** PSY 4230 Adolescent Psychology General Education Coursework in Minor Semester Total                              | Hrs. 3 3 3 3 6 18                  | Junior Year - Second Semester MATH 4710 Real Number Systems**** ICAP 4233 Sci., Hist, Soc.Impact of Math**** EDCI 4210 Teaching Reading in Secondary EDSP 2100 Ed. Of the Exceptional Child or PSY 4200 Psy. Of the Exceptional Child Coursework in Minor General Education Semester Total | Hrs. 2 3 2 2 3 6 18    |
| Senior Year - First Semester EDCI 3500 Sec. Teaching & Behav. Management EDCI 3550 Practicum in Secondary Instruction Elective in Major EDCI 4300 Education. Measures & Evaluation Coursework in Minor General Education Semester Total   | Hrs. 3 1 3 2 3 1 1 5               | Senior Year - Second Semester MATH 4820 Secondary Field Experience II MATH 4870 Methods of Teaching Math EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total   | Hrs. 1 2 5 4 12        |

## Mathematics Education Major, B.S. in Ed. Degree - 124.5 hours

- \*Fall only course.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this major does not require free choice electives.
- \*\*\*Student pursuing a B.S. in Ed. must take a biology prefix.
- \*\*\*\*Spring semester only.
- Based on an 18-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Medical Technology Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Medical Technology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Biology for further information or guidance.

| Freshman Year - First Semester BIOL 1000 Discipline of Biology BIOL 1111 Biology I w/lab CHEM 1131 Chemistry 1 MATH 1111 College Algebra ENGL 1020 Composition I Semester Total                    | Hrs. 1 4 5 3 1                 | Freshman Year -Second Semester BIOL 2401 Anatomy & Physiology I CHEM 1132 Chemistry II w/lab ENGL 1030 Composition II General Education Semester Total   | Hrs.<br>4<br>5<br>3<br>5-6<br><b>17-18</b> |
|--|--------------------------------|--|--|
| Sophomore Year - First Semester<br>BIOL 2402 Anatomy & Physiology II<br>BIOL 2511 Genetics<br>HIST 1350 or 1351 or POLS 1510<br>ET 1020 General Electronics<br>General Education<br>Semester Total | Hrs. 4 4 3 3 17                | Sophomore Year - Second Semester<br>BIOL 2512 Cell Biology<br>CHEM 3341 Organic Chemistry I<br>MATH 1112 College Trigonometry (2) OR<br>PSY 4520 Statistics for the Behavioral Sci. (3)<br>General Education<br>Semester Total | Hrs. 3 4 2-3 6 15-16                       |
| Junior Year - First Semester BIOL 4000 Biology Colloquium BIOL 4311 Parasitology BIOL 4514 Molecular Biology CHEM 3212 Quantitative Analysis General Education Semester Total                      | Hrs. 1 4 3 4 6 18              | Junior Year - Second Semester<br>BIOL 3413 Immunology<br>BIOL 3611 Microbiology<br>BIOL 4515 Molecular Biology Lab<br>ICAP 4222 Biological Perspective<br>General Education<br>Semester Total                                  | Hrs. 3 4 2 3 6 18                          |
| Senior Year - First Semester<br>BIOL 4012 Clinicals<br>Semester Total  | <b>Hrs.</b><br>15<br><b>15</b> | Senior Year - Second Semester<br>BIOL 4012 Clinicals<br>Semester Total   | Hrs.<br>15<br><b>15</b>                    |

# Medical Technology Functional Major, B.S. Degree - 131-133 hours

- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Middle School Education Major, B.S. in Ed. Degree

1/2005

This is a recommended program of study for the Middle School Education (Grades 5-9) Major, B.S. Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Curriculum & Instruction for further information or quidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  General Education  POLS 1510 American Government  ART 1800, MUS 1210, or THEA 2400  Modern Lang Chinese, French, Ger. or Span.  Semester Total  AE 1400 Student Development Seminar*                       | Hrs. 3 3 3 3 3 15        | Freshman Year - Second Semester ENGL1030 Composition II HIST 1350 or 1351 U.S. History MATH 1620 Contemporary Math General Education Science w/lab T&OE 2000 Technology and Change or BE&O 1210 Essentials of Managing Info. Semester Total                                | Hrs. 3 3 4 2-3 15-16 |
|---|--------------------------|--|----------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Ed. & Fld. Exp. EDCI 2101 Models of Teaching EDCI 2240 Education Psychology EDCI 2310 Computer/Technology in Education GEOG 2212 World Geography MATH 3812 Math in Inst. Mdl. School Cur.** Semester Total | Hrs. 3 2 3 2 3 2 3 4 16  | Sophomore Year - Second Semester Science for Teachers Requirement EDCI 3210 Methods Reading Instruction ENGL 2205 or 2220 Literature EDSP 2100 Education of Exceptional Child or PSY 4200 Psychology of Exceptional Child Teaching Minor Semester Total                    | Hrs. 3 3 3 7 2 6 17  |
| Junior Year - First Semester EDCI 2110 World Diversity & America EDCI 3220 Teaching Language Arts EDCI 3440 Literature for the Middle Level HED 4310 Drugs & Youth HED 4330 First Aid & CPR for Education Teaching Minor Semester Total                             | Hrs. 3 3 2 3 1 6 18      | Junior Year - Second Semester EDCI 3230 Content Literacy in M.S. EDCI 4130 The Middle School PSY 3220 Lifespan Development or PSY 4230 Psychology of Adolescence HED 4320 Teaching Sex Ed. in the School IGEN 3468 Home/Sch./Comm. Relations Teaching Minor Semester Total | Hrs. 3 3 3 3 18      |
| Senior Year - First Semester EDCI 4220 Analysis & Corr. Reading Instr. EDCI 4250 Practicum in Reading EDCI 4340 Tchg. Strategies in Middle School EDCI 4300 Education Measurement & Eval. Special Methods Class for Minor Area Teaching Minor Semester Total        | Hrs. 2 1 3 2 2-3 6 16-17 | Senior Year - Second Semester<br>EDCI 4497 Student Teaching I<br>EDCI 4498 Student Teaching II<br>Semester Total   | Hrs.<br>6<br>6<br>12 |

# Middle School Education Major, B.S. in Ed. Degree - 127 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students selecting a math minor must contact the math advisor before taking MATH 3812.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- A teaching minor is an area of concentration for which Central Missouri sponsors certification. For middle school majors, these are: Art, Business Education, English, French, Family and Consumer Sciences, German, Math, Science, Social Studies, Spanish, Speech Communication and Theatre, and Technology Education. These range in hours from 21 to 27. The above plan is based on a 21 credit minor.n.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Music Major, B.A. Degree

1/2005

This is the recommended program of study for the Music Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Music for further information or guidance:

| Freshman Year - First Semester MUS 1000 Recital Attendance MUS 1100 Fund of Music or Free Elective Major Large Ensemble Major Instrument or Voice, 1000 level ENGL 1020 Composition I MUS 1225 Music of the World's Cultures Modern Language Requirement** Semester Total AE 1400 Student Development Seminar* | Hrs. 0 3 1 1 3 3 3 3 14  | Freshman Year - Second Semester MUS 1000 Recital Attendance Major Large Ensemble Major Instrument or Voice, 1000 level MUS 1111 Theory I MUS 1121 Aural Training I ENGL 1030 Composition II General Education Math Modern Language Requirement** Semester Total | Hrs. 0 1 1 3 1 3 3 3 3 15    |
|--|--------------------------|---|------------------------------|
| Sophomore Year - First Semester MUS 1000 Recital Attendance Major Instrument or Voice, 1000 level MUS 1112 Theory II MUS 1122 Aural Training II MUS 2221 Intro. to Music Lit. I HIST 1350 or 1351 or POLS 1510 General Education Modern Language Requirement** Semester Total                                  | Hrs. 0 1 3 1 2 3 3 1 1 6 | Sophomore Year - Second Semester MUS 1000 Recital Attendance Major Instrument or Voice, 1000 level MUS 2111 Theory III MUS 2121 Aural Training III MUS 2222 Intro. to Music Lit. II General Education Science Course in Minor General Education Semester Total  | Hrs. 0 1 3 1 2 3-4 3 1 16-17 |
| Junior Year - First Semester MUS 1000 Recital Attendance Major Instrument or Voice, 3000 level MUS 3211 Music History to 1800 General Education Courses in Minor Semester Total  | Hrs. 0 1.5 3 6 6 16.5    | Junior Year - Second Semester MUS 1000 Recital Attendance Major Instrument or Voice, 3000 level MUS 3212 Music History 1800-Present General Education Courses in Minor Semester Total   | Hrs. 0 1.5 3 5-6 6 15.5-16.5 |
| Senior Year - First Semester Major Instrument or voice, 3000 level Elective in Music Course in Minor General Education Free Choice Elective Semester Total   | Hrs. 1.5 3 3 5 15.5      | Senior Year - Second Semester Major Instrument or voice, 3000 level Course in Minor General Education Free Choice Elective Semester Total   | Hrs. 1.5 3 7 14.5            |

# Music Major, B.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on 2 modern language courses and ENGL 2220 for General Education Literature.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Music Functional Major, B.M. Degree

1/2005

This is the recommended program of study for the Music Functional Major, B.M. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Music for further information or guidance:

| Freshman Year - First Semester MUS 1000 Recital Attendance MUS 1100 Fund. of Music or Free Choice Elec. Major Instrument or Voice, 1000 level Major Large Ensemble (Piano) ENGL 1020 Composition I General Education Science General Education Semester Total AE 1400 Student Development Seminar*                 | Hrs. 0 3 2 1 (1) 3 3-4 3 15-17                  | Freshman Year - Second Semester MUS 1000 Recital Attendance Major Instrument or Voice, 1000 Level Major Large Ensemble MUS 1111 Theory I MUS 1121 Aural Training (Piano) ENGL 1030 Composition II MUS 1225 Music of World's Cultures General Education Semester Total | Hrs. 0 2 1 3 1 (1) 3 3 1 6-17                      |
|--|---|---|--|
| Sophomore Year - First Semester MUS 1000 Recital Attendance Major Large Ensemble Major Instrument or Voice, 1000 level (Piano) MUS 1112 Theory II MUS 1122 Aural Training II MUS 2400 Fundamentals of Conducting Emphasis Area Electives HIST 1350 or HIST 1351 or POLS 1510 General Education Math Semester Total | Hrs. 0 1 2 (1) 3 1 2 3 3 3 18-19                | Sophomore Year - Second Semester MUS 1000 Recital Attendance Major Large Ensemble Major Instrument or Voice, 1000 level (Piano) MUS 2111 Theory III MUS 2121 Aural Training III Emphasis Area Electives General Education Semester Total                              | Hrs. 0 1 2 (1) 3 1 3 6 16-17                       |
| Junior Year - First Semester MUS 1000 Recital Attendance Major Instrument or Voice, 3000 level MUS 2112 Theory IV MUS 2122 Aural Training IV MUS 3211 Music History to 1800 Emphasis area electives General Education Semester Total   | Hrs. 0 3 3 1 1 3 3 3 16                         | Junior Year - Second Semester MUS 1000 Recital Attendance Major Instrument or Voice, 3000 level MUS 3212 Music History 1800-Present Emphasis area electives General Education Semester Total  | Hrs. 0 3 3 6 6 3 <b>15</b>                         |
| Senior Year - First Semester MUS 1000 Recital Attendance MUS 4125 Form and Analysis Major Instrument or voice, 3000 level Emphasis Area Electives General Education Semester Total   | Hrs.<br>0<br>3<br>3<br>5-9<br>3<br><b>14-18</b> | Senior Year - Second Semester MUS 1000 Recital Attendance Major Instrument or voice, 3000 level Senior Recital Emphasis Area Electives General Education Semester Total   | Hrs.<br>0<br>1.5<br>1<br>7-9<br>5<br>14.5-<br>16.5 |

# Music Functional Major, B.M. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- Emphases available: Performance, Music Technology, Jazz-Commercial Music, Piano Pedagogy
- · A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Music Education Functional Major (Instrumental Option), B.M.E. Degree

1/2005

This is the recommended program of study for the Music Education Functional Major (Instrumental Option), B.M.E. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Music for further information or guidance.

| Freshman Year - First Semester MUS 1000 Recital Attendance (MUS 1100 Fundamentals of Music) Major Large Instrumental Ensemble Major Instrument, 1000 level (Piano) Instrument Techniques Class: (See list) ENGL 1020 Composition I General Education Math POLS 1510 American Government Semester Total AE 1400 Student Development Seminar*  | Hrs. 0 (3) 1 1 (1) 1 3 3 3 12-16  | Freshman Year - Second Semester MUS 1000 Recital Attendance Major Large Instrumental Ensemble Major Instrument, 1000 level MUS 1111 Theory I MUS 1121 Aural Training I (Piano) Instrument Techniques Class: (See list) ENGL 1030 Composition II MUS 1225 Music of World's Cultures General Education Science Semester Total                     | Hrs. 0 1 1 3 1 (1) 1 3 3 3 3-4 16-18 |
|--|-----------------------------------|---|--------------------------------------|
| Sophomore Year - First Semester MUS 1000 Recital Attendance Major Large Instrumental Ensemble Major Instrument, 1000 level Instrument Techniques Class: (see list) (Piano) MUS 1112 Theory II MUS 1122 Aural Training II HIST 1350 or HIST 1350 General Education Semester Total   | Hrs. 0 1 1 1 (1) 3 1 3 7 17-18    | Sophomore Year - Second Semester MUS 1000 Recital Attendance Major Large Instrumental Ensemble Major Instrument, 1000 Level Instrument Techniques Class: (see list) (Piano) MUS 2111 Theory III MUS 2121 Aural Training III EDCI 2100 Foundations of Education & Field Exp. EDCI 2240 Educational Psychology General Education Semester Total   | Hrs. 0 1 1 (1) 3 1 3 3 3 3 17-18     |
| Junior Year - First Semester MUS 1000 Recital Attendance Major Large Instrumental Ensemble Major Instrument, 3000 Level Instrument Techniques Class: (see list) MUS 2112 Theory IV MUS 2122 Aural Training IV MUS 3211 Music History to 1800 MUS 2400 Fundamentals of Conducting MUS 3308 Marching Band Techniques PSY 4230 Psychology of Adolescence General Education Semester Total   | Hrs. 0 1 1.5 1 3 1 3 2 1 3 3 19.5 | Junior Year - Second Semester MUS 1000 Recital Attendance Major Large Instrumental Ensemble Major Instrument, 3000 level Instrument Techniques Class: (see list) MUS 4115 Instrumentation MUS 3212 Music History 1800-Present MUS 3420 Instrumental Conducting MUS 3306 Methods of Teaching Instrum. Mus. MUS 4381 Jazz Pedagogy Semester Total | Hrs. 0 1 1.5 1 3 3 3 3 2 17.5        |
| Senior Year - First Semester  MUS 1000 Recital Attendance  Major Large Instrumental Ensemble  Major Instrument, 3000 level  Instrument Tech Class: (see list)  EDCI 3500 Sec. Teaching & Behavioral Managemer  EDCI 3550 Practicum in Secondary Instruction  EDCI 4210 Teaching Reading in Sec School  EDCI 4300 Educational Measurement & Evaluation  MUS 1601 Voice Class I  PSY 4200 Psychology of Exceptional Children or  EDSP 2100 Education of the Exceptional Child  General Education  Semester Total | 1<br>2                            | Senior Year - Second Semester MUS 4310 Methods of Teaching Music MUS 4350 Secondary Field Experience II EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total   | Hrs. 2 1 5 4 <b>12</b>               |

# Music Education Functional Major (Instrumental Option), B.M.E. Degree - 129.5 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- Emphases available: Performance, Music Technology, Jazz-Commercial Music, Piano Pedagogy
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.

