

**Clinical Nutrition Graduate Degree Program  
(Future Education Model)  
Student Handbook  
2023-24**



**University of Central Missouri**

College of Health, Science and Technology  
Department of Nutrition, Kinesiology, and Health  
Updated November 2023

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## Greetings from the Nutrition Program

Welcome to the Graduate Nutrition Program at the University of Central Missouri. This program awards a Master of Science in Clinical Nutrition and provides eligibility for students to take the Commission on Dietetic Registration (CDR) exam to become Registered Dietitian Nutritionists (RDNs). The purpose of this handbook is to provide you with current and important information about our program. Please read the handbook carefully before signing and submitting the attached declaration signifying that you are aware of the program's policies and procedures.

Our 18-month program includes a rigorous course plan and supervised experiential learning (SEL). The courses include nutritional biochemistry, clinical and community nutrition, management, nutrition counseling, and research. The SEL includes experiences in clinical nutrition, foodservice, and community/public health nutrition. The capstone course gives students the opportunity to research an area of interest.

As a candidacy program for accreditation by the Accreditation Council in Education for Nutrition and Dietetics (ACEND), this Future Education Model program covers all required competencies for dietitians.

We look forward to getting to know you.

Sincerely,

Meera Penumetcha, PhD, RDN  
Associate Professor & Program Director  
penumetcha@ucmo.edu

Meet the faculty:

<https://www.ucmo.edu/college-of-health-science-and-technology/department-of-nutrition-kinesiology-and-health/nutrition/fac-staff/index.php>

## Program Mission

The Future education model Graduate Program (GP) in nutrition at UCM prepares students to fulfill the university's Master of Science degree criteria while meeting the foundational **knowledge and skills** necessary to practice as an entry level registered dietitian nutritionist (**professional career**) by completing supervised **experiential** learning activities. Through the use of evidence-based practice, nutrition research (**innovation**), and communication **technologies**, students are prepared to become **lifelong learners** who promote public health and wellness.

**Goal 1:** Program graduates will be competent to pursue entry-level dietitian nutritionist and/or careers in dietetics and nutrition related areas.

### Objectives:

- a. At least 80% of students complete program requirements within 2.25 years (150% of the program length). (Program Completion Objective)
- b. Of graduates who seek employment, at least eighty percent are employed in nutrition and dietetics or related fields within 12 months of graduation. (Graduate Employment Objective)
- c. At least ninety percent of program graduates take the CDR credentialing exam for dietitian nutritionists within 12 months of program completion. (Registration Exam Objective)
- d. The program's one-year pass rate (graduates who pass the registration exam within one year of the first attempt) on the CDR credentialing exam for dietitian nutritionists is at least 80%. (Registration Exam Objective)
- e. Eighty percent of the employers will give a score of 4.0 or above on a 5-point scale for the competency of the GP program graduate for entry-level practice. (Employer Satisfaction Objective)

**Goal 2:** Program graduates will be competent in the practice of nutrition/dietetics research.

### Objective:

- a. At least 80 percent of graduates will rate 5 or above on a 1–7-point scale on feeling confident to plan, develop, implement, and disseminate an original nutrition/dietetics-related research project. (Program Specific Objective.)

## Program Accreditation

The Graduate Program in Clinical Nutrition has been granted candidacy accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, (800)/877-1600 x5400, [ACEND](#).

## Admission Requirements

**Baccalaureate degree.** Applicants must hold a baccalaureate degree from a four-year college or university, or its international equivalent with a 3.0 GPA or better in any major. Students who earned a degree in nutrition/dietetics and have received a verification statement are eligible to apply, as are students who earned a degree in any other major, as long as they have completed the required prerequisite courses prior to admission (please note exception below).

**\*Required prerequisite courses.** The following prerequisite courses are required prior to admission:

Completion of the following prerequisite courses with a grade of B or higher is required prior to beginning the professional program. Program prerequisites include either completion of a U.S. Dietetics Program or transcripts showing the completion of all of the prerequisite courses listed below.

ACCT 1101 – Foundations of Financial Reporting (3 credits)  
BIOL 2510 Basic Genetics (3 credits) or BIOL 3511 Genetics w/lab (4 credits)  
BIOL 3611 Microbiology with lab (4-5 credits)  
BIOL 3401 Human Anatomy with lab (3 credits)  
BIOL 3402 Human Physiology with lab (5 credits)  
CHEM 1104 Intro to Chemistry with lab (4 credits)  
CHEM 1604 Organic and Biochemistry with lab (4 credits)  
D&N 3340 Nutrition (3 credits)  
NUTR 4010 Advanced Nutrition (3 credits)  
FOOD 2322 Food Preparation with lab (3-4 credits)

\*Students who have not completed all prerequisite courses prior to submitting their application will still be considered for the program as long as no more than two prerequisite courses are outstanding prior to the application deadline, and the student can demonstrate proof of enrollment in the remaining prerequisite courses in their application. Students with outstanding prerequisite courses must demonstrate that they completed those courses with a B or better prior to the start of the program. Students will be dropped from the program if prerequisite courses are not complete, or if a B or better was not earned prior to the start of the program. Program prerequisites may be completed at any accredited institution. For questions on articulations and/or transfer equivalencies, please contact our Program Manager, Ms. Paula Brant at [brant@ucmo.edu](mailto:brant@ucmo.edu).

Prerequisite courses must have been taken within 5 years of applying to the program or approval from the Program Director.

### **Assessment of Prior Learning**

Supervised practice experiences or experiential learning completed prior to the start of the program will not be considered as replacements of the program's required applied experiences.

### **Application Materials**

Submission of a current resume which details paid and volunteer experiences.

Statement of Goals - A statement should include a summary of the applicant's relevant educational, professional and research experiences, as well as the applicant's career and professional goals both short term and long term include the following (approximately 1000 words):

- Why did you choose UCM?
- What relevant educational, professional and research experiences do you have in the nutrition/dietetics field?
- Why do you want to become a registered dietitian?
- What are your short- and long-term professional/career goals?

Transcripts – Submission of official transcripts from where you earned or are earning your Bachelor's degree along with any courses you have taken as prerequisites since in order to apply for the MS Clinical Nutrition Program.

Letters of Recommendation - Applicants must submit three (3) letters of recommendation: two from faculty, one from clinical/research supervisor or /employer. Choose people who have knowledge of your strengths and goals.

International Students Only. All international applicants must submit an acceptable, official (reported directly from ETS) Test of English as a Foreign Language (TOEFL) score. TOEFL scores must be submitted by Educational Testing Services (ETS) directly to the University of Central Missouri's Testing Services Office (660-543-4919). The ETS code for UCM is 6090. For more information on applying as an international applicant visit <https://www.ucmo.edu/offices/graduate-and-international-student-services/>

### **Program Requirements**

Students must complete all required courses and SEL experiences outlined in the course plan in order to receive a Master's of Science in Clinical Nutrition and a Verification Statement to sit for the RDN exam. Students complete the courses in a cohort model. Students must complete the didactic courses (30 credits), all supervised experiential learning experiences (10 credits), and one capstone project (3 credits). Students are required to complete the courses in the order listed, though exceptions may be made for extenuating circumstances. Students must meet all ACEND Competencies (see appendix) at the end of document.

## Academic Program Calendar

The program will follow the UCM calendar with university holidays and vacations observed. The university calendar can be accessed here: <https://www.ucmo.edu/calendar/>

### Course Timeline

<b>Semester 1- Fall</b>	<b>Total Credits 12</b>	
NUTR 5010		Advanced Nutrition and Human Metabolism (3)
NUTR 5011		Food Systems Management (3)
NUTR 5012		Medical Nutrition Therapy I (3)
NUTR 5013		Practical Applications in Nutrition Research (3)
*Must earn cumulative GPA of 3.00 on first semester courses to advance in Program		
<b>Semester 2-Spring</b>	<b>Total Credits 13</b>	
NUTR 5014		Advanced Community Nutrition (3)
NUTR 5015		Macronutrients (3)
NUTR 5016		Micronutrients (3)
NUTR 5017		Advanced Medical Nutrition Therapy-(3)
NUTR 6013		Capstone Project (1)
<b>Semester 3-Summer</b>	<b>Total Credits 10-11</b>	
NUTR 5018		Nutrition Education and Counseling (3)
NUTR 5019		Nutrition Across the Lifespan- (3)
NUTR 6010 OR NUTR 6011 OR NUTR 6012		Supervised Experiential Learning-Clinical (4), Community or Food Service Management (3)
NUTR 6013		Capstone Project (1)
<b>Semester 4-Fall</b>	<b>Total Credits 7-8</b>	
NUTR 6010 OR NUTR 6011 OR NUTR 6012		Supervised Experiential Learning-Clinical (4), Community or Food Service Management (3)
NUTR 6013		Capstone Project (1)
	<b>Total hours 43 (30 Didactic, 10 Experiential, 3 Capstone)</b>	

### Supervised Experiential Learning

Students Experiential Learning will take place in Clinical, Community, and Food Service/Management sites around the Kansas City and Warrensburg areas.

**Supervised Experiential Learning Documentation (SEL):** Competencies associated with didactic courses and Alternative Experiential Learning (AELs) are tracked by faculty instructors. Each faculty instructor is responsible for reviewing student performance and follows up with remediation as needed. All course syllabi contain a list of competencies, and the assignments associated with specific Performance Indicators (PI) are identified on score cards. All score cards across the curriculum will use the same scale to evaluate student performance: 1-3=Below

Expectations, 4-6=Met Expectations, and 7-9= Exceeded Expectations. All students must meet at least a 4-6 score to be assessed as competent. The Program uses Trajecsyst (<https://www.trajecsyst.com/software>), a software tool, to track competency achievement during SEL rotations. The score cards are populated in Trajecsyst for competency achievement evaluation by preceptors. The Program faculty and Manager (PM) are trained in the use of the Trajecsyst platform. The PM registers each new preceptor and student and trains them in the use of this platform for tracking student time and performance during each rotation. Students use this platform to record time and evaluate preceptors as well.

Students will not be given the opportunity to make-up, extend, or repeat a SEL outside of the scheduled semester. In case of extenuating circumstances, a decision will be made in consultation with the Program Director and interested parties. During an SEL rotation the student should not be used to replace employees. Students should report any such instance to program faculty and Program Director.

### **SEL and Professionalism**

Professionalism is critical to a student's success in the program, in the profession, and is an essential component of the curriculum. Additionally, the program has a policy specific to certain elements of professionalism:

**Professional Behavior.** A student must conduct himself or herself in accordance with University Policy and the professional and ethical standards of the profession. The student is referred to the following documents for details:

1. Code of Ethics for the Profession of Dietetics  
<https://www.eatrightpro.org/practice/code-of-ethics/ethics-complaints-and-violations>
2. UCM Student Code of Conduct  
<https://issuu.com/ucentralmo/docs/ucmguidetogooddecisionmaking?e=9595811/51394453>
3. UCM Academic Integrity Policy  
<https://www.ucmo.edu/offices/general-counsel/university-policy-library/academic-policies/academic-honesty-policy/>
4. UCM student handbook  
<https://issuu.com/ucentralmo/docs/ucmguidetogooddecisionmaking?e=9595811/51394453>

A student who fails to comply with the standards established in these documents as well as what is listed in the handbook on professional dress/appearance is required to meet with the Program Director. Depending on the nature of the incident and any previous infractions, remediation may be required, or dismissal may be recommended. Remediation may include establishing an Academic Improvement Plan, and the student must meet the directives outlined within the plan in order to continue to progress in the program. In addition, during SEL rotations students must follow all professional behavior, dress, and conduct dictated by the facilities in which a student is rotating. Students will be required to meet with preceptors and the SEL instructor in addition to the Program Director if there is a breach in compliance of facility standards.



## **Professional Dress/Appearance**

Professional appearance is encouraged at all times the student is engaged in program-related activities. Professional dress is required when students participate in clinical education and community settings. If you are unsure of the expected dress code, please reach out to the Program Director. The [Professional Clothing Studio](#) housed in Career Services at the Warrensburg campus allows students to select professional clothing for free.

## **Liability Insurance**

Professional Liability Insurance is covered by the SEL site for students enrolled in Supervised Experiential Learning hours. Should you decide you would like a personal, professional liability policy, this can be arranged with an agent of your choice or check. <https://www.proliability.com/> The cost for liability insurance is around \$35.

## **Travel**

Students must have a dependable car and must provide proof of current car insurance if requested. Students are liable for safety and travel to and from all activities related to program requirements.

## **UCM Travel Policy**

The University of Central Missouri is extensively involved in a variety of dimensions of domestic and international travel. Faculty, staff and students are involved in both individual and group travel that results from the many University-related programs. The guidelines set forth herein represent a concerted effort to clarify policies and procedures relative to all University domestic and international travel. Further, it is the desire of the University to make the guidelines available to all members of the University community, so they may understand them. Any exceptions to the following guidelines must be authorized by the Vice President of Finance and Operations. See: <https://www.ucmo.edu/offices/general-counsel/university-policy-library/procedures/travel-guidelines-and-procedures/#>

## **Injury or Illness**

During SEL, should a student become seriously ill or injured, the student must notify the preceptor immediately. The student must also obtain documentation for an injury or illness by visiting the student health center or an outside healthcare provider. The student must arrange with the SEL Instructor and preceptor how missed hours and activities will be made up following the injury or illness. The Program Director should be informed of the finalized plan and on progress of making up hours. Make-up opportunities for missed classes due to illness or injury are at the discretion of each instructor and outlined in each course syllabus. University policy states that students contact the Office of Student Experience and Engagement in the case of serious illness or injury that completes completion of coursework. See University policy on class attendance at <https://www.ucmo.edu/offices/general-counsel/university-policy-library/academic-policies/class-attendance/>.

## **Drug Testing and Criminal Background Check**

Students must complete drug testing and a criminal background check prior to the start of supervised experiential learning. The student will be responsible for all associated fees. If the

student fails the drug test or criminal background check, the student will be unable to complete supervised experiential learning experiences and will be dismissed from the program.

### **Health Tests, Trainings, and Immunizations**

Students must obtain proof of the following immunizations, tests, and training prior to SEL rotations. Please note that the following list contains commonly required vaccinations. Clinical sites may have additional requirements that may include additional vaccinations or training. If a student is unable to get the required vaccinations he/she should contact the Director of the Program to determine if a particular site has vaccine exemption policies. The Program Director will try to find a suitable site, but there is no guarantee that a site will be found and the student will not be able to complete the program and will not be eligible to sit for the RDN exam.

Hepatitis B series

MMR

COVID-19

TDAP (tetanus, diphtheria, and pertussis)

Varicella

2-Step TB/PPD test (with annual tests thereafter)

Seasonal influenza vaccine

AHA's Basic Life Support for Healthcare Providers Evidence of HIPPA and OSHA training

### **Verification Statements**

Following completion of all program requirements, and once the degree is officially posted, students will receive a verification statement with digital signature signed by the Program Director and be able to apply to sit for the Registration Examination for Dietitian Nutritionists through the Commission on Dietetic Registration. Six signed copies of the verification statement will be mailed to the student's permanent address along with a digital copy will be sent upon request.

### **Student Performance Monitoring**

The GP has set the first semester as a benchmark for students to move forward. If the student's GPA falls below a 3.0 during the first semester or does not meet university graduate program policy requirements, the student will be required to set up a meeting with the Program Director. In addition, UCM policy requires faculty to participate in an early alert system to identify any academic, behavioral or truancy issues with a student. Once this alert is put in place then the student is referred to the appropriate care team member. One such program is the "Educational Conduct Process and the Role of the Conduct Education" found on page 8 of the [UCM Student Handbook](#). Students with minimal chances of success in the program will be counseled into career paths that are appropriate to the student's ability.

### **Student Remediation and Retention**

If a student struggles to perform at graduate-level standards within a class or supervised experiential setting, the student is encouraged to arrange remedial instruction with the course instructor. Course instructors can provide tutoring during scheduled office hours, or by appointment. For writing assistance students are encouraged to schedule an appointment at the University Writing Center, [Online](#)

[Writing Lab \(OWL\)](#). Following University policy, students are required to contact the [The Office of Student Experience and Engagement](#) in case of serious illness or injury that interferes with the completion of course work. Subsequently, the instructor receives a notification from the SEE office which allows the instructor to work with the student to complete the coursework. Lapses in professional and ethical behavior are addressed by the instructor/preceptor, but repeated lapses are addressed by referring the student to the UCM [Campus Community Health](#) office which houses the Campus Counseling Center as well.

### **Equitable Treatment**

Students' diverse needs are addressed on an individual basis with the program director and/or faculty. The students' needs are met as needed by utilizing the ample resources at UCM. Information about non-discrimination, equal access, and fair treatment is available on pages 6-7 of the [UCM Student Handbook](#).

### **Disciplinary and Termination Procedures**

Graduate students must maintain good academic standing in order to be eligible to continue in or to return to the University. Good Academic Standing is demonstrated by a 3.00 grade point average (GPA) for all courses taken including those required in the program of study. No more than two courses of "C" grades\*, and no course grades of "D" or "F" are allowed.

Additional information about the disciplinary and termination policies set by the graduate college can be found here: <https://catalog.ucmo.edu/content.php?catoid=12&navoid=469#minimum-grades-and-grade-point-averages> Within the GP program, should the student's GPA fall below a 3.0 for more than one semester, or should the student earn a course grade of "D" or "F" within a single semester, the student will be dismissed from the GP program.

**Allowable Time for Course Completion.** The "U" (incomplete) grade is intended for use only in extenuating circumstances beyond the student's control in the last few days of the semester. An instructor may report a semester mark of "U" when, for justifiable reasons (handled by the student through the [Office of Student Experience and Engagement](#)) the student was not able to complete the work of the course. During the next semester, 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. The grade policy can be reviewed at [Grades \(ucmo.edu\)](#). Students must complete all requirements for their master's degree within an eight year period, as outlined in the UCM policy: <https://catalog.ucmo.edu/content.php?catoid=21&navoid=897>

### **Grievances**

Most student complaints can be resolved on an informal basis with the instructor or preceptor. Students who believe they are victims of unfair policies or practices should first discuss their concerns with the instructor or preceptor directly. They may then contact the Program Director and, if necessary, the Chair of the Department of Nutrition, Kinesiology, and Health, without fear of retaliation. The link to the Academic Appeal Process can be found on page 39 of the [UCM Student Handbook](#). The program will maintain a record of student complaints for a period of seven years.