## Music Education Functional Major (Vocal Option), B.M.E Degree

1/2005

This is the recommended program of study for the Music Education Major (Vocal Option), B.M.E. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Music for further information or guidance:

| Freshman Year - First Semester MUS 1000 Recital Attendance (MUS 1100 Fundamentals of Music) Major Large Vocal Ensemble MUS 1610 Voice 1 (Piano) ENGL 1020 Composition I MUS 1225 Music of the World's Cultures General Education Science Semester Total AE 1400 Student Development Seminar *  | Hrs. 0 (3) 1 1 (1) 3 3 3-4 12-16     | Freshman Year - Second Semester MUS 1000 Recital Attendance Major Large Vocal Ensemble MUS 1610 Voice 1 MUS 1111 Theory I MUS 1121 Aural Training I (Piano) ENGL 1030 Composition II General Education Math POLS 1510 American Government General Education Semester Total  | Hrs. 0 1 1 3 1 (1) 3 3 3 3 3 3 18-19  |
|--|--------------------------------------|---|---------------------------------------|
| Sophomore Year - First Semester MUS 1000 Recital Attendance Major Large Vocal Ensemble MUS 1610 Voice 1 MUS 2400 Fundamentals of Conducting (Piano) MUS 1112 Theory II MUS 1122 Aural Training II MUS 2221 Intro to Music Literature I HIST 1350 or 1351 US History General Education Semester Total   | Hrs. 0 1 1 2 (1) 3 1 2 3 3 16-17     | Sophomore Year - Second Semester MUS 1000 Recital Attendance Major Large Vocal Ensemble MUS 1610 Voice 1 (Piano) MUS 2111 Theory III MUS 2121 Aural Training III MUS 2222 Intro to Music Literature II MUS 2632 Diction for Singers EDCI 2100 Foundations of Education EDCI 2240 Educational Psychology MUS 3410 Choral Conducting Semester Total | Hrs. 0 1 1 (1) 3 1 2 2 3 3 3 1 18-19  |
| Junior Year - First Semester MUS 1000 Recital Attendance Major Large Vocal Ensemble MUS 3610 Voice II MUS 2112 Theory IV MUS 2122 Aural Training IV MUS 3211 Music History to 1800 MUS 3415 Choral Techniques MUS 1615 Opera Theatre or MUS 1620 Music Theatre Practicum I MUS 3305 Methods of Teach Elem. School Music General Education Semester Total   | Hrs. 0 1 1.5 3 1 3 2 1 1 3 3 3 18.5  | Junior Year - Second Semester MUS 1000 Recital Attendance Major Large Vocal Ensemble MUS 3610 Voice II MUS 3212 Music History 1800-Present MUS 4230 Choral Literature EDCI 4210 Teaching Reading in Sec Schools PSY 4230 Psychology of Adolescence General Education Semester Total   | Hrs. 0 1 1.5 3 2 2 3 5 17.5           |
| Senior Year - First Semester MUS 1000 Recital Attendance Major Large Vocal Ensemble MUS 3610 Voice II MUS 4130 Choral Arranging MUS 4320 Methods of Teach Middle School Music EDCI 3500 Sec Teaching & Behavioral Mgt EDCI 3550 Practicum in Secondary Instruction PSY 4200 Psychology of Exceptional Children or EDSP 2100 Education of the Exceptional Child EDCI 4300 Educational Measurement & Eval General Education Semester Total | Hrs. 0 1 1.5 2 2 3 1 1 2 2 3 1 1 7.5 | Senior Year - Second Semester MUS 4310 Methods of Teaching Music MUS 4350 Secondary Field Experience II EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total   | Hrs.<br>2<br>1<br>5<br>4<br><b>12</b> |

# Music Education Functional Major (Vocal Option), B.M.E. Degree - 129.5 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.

### Nursing Functional Major, B. S. Degree

1/2005

This is the recommended program of study for the Nursing Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Nursing for further information or guidance.

| Freshman Year - First Semester CHEM 1104 Intro to Sciences: Chemistry* SOC 1800 General Sociology* ENGL 1020 Composition I General Education Math NUR 1700 Intro to Professional Nursing** General Education Semester Total   | Hrs. 4 3 3 3 2 2 3 18                 | Freshman Year - Second Semester<br>BIOL 2401 Anatomy & Physiology I*<br>PSY 1100 General Psychology*<br>ENGL 1030 Composition II<br>General Education<br>Semester Total                                       | Hrs. 4 3 3 6 16                       |
|---|---------------------------------------|---|---------------------------------------|
| Sophomore Year - First Semester BIOL 2402 Anatomy & Physiology II* D&N 3340 Nutrition* HIST 1350 or 1351 US History General Education Semester Total  | Hrs. 4 3 5 15                         | Sophomore Year - Second Semester<br>BIOL 3611 Microbiology*<br>NUR 2000 Nur. Cnpts. for Hlth. Prom. & Maint.**<br>Nursing elective***<br>General Education<br>Semester Total                                  | Hrs.<br>4<br>3<br>2<br>6<br><b>15</b> |
| Junior Year - First Semester  NUR 3312 Observation & Assessment  NUR 3110 Concepts of Nursing I  NUR 3111 Concepts of Nursing I Practicum  NUR 3300 Concepts of Altered Health  Semester Total  | Hrs.<br>3<br>5<br>2<br>5<br><b>16</b> | Junior Year - Second Semester NUR 3010 Pharmacology NUR 3320 Concepts of Nursing II NUR 3321 Concepts of Nursing II Practicum NUR 3322 Technological Applications NUR 4010 Research in Nursing Semester Total | Hrs. 3 4 4 2 15                       |
| Senior Year - First Semester ICAP 4111 Socio-Econ Factors Impacting Health NUR 4210 Adv. Concepts of Nur. in Family Health NUR 4211 Adv. Concepts of Nur. in Family Pract. NUR 4310 Adv. Concepts of Adult Nursing NUR 4311 Adv. Concepts of Adult Nursing Pract. NUR 4011 Prof Issues & Ethics in Nursing Semester Total | Hrs. 3 3 2 2 3 2 15                   | Senior Year - Second Semester NUR 4420 Advanced Concepts of Com/MH Nursing NUR 4421 Adv. Concepts of Com/MH Practicum NUR 4620 Nursing Management NUR 4621 Nursing Management Practicum Semester Total        | Hrs. 5 4 3 3 <b>15</b>                |

## Nursing Functional Major, B.S. Degree - 124 hours

- \*Nursing Program Prerequisite Courses (must be taken prior to admission to the program). Preference for admission into the Nursing major will be given to students taking ALL prerequisites at Central Missouri.
- \*\*Lower Level Required Nursing Courses (must be taken prior to admission to the program).
- \*\*\*Nursing electives may be taken anytime after sophomore standing is achieved. One nursing elective course is required from the following for Nursing Majors: NUR 2020 Health: The Women's Prospective; NUR 4020 Grief and Loss; NUR 4030 Human Sexuality; NUR 4405 Aging of Self and Others; NUR 4040 Nursing Informatics.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Occupational Safety and Health Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Occupational Safety and Health Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Safety Sciences for further information or guidance.

| Freshman Year - First Semester MATH 1111 College Algebra ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*   | Hrs.<br>3<br>3<br>9<br><b>15</b> | Freshman Year - Second Semester PSY 1100 General Psychology CHEM 1104 Intro to Sciences: Chemistry ENGL 1030 Composition II General Education MATH 1131 Calculus for Business & Economics Semester Total                        | Hrs. 3 4 3 3 16                |
|--|----------------------------------|---|--------------------------------|
| Sophomore Year - First Semester<br>SAFE 3000 Accident Causation & Prevention<br>SAFE 3120 Introduction to Industrial Hygiene<br>PHYS 1101 College Physics I<br>HIST 1350 or 1351 or POLS 1510<br>Semester Total        | Hrs. 3 4 3 13                    | Sophomore Year - Second Semester<br>PHYS 1102 College Physics II<br>CHEM 2650 Elementary Organic & Biochemistry<br>SAFE 3430 Industrial Hazard Control<br>General Education<br>Semester Total                                   | Hrs. 4 5 3 3 <b>15</b>         |
| Junior Year - First Semester<br>BIOL 2401 Anatomy & Physiology I<br>SAFE 4425 Safety & Health Legis. & Standards<br>General Education<br>Semester Total  | Hrs. 4 3 9 <b>16</b>             | Junior Year - Second Semester SAFE 4430 Workers Compensation Legislation SAFE 4000 Ergonomics in Safety & Health SAFE 4140 Safety & Health Lab SAFE 4020 Legal Aspects of Safety and Health Free Choice Elective Semester Total | Hrs. 3 3 3 2 14                |
| Summer – Between Junior & Senior Year<br>SAFE 4990 Internship in Safety Sciences**<br>Semester Total   | <b>Hrs.</b><br>6<br><b>6</b>     |   |                                |
| Senior Year - First Semester SAFE 4010 Accident Investigation SAFE 4035 Safety Program Management SAFE 4850 Industrial Fire Protection SAFE 4940 Introductory Quantitative Methods Free Choice Elective Semester Total | Hrs. 3 3 3 3 15                  | Senior Year - Second Semester<br>SAFE 4435 Environmental Compliance<br>SAFE 4360 Introduction to Systems Safety<br>ICAP 4115 Safety & Health Management<br>Free Choice Electives<br>Semester Total                              | Hrs.<br>3<br>3<br>3<br>5<br>14 |

# Occupational Safety and Health Functional Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*SAFE 4990 Internship in Safety Sciences (6 hrs) is taken the summer after the Junior Year.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Photography Major, B.S. Degree

1/2005

# Areas of Emphasis: Portrait, Digital, Media, Technical, Commercial

This is the recommended program of study for the Photography Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Graphic Imaging & Design Technology for further information or guidance.

| Freshman Year - First Semester PHOT 1210 Elementary Photography PHOT 1211 Technique & Critique General Education General Education Math ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar* | Hrs. 3 1 6 3 3 <b>16</b> | Freshman Year - Second Semester PHOT 1215 Photographer's Forum PHOT 2200 Color Transparency PHOT 2210 Introduction to Studio Techniques ENGL 1030 Composition II HIST 1350 or 1351 or POLS 1510 General Education Science Semester Total | Hrs5 3 3 3 3 -4 15.5-16.5                |
|---|--------------------------|--|--|
| Sophomore Year - First Semester<br>PHOT 3230 Electronic Imaging<br>PHOT 3250 Portrait<br>General Education<br>Coursework in Minor<br>Semester Total   | Hrs. 3 3 6-7 3 15-16     | Sophomore Year - Second Semester<br>PHOT 1215 Photographer's Forum<br>PHOT 2220 Materials & Processes<br>General Education<br>Coursework in Minor<br>Semester Total  | Hrs.<br>.5<br>3<br>6<br>6<br><b>15.5</b> |
| Junior Year - First Semester PHOT 2270 Zone System Photography Specialty Area Elective General Education Coursework in Minor Semester Total   | Hrs. 3 3 6 3 <b>15</b>   | Junior Year - Second Semester<br>Photography Specialty Area Electives<br>General Education<br>PHOT 1215 Photographer's Forum**<br>Coursework in Minor<br>Semester Total  | Hrs.<br>6<br>6<br>1<br>3<br><b>16</b>    |
| Senior Year - First Semester PHOT 4200 Color Imaging Photography Specialty Area Elective Free Choice Electives*** Coursework in Minor Semester Total  | Hrs. 3 3 6 15            | Senior Year - Second Semester PHOT 1215 Photographer's Forum PHOT 4252 Portfolio Photography Specialty Area Elective IGEN 3116 Creative Problem Solving Free Choice Electives*** Semester Total  | Hrs.<br>1<br>3<br>3<br>5<br>15           |

# Photography Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Mid-Program Review is required before the conclusion of the 3rd Forum.
- \*\*\*The above plan is based on a 21-hour minor. The number of required free choice electives will vary based on minor chosen.
- Forty hours of upper level credits must be earned to meet graduation requirements. Student should make appropriate choices in minor, major electives, and free choice electives coursework.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Physical Education Functional Major (Corporate Fitness), B.S. Degree

1/2005

This is the recommended program of study for the Physical Education Functional Major (Corporate Fitness), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester PE 1100 Orientation to Physical Education PE 1206 Lifetime Fitness* PE 1120 Microcomputer App in Physical Education General Education ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar** | Hrs. 1 3 2 6 3 15   | Freshman Year - Second Semester General Education Science ENGL 1030 Composition II General Education Math PE 1204 Stress Management General Education Semester Total   | Hrs. 3-4 3 1 6 16-17              |
|---|---------------------|--|-----------------------------------|
| Sophomore Year - First Semester HED 1350 Responding to Emergencies PE 2320 A & T Weight Training PE 2303 A & T Aerobic Conditioning PE 2800 Human Anatomy PSY 1100 General Psychology*** General Education Semester Total                         | Hrs. 3 1 2 3 3 6 18 | Sophomore Year - Second Semester ACCT 2101 Principles of Financial Accounting PE 4110 History & Philosophy of Physical Ed. PE 2850 Foundations Exercise Physiology PE 3610 Care & Prevention of Injuries HIST 1350 or 1351 or POLS 1510 General Education Semester Total | Hrs. 3 2 3 2 3 16                 |
| Junior Year - First Semester BLAW 2720 Legal Environment of Business MKT 3400 Principles of Marketing PE 3800 Kinesiology PE 4340 Adapted Physical Education PE 4860 Fitness Program & Implementation Semester Total                              | Hrs. 3 3 3 3 3 14   | Junior Year - Second Semester MKT 3420 Principles Advertising HED 4300 Nutrition & Human Performance PE 4341 Physical Activity & the Older Adult PE 4740 Legal Liability in F/W, PE Settings General Education Free electives Semester Total                             | Hrs. 3 2 2 2 3 3 <b>15</b>        |
| Senior Year - First Semester HED 4310 Drugs and Youth MKT 3430 Personal Selling PE 4850 Assessment & Eval. Fitness/Wellness General Education Free Choice Electives Semester Total  | Hrs. 3 3 3 3 15     | Senior Year - Second Semester PE 4765 Internship**** Free Choice Electives Semester Total  | Hrs.<br>2-4<br>10-12<br><b>14</b> |

### Physical Education (Corporate Fitness) Major, B.S. Degree - 124 hours

- \*Students can also choose to take PE 1203, 1204, and 2200 to fulfill this requirement.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*\*PSY 1100 is a required general education course.
- \*\*\*\*The internship can also be taken the semester after all other coursework is completed.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Physical Education Functional Major (Exercise Science), B.S. Degree

1/2005

This is the recommended program of study for the Physical Education Functional Major (Exercise Science), B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester PE 1100 Orientation to Physical Education PE 1120 Microcomputer App in Physical Education PE 1206 Lifetime Fitness* SOC 1800 General Sociology*** CHEM 1104 Intro. to Sci: Chem. (w/lab)** ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar** | Hrs. 1 2 3 3 4 3 16            | Freshman Year - Second Semester PE 2800 Human Anatomy ENGL 1030 Composition II General Education Math General Education Semester Total   | Hrs. 3 3 3 5-6 14-15                               |
|--|--------------------------------|--|--|
| Sophomore Year - First Semester BIOL 2401 Anatomy & Physiology I*** HED 1350 Responding to Emergencies PE 1204 Stress Management PE 2320 Analysis & Teaching of Weight Training General Education Semester Total   | Hrs. 4 3 1 1 6 <b>15</b>       | Sophomore Year - Second Semester BIOL 2402 Anatomy & Physiology II*** PE 2303 Anal. & Teaching of Aerobic Conditioning PE 2850 Foundations Exercise Physiology PE 3610 Care & Prevention of Injuries HIST 1350 or 1351 or POLS 1510 General Education Semester Total   | Hrs. 4 2 3 2 3 3 17                                |
| Junior Year - First Semester<br>D&N 3340 Nutrition<br>HED 4310 Drugs and Youth<br>PE 3800 Kinesiology<br>PE 4340 Adapted Physical Education<br>PE 4860 Fitness Program & Implementation<br>General Education<br>Semester Total   | Hrs. 3 3 3 3 3 3 18            | Junior Year - Second Semester CHEM 2650 Elemen. Org. & Bio. (5 hrs) or PHYS 1104 Intro. to Sci.: Physics (4 hrs) or EDCI 1310 Physics for Teachers (3 hrs) PE 4110 History & Philosophy of Phys. Education PE 4341 Physical Activity & the Older Adult PE 4740 Legal Liability in F/W, PE Settings PSY 4520 Stats for the Behavioral Sciences General Education Semester Total | 3-5<br>2<br>2<br>2<br>2<br>3<br>3<br>1 <b>5-17</b> |
| Senior Year - First Semester HED 4300 Nutrition & Human Performance General Education PE 4850 Assess and Evaluation Fitness/Wellness Free Choice Electives Semester Total  | Hrs.<br>2<br>3<br>3<br>9<br>17 | Senior Year - Second Semester PE 4765 Internship**** Free Choice Electives General Education Semester Total  | Hrs.<br>2-4<br>5-8<br>3<br>12-13                   |

# Physical Education Major (Exercise Science), B.S. Degree - 124 hours

- \*Students can also choose to take PE 1203, 1204, and 2200 to fulfill this requirement.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*\*SOC 1800 is a required general education course, fulfilling 3 hours of Social Sciences. CHEM 1104, BIOL 2401, BIOL 2402 are required general education courses, fulfilling 7 hours of Life and Physical Sciences.
- \*\*\*\*The internship can also be taken the semester after all other coursework is completed.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Physical Education (K-12 Certification) Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Physical Education (K - 12 Education) Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester PE 1120 Microcomputer Applications in PE ENGL 1020 Composition I HIST 1350 or 1351 US History PE 1100 Orientation to Physical Education PE 1206 Lifetime Fitness* General Education Semester Total AE 1400 Student Development Seminar**   | Hrs. 2 3 3 1 1 3 3 3 15  | Freshman Year - Second Semester General Education Science ENGL 1030 Composition II General Education Math COMM 1000 Public Speaking BE&O 1210 Essentials of Managing Information or LIS 1600 Information Resources General Education Semester Total                               | Hrs. 4 3 3 3 3 3 4 2 3 18 |
|---|--------------------------|---|---------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Ed. & Field Experience EDCI 2240 Educational Psychology PE 1450 Growth & Development in Elementary PE PE 2240 Anal. & Teaching of Indiv. & Dual Activ. PE 2800 Human Anatomy PE 3300 Teaching of Dance Semester Total  | Hrs. 3 3 3 3 3 2 17      | Sophomore Year - Second Semester POLS 1510 American Government PE 2303 Anal. & Teaching of Aerobic Conditioning PE 2850 Foundations of Exercise Physiology PE 3280 Analysis & Teaching of Team Activities PSY 4230 Psychology of Adolescence General Education Semester Total     | Hrs. 3 2 3 3 3 17         |
| Junior Year - First Semester  EDSP 2100 Education of the Exceptional Child or PSY 4200 Psychology of Exceptional Child PE 2290 Anal. & Teaching of Innovative Activities PE 2320 Analysis & Teaching of Weight Training PE 3430 Creative Dance & Rhythms for Elem. Sch. PE 3610 Care & Prevention of Injuries PE 3800 Kinesiology PE 3850 Motor Learning and Control PE 4110 History and Philosophy of Phys. Educ. Semester Total | Hrs.  2 2 1 2 2 3 3 2 17 | Junior Year - Second Semester PE 3315 Analysis & Teaching of Outdoor Activities PE 4340 Adapted Physical Education PE 4840 Social Aspects of Physical Activity PE 4740 Legal Liability in F/W, PE Settings PE 4760 Physical Education Curriculum General Education Semester Total | Hrs. 1 3 2 2 2 6 16       |
| Senior Year - First Semester EDCI 4210 Teach of Reading in Sec School PE 3450 Tech of Teach PE Act. in Elem. Schools PE 3460 Tech of Teach PE Act. Mid./High Schools PE 4390 Evaluation Procedures in Phys. Education PE 4830 Psychological Aspects in Phys. Education EDCI 3500 Sec. Teaching and Behavioral Mgmt. EDCI 3550 Practicum in Secondary Instruction Semester Total   | Hrs. 2 3 3 3 2 3 1 17    | Senior Year - Second Semester<br>EDCI 4495 Student Teaching Elementary I<br>ICAP 4468 Student Teaching Secondary II<br>PE 4880 Methods of Teaching Phys. Education<br>PE 4885 Secondary Field Experience<br>Semester Total  | Hrs. 5 4 2 1 <b>12</b>    |

# Physical Education (K-12 Certification) Functional Major, **B.S. Degree - 129 hours**

- \*Students can also choose to take PE 1203, 1204, and 2200 to fulfill this requirement.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Physics Functional Major, B.A. Degree

1/2005

This is the recommended program of study for the Physics Functional Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Chemistry and Physics for further information or guidance.

| Freshman Year - First Semester CHEM 1131 General Chemistry I ENGL 1020 Composition I MATH 1151 Calc. & Analytical Geom. I PHYS 1101 College Physics I* or General Education Semester Total AE 1400 Student Development Seminar** | Hrs 5 3 5 5 3-4 16-17           | Freshman Year -Second Semester CHEM 1132 General Chemistry II MATH 1152 Calculus & Analytical Geometry II PHYS 2121 University Physics I General Education Semester Total  | Hrs 5 5 5 5 2 <b>17</b> |
|--|---------------------------------|--|-------------------------|
| Sophomore Year - First Semester  ENGL 1030 Composition II  MATH 2153 Calculus & Analytical Geometry III  PHYS 2122 University Physics II  PHYS 3211 Analytical Mechanics I  Modern Language Requirement***  Semester Total       | Hrs 3 5 2 3 16                  | Sophomore Year - Second Semester CS 1100 Introduction to Computing I HIST 1350 or 1351 or POLS 1510 PHYS 3080 Advanced Physics Lab PHYS 3511 Modern Physics PHYS 4212 Analytical Mechanics II Modern Language Requirement *** Semester Total | Hrs 3 3 1 3 3 1 3 3 1 6 |
| Junior Year - First Semester PHYS 3080 Advanced Physics Lab Departmentally approved Physics elective*** Modern Language Requirement*** General Education Semester Total  | Hrs 1 3 9 16                    | Junior Year - Second Semester<br>PHYS 3012 Electric Measurements Lab<br>PHYS 3311 Electric Circuit Theory<br>MATH 3151 Differential Equations<br>General Education<br>Semester Total   | Hrs 2 3 3 6 14          |
| Senior Year - First Semester<br>PHYS 3080 Advanced Physics Lab<br>General Education<br>Free Choice Electives<br>Semester Total   | Hrs<br>1<br>6<br>7<br><b>14</b> | Senior Year - Second Semester PHYS 4411 Thermodynamics Departmentally approved Physics Elective**** General Education Free Choice Electives Semester Total   | Hrs 3 3 5-6 14-15       |

## Physics Functional Major, B.A. Degree - 124 hours

- \*Students whose high school preparation is inadequate should take PHYS 1101 during their first year at Central Missouri.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*\*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on 9 hours of modern language courses.
- \*\*\*\*Departmentally approved electives can be selected from the following courses: PHYS 2020, PHYS 4312, PHYS 3512, PHYS 3611, PHYS 4512, PHYS 4513, PHYS 4711.
- The department strongly recommends that most free choice electives be Physics/Math/ Computer Science/ Chemistry courses.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Physics Functional Major, B.S. Degree

1/2005

This is the recommended program of study for the Physics Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Chemistry and Physics for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I CHEM 1131 General Chemistry I MATH 1151 Calc. & Analytical Geometry I PHYS 1101 College Physics I or Gen. Ed* Semester Total AE 1400 Student Development Seminar** | Hrs. 3 5 5 3-4 16-17 | Freshman Year -Second Semester<br>CHEM 1132 General Chemistry II<br>MATH 1152 Calc. & Analytical Geometry II<br>PHYS 2121 University Physics I<br>General Education<br>Semester Total   | Hrs. 5 5 5 2 17                       |
|---|----------------------|---|---------------------------------------|
| Sophomore Year - First Semester ENGL 1030 Composition II HIST 1350 or 1351 or POLS 1510 MATH 2153 Calc. & Analytical Geometry III PHYS 2122 University Physics II PHYS 3211 Analytical Mechanics I Semester Total         | Hrs. 3 5 2 3 16      | Sophomore Year - Second Semester MATH 3151 Differential Equations or MATH 3160 Advanced Applied Calculus PHYS 3080 Advanced Physics Lab PHYS 3511 Modern Physics PHYS 4212 Analytical Mechanics II General Education Semester Total | Hrs. 3 1 3 3 6 16                     |
| Junior Year - First Semester<br>PHYS 3080 Advanced Physics Lab<br>PHYS 3512 Modern Physics II<br>Departmentally Approved Physics Elective***<br>General Education<br>Semester Total                                       | Hrs. 1 3 9 16        | Junior Year - Second Semester PHYS 3012 Electric Measurements Lab PHYS 3311 Electric Circuit Theory PHYS 4312 Electricity & Magnetism General Education Semester Total  | Hrs.<br>2<br>3<br>3<br>6<br><b>14</b> |
| Senior Year - First Semester PHYS 3080 Advanced Physics Lab Departmentally Approved Physics Elective*** General Education Free Choice Electives*** Semester Total   | Hrs. 1 3 7 14        | Senior Year - Second Semester<br>PHYS 4411 Thermodynamics<br>General Education<br>Free Choice Electives****<br>Semester Total   | Hrs.<br>3<br>3<br>8-9<br><b>14-15</b> |

# Physics Functional Major, B.S. Degree - 124 hours

- \*Students whose high school preparation is inadequate should take PHYS 1101 during their first year at Central Missouri.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice
- \*\*\*Departmentally approved electives can be selected from the following courses: PHYS 2020, PHYS 3611, PHYS 4512, PHYS 4513, PHYS 4711.
- \*\*\*\*The department strongly recommends that most free electives be Physics/Math/Computer Science/Chemistry courses.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Physics Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Physics Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Chemistry & Physics for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I CHEM 1131 General Chemistry I MATH 1151 Calc. & Analytic Geom. I (PHYS 1101)* General Education Semester Total AE 1400 Student Development Seminar **   | Hrs 3 5 (4) 0-3 16-17 | Freshman Year -Second Semester CHEM 1132 General Chemistry II PHYS 2121 University Physics I MATH 1152 Calc. & Analytical Geom. II COMM 1000 Public Speaking Semester Total   | Hrs 5 5 5 5 3 <b>18</b>         |
|--|-----------------------|---|---------------------------------|
| Sophomore Year - First Semester PHYS 2122 University Physics II MATH 2153 Calc. & Analytical Geom. III EDCI 2100 Foundations Ed. & Field Exp. EDCI 2240 Educational Psychology ENGL 1030 Composition II Semester Total   | Hrs 5 3 3 3 3 17      | Sophomore Year - Second Semester PHYS 3511 Modern Physics I BIOL 1005 Introduction to Environment Sci. EASC 1004 Intro. to Sci. Geology, 4, or EASC 3114 Meteorology, 3 CS 1100 Introduction to Computing I HIST 1350 or 1351 U.S. History Semester Total | Hrs 3 3 3 4 3 15-16             |
| Junior Year - First Semester PHYS 3080 Advanced Physics Lab PSY 4230 Psychology of Adolescence BIOL 1111 Biology I T&OE 2000 Technology & Change General Education Semester Total  | Hrs 1 3 4 3 5 16      | Junior Year - Second Semester EDCI 4210 Teaching Reading in Secondary EDCI 4300 Ed. Measurement & Evaluation Departmentally approved Elective*** PHYS 3080 Advanced Physics Lab POLS 1510 American Government General Education Semester Total            | Hrs 2 2 3 1 3 3-6 14-17         |
| Senior Year - First Semester EDCI 3500 Sec ondary Tchg. & Behav. Mgt. EDCI 3550 Practicum in Secondary Instruction EDSP 2100 Education of the Exceptional Child or PSY 4200 Psychology of Exceptional Child Departmentally Approved Elective*** General Education Semester Total | Hrs 3 1 2 5 3 14      | Senior Year - Second Semester<br>CHEM 4011 Methods of Tchg. Physical Sci.<br>EDCI 4595 Student Teaching Secondary I<br>ICAP 4468 Student Teaching Secondary II<br>Semester Total  | Hrs<br>3<br>5<br>4<br><b>12</b> |

## Physics Functional Major, B.S. in Ed. Degree - 124 hours

- \*Students whose high school preparation is inadequate should take PHYS 1101 during their first year at Central Missouri.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*\*Departmentally approved electives can be selected from the following courses: PHYS 3211, PHYS 3512, PHYS 3611, PHYS 4312, or PHYS 4411.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Political Science Major, B.A. Degree

1/2005

This is the recommended program of study for the Political Science Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Political Science and Geography for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  POLS 1500 Introduction to Political Science General Education  Semester Total  AE 1400 Student Development Seminar* | Hrs. 3 3 9 15          | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math POLS 1510 American Government General Education Semester Total                                     | Hrs.<br>3<br>3<br>3<br>6<br><b>15</b> |
|--|------------------------|---|---------------------------------------|
| Sophomore Year - First Semester General Education Science POLS 2580 Public Law & Judicial Process POLS Elective General Education Coursework in Minor Semester Total         | Hrs. 3-4 3 3 6 3 18    | Sophomore Year - Second Semester<br>POLS 2520 Comparative Government<br>POLS 2530 International Relations<br>General Education<br>Modern Language Requirement**<br>Semester Total | Hrs.<br>3<br>3<br>6<br>3<br><b>15</b> |
| Junior Year - First Semester POLS 3560 Research Methods Upper-Level POLS Elective Coursework in Minor Modern Language Requirement** Semester Total                           | Hrs. 3 3 6 3 <b>15</b> | Junior Year - Second Semester POLS 3540 Survey of Political Theory POLS 4570 Public Administration Coursework in Minor Modern Language Requirement** Semester Total               | Hrs. 3 3 6 3 <b>15</b>                |
| Senior Year - First Semester Upper-level POLS electives General Education Coursework in Minor Free Choice Electives Semester Total   | Hrs. 6 3 4 16          | Senior Year - Second Semester<br>Upper-Level POLS Electives<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total   | Hrs.<br>3<br>3<br>9<br><b>15</b>      |

# Political Science Major, B.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*See the current catalog for BA Degree fulfillment options. This plan is based on 9 hours of modern language. .
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Political Science Major, B.S. Degree

1/2005

This is the recommended program of study for the Political Science Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Political Science and Geography for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I POLS 1500 Introduction to Political Science General Education Semester Total AE 1400 Student Development Seminar* | Hrs.<br>3<br>3<br>9<br><b>15</b> | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math POLS 1510 American Government General Education Semester Total                     | Hrs.<br>3<br>3<br>3<br>6<br><b>15</b> |
|--|----------------------------------|---|---------------------------------------|
| Sophomore Year - First Semester  General Education Science  POLS 2580 Public Law & Judicial Process  POLS Elective  General Education  Semester Total                    | Hrs. 3-4 3 6 15-16               | Sophomore Year - Second Semester<br>POLS 2520 Comparative Govt<br>POLS 2530 International Relations<br>General Education<br>Coursework in Minor<br>Semester Total | Hrs. 3 3 6 3 15                       |
| Junior Year - First Semester POLS 3560 Research Methods in Political Science Upper-Level POLS Elective Coursework in Minor General Education Semester Total              | Hrs. 3 3 6 3 <b>15</b>           | Junior Year - Second Semester POLS 3540 Survey of Political Theory POLS 4570 Public Administration Coursework in Minor Free Choice Electives Semester Total       | Hrs.<br>3<br>3<br>6<br>3<br><b>15</b> |
| Senior Year - First Semester Upper-level POLS Electives General Education Coursework in Minor Free Choice Electives Semester Total                                       | Hrs.<br>6<br>3<br>4<br>16        | Senior Year - Second Semester<br>Upper-Level POLS electives<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total                                     | Hrs.<br>3<br>3<br>12<br><b>18</b>     |

# Political Science Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Psychology Major, B.A. Degree

1/2005

This is the recommended program of study for the Psychology Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Psychology for further information or guidance.