Complaints regarding program noncompliance with the Accreditation Council for Education in Nutrition and Dietetics (ACEND) accreditation standards can be directed to:

<https://www.eatrightpro.org/practice/code-of-ethics/ethics-complaints-and-violations>

Accreditation Council for Education in Nutrition and Dietetics 120 South Riverside Plaza  
Suite 2190

Chicago, IL 60606-6995

800/877-1600, ext. 5400

312/899-0040

Fax: 312/899-4817

**Withdrawal, ‘W’ in a course.**

The university withdrawal policy can be found here: <https://www.ucmo.edu/current-students/office-of-the-registrar-and-student-records/enrollment/adding-dropping-waitlisting-classes/>

**Refund of tuition and fees.** The university tuition refund policy can be found here:

<https://www.ucmo.edu/current-students/office-of-the-registrar-and-student-records/dates-and-deadlines/>

**Program Costs** (\*Program costs are variable and subject to change.)

Estimated Cost of Attendance for Academic Year 2023-24		
Tuition/Fees  *Per credit hour rates do not include mandatory, technology, program, or course fees. Additional course/program fee per credit hour may be applicable.	Graduate Online Tuition	\$413.50 per credit hour for both Missouri and Out of State Residents.  Up-to-date nutrition and fees for graduate programs can be found here: <a href="https://www.ucmo.edu/future-students/tuition-and-costs/">https://www.ucmo.edu/future-students/tuition-and-costs/</a>
Housing	Not applicable for courses offered online during the first two semesters but during SEL rotations (last 2 semesters), housing in the Kansas City/Warrensburg area will be necessary	
Textbooks	Varies depending on course load	\$600-\$1000 per semester
Liability Insurance at SEL sites	Prior to NUTR 6010	Covered by the rotation site based on affiliation agreement.
Background Check	Required for SEL Sites	\$38.50 + \$2.00 admin. fee
TB Test	Some facilities require a TB test verification before a student enters the facility	\$10
Drug Screening	Required for SEL Sites	\$42 + \$2 admin. fee

Uniform	Dependent on SEL Sites	Varies
Travel	Require a vehicle and auto insurance during the last two semesters to travel to SEL Sites and regional or national meetings.	Varies depending on SEL site locations.
RD Exam Study Guide	Available resource	No Charge
<u>Subscriptions</u>		
Neehrperfect	Electronic Health Records for MNT, Advanced MNT Nutrition Education and Counseling Courses	\$60-\$120
NutriCalc	Suggested Software for Dietary Analysis Projects	\$20
Memberships	Academy of Nutrition and Dietetics (AND) Students are strongly encouraged to join the Academy early in their curriculum. Student membership includes free access to educational and training materials, reduced registration fees for professional meetings, and the monthly professional journal. Student membership is required for scholarships sponsored by AND and its affiliates. You will need access to the Academy website for some courses.  MO Academy of Nutrition and Dietetics (MOAND)  Kansas Academy of Nutrition and Dietetics Association	\$58 per year for student membership (8 year maximum allowed)  Included in AND Membership  Included in AND Membership
UCM Graduation Fee		\$50

### Student Support Services

1. Students have access to the following support services:  
<https://www.ucmo.edu/current-students/student-services/>
2. Campus Community Health: <https://www.ucmo.edu/offices/campus-community-health/> Health Center: <https://www.ucmo.edu/offices/health-center/>
3. Counseling Services: <https://www.ucmo.edu/current-students/student-services/counseling-center/>  
Health and Wellness Promotion. <https://www.ucmo.edu/offices/campus-community-health/wellness-support-and-community-engagement/>

4. Financial Services: <https://www.ucmo.edu/offices/student-financial-services>
5. Career Services: <https://www.ucmo.edu/offices/career-services-center/>
6. Academic Support: <https://www.ucmo.edu/offices/learning-commons/>

### **Academic Advising**

The program director and the program manager will serve as academic advisors. Any questions or concerns about courses, course sequencing, or supervised experiential learning experiences should be directed to either the program director or manager. Students are required to meet with the program director at least once every semester to discuss student performance and progress. During supervised experiential learning experiences, students will be evaluated by their preceptor mid-way through their rotation and at the end. All evaluations and advising sessions will be documented in the **student's file** and students will have access to their files upon request.

### **Faculty Mentoring**

Each student will be paired with a faculty member within the program, at the beginning of the program who will serve as their faculty mentor. Faculty and students will meet regularly throughout the program at a frequency determined by the individual faculty member. These meetings are meant to provide extra support and guidance to students as they complete program requirements.

### **Distance Education and Student Privacy**

Students will need access to a computer with camera, a high-speed Internet connection, an updated version of a web browser, and access to common tools and software such as Microsoft Word, Excel, PowerPoint, email, (provided to UCM students) as well as program specific software listed above under Program Costs. Technical support is provided by our Technology Support Center at [tsc@ucmo.edu](mailto:tsc@ucmo.edu) or 660-543-4357. If there is a concern with access to the above requirements, please contact the Program Director immediately for support.

All academic courses in this program are fully online, although some courses may have both *synchronous and asynchronous aspects*. Student identification on Blackboard (Bb) will be necessary to submit assignments and exams. Faculty have the choice to use either Respondus or Honorlock for testing identification and security. Student files will be kept on a password-protected computer, within password-protected program management software systems, and in locked filing cabinets. Students will have access to their own student files upon request. In addition, students will be able to access their transcripts through the password protected MyCentral system.

Students sign an authorization that permits UCM to release information that includes evidence of background checks and drug screens conducted by a third party to clinical sites. Students sign an authorization to allow the GP to use photographs and videos taken during their time at UCM.

## Student Acknowledgement Statement

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This is to acknowledge that I,

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(Please print name)

1. I have reviewed and understand the student handbook and agree to abide by the policies and procedures of this graduate degree program as outlined in the handbook.
2. I accept responsibility for knowing and meeting all requirements for the MS Nutrition Degree listed in the UCM catalog under which I was admitted.
3. I have read and understand the policies regarding vaccination requirements for SEL rotations.

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Student Signature

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Date

This form is to be signed by the student and placed in the student's academic file.

# Competencies, Performance Indicators Learning Activities, Practice Illustrations and Assessment Strategies

\* Denotes an enhanced competency

FG Unit 1: Foundational Knowledge			
Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<p><b>1.1</b> Applies an understanding of environmental, molecular factors (e.g., genes, proteins, metabolites) and food in the development and management of disease. (S)</p>	<p>1.1.1 Analyzes the usefulness and limitations of epidemiological, clinical and other study designs and identifies trends in diet and disease. (S)</p> <p>1.1.2 Demonstrates general understanding of nutrition and genetics, as it relates to health conditions. (K)</p> <p>1.1.3 Communicates epidemiological evidence related to the relationship between diet and the development of disease. (S)</p> <p>1.1.4 Demonstrates an understanding of research techniques and processes used to study the relationship between molecules (e.g., genes, proteins, metabolites) and microbes with disease states. (K)</p> <p>1.1.5 Identifies the influence of food consumption on the development of diseases. (K)</p>	<ul style="list-style-type: none"> <li>Review epidemiological data from a data set (e.g., health department) and determine prevalence of disease.</li> <li>Evaluate client/patient and environmental characteristics that may contribute to the development of disease (e.g., obesity, hypertension, diabetes, cancer).</li> <li>Create client/patient education materials incorporating the effects of genetics and diet on the development of chronic diseases.</li> <li>Review and analyze research papers related to molecules and microbes to make an informed data driven opinions of the impact of genetics and diet on disease states.</li> <li>Use research-based evidence to identify a relationship between a specific gene-nutrient interaction to identify patients at a higher risk for developing a chronic disease (e.g., hypertension, obesity, diabetes, hypercholesterolemia).</li> <li>Communicates epidemiological evidence related to the relationship between diet and the development of disease.</li> <li>Utilize evidence-based guidelines to develop, improve or recommend changes to a public health program based on the population and common genetic disposition.</li> <li>Apply knowledge of genetic testing and impact on diet when educating others or when providing counseling services. (e.g., Phenylketonuria (PKU), cystic fibrosis, mitochondrial)</li> <li>Tailor diet plan, diet prescription and nutritional recommendations based on genetic predisposition and disease state.</li> <li>Identify potential genetic risk factors and health condition based on laboratory findings (e.g., PKU, microorganisms, elevated LDH, low levels of vitamin D) and understand the impact of the findings on disease and health.</li> <li>Provide diet counseling based on client's/patient's family history, risk factors and epidemiology factors.</li> <li>Explain how environmental and genetic factors impact disease development and develop nutrition goals/interventions that address these factors.</li> <li>Discuss recent health and nutrition news in the popular press with clients.</li> </ul>	<p><b>Assessment Types</b> Essay, presentation (poster, written, verbal, etc.), scenarios/case studies, counseling role playing, research studies</p> <ul style="list-style-type: none"> <li>Analyze client food record.</li> <li>Complete a survey for peer reviewed epidemiological research study related to the food environment, diet and the development of disease.</li> </ul>



<b>FG Unit 1: Foundational Knowledge</b>			
<b>Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.</b>			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>
<b>1.1 (cont.)</b>		<ul style="list-style-type: none"> <li>• Explain how environmental exposure/consumption affects the health of patient.</li> </ul>	
<p><b>1.2</b> Applies an understanding of anatomy, physiology, and biochemistry. (S)</p>	<p>1.2.1 Analyzes the impact of food and nutrition on physiological processes. (S)</p> <p>1.2.2 Integrates knowledge of anatomy, physiology, and biochemistry to make decisions related to nutrition care. (S)</p>	<ul style="list-style-type: none"> <li>• Apply knowledge related to digestion, absorption and metabolism to disease states.</li> <li>• Assess the physiological impact of the elements in nutrition support and manipulate these elements for the desired physiological outcomes.</li> <li>• Demonstrate how body mechanics work and how it is related to food.</li> <li>• Use appropriate anatomy and physiology terminology in client/patient records and other documentation.</li> <li>• Describe pathophysiology of a disease state and how it applies to medical nutrition therapy.</li> <li>• Communicate an understanding of the human body and the impact of food and nutrition on body systems.</li> <li>• Explain micro and macro neutralization in the body.</li> <li>• Describe in detail etymology, signs, symptoms, etc. of disease state and the nutrition concerns for the specific disease.</li> <li>• Understand the healing process and nutrients needed to promote growth, repair and healing.</li> </ul>	<p>Case studies, presentations, chart review, create or present patient education material</p> <p>Case study discussion</p> <ul style="list-style-type: none"> <li>• Identify potential future micronutrient deficiencies in a patient with a surgically altered gut.</li> <li>• Evaluate and discuss possible complications to a patient who has undergone bariatric surgery, who have diabetes, cardiac disease, etc.</li> <li>• Examine the impact of the disease on the pancreas and how food intake impacts the physiological process of that organ and disease management.</li> <li>• Explain why lactase deficiency produces GI disturbances for the patient who consumes lactose.</li> <li>• Understand liver function and how the liver processes drugs and toxins in order to evaluate the effect of various dietary supplements on an individual's nutritional and health status.</li> <li>• Explain why a sodium restriction would be important for a client/patient with hypertension.</li> </ul>