| Freshman Year - First Semester PSY 1100 General Psychology ENGL 1020 Composition I Modern Language Requirement* General Education Science Semester Total AE 1400 Student Development Seminar** | Hrs. 3 3 3 3 4 12-13      | Freshman Year - Second Semester ENGL 1030 Composition II General Education Math General Education Modern Language Requirement* Semester Total                    | Hrs. 3 3 6 3 <b>15</b>                |
|--|---------------------------|--|---------------------------------------|
| Sophomore Year - First Semester PSY 2110 Research Design & Analysis I General Education HIST 1350 or 1351 or POLS 1510 Modern Language Requirement* Semester Total                             | Hrs. 4 6 3 3 16           | Sophomore Year - Second Semester<br>PSY 2120 Research Design & Analysis II<br>PSY 2130 Learning<br>General Education<br>Coursework in Minor<br>Semester Total    | Hrs. 4 3 6 3 16                       |
| Junior Year - First Semester PSY 3130 Physiological Psychology PSY 3220 Lifespan Development Coursework in Minor General Education Free Choice Elective Semester Total                         | Hrs. 4 3 3 3 16           | Junior Year - Second Semester PSY 3340 Social Psychology PSY 4440 Abnormal Psychology Coursework in Minor General Education Free Choice Electives Semester Total | Hrs. 3 3 3 3 5 17                     |
| Senior Year - First Semester PSY 4310 Theories of Personality Coursework in Minor Free Choice Electives Semester Total   | Hrs.<br>3<br>6<br>6<br>15 | Senior Year - Second Semester PSY 4110 Systems of Psychology Coursework in Minor General Education Free Choice Electives Semester Total                          | Hrs.<br>3<br>6<br>3<br>5<br><b>17</b> |

# Psychology Major, B.A. Degree - 124 hours

- \*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on 3 modern language courses.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- The above degree plan is based on a 21 hour minor.
- A 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Psychology Major, B.S. Degree

1/2005

This is the recommended program of study for the Psychology Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Psychology for further information or guidance.

| Freshman Year - First Semester PSY 1100 General Psychology ENGL 1020 Composition I General Education Math General Education Semester Total AE 1400 Student Development Seminar* | Hrs.<br>3<br>3<br>3<br>5-6<br><b>14-15</b> | Freshman Year - Second Semester<br>General Education<br>General Education Science<br>ENGL 1030 Composition II<br>Semester Total                               | Hrs.<br>9<br>3-4<br>3<br><b>15-16</b> |
|---|--|---|---------------------------------------|
| Sophomore Year - First Semester PSY 2110 Research Design & Analysis I General Education HIST 1350 or 1351 or POLS 1510 Free Choice Electives Semester Total                     | Hrs. 4 6 3 1                               | Sophomore Year - Second Semester<br>PSY 2120 Research Design & Analysis II<br>PSY 2130 Learning<br>Coursework in Minor<br>General Education<br>Semester Total | Hrs. 4 3 3 6 16                       |
| Junior Year - First Semester PSY 3130 Physiological Psychology PSY 3220 Lifespan Development Coursework in Minor General Education Free Choice Electives Semester Total         | Hrs. 4 3 3 3 16                            | Junior Year - Second Semester<br>PSY 3340 Social Psychology<br>PSY 4440 Abnormal Psychology<br>Coursework in minor<br>Free Choice Electives<br>Semester Total | Hrs. 3 3 6 3 15                       |
| Senior Year - First Semester<br>PSY 4310 Theories of Personality<br>Coursework in Minor<br>Required Electives in Psychology**<br>Semester Total                                 | Hrs.<br>3<br>6<br>6<br>15                  | Senior Year - Second Semester PSY 4110 Systems of Psychology Coursework in Minor Free Choice Electives Required Electives in Psychology** Semester Total      | Hrs. 3 3 7 3 16                       |

## Psychology Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice
- \*\*See the current catalog for a list of courses that fulfill required electives for the degree.
- The above degree plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Public Relations Major, B.S. Degree

1/2005

This is the recommended program of study for the Public Relations Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester  ENGL 1020 Composition I  COMM 1100 Introduction to Comm. Studies  COMM 1110 Communication Skills Lab  COMM 1200 Intro. to Mass Communication  General Education  Semester Total   | Hrs 3 1 1 3 8 16      | Freshman Year - Second Semester  ENGL 1030 Composition II  COMM 1000 Public Speaking  General Education MATH  General Education  Semester Total  | Hrs 3 3 6 15             |
|---|-----------------------|--|--------------------------|
| Sophomore Year - First Semester COMM 1520 Elements of News Reporting COMM 2620 Public Relations HIST 1350 or 1351 or POLS 1510 General Education Semester Total   | Hrs 3 3 3 6 15        | Sophomore Year - Second Semester COMM 2100 Foundations of Comm. Theory COMM 2110 Foundations of Comm. Theory Lab COMM 2520 Copy Editing & Layout COMM 3010 Interpersonal Communication General Education Science Coursework for Minor Semester Total | Hrs 3 1 3 3 3-4 3 16-17  |
| Junior Year - First Semester COMM 3100 Communication Research Methods COMM 3110 Resources & Methods Lab COMM 4250 Mass Communication Law Coursework for Minor COMM 4685 Case Studies in Public Relations Upper-Level Free Choice Electives Semester Total | Hrs 3 1 3 3 2 4 16    | Junior Year - Second Semester COMM 3000 Film Appreciation COMM 4680 Publicity Approved Major Elective Coursework for Minor Upper-Level Free Choice Electives Semester Total  | Hrs 3 3 3 3 3 15         |
| Senior Year - First Semester<br>COMM 4510 Magazine Design & Prod<br>IGEN 3224 or IGEN 3232 or IGEN 4224<br>Coursework for Minor<br>Approved Major Elective<br>Semester Total  | Hrs 3 3 6 3 <b>15</b> | Senior Year - Second Semester<br>COMM 4690 Campaigns<br>Coursework for Minor<br>Upper-Level Free Choice Electives<br>Semester Total  | Hrs<br>3<br>6<br>6<br>15 |

# Public Relations Major, B.S. Degree - 124 hours

- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- During the last semester of the senior year, all graduates must submit a portfolio to the Public Relations assessment coordinator before graduating. See department advisor for requirements.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Safety Management Major, B.S. Degree

1/2005

This is the recommended program of study for the Safety Management Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Safety Sciences for further information or guidance.

| Freshman Year - First Semester SAFE 3000 Accident Causation & Prevention MATH 1111 College Algebra ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*  | Hrs. 3 3 6 15            | Freshman Year - Second Semester PSY 1100 General Psychology CHEM 1104 Intro to Sciences: Chemistry ENGL 1030 Composition II General Education Semester Total                                       | Hrs.<br>3<br>4<br>3<br>6<br><b>16</b> |
|---|--------------------------|--|---------------------------------------|
| Sophomore Year - First Semester SAFE 4020 Legal Aspects of Safety & Health SAFE 3120 Introduction to Industrial Hygiene PHYS 1103 Introduction to the Sciences: Physics HIST 1350 or 1351 or POLS 1510 Minor Coursework Semester Total  | Hrs. 3 3 3 3 3 <b>15</b> | Sophomore Year - Second Semester<br>SAFE 4510 Loss Control<br>SAFE 4520 Safety & Risk Analysis<br>SAFE 3430 Industrial Hazard Control<br>General Education<br>Minor Coursework<br>Semester Total   | Hrs. 3 3 3 3 15                       |
| Junior Year - First Semester SAFE 3070 Psychology & Philosophy of Safety SAFE 4000 Ergonomics in Safety & Health SAFE 4425 Safety & Health Legislation & Standard SAFE 4140 Safety & Health Laboratory General Education Semester Total | Hrs. 3 3 5 3 7 15        | Junior Year - Second Semester SAFE 4430 Workers Compensation Legislation SAFE 4215 Transportation & Storage of Haz. Mat. Minor Coursework General Education Free Choice Elective*** Semester Total | Hrs. 3 3 3 3 15                       |
| Summer – Between Junior & Senior Year<br>SAFE 4990 Internship in Safety Sci. & Tech. or<br>SAFE 4910 Special Projects in Safe Sci. &<br>Tech.**<br>Semester Total   | Hrs.<br>3<br><b>3</b>    |  |                                       |
| Senior Year - First Semester SAFE 4010 Accident Investigation SAFE 4035 Safety Program Management SAFE 4940 Introductory Quantitative Methods General Education Minor Coursework*** Semester Total                                      | Hrs. 3 3 3 3 15          | Senior Year - Second Semester<br>SAFE 4435 Environmental Compliance<br>SAFE 4360 Intro. to Systems Safety<br>ICAP 4115 Safety & Health Management<br>Minor Coursework***<br>Semester Total         | Hrs. 3 3 6 15                         |

# Safety Management Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*SAFE 4990 or SAFE 4910 should be taken during the summer.
- \*\*\*This plan is based on an 18-hour minor. The number of free choice electives will depend on the hours required in the chosen minor.
- SAFE 4990 Internship in Safety Sciences 3- 6 hours.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Social Studies Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Social Studies Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of History and Anthropology for further information or quidance.

| Freshman Year - First Semester HIST 1350 History of the U.S. to 1877 SOC 1800 General Sociology General Education Science (or Math) ENGL 1020 Composition I General Education Semester Total AE 1400 Student Development Seminar*         | Hrs. 3 3 3-4 3 3 15-16 | Freshman Year - Second Semester HIST 1351 History of the U.S. from 1877 ECON 1010 Principles of Macroeconomics POLS 1510 American Government General Education Math (or Science) ENGL 1030 Composition II Semester Total        | Hrs. 3 3 3 3-4 3 15-16 |
|---|------------------------|---|------------------------|
| Sophomore Year - First Semester<br>GEOG 2212 World Geography<br>HIST 2401 History of the Early Modern World<br>EDCI 2100 Found of Education & Field Experience<br>EDCI 2240 Educational Psychology<br>General Education<br>Semester Total | Hrs. 3 3 3 3 1 5       | Sophomore Year - Second Semester POLS 2511 State Government HIST 2400 History of the Early World or HIST 2402 History of the Modern World*** Upper-Level Elective in GEOG for Major** General Education Semester Total          | Hrs. 3 3 3 1 7         |
| Junior Year - First Semester SOSC 3010 Writing in the Social Sciences HIST Upper-Level Electives**** PSY 4200 Psychology of Exceptional Children EDCI 4300 Educational Measurement & Evaluation General Education Semester Total          | Hrs. 3 6 2 2 3 16      | Junior Year - Second Semester HIST Upper-Level Electives**** Upper-Level Elective in SOC or ANTH PSY 4230 Psychology of Adolescence EDCI 4210 Teaching of Reading in the Sec. School General Education Semester Total           | Hrs. 6 3 2 3 17        |
| Senior Year - First Semester SOSC 4050 The Social Studies Upper-Level Electives in Major** EDCI 3500 Sec. Teaching and Behavioral Mgt. EDCI 3550 Practicum in Secondary Instruction Semester Total  | Hrs. 3 9 3 1 16        | Senior Year - Second Semester<br>SOSC 4074 Methods of Teaching Social Studies<br>SOSC 4020 Secondary Field Experience II<br>EDCI 4595 Student Teaching Secondary I<br>ICAP 4468 Student Teaching Secondary II<br>Semester Total | Hrs. 2 1 5 4 12        |

# Social Studies Functional Major, B.S. in Ed. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students choose upper-level electives from at least two of the following prefixes: GEOG, HIST, POLS, SOC, ANTH, or ECON.
- \*\*\*If selected, HIST 2402 will fulfill 3 hours of General Education Division II Area D.
- \*\*\*\*See catalog for a list of History classes to fulfill the Upper-level electives in American History and World History requirements.
- This program must include at least one course that focuses on a non-western society, nation or region or on the non-western world. A list of the courses which fulfill this requirement is available from the Department of History and Anthropology and is on file with the Academic Advisors.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Social Work Functional Major, B.S.W. Degree

1/2005

This is the recommended program of study for the Social Work Functional Major, B.S.W. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Sociology and Social Work for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I General Education General Education Math Semester Total AE 1400 Student Development Seminar*   | Hrs.<br>3<br>8-9<br>3<br><b>14-15</b> | Freshman Year - Second Semester<br>SOC 1800 General Sociology<br>ENGL 1030 Composition II<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Semester Total   | Hrs.<br>3<br>3<br>6<br><b>15</b> |
|---|---------------------------------------|--|----------------------------------|
| Sophomore Year - First Semester General Education Science PSY 1100 General Psychology General Education Free Choice Electives Semester Total  | Hrs.<br>3-4<br>3<br>3<br>6<br>15-16   | Sophomore Year - Second Semester<br>SOWK 2600 Intro to Social Welfare & Social Work<br>BIOL 2010 Human Biology<br>General Education<br>Free Choice Electives<br>Semester Total   | Hrs. 3 3 6 3 <b>15</b>           |
| Junior Year - First Semester SOWK 2611 Social Work Fld. Observ. & Partic. SOWK 3600 Introduction to Social Work Practice SOWK 3612 Human Behav. in Social Environ I SOC 2805 Introduction to Social Research SOC 3825 Race & Ethnic Relations Free Choice Elective Semester Total             | Hrs. 2 3 3 3 3 2 16                   | Junior Year - Second Semester SOWK 3610 Social Work Practice: Basic Skills SOWK 4612 Human Behavior in Social Environ II SOWK 3625 Populations at Risk SOWK 3605 Meth. of Inq. & Eval. for Soc. Workers PSY 4440 Abnormal Psychology Free Choice Electives Semester Total Apply for Admission to Social Work Program | Hrs. 3 3 3 3 3 2 17              |
| Senior Year - First Semester SOWK 4610 Special Topics in Social Work or SOWK 4620 Social Services & the Elderly SOWK 4630 SW Practice: Inter. with Fam. & Grps. SOWK 4640 SW Practice: Inter. w/Comm. & Orgs. SOWK 4650 Social Policy & Economic Justice Free Choice Electives Semester Total | Hrs. 3 3 3 3 3 15                     | Senior Year - Second Semester<br>SOWK 4660 Field Practicum<br>ICAP 4478 Integ. Social Work Practicum Seminar<br>Free Choice Electives<br>Semester Total  | Hrs.<br>9<br>3<br>4<br><b>16</b> |

# Social Work Functional Major, B.S.W. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Sociology Major, B.A. Degree

1/2005

This is the recommended program of study for the Sociology Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Sociology and Social Work for further information or guidance.

| Freshman Year - First Semester SOC 1800 General Sociology ENGL 1020 Composition I Modern Language Requirement* General Education Math General Education Semester Total AE 1400 Student Development Seminar** | Hrs. 3 3 3 3 3 15  | Freshman Year - Second Semester<br>SOC elective (1000-2000 level)<br>General Education<br>ENGL 1030 Composition II<br>Modern Language Requirement*<br>Semester Total | Hrs.<br>3<br>6<br>3<br><b>15</b>  |
|--|--------------------|--|-----------------------------------|
| Sophomore Year - First Semester<br>SOC 2805 Introduction to Social Research<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Coursework in minor<br>Modern Language Requirement*<br>Semester Total  | Hrs. 3 3 3 3 15    | Sophomore Year - Second Semester SOC 3885 Globalization and the Future Coursework in minor General Education Science General Education Semester Total                | Hrs. 3 3 3-4 6 15-16              |
| Junior Year - First Semester SOC 3800 History of Social Thought SOC 3870 Personality and Society Coursework in minor General Education Semester Total  | Hrs. 3 3 6-7 15-16 | Junior Year - Second Semester SOC 4860 Contemporary Social Thought SOC elective Coursework in minor General Education Free Choice Electives Semester Total           | Hrs. 3 3 6 3 2 17                 |
| Senior Year - First Semester<br>SOC 4890 Sociological Investigations<br>SOC 4895 Sociology Capstone Seminar<br>Coursework in minor<br>Free Choice Electives<br>Semester Total                                | Hrs. 3 4 3 6 13    | Senior Year - Second Semester<br>SOC or Dept approved elective<br>Coursework in minor<br>Free Choice Electives<br>Semester Total                                     | Hrs.<br>3<br>3<br>10<br><b>16</b> |

## Sociology Major, B.A. Degree - 124 hours

- \*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on 3 modern language courses.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- The above degree plan is based on a 21-hour minor. Number of free choice electives will depend on minor chosen.
- A minimum 15-hour block of General Education in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters (60 hours) to take the C-Base exam for General Education Assessment. These courses are designated in **bold** italics.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.

### Sociology Major, B.S. Degree

1/2005

This is the recommended program of study for the Sociology Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Sociology and Social Work for further information or guidance.

| Freshman Year - First Semester SOC 1800 General Sociology ENGL 1020 Composition I General Education General Education Math Semester Total AE 1400 Student Development Seminar* | Hrs.<br>3<br>3<br>6<br>3<br><b>15</b> | Freshman Year - Second Semester<br>SOC Elective (1000-2000 level)<br>ENGL 1030 Composition II<br>HIST 1350 or 1351 or POLS 1510<br>General Education<br>Semester Total | Hrs.<br>3<br>3<br>3<br>6<br><b>15</b> |
|--|---------------------------------------|--|---------------------------------------|
| Sophomore Year - First Semester<br>SOC 2805 Introduction to Social Research<br>Coursework in minor<br>General Education Science<br>General Education<br>Semester Total         | Hrs. 3 3 3-4 6 15-16                  | Sophomore Year - Second Semester<br>SOC 3885 Globalization and the Future<br>Coursework in minor<br>General Education<br>Free Choice Electives<br>Semester Total       | Hrs. 3 3 6-7 3 15-16                  |
| Junior Year - First Semester SOC 3800 History of Social Thought SOC 3870 Personality and Society Coursework in minor General Education Semester Total                          | Hrs. 3 3 6 3 <b>15</b>                | Junior Year - Second Semester<br>SOC 4860 Contemporary Social Thought<br>SOC Elective<br>Coursework in minor<br>Free Choice Elective<br>Semester Total                 | Hrs.<br>3<br>6<br>3<br>1<br><b>16</b> |
| Senior Year - First Semester<br>SOC 4890 Sociological Investigations<br>SOC 4895 Sociology Capstone Seminar<br>Coursework in minor<br>Free Choice Electives<br>Semester Total  | Hrs. 3 3 7 16                         | Senior Year - Second Semester<br>SOC Electives<br>Coursework in minor<br>Free Choice Elective<br>Semester Total  | Hrs.<br>10<br>3<br>3<br><b>16</b>     |

# Sociology Major, B.S. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- The above degree plan is based on a 21-hour minor. The number of free choice electives required will depend on the minor chosen.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.

## Spanish Major, B.A. Degree

1/2005

This is the recommended program of study for the Spanish Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Modern Languages for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I SPAN 2601 Intermediate Spanish I General Education Semester Total AE 1400 Student Development Seminar*                      | Hrs.<br>3<br>3<br>8-9<br><b>14-15</b> | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math SPAN 2602 Intermediate Spanish II General Education Coursework in Minor Semester Total  | Hrs. 3 3 3 3 3 15      |
|--|---------------------------------------|--|------------------------|
| Sophomore Year - First Semester HIST 1350 or 1351 or POLS 1510 SPAN 2603 Spanish Conversation I SPAN 3623 Spanish Composition General Education Coursework in Minor Semester Total | Hrs. 3 3 3 3 1 5                      | Sophomore Year - Second Semester<br>General Education Science<br>SPAN 3603 Spanish Conversation II<br>SPAN 3662 Spanish American Civ. & Literature<br>General Education<br>Coursework in Minor<br>Semester Total | Hrs. 3-4 3 3 3 15-16   |
| Junior Year - First Semester<br>SPAN 3661 Spanish Civ. & Lit.<br>SPAN 4603 Advanced Read. and Oral Expressions<br>Coursework in Minor<br>General Education<br>Semester Total       | Hrs. 3 3 6 15                         | Junior Year - Second Semester<br>SPAN 4623 Advanced Spanish Composition<br>Elective in SPAN 4000-level<br>Coursework in Minor<br>General Education<br>Semester Total   | Hrs. 3 3 6 3 <b>15</b> |
| Senior Year - First Semester<br>Elective in SPAN 4000-level<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total  | Hrs.<br>3<br>6<br>6<br>15             | Senior Year - Second Semester Elective in SPAN 4000-level Coursework in minor General Education Free Choice Electives Semester Total   | Hrs. 3 3 4 13          |

## Spanish Major, B.A. Degree - 124 hours (118 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- Credits for SPAN 1601 (Elementary Spanish I) and SPAN 1602 (Elementary Spanish II): If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. If not, you will receive credit for these classes by completing SPAN 2601 with a grade of "C" or higher (validated credit program).
- This plan is based on a 27-hour minor. Number of free choice electives needed will depend on the minor chosen.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Spanish Major, B.S. Degree

1/2005

This is the recommended program of study for the Spanish Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Modern Languages Department for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I SPAN 2601 Intermediate Spanish I General Education Semester Total AE 1400 Student Development Seminar*                              | Hrs.<br>3<br>3<br>8-9<br><b>14-15</b> | Freshman Year -Second Semester ENGL 1030 Composition II General Education Math SPAN 2602 Intermediate Spanish II Coursework in Minor General Education Semester Total  | Hrs. 3 3 3 3 3 15      |
|--|---------------------------------------|--|------------------------|
| Sophomore Year - First Semester  HIST 1350 or 1351 or POLS 1510  SPAN 2603 Spanish Conversation I  SPAN 3623 Spanish Composition  Coursework in Minor  General Education  Semester Total   | Hrs. 3 3 3 3 3 15                     | Sophomore Year - Second Semester<br>General Education Science<br>SPAN 3603 Spanish Conversation II<br>SPAN 3662 Spanish American Civ. & Literature<br>General Education<br>Coursework in Minor<br>Semester Total | Hrs. 3-4 3 3 3 15-16   |
| Junior Year - First Semester<br>SPAN 3661 Spanish Civilization & Literature<br>SPAN 4603 Advanced Read. and Oral Expressions<br>Coursework in Minor<br>General Education<br>Semester Total | Hrs. 3 3 6 15                         | Junior Year - Second Semester<br>SPAN 4623 Advanced Spanish Composition<br>Elective in SPAN 4000-level<br>Coursework in Minor<br>General Education<br>Semester Total   | Hrs. 3 3 6 3 <b>15</b> |
| Senior Year - First Semester<br>Elective in SPAN 4000-level<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total  | Hrs.<br>3<br>6<br>6<br><b>15</b>      | Senior Year - Second Semester<br>Elective in SPAN 4000-level<br>Coursework in Minor<br>General Education<br>Free Choice Electives<br>Semester Total  | Hrs. 3 3 4 13          |

# Spanish Major, B.S. Degree - 124 hours

(118 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- Credits for SPAN 1601 (Elementary Spanish I) and SPAN 1602 (Elementary Spanish II): If you received college credit for these classes while in high school (dual credit), these credits be applied to the major sequence. If not, you will receive credit for these classes by completing SPAN 2601 with a grade of "C" or (validated credit program).
- This plan is based on a 27-hour minor. Number of free choice electives needed will depend on the minor chosen.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Spanish Education Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Spanish Education Major, B.S.E. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Modern Languages for further information or guidance:

| Freshman Year - First Semester ENGL 1020 Composition I POLS 1510 American Government SPAN 2601 - Intermediate Spanish I General Education Science* General Education Semester Total AE 1400 Student Development Seminar**           | Hrs. 3 3 3 3 4 2-3 15 | Freshman Year - Second  ENGL 1030 Composition II  SPAN 2602 - Intermediate Spanish II  General Education Math  Coursework in Minor  HIST 1350 or 1351 U.S. History  Semester Total  | Hrs. 3 3 3 3 15                       |
|---|-----------------------|---|---------------------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Education & Field Exp. EDCI 2240 Educational Psychology SPAN 3623-Spanish Composition SPAN 2603 - Spanish Conversation I General Education Minor Coursework Semester Total | Hrs. 3 3 3 3 3 18     | Sophomore Year - Second<br>SPAN 3603 - Spanish Conversation II<br>Elective in Spanish***<br>General Education<br>Coursework in Minor<br>Semester Total  | Hrs. 3 3 6 3 <b>15</b>                |
| Junior Year - First Semester<br>SPAN 4603 – Adv. Reading and Oral Expression<br>SPAN 3661-Spaninish Civilization & Literature<br>Coursework in Minor<br>General Education<br>Elective in Spanish***<br>Semester Total               | Hrs. 3 3 3 3 3 15     | Junior Year - Second Semester SPAN 4623 - Advanced Spanish Composition SPAN 3662- Spanish-American Civil. & Literature EDCI 4210 - Teaching of Reading in Secondary EDCI 4300 - Educ. Measurement and Evaluation PSY 4200 - Psychology of Excep. Children or EDSP 2100 - Education of the Excep. Child General Education Coursework in Minor Semester Total | Hrs. 3 3 2 2 2 1 8                    |
| Senior Year - First Semester Elective in Spanish*** Coursework in Minor General Education EDCI 3500- Sec. Teaching and Beh. Management EDCI 3550- Practicum in Secondary Instruction PSY 4230 Adolescent Psychology Semester Total  | Hrs. 3 3 3 1 1 3      | Senior Year - Second Semester ML 4020 - Field Experience II ML 4054 - Methods of Teaching Foreign Language EDCI 4495 Student Teaching Elementary I ICAP 4468 Student Teaching Secondary II Semester Total   | Hrs.<br>1<br>2<br>5<br>4<br><b>12</b> |

#### Spanish Major, B. S. Ed. Degree - 130 hours

# (124 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*Students pursuing a B.S. in Ed. must complete a biology prefix.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective; however this major does not require any free choice electives.
- \*\*\*Students chose from the following classes: SPAN 4650, SPAN 4665, SPAN 4671, or SPAN 4680.
- Credits for Span 1601 (Elementary Span I) and Span 1602 (Elementary Span II): If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. If not, you will receive credit for these classes by completing Spanish 2601 with a grade of "C" or higher (validated credit program).
- This program is based on a 18-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Special Education: Early Childhood Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Special Education: Early Childhood Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Educational Leadership & Human Development for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I MATH 1620 Contemporary Mathematics HIST 1350 or 1351 American History General Education Science with lab General Education Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 4 3 16          | Freshman Year - Second Semester EDSP 2100 Educ. of the Exceptional Child GEOG 2212 World Geography ENGL 1030 Composition II EDCI 1310 Physics for Teachers or EDCI 1320 Biology for Teachers** General Education Semester Total   | Hrs. 2 3 3 3 6 17                |
|---|--------------------------|---|----------------------------------|
| Sophomore Year - First Semester EDCI 2240 Educational Psychology EDCI 2100 Found. of Edu. & Field Experience CFD 1220 Child Development D&N 2310 Early Childhood Nutrition EDCI 2310 Computer/Technology in Educ. CD 2000 Bases of Language Free Choice Electives Semester Total                                    | Hrs. 3 3 3 2 2 2 1 16    | Sophomore Year - Second Semester POLS 1510 American Government EDSP 3150 Community & Family Resources EDSP 3151 Pract. Comm & Family Resources General Education Semester Total   | Hrs. 3 2 1 9 15                  |
| Junior Year - First Semester EDSP 4140 Collaborating with Families EDSP 4320 Intro. to Early Childhood Sp. Ed. EDSP 4370 Screening, Diag., & Presc. Inst. EDSP 4620 Eval. of Ability & Achievement MATH 3890 Conc. & Meth. for Teach. Sp. Ed. HED 4330 First Aid and CPR CFD 1230 Observing Children Semester Total | Hrs. 3 3 3 3 3 1 2 18    | Junior Year - Second Semester EDSP 4350 Augment & Alternative Comm. EDSP 4470 Perceptual Motor Training EDSP 4440 Curriculum & Methods ECSE EDSP 4360 Behavior Mgt. Techniques EDSP 4361 Practicum in Behav. Mgt. Tech. EDCI 3210 Methods of Reading Instruction Semester Total | Hrs. 3 3 3 2 1 1 3 15            |
| Senior Year - First Semester IGEN 3468 Comm. School & Family Conn. EDCI 3220 Teaching Language Arts EDCI 3410 Children's Literature EDSP 4700 IEP & Law ART 3910 Art for Elementary School Free Choice Electives Semester Total   | Hrs. 3 3 2 3 2 0-2 13-15 | Senior Year - Second Semester<br>EDSP 4395 Student Teaching I<br>EDSP 4396 Student Teaching II<br>Semester Total  | Hrs.<br>6-8<br>6<br><b>12-14</b> |

# Special Education: Early Childhood Major, B.S. in Ed. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students must have one Biological and one Physical Science.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Special Education: Mild/Moderate Cross Categorical Disabilities, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Special Education: Mild/Moderate Cross Categorical Disabilities Functional Major, B. S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Educational Leadership & Human Development for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I MATH 1620 Contemporary Mathematics POLS 1510 American Government General Education Science with Lab General Education Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 4 2-3 15-16 | Freshman Year - Second Semester HIST 1350 or 1351 American History EDSP 2100 Educ. of the Exceptional Child ENGL 1030 Composition II EDCI 1310 Physics for Teachers or EDCI 1320 Biology for Teachers** General Education Semester Total  | Hrs. 3 2 3 3 6 17                  |
|--|----------------------|---|------------------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Edu. & Field Exper. EDCI 2240 Educational Psychology EDSP 4385 Intro. to Cross Cat. Disabilities PSY 2220 Child Psychology*** EDCI 2310 Computer Technology in Education Free Choice Electives Semester Total   | Hrs. 3 3 3 2 1 15    | Sophomore Year - Second Semester<br>PSY 4230 Adolescent Psychology***<br>GEOG 2212 World Geography<br>HED 3310 Health Education in Elem. Schools<br>EDSP 4140 Collaborating with Families<br>General Education<br>Semester Total  | Hrs. 3 3 2 3 6 17                  |
| Junior Year - First Semester MATH 3890 Conc. & Meth for Teach. Sp. Ed. ART 3910 Art for Elementary School EDSP 4360 Behavior Management Techniques EDSP 4361 Practice in Behavior Mgt. Tech. EDSP 4150 Career Dev. for Student w/Dis. EDSP 4620 Eval. of Ability & Achievement EDCI 3210 Meth of Reading Instruct Semester Total | Hrs. 3 2 1 2 3 3 16  | Junior Year - Second Semester MATH 4890 Math for Special Education EDSP 4421 Meth. Cross - Categorical I EDSP 4422 Meth. Cross - Categorical II EDCI 3215 Teaching Reading Content CD 4402 Lang. Dev. for Indiv. w/Disabilities HED 4330 First Aid and CPR Free Choice Electives Semester Total | Hrs. 2 3 3 3 2 1 3 17              |
| Senior Year - First Semester EDSP 4700 IEP & Law EDSP 4423 Meth. Cross - Categorical III EDCI 4220 Analysis/Correction Rdg. Disability EDCI 4250 Practicum in Reading Free Choice Electives Semester Total   | Hrs. 3 3 2 1 6 15    | Senior Year - Second Semester<br>EDSP 4395 Student Teaching in Special Ed. I<br>ICAP 4468 Student Teaching Second II<br>Semester Total  | <b>Hrs.</b><br>6<br>6<br><b>12</b> |