<p><b>1.3</b> Applies knowledge of microbiology and food safety. (S)</p>	<p>1.3.1 Applies food safety principles of microbiological food spoilage and strategies for controlling microbial growth. (S)</p> <p>1.3.2 Implements key principles and practices to make foods safe for consumption at all stages during the flow of food. (S)</p>	<ul style="list-style-type: none"> <li>• Create a HACCP plan and explain why a step is a hazard that needs to be controlled and the mechanism and reason for effectiveness for the controls.</li> <li>• Create a food safety policy.</li> <li>• Conduct a food safety inspection in a kitchen and make recommendation for changes or improvements in food preparation and storage protocol.</li> <li>• Educate clients/patients and staff members on food contamination, microbial development and proper food handling and storage.</li> </ul>	<p>Case studies, multiple choose or short answer questions, develop written / education material, presentation/in-service, laboratory experiment, review real cases of documented foodborne illness.</p>
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<p><b>FG Unit 1: Foundational Knowledge</b> <b>Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.</b></p>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<p><b>1.3 (cont.)</b></p>		<ul style="list-style-type: none"> <li>• Take action to ensure safe food handling practices that follow the flow of food throughout the food service system.</li> <li>• Explain why specific populations (e.g., elderly, young, underserved, developing nation) are at risk of foodborne illness.</li> </ul>	
<p><b>1.4</b> Integrates knowledge of chemistry and food science as it pertains to food and nutrition product development and when making modifications to food. (S)</p>	<p>1.4.1 Analyzes the role of fundamental chemistry and organic chemistry principles on food, human health and metabolism. (S)</p> <p>1.4.2 Integrates nutritional biochemistry knowledge to make informed food and nutrition decisions for optimal health. (S)</p> <p>1.4.3 Evaluates the chemical nature and composition of food on food quality, acceptability and compatibility. (S)</p>	<ul style="list-style-type: none"> <li>• Analyze metabolic impact of disease, comorbidities and complications, and develop a nutrition prescription that addresses altered metabolism.</li> <li>• Discuss the effects of storage on vitamins in food and other aspects of food chemistry including antioxidants.</li> <li>• Select appropriate formulas or feeding products for individuals with special needs. • Apply technical knowledge in the development of new food products.</li> <li>• Make recommendations for substitution of ingredients that modify target nutrients (e.g., low fat, wheat free, allergies) without sacrificing characteristics of the food product.</li> </ul>	<p>Case studies, multiple choose or short answer questions</p> <ul style="list-style-type: none"> <li>• Develop and manage a Capstone /Theme meal project.</li> <li>• Create a food label.</li> <li>• Write technical papers on food production or product development.</li> </ul>

<p><b>1.5</b> Applies knowledge of patho-physiology and nutritional biochemistry to physiology, health and disease. (S)</p>	<p>1.5.1 Examines nutritional biochemical indicators specific to the disease process. (K)</p> <p>1.5.2 Interprets and analyzes the effect of diet, fluids, electrolytes and nutritional status on the development and progress of the disease process. (S)</p> <p>1.5.3 Interprets and analyzes the effects of disease, clinical condition and treatment on nutritional health status. (S)</p> <p>1.5.4 Analyzes the correlation between mental health conditions and nutritional health. (S)</p>	<ul style="list-style-type: none"> <li>• Calculate fluid and caloric needs for client/patient.</li> <li>• Develop and modify medical nutrition therapy for clients/patients based on pathophysiology and biochemistry findings.</li> <li>• Explain how nutrition could affect disease progression.</li> <li>• Review evidence-based literature and research and identify the impact of nutrition deficiency on mental disorders.</li> <li>• Review research findings and evidence-based literature related to the physiological process through the lifecycle (e.g., nutrition health, progress of heart disease, the lactation process).</li> </ul>	<p>Case studies, meal / menu planning, nutrition order, presentation, field placement, role play • Present a case study with abnormal laboratory finds.</p> <ul style="list-style-type: none"> <li>• Make dietary recommendations for a breastfeeding mother.</li> <li>• Explain the lactation physiological process. • Provide counseling to clients/patients with eating disorders.</li> </ul>
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<p><b>FG Unit 1: Foundational Knowledge</b> Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.</p>			
<p><b>Competencies</b></p>	<p><b>Performance Indicators</b></p>	<p><b>Learning Activities and Practice Illustrations</b></p>	<p><b>Demonstration/Assessment</b></p>

<p><b>1.6</b> Applies knowledge of social, psychological and environmental aspects of eating and food. (S)</p>	<p>1.6.1 Formulates food and nutrition services considering psychological and social factors to meet the needs of individuals, communities and populations. (S)</p> <p>1.6.2 Articulates the impact of nutritional health on psychiatric disorders. (S)</p> <p>1.6.3 Integrates knowledge of maximizing sustainability, food and water waste, reusable/ biodegradable items, local and global produce sourcing and access to food. (S)</p> <p>1.6.4 Analyzes the environmental factors affecting access to services and/or adequate nutrition. (S)</p>	<ul style="list-style-type: none"> <li>• Demonstrate all eating is psychologically and socially rooted (e.g., provide counseling for eating disorder, nutrition/weight-loss, elderly population, oncology).</li> <li>• Encourage and utilize mindful eating techniques.</li> <li>• Compare how certain antidepressants or atypical antipsychotic medications have nutrient interactions.</li> <li>• Develop effective public health assessment/screening tools.</li> <li>• Take into consideration the client's/patient's situation and environment (e.g., homelessness, community, home-life, disability accommodations); and how these factors affect person's ability to meet basic nutritional needs.</li> <li>• Explore the geographic aspects of food production, consumption and post-consumption. • Identify disease outbreaks and environmental factors/events which impact food supply. • Identify influences that affect health and nutrition, including physical/geographic circumstances (e.g., altitude, temperature regimes, and pollutants), social context (e.g., social networks, access to care, perception of risk behaviors), and economic conditions (e.g., quality of nutrition, access to food and water).</li> <li>• Identify community resources for under serviced populations (e.g., foodbanks, meal delivery for homeless, shelters).</li> </ul>	<p>Role playing, case studies, project work, presentation</p> <ul style="list-style-type: none"> <li>• Conduct a local food system investigation.</li> <li>• Conduct a needs assessment with a group or community with known social services and/or mental health services needs.</li> <li>• Develop and present a food system viewpoint.</li> <li>• Develop a quantity food project for a local vendor or local non-profit food organization.</li> <li>• Develop a community action plan to address access to adequate nutrition and outline implementation plan.</li> <li>• Create a diet plan for a client with an eating disorder, mental illness or low socio-economic status.</li> </ul>
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<p><b>FG Unit 1: Foundational Knowledge</b> <b>Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.</b></p>			
<p><b>Competencies</b></p>	<p><b>Performance Indicators</b></p>	<p><b>Learning Activities and Practice Illustrations</b></p>	<p><b>Demonstration/Assessment</b></p>

<p><b>1.7</b> Integrates the principles of cultural competence within own practice and when directing services. (D)</p>	<p>1.7.1 Demonstrates knowledge of the cultural competence models. (K)</p> <p>1.7.2 Applies knowledge of foods eating patterns and food trends. (S)</p> <p>1.7.3 Identifies challenges that arise when different cultures, values, beliefs and experiences exist between clients/patients and nutrition and dietetics professionals. (S)</p> <p>1.7.4 Identifies and implements strategies to address cultural biases and differences. (D)</p> <p>1.7.5 Applies culturally sensitive approaches and communication skills. (D)</p> <p>1.7.6 Develops awareness of one's own personal beliefs, values and biases to better serve clients/patients of different cultures and backgrounds. (S)</p>	<ul style="list-style-type: none"> <li>• Undertake a process of reflection on one's own cultural identity and recognizes the impact of one's own culture on practice.</li> <li>• Apply cultural competence including cultural awareness, cultural security, cultural respect and cultural safety.</li> <li>• Incorporate diverse eating patterns and preferences (e.g., Jewish dietary laws, hot and cold theory, holiday traditions) into practice (e.g., nutrition care plan, meal planning ,nutrition counseling, food preparation)</li> <li>• Describe a way of eating that conflicts with one's own cultural method (religious, ethnic, etc.).</li> <li>• Understand the family cultural influences and cultural foods.</li> <li>• Understand meal planning, nutritional plan and cooking foods from different cultures.</li> <li>• Consider that culture is beyond ethnical background and includes personal beliefs, values and sexual orientation.</li> <li>• Utilize culturally sensitive and gender neutral language.</li> <li>• Be familiar with food preferences and eating patterns of a specific population.</li> </ul>	<p>Case study, menu planning, community projects, self-reflection exercise, self-assessment, role play</p> <ul style="list-style-type: none"> <li>• Implement nutrition counseling or program planning for culturally diverse populations.</li> <li>• Create a specific menu based on a primary religion, ethnicity, personal beliefs and values.</li> <li>• Observe a culturally competent/sensitive counseling session and note required competence and modifications.</li> <li>• Attend a cultural event outside of student's own beliefs/cultural to expose self to other cultures and various eating patterns.</li> <li>• Engage in a self-assessment of personal bias including weight bias.</li> </ul>
<p><b>1.8*</b> Applies knowledge of pharmacology to recommend, prescribe and administer medical nutrition therapy. (S)</p>	<p>1.8.1 Identifies the classifications of nutraceutical pharmacological agents and the action of the body. (K)</p> <p>1.8.2 Demonstrates understanding of pharmacokinetics, absorption, clearance, drug metabolism, latency period, drug and supplement metabolism, accumulation, half-life, and routes of administration. (S)</p> <p>1.8.3 Identifies potential drug and food interactions based on physiological responses to pharmacological agents and takes appropriate actions. (S)</p>	<ul style="list-style-type: none"> <li>• Apply knowledge when recommending or prescribing nutrition related drug therapy.</li> <li>• Make recommendations for changes in diet based on the client's/patient's current medication use.</li> <li>• Evaluate a client's/patient's medication list or herbal supplement list for possible food/drug interactions.</li> <li>• Identify medications that are nutrient depleting.</li> <li>• Identify various drugs needed to help with absorption and/or decrease/improve gastric symptoms.</li> <li>• Understand side effects of medication that affect nutritional status (e.g., medications that affect blood glucose or potassium levels; determine which antacids may interfere with dissolution of antiretroviral medications).</li> </ul>	<p>Case studies, multiple choice test, create nutrition drug prescription</p> <ul style="list-style-type: none"> <li>• Create dietary treatment plan for a client/patient with diabetes, heart disease, or cancer, considering medication regime.</li> <li>• Create a chart showing the breakdown of a common nutrition-related pharmacology agent. Identify side effects, uses, contraindications.</li> <li>• Describe a drug-nutrient interaction and how treatment would be recommended to avoid it.</li> </ul>

**FG Unit 1: Foundational Knowledge**

**Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.**

Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<p><b>1.9*</b> Applies an understanding of the impact of complementary and integrative nutrition on drugs, disease, health and wellness. (S)</p>	<p>1.9.1 Critically evaluates evidence-based literature to inform decisions about use of complementary and integrative nutrition. (S)</p> <p>1.9.2 Applies an understanding of the impact of complementary and integrative nutrition on drugs, food, disease states and wellness. (S)</p> <p>1.9.3 Identifies indications, use and contraindications of complementary and integrative nutrition. (K)</p>	<ul style="list-style-type: none"> <li>• Provide evidence-based information and education related to the use of complementary and integrative nutrition.</li> <li>• Review and compare findings for studies related to complementary and integrative nutrition to determine validity of the claims.</li> <li>• Provide science-based answers to clients/patients about complementary and integrative nutrition therapy.</li> <li>• Articulate the role and scope of practice for complementary health providers (e.g., natural path, chiropractor, Chinese medicine).</li> </ul>	<p>Literature review and case study, presentation • Develop client/patient education material. • Reference evidence-based and science based literature to support recommendations.</p>
<p><b>1.10*</b> Applies knowledge of math and statistics. (S)</p>	<p>1.10.1 Chooses appropriate statistical methods, performs statistical analysis and interprets results in various data analysis situations. (S)</p> <p>1.10.2 Communicates information on statistical methods, results and interpretation, both orally and in writing. (S)</p> <p>1.10.3 Applies math skills to perform food and nutrition calculations. (S)</p>	<ul style="list-style-type: none"> <li>• Communicate statistical methods and results in writing and orally.</li> <li>• Conduct a research project on a food-related subject and apply statistical concepts to interpret the results correctly.</li> <li>• Run sample data sets using statistical software, interpret results of sample data set, read articles and interpret results.</li> <li>• Calculate complex math formula related to food and nutrition (e.g., nutrient needs, costing, budget)</li> <li>• Apply formulas to basic statistical calculations (e.g., mean, average, standard deviation, quartiles, confidence intervals, binomial distribution).</li> </ul>	<p>Literature review, case study, presentation, research project</p> <ul style="list-style-type: none"> <li>• Analyze the statistical results of a published study</li> <li>• Conduct a nutrition epidemiology focused dataset analysis.</li> <li>• Calculate parenteral feeding infusion rate.</li> </ul>
<p><b>1.11</b> Applies knowledge of medical terminology when communicating with individuals, groups and other health professionals. (D)</p>	<p>1.11.1 Interprets and communicates medical terminology to non-health professional audiences. (D)</p> <p>1.11.2 Uses acceptable medical abbreviations and appropriate medical terminology in all forms of communication. (D)</p>	<ul style="list-style-type: none"> <li>• Document in client/patient record using appropriate medical terminology and abbreviations. • Interpret laboratory test results in relationship to diet therapy when conducting nutritional counseling.</li> <li>• Use appropriate medical terminology and abbreviations to clearly communicate the condition and treatment method.</li> <li>• Clearly communicate nutrition-related concerns to others ensuring proper interpretation and understanding.</li> </ul>	<p>Chart review, present case study, develop patient / client education material, role playing, standardized testing, field placement</p> <ul style="list-style-type: none"> <li>• Participate in simulations of interdisciplinary care rounds.</li> <li>• Write sample client/patient chart notes based on a case study.</li> </ul>

**FG Unit 1: Foundational Knowledge**

**Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.**

Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
1.11 (cont.)			<ul style="list-style-type: none"> <li>• Conduct a chart review in clinical placement.</li> <li>• Create client/patient education material using layman terms to explain medical terminology.</li> </ul>
<p><b>1.12</b> Demonstrates knowledge of and is able to manage food preparation techniques (D)</p>	<p>1.12.1 Demonstrates understanding of safe work habits and safety hazards and employs preventive safety measures. (K)</p> <p>1.12.2 Converts recipes and ingredients based on client/patient's preferences or dietary needs. (D)</p> <p>1.12.3 Develops recipes and menus and increases or decreases quantities served from the recipe. (D)</p> <p>1.12.4 Evaluates recipes using sensory evaluation methods. (D)</p>	<ul style="list-style-type: none"> <li>• Create a recipe and scale it.</li> <li>• Modify meal plans to meet the needs of the clients/patients, considering the current food supply and the environment (e.g., during a disaster, electrical outage).</li> <li>• Plan, prepare, execute and evaluate a meal.</li> <li>• Evaluate and make recommendation for staff resources for food preparation.</li> </ul>	<p>Case study, field placement, capstone/ theme meal</p>
<p><b>1.13*</b> Demonstrates computer skills and uses nutrition informatics in the decision making process. (D)</p>	<p>1.13.1 Analyzes appropriate data in electronic format to make best decisions related to nutrition and diet. (S)</p> <p>1.13.2 Evaluates accuracy and reliability when accessing and evaluating nutrition information in electronic format. (S)</p> <p>1.13.3 Operates nutrition informatics systems in practice. (D)</p> <p>1.13.4 Uses electronic databases to obtain nutrition information and evaluate credible sources in decision making. (D)</p> <p>1.13.5 Uses technology and informatics skills proficiently to aggregate data, enhance practice and client/patient care. (D)</p>	<ul style="list-style-type: none"> <li>• Explain how technology can be used to enhance nutrition education or treatment.</li> <li>• Document in an electronic health record.</li> <li>• Create and teach patients/clients to use nutrition related technology (e.g., track food/ exercise program).</li> <li>• Use electronic resources to analyze nutrient content and adequacy of specific recipes in a food service operation.</li> <li>• Act as a nutrition content expert for the design of a new nutrition and dietetics software, system, technology (e.g., electronic health records).</li> <li>• Export data from a system, analyze and make appropriate recommendations and decisions.</li> <li>• Identify trends in food and nutrition using health information systems.</li> <li>• Act as a subject matter expert for the development of electronic and nutrition informatics systems.</li> </ul>	<p>Project work, practical skills labs, simulations, chart review</p> <ul style="list-style-type: none"> <li>• Analyze online insulin pump upload.</li> <li>• Conduct live chats answering dietary questions.</li> <li>• Utilize electronic data to conduct community needs assessments, public health program planning/grant applications.</li> </ul>

<b>FG Unit 1: Foundational Knowledge</b>			
<b>Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.</b>			
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<p><b>1.14</b> Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D)</p>	<p>1.14.1 Evaluates, integrates and communicates nutritional requirements across the life cycle. (D)</p> <p>1.14.2 Identifies nutritional risk factors across the life cycle. (D)</p> <p>1.14.3 Teaches the benefits of physical activity across the life cycle to individuals, groups and populations. (D)</p> <p>1.14.4 Explains and takes into consideration how nutrients, nutritional supplements and hydration influence physical activity and wellness. (K)</p>	<ul style="list-style-type: none"> <li>• Create nutrition and physical activity program for a specific age group and implement (e.g., school system, hospital, outpatient clinic).</li> <li>• Make appropriate exercise recommendations based on the client's/patient's ability, nutritional intake and blood glucose results.</li> <li>• Emphasize the importance of physical activity in controlling metabolic risk factors when conducting counseling or group sessions.</li> <li>• Identify the benefits of exercise and current recommendations for clients/patients throughout the lifecycle.</li> <li>• Support patient's/client's realistic health goals incorporating activities to achieve them based on anthropometric measurements, age, personal and cultural preferences and resources available.</li> <li>• Evaluate caloric requirements considering relevant factors including activity level. • Understand the impact of exercise on disease and nutritional intake.</li> <li>• Evaluate fluid and calorie requirements for those engaging in various levels of physical activity.</li> </ul>	<p>Case study, presentation, develop client/patient education material</p> <ul style="list-style-type: none"> <li>• Give a presentation in community setting on nutrition and physical activity tips.</li> <li>• Develop an educational website, handout/pamphlet, for various stages of the lifecycle; incorporate appropriate nutrition and physical activity components.</li> </ul>
<p><b>1.15*</b> Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S)</p>	<p>1.15.1 Recognizes and communicates the cause of disease and nutrition risks. (K)</p> <p>1.15.2 Identifies, prioritizes and implements health risk reduction strategies for individuals, groups and populations. (S)</p> <p>1.15.3 Examines the influence of the determinants of health on health and wellness. (S)</p> <p>1.15.4 Designs food and nutrition activities for various audiences considering factors relevant to individuals, groups and communities. (S)</p> <p>1.15.5 Applies behavior change theories for</p>	<ul style="list-style-type: none"> <li>• Develop plans to address dimensions of wellness important to groups and individuals. • Develop community classes to encourage health and wellness (e.g., breastfeeding nutrition class, cooking classes, diabetes nutrition program).</li> <li>• Develop a wellness program for individuals, groups and population.</li> <li>• Conduct a patient, community and population assessment documenting demographics, lifestyle risk factors, epidemiology, socio-psychological and economic factors, and ecological issues to promote wellness.</li> <li>• Apply knowledge of health promotion and prevention for individuals, groups and populations when planning and conducting employee wellness programs. • Identify population markers to determine overall health status of a new minority group of immigrants coming from an impoverished area.</li> <li>• Complete a needs assessment within a local community.</li> <li>• Develop, implement and evaluate an intervention which targets the community's needs.</li> </ul>	<p>Case study, presentation, research project, paper • Design a billboard sign, commercial or other media that educates public on chronic disease risks.</p> <ul style="list-style-type: none"> <li>• Design a wellness activity for a specific audience.</li> <li>• Develop a lesson plan and presentation to classroom or a community audience</li> <li>• Plan and conduct a supermarket tour to increase client/patient awareness of advertising influence, food labels, and health meals/foods.</li> </ul>