# Special Education: Mild/Moderate Cross Categorical Disabilities Major, **B.S. in Ed. Degree - 124 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students must have one Biological and one Physical Science.
- \*\*\*With permission of advisor, students may substitute PSY 3220 Lifespan Psychology for both PSY 2220 and PSY 4230.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## Special Education: Severe Developmental Disabilities Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Special Education: Severe Developmental Disabilities Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Educational Leadership & Human Development for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I MATH 1620 Contemporary Mathematics POLS 1510 American Government General Education Science with Lab General Education Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 4 2-3 15-16 | Freshman Year - Second Semester GEOG 2212 World Geography ENGL 1030 Composition II General Education EDCI 1310 Physics for Teachers or EDCI 1320 Biology for Teachers** EDSP 2100 Education of the Exceptional Child Semester Total  | Hrs. 3 3 6 3 2 17           |
|--|----------------------|--|-----------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Edu. & Field Exper. EDCI 2240 Educational Psychology HED 1350 Student First Aid EDCI 2310 Computer/Tech. in Education CD 4402 Language Dev. for Indiv. w/Disability PSY 2220 Child Psychology*** Semester Total | Hrs. 3 3 3 2 2 3 16  | Sophomore Year - Second Semester EDSP 4140 Collaborating with Families PE 4340 Adaptive Physical Education HIST 1350 or 1351 American History EDSP 4350 Augment & Alternative Comm. General Education HED 3310 Methods in Elem. School Health Semester Total                     | Hrs. 3 3 3 3 2 17           |
| Junior Year - First Semester EDSP 4310 Intro. to Students with SDD EDSP 4330 Ed. & Trng. of Students w/SDD EDSP 4370 Screening, Diagn., & Presc. Inst. MATH 3890 Conc. & Meth. for Teach. Sp. Ed. General Education Semester Total                                       | Hrs. 2 3 3 3 6 17    | Junior Year - Second Semester EDSP 4470 Perceptual Motor Training EDSP 4450 Curriculum & Methods SDD EDSP 4360 Behavior Mgt .Techniques EDSP 4361 Practice in Behav. Mgt. Tech. EDSP 4620 Eval. of Ability & Achievement EDCI 3210 Methods of Reading Instruction Semester Total | Hrs. 3 3 2 1 3 3 <b>15</b>  |
| Senior Year - First Semester PSY 4230 Psychology of Adolescence*** EDSP 4700 IEP & Law ART 3910 Art for Elementary School MATH 4890 Math for Special Education HED 4330 First Aid and CPR for Educators Free Choice Electives Semester Total                             | Hrs. 3 3 3 2 1 3 15  | Senior Year - Second Semester<br>EDSP 4395 Student Teaching I<br>ICAP 4468 Student Teaching II<br>Semester Total   | Hrs.<br>6<br>6<br><b>12</b> |

# Special Ed. Severe Developmental Disabilities Major, B.S. in Ed. -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students must have one Biological and one Physical Science.
- \*\*\*With permission of advisor, students may substitute PSY 3220 Lifespan Psychology for both PSY 2220 and PSY 4230.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Speech Communication Major, B.A. Degree

1/2005

This is the recommended program of study for the Speech Communication Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester COMM 1000 Public Speaking COMM 2325 Improving Listening Abilities ENGL 1020 Composition I Modern Language Requirement* General Education Semester Total AE 1400 Student Development Seminar** | Hrs 3 2 3 3 3 14 | Freshman Year - Second Semester COMM 2100 Intro. to Communication Theory COMM 2330 Small Group Communication ENGL 1030 Composition II Modern Language Requirement* General Education Semester Total | Hrs 3 3 3 3 3 15       |
|--|------------------|---|------------------------|
| Sophomore Year - First Semester COMM 2320 Foundations of Rhetorical Thinking HIST 1350 or 1351 or POLS 1510 General Education Math Modern Language Requirement* General Education Semester Total                             | Hrs 3 3 3 3 1 5  | Sophomore Year - Second Semester ANTH 1820 or GEOG 3201 or WS 2000 COMM 3010 Interpersonal Communication General Education General Education Science Coursework in Minor Semester Total             | Hrs 3 3 3 3 -4 3 15-16 |
| Junior Year - First Semester<br>COMM 3730 Communication Conflict Mgmt.<br>General Education<br>Coursework in Minor<br>Free Choice Electives<br>Semester Total  | Hrs 3 5 3 6 17   | Junior Year - Second Semester COMM 3340 Intercultural Communications COMM 4340 Classical Rhetorical Theory Coursework in Minor Free Choice Elective Semester Total                                  | Hrs 3 3 6 3 15         |
| Senior Year - First Semester COMM 3320 Audience Adaptation or COMM 4345 Modern Rhetorical Theory COMM 4335 Gender Communication Coursework in Minor Free Choice Electives Semester Total                                     | Hrs 3 3 6 5 16   | Senior Year - Second Semester COMM 4330 Theories of Interpersonal Communication IGEN 3224, 3232 or 4224 Coursework in Minor Free Choice Electives Semester Total                                    | Hrs 3 3 6 15           |

## Speech Communication Major, B.A. Degree - 124 hours

- \*Refer to the Bachelor's Degree Requirements section of the catalog for the BA Modern Language requirement. This plan is based on 9 hours of modern language.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- In their final semester, Speech Communication majors are required to participate in an exit interview as a summative assessment. See department advisor for further information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Speech Communication Major, B.S. Degree

1/2005

This is the recommended program of study for the Speech Communication Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester COMM 1000 Public Speaking COMM 1100 Introduction to Communication COMM 1110 Communication Skills Lab COMM 2325 Improving Listening Abilities ENGL 1020 Composition I General Education Semester Total         | Hrs 3 1 1 2 3 6 16    | Freshman Year - Second Semester COMM 2330 Small Group Communication COMM 3010 Interpersonal Comm ANTH 1820 or GEOG 3201 or WS 2000 ENGL 1030 Composition II General Education Semester Total                             | Hrs 3 3 3 3 1 5         |
|--|-----------------------|--|-------------------------|
| Sophomore Year - First Semester COMM 2100 Introduction to Comm. Theory COMM 2110 Introduction to Comm. Theory Lab Major Elective in Social Influence* HIST 1350 or 1351 or POLS 1510 General Education Math General Education Semester Total | Hrs 3 1 2-3 3 3 15-16 | Sophomore Year - Second Semester COMM 2320 Foundations of Rhetorical Theory COMM 3100 Comm. Res. Methods COMM 3110 Resource & Methods Lab General Education General Education Science Coursework in Minor Semester Total | Hrs 3 3 1 3 3-4 3 16-17 |
| Junior Year - First Semester COMM 3350 Principles of Presentational Speaking Major Elective in Applied Communication* Department-Approved Upper-Level Elective General Education Coursework in Minor Semester Total                          | Hrs 3 2-3 3 3 14-15   | Junior Year - Second Semester<br>COMM 3000 Film Appreciation<br>Major Elective in Social Influence*<br>Coursework in Minor<br>Department-Approved Upper-Level Elective<br>Semester Total                                 | Hrs 3 2-3 6 3 14-15     |
| Senior Year - First Semester Major Elective in Social Influence* Major Elective in Rhetorical Studies* IGEN 3224 or 3232 or 4224 Coursework in Minor Semester Total  | Hrs 2-3 3 6 14-15     | Senior Year - Second Semester<br>COMM 4320 Persuasion<br>Major Elective in Rhetorical Studies*<br>Major Elective in Social Influence<br>Coursework in Minor<br>Upper-Level Free Choice Electives<br>Semester Total       | Hrs 2 3 3 3 1 14-16     |

## Speech Communication Major, B.S. Degree - 124 hours

(118 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*A minimum of 14 major elective hours taken in applied communication, interaction skills, social influence, and rhetorical studies must be upper-level.
- In their final semester, Speech Communication majors are required to participate in an exit interview as a summative assessment. See department advisor for further information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 21-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Speech Communication and Theatre Major - Speech Option, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Bachelor of Science in Education in Speech Communication and Theater Arts Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication for further information or guidance.

| Freshman Year - First Semester ENGL 1020 Composition I General Education Math COMM 1000 Public Speaking COMM 1100 Introduction to Communication POLS 1510 American Government General Education Semester Total                                | Hrs 3 3 1 3 1 3 1 6           | Freshman Year - Second Semester  ENGL 1030 Composition II  THEA 1500 Acting THEA 2400 Theatre in West Civilization  HIST 1350 or 1351 US History  WS 2000 or GEOG 3201 or ANTH 1820  Semester Total  | Hrs 3 3 3 3 15                |
|---|-------------------------------|--|-------------------------------|
| Sophomore Year - First Semester COMM 2100 Intro. to Comm. Theory COMM 2110 Intro. to Comm. Theory Lab COMM 2330 Small Group Communication COMM 3010 Interpersonal Communication THEA 1600 Stagecraft General Education Science Semester Total | Hrs 3 1 3 3 3 4 16-17         | Sophomore Year - Second Semester<br>COMM 2340 Argumentation & Debate<br>COMM 3390 Forensics<br>EDCI 2100 Foundations of Ed. & Field Exp.<br>EDCI 2240 Educational Psychology<br>THEA 3700 Directing<br>Coursework in Minor<br>Semester Total | Hrs 3 1 3 3 3 16              |
| Junior Year - First Semester PSY 4200 Psychology of Exceptional Child or  | Hrs                           | Junior Year - Second Semester  | Hrs                           |
| EDSP 2100 Ed. of Exceptional Child COMM 3325 Nonverbal Communication COMM 3350 Principles of Presentational Speaking Coursework in Minor General Education Semester Total   | 2<br>3<br>6<br>3<br><b>16</b> | EDCI 4210 Teaching Reading in Secondary<br>PSY 4230 Psychology of Adolescent<br>COMM 3000 Film Appreciation<br>Coursework in Minor<br>General Education<br>Semester Total  | 2<br>3<br>6<br>3<br><b>17</b> |

## Speech Communication and Theatre Major - Speech Option, B.S. in Ed. Degree - 124 hours

- The above degree plan is based on an 18-hour minor..
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Speech Communication and Theatre Major - Theatre Option, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Speech Communication and Theatre Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Theatre for further information or guidance.

| Freshman Year - First Semester THEA 1500 Acting THEA 1100 Oral Interpretation THEA 1600 Stagecraft General Education Math ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 3 15   | Freshman Year -Second Semester General Education Science** HIST 1350 or 1351 U.S. History THEA 2400 Theatre in Western Civilization ENGL 1030 Composition II General Education Semester Total   | Hrs. 3-4 3 3 2-3 15                   |
|---|---------------------|---|---------------------------------------|
| Sophomore Year - First Semester EDCI 2100 Foundations of Education & Field Exp. EDCI 2240 Ed. Psychology COMM 2330 Small Group Communication COMM 2340 Argumentation & Debate Coursework in Minor POLS 1510 American Government Semester Total                      | Hrs. 3 3 3 3 3 3 18 | Sophomore Year - Second Semester EDSP 2100 Ed. of the Exceptional Child or PSY 4200 Psychology of the Exceptional Child COMM 2100 Introduction to Comm. Theory THEA 3700 Directing General Education Coursework in Minor Semester Total | Hrs. 2 3 3 6 3 17                     |
| Junior Year - First Semester COMM 3390 Forensics COMM 3325 Nonverbal THEA 4400 Literature & History I COMM or Theatre Electives General Education Coursework in Minor Semester Total  | Hrs. 1 2 3 4 3 3 16 | Junior Year - Second Semester THEA 3630 Studio Theatre I THEA 4420 Literature & History II PSY 4230 Adolescent Psychology General Education Coursework in Minor Semester Total  | Hrs. 1 3 6 3 16                       |
| Senior Year - First Semester THEA 4730 Studio Theatre II EDCI 3500 Secondary Teaching & Behavior Mgt. EDCI 3550 Practicum In Secondary EDCI 4210 Tchg. of Rdg. in the Secondary School EDCI 4300 Education Measures & Evaluation Coursework in Minor Semester Total | Hrs. 1 3 1 2 2 6 15 | Senior Year - Second Semester THEA 4920 Secondary Field Experience II THEA 4984 Methods of Teaching Speech & Theatre EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total                      | Hrs.<br>1<br>2<br>5<br>4<br><b>12</b> |

## Speech and Theatre Major - Theatre Option, B.S. in Ed. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*Students pursuing a B.S. in Ed. must complete a biology prefix.
- The above degree plan is based on an 18-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Speech Pathology Major, B.S. Degree

1/2005

Please refer to the Department of Communication Disorders for upcoming changes to the major requirements.

This is the recommended program of study for the Speech Pathology Functional Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Communication Disorders for further information or guidance.

| Freshman Year - First Semester CD 3501 Introduction to Communication Disorders CD 3802 Obs. Clinical Prac. in Com. Disorders ENGL 1020 Composition I BIOL 1004 Introduction to Sciences: Ecology General Education Math Semester Total AE 1400 Student Development Seminar*   | Hrs. 1 3 4 3 14                     | Freshman Year - Second Semester CD 2301 American Phonetics ENGL 1030 Composition II POLS 1510 or HIST 1350/1351 PHYS 1103 Introduction to Sciences: Physics General Education Semester Total   | Hrs. 3 3 3 3 15     |
|---|-------------------------------------|--|---------------------|
| Sophomore Year - First Semester<br>CD 3301 Anat. & Phys. of Speech and Swallowing<br>COMM 1000 Public Speaking<br>PSY 1100 General Psychology<br>General Education<br>Free Choice Electives<br>Semester Total   | Hrs.<br>2<br>3<br>3<br>6<br>2<br>16 | Sophomore Year - Second Semester CD 3503 Principals of Clinical Management CD 3304 Speech Science ENGL 4110 Linguistics PSY 3220 Lifespan Development General Education Semester Total   | Hrs. 3 3 3 3 15     |
| Junior Year - First Semester CD 4701 Introduction to Audiology CD 4504 Assess & Intervention I CD 4401 Language Development CD 4501 Basic Neurosci. for Speech-Lang. Path. PSY 4000 Special Projects: Beg. Sign Language General Education Semester Total   | Hrs. 3 3 2 2 3 16                   | Junior Year - Second Semester CD 4706 Hearing Measurement CD 4505 Assessment & Intervention II HED 4330 First Aid and CPR for Educators General Education Free Choice Elective Semester Total  | Hrs. 3 3 6 1 16     |
| Senior Year - First Semester CD 4803 Undergraduate Clinical Practicum CD 4512 Birth to Three: Assess. & Intervention CD 4510 Multicultural Issues in Comm. Disorders CD 4103 Intr. To Evid. Based Pract. in Comm. Dis. CD 4708 Aural Rehabilitation CD 4102 Coun. Pers. w/ Comm. Dis. & Their Fam. Free Choice Electives Semester Total | Hrs. 1 3 2 2 3 3 2 16               | Senior Year - Second Semester CD 4515 Rehabilitation of CogLing. Impairments PSY 4520 Statistics for Behavioral Sciences CD 4511 Assistive Tech. Across the Lifespan CD 4803 Undergraduate Clinical Practicum General Education Free Choice Electives Semester Total | Hrs. 2 3 2 1 3 5 16 |

## Speech Pathology Major, B.S. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- Students must contact the undergraduate advisor in the Department of Communication Disorders for admission into the program.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Studio Art Functional Major, B.F.A. Degree

1/2005

This is the recommended program of study for the Studio Art Functional Major, B.F.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Art for further information or guidance.

| Freshman Year - First Semester ART 1110 Drawing I ART 1315 Design I ART 1800 Ideas in the Visual Arts ENGL 1020 Composition I General Education Math Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 1 5                        | Freshman Year - Second Semester ART 1120 Drawing II ART 1325 Design II ART (2412, 2420, 2511) Beginning Studio (Ceramics, Sculpture, Painting) ENGL 1030 Composition II General Education Semester Total  | Hrs. 3 3 3 3 15                  |
|--|---|---|----------------------------------|
| Sophomore Year - First Semester ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring) ART 3209 Figure Construction ART (2412, 2420, 2511) Beginning Studio (Ceramics, Sculpture, Painting) HIST 1350 or 1351 or POLS 1510 Art Elective Semester Total | Hrs. 3 3 3 3 15                         | Sophomore Year - Second Semester ART 2710 Introduction to Printmaking ART (2412, 2420, 2511) Beginning Studio (Ceramics, Sculpture, Painting) ART 1825 Art History Survey II (spring) General Education General Education Science Art Elective Semester Total | Hrs. 3 3 3 3 3 18                |
| Junior Year - First Semester Elective from area of emphasis ART 3110 Drawing III ART 2335 Design III Art Elective General Education Semester Total   | Hrs. 3 3 3 3 6 18                       | Junior Year - Second Semester Elective from area of emphasis General Education Art Elective ART 4850 20th Century Art and Arch. (fall) or ART 4860 Contemp. Art & Design (spring) Semester Total  | Hrs. 6 6 3 3 18                  |
| Senior Year - First Semester Elective from area of emphasis General Education Art Elective Semester Total  | <b>Hrs.</b><br>6<br>3<br>5<br><b>14</b> | Senior Year - Second Semester<br>Elective from area of emphasis<br>ICAP 4221 Artists in Contemp. Society<br>General Education<br>Semester Total   | Hrs.<br>6<br>3<br>6<br><b>15</b> |