	nutritional health promotion and disease prevention. (S)		
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<b>FG Unit 1: Foundational Knowledge</b> <b>Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.</b>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<b>1.16*</b> Gains a foundational knowledge on public and global health issues, policies and nutritional needs. (K)	1.16.1 Examines the trends, policies and current issues that impact public and global health from existing, new and reemerging diseases that spread through immigration, travel and global trade. (K) 1.16.2 Examines the impact of global food supply and sustainability and related factors. (K) 1.16.3 Examines how globalizing processes impact nutrition, nutrition education and nutrition related diseases in developing countries. (K)	<ul style="list-style-type: none"> <li>• Write policy briefs and articles related to global health issues.</li> <li>• Identify nutritional deficiencies in developing countries and make recommendations to meet needs.</li> <li>• List major food problems around the world and identify the impact to the health of the population.</li> <li>• Demonstrate awareness of environmental issues and government policies in procuring and exporting foods.</li> <li>• Identify the impact of US food related policies on other countries.</li> <li>• Identify the role of dietitians in other countries.</li> </ul>	Case studies, literature review, paper, presentation, study abroad <ul style="list-style-type: none"> <li>• Trace food to market, identifying the energy costs at each step.</li> <li>• Present and discuss a news article/story on global nutrition.               <ul style="list-style-type: none"> <li>• Write a report on a selected developing country, include the country's health statistics, particularly nutritional aspects, and aspects related to agriculture, disease incidence and prevalence pertinent to the country.</li> </ul> </li> </ul>

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<b>FG Unit 2: Client/Patient Services</b> <b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment

<p><b>2.1*</b> Applies a framework to assess, develop, implement and evaluate products, programs and services. (D)</p>	<p>2.1.1 Conducts or coordinates an assessment of the environment, competitive landscape and stakeholder opinions to identify and evaluate data needed to make decisions regarding nutritional products, programs and services. (D)</p> <p>2.1.2 Designs nutritional products, programs or services that promote consumer nutritional health, dimensions of wellness, and lifestyle management. (D)</p> <p>2.1.3 Creates a work plan or project plan to implement nutritional programs and services or launch products. (D)</p> <p>2.1.4 Conducts an evaluation of a product, program or service by analyzing reasons for variance from expected outcomes and implements new strategies as appropriate. (D)</p>	<ul style="list-style-type: none"> <li>• Conduct an environmental scan to determine competition of related programs, services or products.</li> <li>• Create data collection tools (survey, focus group interview questions) to test or market new nutrition and diet product or services.</li> <li>• Develop an instrument for analyzing an existing product, program or service. • Create an evaluation tool (e.g., patient/client/consumer survey, outcome measures checklist).</li> <li>• Conduct an environmental scan and SWOT analysis for a new program or service. • Create feedback surveys and conduct focus groups.</li> <li>• Identify required team members and stakeholders to develop and implement nutrition and food services, program or product.</li> </ul>	<p>Project work, community project, project development project, field placement, industry field placement</p> <ul style="list-style-type: none"> <li>• Coordinate and manage a community event. • Write and present a proposal for a new program or service..</li> <li>• Co-lead product testing focus groups. • Write a report based on program, service or project evaluation data.</li> </ul>
<p><b>2.2</b> Selects, develops and/or implements nutritional screening tools for individuals, groups or populations. (D)</p>	<p>2.2.1 Considers all client/patient factors when selecting, developing nutrition screening tools. (D)</p> <p>2.2.2 Evaluates the validity and reliability of the nutrition screening tools and modifies based on current evidence-informed practice. (S)</p> <p>2.2.3 Leads the implementation of nutrition screening tools in collaboration with other health professionals. (D)</p> <p>2.2.4 Prioritizes care based on results of screening considering complexity of care needs. (D)</p>	<ul style="list-style-type: none"> <li>• Identify appropriate validated screening tool appropriate for the patient population. • Develop a screening tool to determine level of care and the required nutrition and dietetics professional required to meet client/patient care needs.</li> <li>• Coordinate community health and nutrition events.</li> <li>• Educate other professionals on the use of the screening tool and indicators.</li> </ul>	<p>Case studies, tool develop and evaluation, a simulation activity, field placement</p> <ul style="list-style-type: none"> <li>• Develop a screening tool for high risk populations.</li> <li>• Organize a community health fair.</li> <li>• Develop and implement a needs assessment for community nutrition program.</li> <li>• Utilize screening tool to assess risk for malnutrition.</li> <li>• Identify the applicability of using a screening tool in a specific population, and/or environment.</li> <li>• Modify an existing screening tool based on outcome data.</li> </ul>

<b>FG Unit 2: Client/Patient Services</b> <b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<p><b>2.3</b> Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D)</p>	<p><u>Nutrition Assessment</u></p> <p>2.3.1 Selects and implements nutrition assessment tools for individuals, groups or populations. (D)</p> <p>2.3.2 Interviews client/patient to collect subjective information considering the determinants of health. (D)</p> <p>2.3.3 Conducts a nutrition focused physical exam. (D)</p> <p>2.3.4 Takes a food and nutrition related medical history. (D)</p> <p>2.3.5 Assesses physical activity and history of physical activity. (D)</p> <p>2.3.6 Collects, assesses and interprets anthropometric measures and body composition. (D)</p> <p>2.3.7 Orders, collects and interprets biochemical tests. (D)</p> <p>2.3.8 Analyzes diagnostic test results relevant to nutrition (e.g. diagnostic imaging related to fluoroscopy, swallowing evaluation, enteral feeding tube placement). (D)</p> <p>2.3.9 Identifies signs and symptoms of nutrient deficiencies or excesses. (D)</p> <p>2.3.10 Determines barriers that might influence a client/patient's nutritional status. (D)</p> <p>2.3.11 Determines accuracy and currency of nutrition assessment data. (D)</p> <p>2.3.12 Identifies patient appropriate validated formula and performs calculations to</p>	<ul style="list-style-type: none"> <li>• Coordinate the nutrition care process for individuals, groups or populations. • Complete a comprehensive nutrition assessment, including a nutrition focused physical exam for clients/patients who have major or complex health and nutrition needs. • Order and interpret laboratory test to inform nutrition and supplement requirements (e.g., blood glucose, potassium, iron, cholesterol, triglycerides, serum pre-albumin, serum transferrin, total lymphocyte count, nitrogen balance).</li> <li>• Create a nutrition care plan based on assessment data for a wide range of clients/patients with basic to highly complex health and nutrition needs.</li> <li>• Consider social (e.g., live alone, family/community support), and economic factors (e.g., low income, homeless, kitchen resources) and food security, procurement and preparation that may influence the nutrition care process.</li> </ul>	<p>Case study, role play, return demonstration, modified triple jump, chart stimulated recall, chart review/audit, field placement</p> <ul style="list-style-type: none"> <li>• Write examples of PES statements for clients/patients throughout the life cycle. • Determine protein intake and adequacy through food intake questionnaires and laboratory and urinalysis testing.</li> <li>• Create a complex nutrition care plan for patients who are newly diagnosed with diabetes/heart failure, cardiac disease, patient in ICU receiving parental nutrition therapy, patient with extensive wound care needs, homeless clients, breastfeeding mother, teenager with eating disorder.</li> </ul>

	determine nutritional requirements. (D)		
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<b>FG Unit 2: Client/Patient Services</b> <b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
2.3 (cont.)	<p><u>Diagnosis</u></p> <p>2.3.13 Analyzes and synthesizes nutrition assessment data to inform nutrition diagnosis(es) and nutritional plan of care. (D)</p> <p>2.3.14 Devises PES (problem, etiology and sign symptom) statement and outlines reasons for professional opinion cause and contributing factors. (D)</p> <p>2.3.15 Prioritizes the nutrition diagnosis(es). (D)</p> <p><u>Intervention</u></p> <p>2.3.16 Develops an individualized plan of care that addresses nutritional care needs diagnosis and client/patient nutrition goals in collaboration with the client/patient and team members. (D)</p> <p>2.3.17 Orders nutrition prescriptions to address nutritional goals. (D)</p> <p>2.3.18 Implements the nutrition plan of care or nutrition intervention with the client/patient and other team members. (D)</p> <p><u>Monitoring/Evaluation</u></p> <p>2.3.19 Monitors and evaluates impact of nutrition intervention on the</p>		

	<p>nutrition diagnosis. (D)</p> <p>2.3.20 Develops and applies nutrition care outcome indicators to measure nutrition intervention. (D)</p> <p>2.3.21 Assesses client/patient's compliance with nutrition intervention. (D)</p>	<ul style="list-style-type: none"> <li>• Summarize client/patient assessment information and explain PES statement. • Utilize the nutrition care process with individuals to manage basic to highly complex health and nutrition needs at different stages of the lifecycle and in different environments (e.g., acute care, long-term care, rehabilitation, community, mental health facilities, grocery stores, clinics).</li> <li>• Order or modify orders for parenteral nutrition therapy, supplements and minerals and nutrition related drugs (e.g., insulin, antiemetics, pancreatic enzyme replacement therapy). • Determine required monitoring plan, including required diagnostic and laboratory tests, referral, frequency of nutrition and dietetic services.</li> <li>• Prescribe nutrition related drug therapy and supplements to address nutrition healthneeds. • Collaborate with the client/patient to develop and monitor the nutrition plan of care and ensure client/patient understanding.</li> <li>• Complete a follow-up client/patient assessment and identify the impact of the nutrition plan of care.</li> <li>• Identify barriers to accessing food for under-served populations, individuals with special needs (e.g., homeless individuals, elderly clients/patients, clients/patient with disabilities) and developing countries.</li> <li>• Enter billing coding.</li> <li>• Document PES statements in client/patient record to help other health professionals quickly obtain the nutrition diagnosis.</li> </ul>	<p>Case study, chart stimulated recall, chart audit, simulation, role playing, field placement</p> <ul style="list-style-type: none"> <li>• Present a variety of case studies that include drug therapy modification or introduction as part of the nutrition plan.</li> <li>• During field placement make recommendations for nutrition drug therapy and write a mock order.</li> <li>• Create a nutrition care plan, including appropriate intervention; consider (real or mock) hospital admission data, laboratory test results, intake/output records, and the physician's progress notes. The case is followed by a series of questions that focus on pathophysiology; assessment; clinical, nutritional and behavioral outcomes; interventions; and appropriate follow-up for the patient.</li> <li>• Enter billing coding for case studies.</li> </ul>
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<p><b>FG Unit 2: Client/Patient Services</b></p>			
<p><b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b></p>			
<p><b>Competencies</b></p>	<p><b>Performance Indicators</b></p>	<p><b>Learning Activities and Practice Illustrations</b></p>	<p><b>Demonstration/Assessment</b></p>

<p><b>2.3 (cont.)</b></p>	<p>2.3.22 Identifies barriers to meeting client/patient's nutrition goals and makes recommendations to modify the nutrition plan of care or nutrition intervention, and communicates changes to client/patient and others. (D)</p> <p>2.3.23 Summarizes impact of nutrition interventions on client/patient's nutrition outcomes, considering client/patient centered care. (D)</p> <p>2.3.24 Identifies, analyzes and communicates reasons for deviation from expected nutrition outcomes. (D)</p> <p>2.3.25 Evaluates the availability of services to support access to nutrition care and to help meet client/patient nutrition goals. (D)</p> <p><u>Documentation</u></p> <p>2.3.26 Documents all elements of the nutrition care process following professional standards and organizational policies. (D)</p> <p>2.3.27 Demonstrates coding and billing procedures to obtain payment for nutrition services under alternate health care payment models. (D)</p>		
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<p><b>FG Unit 2: Client/Patient Services</b></p>			
<p><b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b></p>			
<p><b>Competencies</b></p>	<p><b>Performance Indicators</b></p>	<p><b>Learning Activities and Practice Illustrations</b></p>	<p><b>Demonstration/Assessment</b></p>

<p><b>2.4*</b></p> <p>Implements or coordinates nutritional interventions for individuals, groups or populations. (D)</p>	<p><u>Medical Nutrition Therapy</u></p> <p>2.4.1 Manages medical nutrition therapy for clients/patients. (D)</p> <p>2.4.2 Applies and integrates understanding of foundational sciences to manage medical nutrition therapy, diet and disease management. (D)</p> <p>2.4.3 Applies foundational science knowledge and medical nutrition therapy principles to establish, order, manage and evaluate the need for nutrition support when prescribing and administering nutritional oral, enteral and parenteral diets. (D)</p> <p>2.4.4 Considers and applies all relevant factors when recommending the use of oral nutritional supplements. (D)</p> <p>2.4.5 Refers/transfers care to relevant professionals when client/patient needs or required interventions are beyond personal competence or professional scope of practice. (D)</p> <p><u>Education</u></p> <p>2.4.6 Applies education theories, adult learning, pedagogy and education principles when developing, modifying, delivering or implementing education materials. (D)</p> <p>2.4.7 Assesses audience's readiness to learn and identifies barriers to learning. (D)</p> <p>2.4.8 Develops or modifies nutrition education materials or delivery methods to meet the needs of the audience. (D)</p> <p>2.4.9 Develops and provides evidence-informed nutritional wellness and therapeutic diet education to variety of audiences. (D)</p>	<p><u>Medical Nutrition Therapy</u></p> <ul style="list-style-type: none"> <li>• Recommend a specific enteral and parenteral nutrition formula for complex client/patient (e.g., an unconscious patient with extensive burns).</li> <li>• Understand indications and contraindications for parenteral and enteral nutrition (e.g., patients with chronic pancreatitis).</li> <li>• Analyze evidence-based practice and clinical indicator for oral nutritional supplements. • Explain the concepts of oxidation/antioxidants to clients/patients when recommending vitamins or antioxidant supplements.</li> <li>• Consider potential barriers to meeting nutrition goals (e.g., health literacy, finances, mobility/disability, food accessibility, cultural differences, social support).</li> </ul> <p><u>Education</u></p> <ul style="list-style-type: none"> <li>• Apply educational theories and principles for both adult and child learning. • Select appropriate educational materials based on audience and needs.</li> <li>• Create education materials using a variety of modes (paper, electronic, verbal) and delivery methods (online, telehealth, group and individual session, radio / TV broadcast).</li> <li>• Create education materials at appropriate reading levels.</li> <li>• Give presentation to a diverse audience.</li> <li>• Create written pre-and post-tests for the target population.</li> <li>• Create or adjust existing materials to support culturally sensitive education. • Consider the population's/audience's literacy level, age, deficient(s), and readiness to learn. • Develop education evaluation methods, analyze results and make appropriate changes.</li> </ul>	<p>Case studies, chart stimulated recall, modified triple-jump assessment, field placement</p> <ul style="list-style-type: none"> <li>• Recommend and write a mock order for medical nutrition therapy.</li> <li>• Refers client/patient to physician to diagnose and initiate diabetic protocols.</li> </ul> <p>Case studies, modified triple-jump assessment, presentation, project work, role playing, simulation, research project, self-assessment exercises, field placement</p> <ul style="list-style-type: none"> <li>• Teach adolescents skills essential for making dietary change and provide information on how to sustain behavior change.</li> <li>• Teach a nutrition class specific to a health condition to non-nutrition students.</li> <li>• Prepare and present a nutrition class at a school or community program for child of different age. Modify the education and</li> </ul>
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<p><b>2.4 (cont.)</b></p>	<p>2.4.10 Translates basic to advanced food and nutrition science knowledge into understandable language tailored to the audience. (D)</p> <p>2.4.11 Communicates complex nutrition information to broad and diverse audiences. (D)</p> <p>2.4.12 Evaluates effectiveness of nutrition education and makes modifications as required. (D)</p> <p><u>Psychological Counseling and Therapies</u></p> <p>2.4.13 Assesses client/patient's nutritional needs and appropriateness for the recommended counseling or therapy. (D)</p> <p>2.4.14 Applies counseling principles and evidence-informed practice when providing individual or group sessions. (D)</p> <p>2.4.15 Identifies the indications, contraindications, benefits, risks and limitations of the counseling or therapy. (K)</p> <p>2.4.16 Demonstrates understanding of transference and counter transference in the therapeutic relationship. (K)</p> <p>2.4.17 Demonstrates awareness of various appropriate counseling techniques. (K)</p> <p>2.4.18 Evaluates effectiveness of the counseling or therapy and makes modifications as required. (D)</p> <p>2.4.19 Refers/transfers client/patient to appropriate health professionals when</p>	<ul style="list-style-type: none"> <li>• Create and present a workshop or education session to a community group.</li> <li>• Develop education materials to support a public health and global health issue.</li> </ul> <p><u>Psychological Counseling and Therapies</u></p> <ul style="list-style-type: none"> <li>• Implement counseling strategies to promote behavioral change</li> <li>• Counsel clients/patients on healthy lifestyles and weight management using various counseling techniques.</li> <li>• Use motivational interviewing skills to obtain food and nutrition practices of a patient and promote behavior change.</li> <li>• Identify psychotherapy approaches (psychoanalysis, psychodynamic therapies, behavior, cognitive, humanistic therapy, integrative therapy).</li> <li>• Provide nutritional counseling and psychological therapy modalities (e.g., behavioral and cognitive therapy) to increase awareness of patterns of thinking and the impact of healthy eating habits and eating behaviors on nutritional and mental wellness.</li> <li>• Define transference and countertransference in the therapeutic relationship; and recognize possible situations when this may occur in the nutrition and dietetic therapeutic relationship. • Refer client/patient to psychiatrist when acute mental health needs are identified (e.g., psychosis).</li> </ul>	<p>presentation based on age.</p> <ul style="list-style-type: none"> <li>• Counsel clients/patients on healthy lifestyle and weight management using various counseling techniques.</li> <li>• Create a nutrition care plan which includes behavior modification to address eating disorder (e.g., anorexia nervosa, bulimia nervosa, binge eating disorder).</li> <li>• Review evidence-based literature related to eating disorders and identify evidence-based psychotherapy modalities: the different indications, risks, contraindications, benefits and limitations.</li> </ul>
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	<p>counseling therapy or client/patient's mental health issues are beyond personal competence or professional scope of practice. (D)</p>		
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<p><b>FG Unit 2: Client/Patient Services</b>  <b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b></p>			
<p><b>Competencies</b></p>	<p><b>Performance Indicators</b></p>	<p><b>Learning Activities and Practice Illustrations</b></p>	<p><b>Demonstration/Assessment</b></p>

<p><b>2.5*</b> Prescribes, recommends and administers nutrition related pharmacotherapy. (S)</p>	<p>2.5.1 Applies knowledge of foundational sciences and disease when determining the appropriateness of the therapy. (S)</p> <p>2.5.2 Demonstrates awareness of food and drug interactions. (S)</p> <p>2.5.3 Assesses client/patient factors to determine the client/patient's indication for the nutrition-related pharmacotherapy. (S)</p> <p>2.5.4 Considers client/patient factors, nutritional impact, indications, side effects, contraindications, benefits, risks, alternatives and foundational sciences when prescribing, recommending and administering nutrition related drug therapy. (S)</p> <p>2.5.5 Critically analyzes the potential negative effects of the nutrition therapy or supplement and determines the required knowledge, skill and judgment required to manage negative outcomes. (S)</p> <p>2.5.6 Prescribes, recommends and administers nutrition related pharmacotherapy adhering to the professional standards and evidence-informed practice. (S)</p> <p>2.5.7 Applies the standard of practice, legislation, organizational policies and evidence-informed practices for prescribing. (S)</p> <p>2.5.8 Applies the principles of safe drug administration. (S)</p> <p>2.5.9 Monitors the response and the effects of the nutrition related drugs on the individual and takes the required action to make modifications or adjustments. (S)</p>	<ul style="list-style-type: none"> <li>• Assess the need for prescribing a nutrition related drug therapy considering drug factors: indication, interactions, contraindications, benefits, risk, dose, duration and frequency; and client/patient factors: health and medication history, disease state, laboratory values and the appropriateness of the drug before prescribing or recommending drug therapy.</li> <li>• Review laboratory results to support decision related to prescribing and/or recommending nutrition related drugs.</li> <li>• Demonstrate understanding of the scope of practice legislation and organization policies related to RDs prescribing and recommending nutrition-related drug therapy.</li> </ul>	<p>Multiple choice examinations, case studies, chart simulated recall, modified triple jump, learning lab, field placement</p> <ul style="list-style-type: none"> <li>• Case study or field work - Use the elements of blood glucose, nutrition intake, activity and health status to make modifications to prescribed diabetes medications.</li> <li>• Prescribe digestive aids for a client/patient undergoing bariatric surgery, following an established protocol or directive from the surgeon.</li> <li>• Prescribe iron supplements to a prenatal client/patient.</li> <li>• Administer B12 injections to a client/patient with long-term history of B12 deficiency, using appropriate technique (Intermuscular, z-track method).</li> </ul>
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<p><b>FG Unit 2: Client/Patient Services</b>  <b>Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.</b></p>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
2.5 (cont.)	2.5.10 Consults and refers/transfers client/patient to the appropriate health professional when client/patient's needs are beyond personal competence or professional scope of practice. (S)		