## Studio Art Functional Major, B.F.A. Degree - 128 hours

- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Technology Education Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Technology Education Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Career & Technology Education for further information or guidance.

| Freshman Year - First Semester GRAP 1010 Intro. to Desktop Publishing ET 1010 Applied Electricity or ET 2020 Industrial Electricity Department-approved elective* ENGL 1020 Composition I MATH General Education Semester Total   | Hrs. 3 3 3 3 3 15  | Freshman Year - Second Semester General Education MMGT 1010 Materials for Mfg. & Construction ENGL 1030 Composition II GRAP 1110 Fundamentals of Drafting ET 1020 General Electronics Coursework in Minor Semester Total                             | Hrs. 3 3 3 3 3 18      |
|---|--------------------|--|------------------------|
| Sophomore Year - First Semester CMGT 2310 Construction Techniques T&OE 2000 Technology & Change PR&T 1010 Power Mechanics HIST 1350 or 1351 U.S. History BIOL 1003 Introduction to Sciences: Ecology Coursework in Minor Semester Total   | Hrs. 3 3 3 3 3 18  | Sophomore Year - Second Semester<br>EDCI 2100 Foundations of Ed. & Field Experience<br>EDCI 2240 Educational Psychology<br>POLS 1510 American Government<br>PHYS 1104 Intro. to the Sciences: Physics (Lab)<br>Coursework in Minor<br>Semester Total | Hrs. 3 3 4 3 16        |
| Junior Year - First Semester IGEN 3116 Creative Problem Solving GEOG 3201 The Cultural Landscape PSY 4230 Psychology of Adolescence General Education Coursework in Minor Semester Total  | Hrs. 3 3 3 3 6 18  | Junior Year - Second Semester EDCI 4210 Teach of Reading in Secondary Schools MMGT 4520 Robotics & Automation or MMGT 3550 Principles of Numerical Control GRAP 4570 Computer Graphics General Education Coursework in Minor Semester Total          | Hrs. 2 3 6 3 17        |
| Senior Year - First Semester  EDCI 4300 Education Measurement & Evaluation  EDCI 3550 Practicum in Secondary Instruction  EDCI 3500 Sec. Teaching & Behavioral Mgmt.  T&OE 4145 Selection & Org. of Subject Matter  EDSP 2100 Educ. of the Exceptional Child or  PSY 4200 Psychology of Exceptional Children  General Education  Semester Total | Hrs. 2 1 3 3 3 4 4 | Senior Year - Second Semester EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II T&OE 4120 Secondary Field Experience T&OE 4160 Principles of Teaching Industrial Educ. Semester Total                                   | Hrs. 5 4 1 2 <b>12</b> |

## Technology Education Major, B.S. in Ed. Degree - 128 hours

- \*Please see the Department for suggested course options.
- The above plan is based on an 18-hour minor
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Theatre Major, B.A. Degree

1/2005

This is the recommended program of study for the Theatre Major, B.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Theatre for further information or guidance.

| Freshman Year - First Semester       | Hrs. | Freshman Year -Second Semester    | Hrs.        |
|--------------------------------------|------|-----------------------------------|-------------|
| ENGL 1020 Composition I              | 3    | ENGL 1030 Composition II          | 3           |
| THEA 1500 Acting                     | 3    | General Education Math            | 3<br>3<br>3 |
| THEA 1400 Script Analysis            | 3    | THEA 1100 Oral Interpretation     | 3           |
| General Education                    | 6    | THEA 1600 Stagecraft              | 3           |
| Semester Total                       | 15   | General Education                 | 3           |
| AE 1400 Student Development Seminar* |      | Semester Total                    | 15          |
| Sophomore Year - First Semester      | Hrs. | Sophomore Year - Second Semester  | Hrs.        |
| HIST 1350 or 1351 or POLS 1510       | 3    | General Education Science         | 3-4         |
| THEA 1510 Stage Movement             | 3    | General Education                 | 5           |
| General Education                    | 6    | Coursework in Minor               | 3           |
| Modern Language Requirement**        | 3    | Modern Language Requirement**     | 3           |
| Semester Total                       | 15   | Semester Total                    | 14-15       |
| Junior Year - First Semester         | Hrs. | Junior Year - Second Semester     | Hrs.        |
| THEA 3600 Scene Design               | 3    | General Education                 | 3           |
| THEA 3700 Directing                  | 3    | Theatre Elective                  | 3           |
| Coursework in Minor                  | 6    | Free Choice Electives             | 4           |
| Modern Language Requirement **       | 3    | Coursework in Minor               | 6           |
| Semester Total                       | 15   | Semester Total                    | 16          |
| Senior Year - First Semester         | Hrs. | Senior Year - Second Semester     | Hrs.        |
| THEA 3630 Studio Theatre I           | 1    | THEA 4420 Literature & History II | 3           |
| THEA 4400 Literature & History I     | 3    | THEA 4730 Studio Theatre II       | 1           |
| Theatre Elective                     | 3    | General Education                 | 3           |
| Coursework in Minor                  | 6    | Coursework in Minor               | 3           |
| Free Choice Electives                | 4    | Free Choice Electives             | 6           |
| Semester Total                       | 17   | Semester Total                    | 16          |

## Theatre Major, B.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Refer to the Bachelor's Degree Requirements section for fulfillment options of the BA Modern Language requirements. This plan is based on 9 hours of modern language.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- This plan is based on a 24-hour minor.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Theatre Functional Major (Performance Option), B.F.A. Degree

1/2005

This is the recommended program of study for the Theatre Functional Major (Performance Option), B.F.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Theatre for further information or guidance.

| Freshman Year - First Semester THEA 1500 - Acting THEA 1400 - Script Analysis THEA 1600 - Stagecraft ENGL 1020 Composition I General Education Math Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 3 15    | Freshman Year -Second Semester THEA 1100 - Oral Interpretation THEA 1610 - Stage Makeup ENGL 1030 Composition II General Education Semester Total  | Hrs. 3 3 3 6 15        |
|---|----------------------|--|------------------------|
| Sophomore Year - First Semester THEA 1510 - Stage Movement Technical Theatre Course Elective General Education HIST 1350 or 1351 or POLS 1510 Semester Total  | Hrs. 3 2-3 6 3 14-15 | Sophomore Year - Second Semester THEA 3700 - Directing General Education Theatre Elective General Education Science Semester Total   | Hrs. 3 5 3 3-4 14-15   |
| Junior Year - First Semester THEA 4310 - Principles of Theatre Management THEA 4300 - Professional Practices THEA 4400 - Literature & History I Technical Theatre course elective Department-Approved Support Course General Education Semester Total | Hrs. 3 1 3 3 3 3 16  | Junior Year - Second Semester THEA 4500 - Advanced Acting THEA 4300 - Professional Practices Department-Approved Support Course General Education Free Choice Electives Semester Total                 | Hrs. 3 1 3 6 3 16      |
| Senior Year - First Semester THEA 3630 - Studio Theatre I THEA 4300 - Professional Practices Dept-Approved Support Course General Education Free Choice Electives Semester Total  | Hrs. 1 1 3 3 9 17    | Senior Year - Second Semester THEA 4420 - Literature & History II THEA 4730 - Studio Theatre II THEA 4710 - Advanced Directing THEA 4300 - Professional Practices Free Choice Electives Semester Total | Hrs. 3 1 3 1 7-8 15-16 |

## Theatre Functional Major (Performance Option), B.F.A. Degree - 124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- The student must take 6-7 hours of Technical Theatre courses.
- The student must take 9-10 hours of departmentally approved support courses.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Theatre Functional Major (Technical Option), B.F.A. Degree

1/2005

This is the recommended program of study for the Theatre Functional Major (Technical Option), B.F.A. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central students should contact the Department of Theatre for further information or guidance.

| Freshman Year - First Semester THEA 1500 Acting THEA 1400 Script Analysis ENGL 1020 Composition I General Education Math General Education Semester Total AE 1400 Student Development Seminar*   | Hrs. 3 3 3 3 3 15     | Freshman Year -Second Semester THEA 1100 Oral Interpretation THEA 1600 Stagecraft General Education ENGL 1030 Composition II Semester Total  | Hrs. 3 6 3 <b>15</b>    |
|--|-----------------------|--|-------------------------|
| Sophomore Year - First Semester THEA 2620 Costume Technology THEA Performance Elective General Education HIST 1350 or 1351 or POLS 1510 Semester Total   | Hrs. 3 3 6 3 15       | Sophomore Year - Second Semester THEA 3700 Directing General Education General Education Science Free Choice Elective Semester Total   | Hrs. 3 6 3-4 2 14-15    |
| Junior Year - First Semester THEA 4310 Principles of Theatre Management THEA 4300 Professional Practices THEA 4400 Lit erature & History of Theatre I THEA 4600 Advanced Technical Theatre General Education Free Choice Electives Semester Total  | Hrs. 3 1 3 3 3 1 16   | Junior Year - Second Semester THEA 3600 Scenic Design THEA 4300 Professional Practices Department-Approved Support Course General Education Free Choice Electives Semester Total   | Hrs. 3 1 3 3 6 16       |
| Senior Year - First Semester THEA 3630 Studio Theatre I THEA 4300 Professional Practices THEA 4610 Advanced Stage Light & Sound THEA Performance Elective Department-Approved Support Course General Education Free Choice Elective Semester Total | Hrs. 1 1 3 3 3 3 2 16 | Senior Year - Second Semester THEA 4420 Literature & History of Theatre II THEA 4730 Studio Theatre II THEA 4300 Professional Practices THEA Elective Department-Approved Support Course Free Choice Elective Semester Total | Hrs. 3 1 1 0-3 3 5-8 16 |

## Theatre Functional Major (Technical Option), B.F.A. Degree -124 hours

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives
- The student must take 6-7 hours of Performance courses.
- The student must take 9-10 hours of departmentally-approved support courses
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Tourism Major, B.S. Degree

1/2005

This is the recommended program of study for the Tourism Major, B.S. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester TOUR 1200 Introduction to Tourism ECON 1010 Principles of Microeconomics Modern Language Requirement* ENGL 1020 Composition I Semester Total AE 1400 Student Development Seminar** | Hrs. 3 3 3 1 12              | Freshman Year - Second Semester REC 2200 Dev. Recreation & Tourism Program Modern Language Requirement** GEOG 2212 World Geography BIOL 1004 Intro. to Sciences: Ecology ENGL 1030 Composition II Semester Total | Hrs. 3 3 4 3 16        |
|---|------------------------------|--|------------------------|
| Sophomore Year - First Semester TOUR 3300 Tourism Destinations Coursework in Minor HIST 1350 or 1351 or POLS 1510 General Education Math General Education Semester Total   | Hrs. 3 3 3 5-6 17-18         | Sophomore Year - Second Semester TOUR 1500 Microcomputer for Tourism & Rec. GEOG 3201 The Cultural Landscape COMM 1000 Public Speaking General Education Free Choice Elective Semester Total                     | Hrs. 3 3 3 3 15        |
| Junior Year - First Semester ACCT 2101 Principles of Financial Accounting HM 4800 Hotel & Restaurant Management Coursework in Minor General Education Semester Total  | Hrs. 3 3 6 3 <b>15</b>       | Junior Year - Second Semester TOUR 3700 Travel Agency Operations TOUR 4710 Group Tour Operations Coursework in Minor General Education Semester Total  | Hrs. 3 3 6 3 <b>15</b> |
| Senior Year - First Semester TOUR 4700 Conference & Convention Planning REC 4740 Seminar Coursework in Minor General Education Free Choice Elective Semester Total  | Hrs. 3 2 3 3 2 13            | Senior Year - Second Semester TOUR 3310 International Tourism (Spring only) TOUR 4720 Tourism Planning & Development TOUR 4730 Tourism Marketing Coursework in Minor Free Choice Elective Semester Total         | Hrs. 3 3 3 3 15        |
| Summer Semester following Senior Year<br>REC 4980 Internship***<br>Semester Total   | <b>Hrs.</b><br>6<br><b>6</b> |  |                        |

## **Tourism Major, B.S. Degree - 124 hours**

- \*Students must have a minimum proficiency of the second college course in a selected language. As a major area requirement we consider two years at the high school level in a modern language as sufficient. In the absence of sufficient high school classes or other college transfer language courses, the student should take 6 hours of a modern language (General Education, Division II Area C). The above plan is based on two college courses.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*\*Prior to enrollment in REC 4980, the student must complete a 500-hour field work experience in an approved setting, have a minimum of 2.5 grade-point average in the major, and a minimum overall grade-point average of 2.25.
- Above degree plan is based on a 21-hour minor.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

#### Vocational Agriculture Education Functional Major, B. S. in Ed. Degree

1/2005

This is the recommended program of study for the Vocational Agriculture Education Functional Major, B. S. Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Agriculture for further information or guidance.

| Freshman Year - First Semester AGRI 1100 Introduction to Agriculture AGRI 1300 Introductory Plant Science AGRI 1200 Agriculture Mechanics (Lab) AGRI 1420 Animal Husbandry CHEM 1104 Intro. to Sci.: Chemistry (w/lab) ENGL 1020 Composition I Semester Total                              | Hrs. 1 1 3 3 4 3 15    | Freshman Year - Second Semester AGRI 1600 Intro. Horticulture Science (Lab) BIOL 1004 Intro. to Sciences: Ecology (w/lab) ENGL 1030 Composition II MATH 1111 College Algebra General Education Semester Total  | Hrs. 3 4 3 3 3 16          |
|--|------------------------|--|----------------------------|
| Sophomore Year - First Semester AGRI 1310 Agronomy I: Row Crops (Lab) AGRI 2010 Comp. App. for Agriculturalists AGRI 2330 Introduction to Soil Science (Lab) ECON 1011 Principles of Economics EDCI 2100 Foundations of Ed. & Fld. Exp. HIST 1350 or HIST 1351 U.S. History Semester Total | Hrs. 2 3 3 3 3 3 3 17  | Sophomore Year - Second Semester AGRI 2130 Global Agriculture AGRI 2315 Agronomy II: Forages AGRI 3200 Farm Power & Machinery (Lab) EDCI 2240 Educational Psychology General Education Semester Total  | Hrs. 3 2 3 3 6 17          |
| Junior Year - First Semester AGRI 3110 Agri-Business Management AGRI 3420 Animal Nutrition AGRI 4900 Planning & Cond. Prog. in Ag. Ed.* PSY 4200 Psychology of Exceptional Child or EDSP 2100 Educ. of the Exceptional Child General Education Semester Total                              | Hrs. 3 3 3 2 5-6 16-17 | Junior Year - Second Semester AGRI 4435 Pork or AGRI 4430 Beef EDCI 4210 Teaching of Reading Secondary Sch. POLS 1510 American Government PSY 4230 Psychology of Adolescence General Education Semester Total  | Hrs. 3 2 3 3 6 17          |
| Senior Year - First Semester AGRI 3120 Distribution & Mkt. Agri. Products AGRI 4820 Agriculture Safety EDCI 3500 Sec. Teaching & Behavior Mgmt. EDCI 3550 Practicum in Sec Instruction ICAP 4101 Agriculture Capstone Experience EDCI 4300 Educational Meas. & Evaluation Semester Total   | Hrs. 3 3 1 1 3 2 15    | Senior Year - Second Semester AGRI 4910 Agri. Occ. Expr. Programs** AGRI 4920 Agri. Mech. in Agri. Education** AGRI 4930 Methods Teaching Voc. Agriculture** AGRI 4940 Secondary Field Experience II** EDCI 4595 Student Teaching Secondary I ICAP 4468 Student Teaching Secondary II Semester Total | Hrs. 2 2 3 1 3 4 <b>15</b> |

## Vocational Agriculture Education Functional Major, **B.S. in Ed. Degree - 128 hours**

- \*AGRI 4900 is only offered in Fall semesters AND is the prerequisite to AGRI 4910, 4920, 4930 and 4940.
- \*\*AGRI 4910, 4920, 4930, and 4940 are only offered in Spring semesters AND their prerequisite is AGRI 4900.
- Courses designated below are highly recommended electives. Taking these courses will increase the total hours in the program: AGRI 4200 Adv. Ag. Mechanics (Lab); AGRI 2425 Livestock Evaluation (Lab) or AGRI 3640 Horticultural Propagation Material (Lab); AGRI 4415 Reproduction of Farm Animals (Lab).
- Your four-year plan will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

### Vocational Family and Consumer Sciences Functional Major, B.S. in Ed. Degree

1/2005

This is the recommended program of study for the Vocational Family and Consumer Sciences Functional Major, B.S. in Ed. Degree at Central Missouri State University. Your schedule may vary. Current or prospective Central Missouri students should contact the Department of Health and Human Performance for further information or guidance.

| Freshman Year - First Semester CFD 1010 Individual & Family Relationships CFD 1220 Child Development General Education General Education Math ENGL 1020 Composition I Free Choice Elective Semester Total AE 1400 Student Development Seminar*                                      | Hrs. 3 3 3 3 1 16   | Freshman Year - Second Semester CFD 2230 Practicum in Child Development ENGL 1030 Composition II CHEM 1104 Intro. to Sciences: Chemistry POLS 1510 American Government General Education Semester Total                                     | Hrs. 1 3 4 3 6 17                     |
|---|---------------------|---|---------------------------------------|
| Sophomore Year - First Semester FACS 2110 Consumer Problems FOOD 2322 Food Preparation FAME 2442 Textiles EDCI 2100 Found. of Educ.& Field Experience EDCI 2240 Educational Psychology Semester Total   | Hrs. 3 3 3 3 1 5    | Sophomore Year - Second Semester FAME 1450 Textile & Apparel Fabrications I D&N 3340 Nutrition BIOL 1003 Introduction to Sciences: Ecology HIST 1350 or 1351 U.S. History Free Choice Elective Semester Total                               | Hrs. 3 3 3 3 15                       |
| Junior Year - First Semester CFD 3230 Family Systems & Lifespan Dev FACS 3710 Organization of Vocational FACS PSY 4230 Psychology of Adolescence HED 4320 Teaching Sex Educ. in the School General Education Semester Total   | Hrs. 3 3 3 3 3 15   | Junior Year - Second Semester CFD 3240 Parent-Child Interaction PSY 4200 Psych. of Exceptional Children or EDSP 2100 Ed of the Exceptional Child FACS 3120 Family Resource Management Free Choice Elective General Education Semester Total | Hrs. 3 2 3 3 6 17                     |
| Senior Year - First Semester FAME 4410 Architectural Interiors EDCI 3500 Secondary Teach. & Behavioral Mgt EDCI 3550 Practicum in Secondary Instruction EDCI 4300 Educ. Measurement & Evaluation EDCI 4210 Tchg. of Reading in the Sec. School Free Choice Electives Semester Total | Hrs. 3 3 1 2 2 5 16 | Senior Year - Second Semester<br>FACS 4725 Secondary Field Experience II<br>FACS 4740 Methods of Teaching Voc. FACS<br>EDCI 4595 Student Teaching Secondary I<br>ICAP 4468 Student Teaching Secondary II<br>Semester Total                  | Hrs.<br>1<br>3<br>5<br>4<br><b>13</b> |

## Vocational Family and Consumer Science Major, B.S. in Ed. Degree - 124 hrs

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- Certification to teach vocational family and consumer sciences from birth to grade 12.
- A 15-hour block of General Education courses in Math, Written Communication, History or Political Science, and Science must be completed in the first four semesters to prepare for the C-Base exam. These courses are indicated on the plan in **bold italics**.
- See the current catalog for complete statement of academic policies, leveling, and prerequisites.
- Time to degree and course sequencing will be dependent upon Planned Placement in math, reading and writing.

## **Faculty and Staff Listings**

Listing as of January 1, 2005

#### **PRESIDENT**

BOBBY R. PATTON - President and Professor of Speech Communication. B.F.A., Texas Christian University; M.A., Ph.D., University of Kansas.

#### **VICE PRESIDENTS**

- GEORGE WILSON Interim Provost and Vice President for Academic Affairs. B.A., M.A., Ph.D., Oklahoma State University
- PAUL A. PAGE Vice President for University Advancement. A.A., Fort Scott Community College; B.S., M.S., Pittsburg State University; Ph.D., University of Kansas.
- WALTER R. HICKLIN Interim Vice President for Student Affairs and Assistant Professor of Mathematics. B.S., Missouri Valley College; M.S. in Ed.S., Ed.S., Central Missouri State University.

#### **ADMINISTRATIVE STAFF**

### Academic Affairs

- KIMBERLY D. ANTHES Operations Manager, Library Services. B.S., Central Missouri State University.
- NAOMI J. BALDWIN Assistant Director of International Admissions. B.S., M.S., Central Missouri State University.
- CYNTHIA A. BERTALOT Assistant Director, Assessment and Testing Services. B.S.E., M.S.E., Southwest Missouri State University; M.S., Central Missouri State University.
- GEORGE W. BODDY Director of Extended Campus and Distance Learning. B.S., M.Ed., South Dakota State University; Ph.D., University of Nebraska-Lincoln.
- RYAN H. BOWIE Admissions Representative. B.S., Central Missouri State University.
- TERI A. BOWMAN Associate Registrar. B.S. in Ed., M.S. in Ed., Northwest Missouri State University.
- TERRY J. BUTLER Program and Facility Manager, Missouri Safety Center. B.S., M.S., Central Missouri State University.
- BARBARA J. CARDER Assistant Director for Distance Learning. THERESE CARMACK - Executive Officer of Military Science
- and Leadership. B.S., University of Wisconsin-La Crosse; M.S., Central Missouri State University.
- GLENN A. CARRIKER Assistant Director, Missouri Safety Center. B.S., M.S., Ed.S., Central Missouri State University.
- BEN L. CLAY Assistant Coordinator for Professional Development.
- SEAN R. COOPER Academic Advisor. B.S., M.S., Central Missouri State University.
- SUSIE COX Coordinator of Professional Development, Missouri Center for Career Education. B.S. in Ed., M.S.E., Ph.D., University of Missouri-Columbia.
- MARTIN M. CUPP Interim Airport Director and Chief Flight Instructor. B.S., M.S., Central Missouri State University.
- **HOLLY N. DAVENPORT** Coordinator, Technology Projects, Center for Teaching and Learning. B.S., Central Missouri State
- **DONALD L. DAVIS** Manager, Business Applications, Small Business Development Center. B.S., Northwest Missouri State
- LEANNA R. DEPUE Director, Missouri Safety Center. B.S., M.S. in Ed., Ph.D., Southern Illinois University-Carbondale.

- MOLLIE D. DINWIDDIE Interim Dean, Library Services, and Professor of Library Services. B.A., Bethel College; M.L.S., Vanderbilt University; Ed.S., Central Missouri State University.
- B. DIANA DUVALL Coordinator of International Programs.
- JOHN A. ELFRINK Acting Dean of the Adrian and Margaret Harmon College of Business Administration and Professor of Accounting. B.S., M.B.A., Southeast Missouri State University; Ph.D., St. Louis University; C.P.A.
- DAVID H. EWING Farm Facilitator. B.S., M.S., Central Missouri State University.
- J. MICHAEL FINNEGAN Assistant Director, New Student Programs. B.S., Kansas State University.
- M. ELAINE FRANK-RAGAN Associate Provost for Academic Programs and Services and Professor of Nursing. B.S.N., Central Missouri State University; M.S.N., Catholic University of America; Ph.D., University of Kansas.
- VICKI L. SILVERS GIER Academic Coordinator, McNair Scholars Program. B.S., M.S., Central Missouri State University; Ph.D., University of Nevada-Reno.
- ALICE L. GREIFE Dean of the College of Applied Sciences and Technology and Professor of Industrial Hygiene. B.S., M.S., Central Missouri State University; Ph.D., University of Cincinnati.
- MICHAEL J. GRELLE Interim Director of Institutional Effectiveness ans Professor of Psychology. B.A., University of Missouri-St. Louis; M.A., Ph.D., Northern Illinois University.
- MARY E. GRIFFIS Coordinator, Academic Media Services, Center for Teaching and Learning. B.F.A., M.S., Central Missouri State University.
- BARBARA A. HARRISON Assistant Director, Missouri Center for Career Education. B.S. in Ed., M.S., Central Missouri State University; Ed.D., University of Missouri-Columbia.
- JANET M. HELM Admissions Officer. B.S., M.A., Western Michigan University; M.A., Ball State University-Indiana.
- LAUREL K. TREE HOGUE Assistant Director for Extended Campus, Extended Campus and Distance Learning. B.S.B.A., M.B.A., Central Missouri State University.
- DANA G. HOOVER Coordinator of International Student and Scholar Services. B.S., M.A., Central Missouri State University.
- JOYCE A. HUFFMAN Outreach Coordinator, Extended Campus and Distance Learning. B.S., Central Missouri State University.
- **DENTON D. HUMPHREY** Academic Advisor. B.A., Alderson Broaddus College; M.S., West Virginia University.
- MELISSA A. INGRAM Assistant Director of Admissions. B.S., Central Missouri State University
- MICHAEL D. JEFFRIES Director, CentralNet. B.A. Central Missouri State University.
- DENNIS W. JONES Traffic Safety Manager, Missouri Safety Center. B.S., Northwest Missouri State University; M.Ed., University of Guam; Ed.S., Central Missouri State University.
- CATHERINE A. KAHOE Coordinator, Resources, Missouri Center for Career Education. B.S., M.A., Central Missouri State University.
- LYNN K. KNIFONG Contract Manager, Missouri Safety Center. B.S. Park College.
- CAROL K. KNIGHT Academic Media Services-ITV, Center for Teaching and Learning. B.A., Western Illinois University.
- GARY W. LOWE Law Enforcement Training, Missouri Safety Center. B.S., M.S., Central Missouri State University.

- MARY ALICE LYON Director, TRIO Programs. B.A., B.S. in Ed., M.A., Ed.S., Central Missouri State University.
- LORRAINE L. MADDEN Academic Advisor. B.S.in Ed., University of Missouri-Columbia; M.S.in Ed., Central Missouri State University.
- MARK A. MANLEY Consulting Engineer, Institute for Entrepreneurial Studies and Development. B.S., University of Missouri.
- LINWOOD MASON Media Specialist, Harmon Computer Commons, Library Services. B.S., U.S. Air Force Academy; M.B.A., Webster University.
- VICTOR T. MASSIA Microcomputer/Network Specialist, Library Services. A.A., Community College of the Air Force.
- TERRY L. McNEELEY Academic Media Services-IDD, Center for Teaching and Learning/Library Services. B.F.A., Central Missouri State University.
- MATTHEW A. MELVIN Assistant Provost for Enrollment Management. B.A., Central College, Pella, Iowa; M.S., Western Illinois University; Ed.D., University of Nebraska-Lincoln.
- NEIL MEYERS Missouri Motorcycle Program, Missouri Safety Center. B.S., Friends University.
- CAROLE E. NIMMER Planning Officer. B.S., M.B.A., Ed.S., Central Missouri State University.
- ANN E. NORDYKE Assistant Director of Student Financial Assistance. B.A., Allegheny College; M.A., Bowling Green State University.
- CAROLYN P. O'KEEFE Director of Lee's Summit Facility. B.S., Emporia State University; M.S., Central Missouri State
- PAUL A. ORSCHELN Chief Admissions Officer. B.S., M.S., Central Missouri State University.
- JOHN PETER OZIAS Academic Advisor. B.S., M.S., Central Missouri State University.
- NOVELLA PERRIN Assistant Provost for Research and Dean of The Graduate School and Professor of Sociology. B.S. in Ed., M.A., Ed.S., Central Missouri State University; Ph.D., University of Kansas.
- **CHARLES W. PETENTLER** Director of International Admissions. B.S., M.A., Central Missouri State University.
- JENNIFER L. PINT Academic Advisor. B.A., South Dakota State University; M.S., Iowa State University.
- ASHIQUR RAHMAN Media Assistant, Harmon Computer Commons, Library Services. B.S., Adamjee College-Bangledesh.
- ROBERT G. RHODES Director of Student Records/Registrar. B.S. in Ed., M.S. in Ed., Central Missouri State University.
- C. DAVID RICE Assistant Provost for Information Technology and Instruction and Professor of History. B.A., Georgia State University; M.A., Vanderbilt University; Ph.D., Emory University.
- LISA M. RUNYAN Interim Director of Academic Advisement. B.A., M.A., The Ohio State University.
- WESLEY A. SAVAGE Director, Small Business Development Center. B.S., University of Missouri-Rolla; M.B.A., Butler
- SUZANNE L. SCHELP Copyright Permission Coordinator. A.A., Longview Community College; B.S., M.A., Central Missouri State University.
- LISA A. SCHMIDT Academic Media Services-IDD, Center for Teaching and Learning. B.F.A., M.S., Central Missouri State
- J. PHILLIP SHREVES Director of Student Financial Assistance. B.S., Kansas State University; M.S., Central Missouri State University.

- RICHARD D. SLUDER Interim Dean of the College of Education and Human Services, and Professor of Criminal Justice. B.S., M.A., Northeast Missouri State University; Ph.D., Sam Houston State University.
- SHAWN C. SMITH Outreach Coordinator, Extended Campus and Distance Learning. B.M.E., Central Missouri State University.
- BRADLEY S. SNYDER Consulting Engineer-Technology, Institute for Entrepreneurial Studies and Development. B.S., Wichita State University; M.B.A., University of Arizona.
- A. JOY STEVENSON Director of International Student and Scholar Services. B.A., University of Texas; M.A., Ph.D., University of Colorado.
- RALPH M. STEWART Breath Lab Technician, Missouri Safety Center. B.S., University of Kansas.
- MARGARET E. STONE Interim Director, Office of Sponsored Programs. B.A., University of Kansas; M.S.W., University of Connecticut; M.H.A., University of Minnesota; Ph.D., University of Missouri-Columbia.
- KATHALEEN L. TALLY Program Coordinator for Dual Credit, Extended Campus and Distance Learning. B.S., Central Missouri State University.
- ROBIN L. TERRELL Fiscal Operations Coordinator, Provost's Office. B.S.B.A, Central Missouri State University.
- **DEBORAH J. TURNBOW** Scholarships and Awards Officer. B.S. in Ed., Central Missouri State University; M.S., University of Nebraska-Lincoln.
- GENE A. VINSON Director of the Central Regional Professional Development Center. B.S. in Ed., M.S. in Ed., Ed.S., Central Missouri State University.
- PETER L. VISCUSI Assistant Provost for Undergraduate Studies and Dean of The Honors College and Professor of History. B.A., LaSalle College; M.A., Ph.D., University of Delaware.
- STEPHEN O. WALLACE Transfer Coordinator/Advisor. B.A., Hardin-Simmons University; M.Ed., University of Oklahoma; Ph.D. University of Alabama.
- ROBERT W. WELSH Breath Alcohol Administrator, Missouri Safety Center. B.S., College of the Ozarks; M.S., Central Missouri State University.
- KRISANA E. WEST Academic Advisor. B.S., M.A., Central Missouri State University.
- VIRGINIA E. WHEELESS Dean of the College of Arts and Sciences and Professor of Communication. B.A., University of Nebraska-Kearney; M.A., Colorado State University; Ph.D., University of Nebraska-Lincoln.
- SAVITRI C. WILDER Instructional Technologist I, Technology Projects, Center for Teaching and Learning. B.A., Idaho State University.

#### Athletics

- K. KIM ANDERSON Head Men's Basketball Coach. B.S., M.S., University of Missouri.
- THERON D. AYCH Assistant Football Coach, Quarterbacks. B.S. Northern State University-Aberdeen, South Dakota.
- CHARLES T. CLEMENS Assistant Football Coach. B.S., Truman State University.
- JEFF S. CONWAY Assistant Head Football Coach & Offensive Coordinator. B.S., Northwest Missouri State University; M.A., Sam Houston State University.
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- A. LAMONT FRAZIER Assistant Men's Basketball Coach. B.S., University of Missouri.
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