<p><b>FG Unit 3: Food Systems Management</b>  <b>Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.</b></p>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstrated/Assessment

<p><b>3.1*</b> Directs the production and distribution of quantity and quality of food products. (D)</p>	<p>3.1.1 Manages or oversees the planning, designing and coordination of meals to ensure delivery of nutritionally sound meals. (D)</p> <p>3.1.2 Analyzes the workflow design and makes recommendations for modifications or approves for implementation. (D)</p> <p>3.1.3 Communicates the organization's mission and how work activities impact the services and organization. (D)</p> <p>3.1.4 Establishes and analyzes policies and performance measures for quality and quantity of work. (D)</p> <p>3.1.5 Implements systems to report on local, state and federal compliance. (D)</p> <p>3.1.6 Directs and analyzes the evaluation of foodservice production and services to inform, change, and/or budget resources and department or corporate direction. (D)</p> <p>3.1.7 Establishes a culture that is ethical and free of safety and health hazards. (D)</p> <p>3.1.8 Investigates and optimizes opportunities to reduce the environmental impact of foodservice operations and to enhance sustainability. (D)</p>	<ul style="list-style-type: none"> <li>• Prepare an evaluation of the production and distribution processes and make recommendations for improvements.</li> <li>• Review organizational policies and make recommendations for modifications. • Collect data and recommend changes based on outcome data.</li> <li>• Create an evaluation tool to help staff evaluate productivity and safety; make recommendations based on outcome data.</li> <li>• Design a kitchen considering, safety, workflow, productivity, budget etc. • Take steps in a known kitchen to reduce carbon footprint.</li> <li>• Create a new meal plan, including budget, for a large organization.</li> </ul>	<p>Project work, course work, mock policies, role play, review, field placement, case studies</p> <ul style="list-style-type: none"> <li>• Direct the production and service of a capstone meal. <ul style="list-style-type: none"> <li>• Develop new policies and education materials to address safety issues, incorporating HACCP principles.</li> </ul> </li> <li>• Create a new menu for a large employee cafeteria.</li> <li>• Conduct a mock kitchen inspection.</li> <li>• Prepare staff education materials to support implementation of new processes and policies.</li> <li>• Create mock budget for foodservice department.</li> </ul>
<p><b>3.2*</b> Oversees the purchasing, receipt and storage of products used in food production and services. (D)</p>	<p>3.2.1 Follows a matrix or measures to evaluate the need for financial, technical and equipment resources for the provision of foodservices. (D)</p> <p>3.2.2 Applies ethical decision making to determine the need for reduction or increase in resources. (D)</p> <p>3.2.3 Creates internal or external professional relations and/or agreements to solve problems in foodservice operations. (D)</p> <p>3.2.4 Acts as a departmental and organizational liaison between contractual parties involved. (S)</p>	<ul style="list-style-type: none"> <li>• Identify evaluation criteria or measures for the technical and equipment resources needed for foodservice in a variety of settings (hospital, long-term care, industry, community).</li> <li>• Create an operational plan including a budget for purchasing of food and supplies. • Complete a purchase order requisition and direct staff to manage food delivery. • Conduct a review of the inventory and storage; identify problem issues (e.g., waste, shortage, safety, lack of availability); make recommendations; and communicate changes.</li> <li>• Identify ethical dilemmas related to the management of resources and ensure safety and appropriate delivery of food.</li> </ul>	<p>Project work, case studies, field placement</p> <ul style="list-style-type: none"> <li>• Present students with ethical case studies that address staff reduction, organizational restructuring, merging services or organizations. Student weighs the pros and cons of several options to manage the situation.</li> <li>• Present ethical cases to students and allow class debate on how to manage the situation.</li> </ul>

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		<ul style="list-style-type: none"> <li>• Identify valuable internal and external resources (staff, food producers/suppliers).</li> </ul>	
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<b>FG Unit 3: Food Systems Management</b> <b>Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.</b>			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstrated/Assessment</b>
<b>3.2 (cont.)</b>	3.2.5 Demonstrates knowledge of inventory control as it pertains to the food and supplies of the foodservice operation. (K)  3.2.6 Applies the principles of the process of receiving and storing products demonstrating adherence to food safety code, nutrition guidelines and regulations. (D)  3.2.7 Applies the relationship between forecasting and production as it pertains to recipe needs and organizational demand. (D)	<ul style="list-style-type: none"> <li>• Identify potential local, national and international foodservice suppliers. • Modify an existing supplier contract incorporating the terms related to the required goods and services.</li> <li>• Trace a food product from back dock to serving area, noting Critical Control Points.</li> </ul>	<ul style="list-style-type: none"> <li>• Create and present a plan to identify and establish internal and external suppliers/partners (including local/community, national and international suppliers).</li> <li>• Modify an existing supplier contract relevant to the required goods and services.</li> </ul>

<p><b>3.3</b> Applies principles of food safety and sanitation to the storage, production and service of food. (D)</p>	<p>3.3.1 Maintains currency in and follows applicable legislation and guidelines. (D) 3.3.2 Incorporates the required safety and nutritional health policies and procedures in the organization's mission and policies. (D) 3.3.3 Develops a plan to minimize vulnerabilities in the food supply chain. (D) 3.3.4 Takes into consideration food allergies when preparing menus and foods. (D)</p>	<ul style="list-style-type: none"> <li>• Review, compare and establish organizational policies to identified relevant legislation and guidelines.</li> <li>• Use food safety and sanitation principles in the inspection of the production and service of food.</li> <li>• Identify food safety violation, develop a plan to address vulnerabilities, and develop staff education material to encourage compliance with polices, guidelines and legislation. • Develop a safety plan for disasters (e.g., bioterrorism, weather related, lack of supplies / resources (e.g., water, waste, electricity).</li> <li>• Partner with a local organization to review their policies compared to regulatory obligations, assess compliance, and vulnerabilities; make recommendations.</li> </ul>	<p>Project work, case studies, presentation, field placement</p> <ul style="list-style-type: none"> <li>• Participate in an accreditation process (e.g., Joint Commission, CMS)</li> <li>• Create a disaster plan for a water or world food shortage (e.g., wheat).</li> </ul>
<p><b>3.4</b> Applies and demonstrates an understanding of agricultural practices and processes. (S)</p>	<p>3.4.1 Has a working knowledge of different agricultural food production systems and related terminology and concepts including potential nutritional impact. (K) 3.4.2 Understands the local and global food markets and applicable nutrition regulations. (S) 3.4.3 Identifies and supports partnerships with local and global food growers and producers. (S)</p>	<ul style="list-style-type: none"> <li>• Utilize local food products, in compliance with applicable regulations, for an institutional food service by sourcing local food growers.</li> <li>• Identify the difference between local, regional, national and international agricultural practices and processes.</li> <li>• Identify the potential impact of a national, international and global disaster and disease on food production and processes.</li> <li>• Identify the significant agricultural trends (e.g., GMO, organic foods, gluten free) and the impact to foodservice.</li> <li>• Create a plan to support local and global food growers and producers.</li> </ul>	<p>Project work, case studies, testing, presentation, field work</p> <ul style="list-style-type: none"> <li>• Create a project plan for the procurement process from farmer to retail, considering food safety principles and applicable legislation.</li> </ul>

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<p><b>FG Unit 4: Community and Population Health Nutrition</b></p>			
<p><b>Applies community and population nutrition health theories when providing support to community or population nutrition programs.</b></p>			
<p><b>Competencies</b></p>	<p><b>Performance Indicators</b></p>	<p><b>Learning Activities and Practice Illustrations</b></p>	<p><b>Demonstration/Assessment</b></p>

<p><b>4.1*</b> Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D)</p>	<p>4.1.1 Recognizes how determinants of health, epidemiological findings, health disparities, political interest, availability of resources, and accessibility influence the nutritional health and well-being of a community and population. (D)</p> <p>4.1.2 Conducts community and population based assessments considering all relevant factors. (D)</p> <p>4.1.3 Identifies the resources and connects with partners needed for sustainability of the program. (D)</p> <p>4.1.4 Develops and implements a program considering relevant data addressing the nutrition needs of the community or population. (D)</p> <p>4.1.5 Interprets and uses nutrition surveillance and global health and safety data. (D)</p> <p>4.1.6 Evaluates the program using measurement indicators and outcomes. (D)</p> <p>4.1.7 Communicates evaluation findings, outcomes, recommendations and research findings to promote change and justify program. (D)</p>	<ul style="list-style-type: none"> <li>• Assess and evaluate a current nutrition public health program; identify strengths, weaknesses, threats (e.g., sustainability, access), new opportunities or areas for improvement.</li> <li>• Conduct an assessment to determine the scope of project, availability of resources, intended audience needs and limitations.</li> <li>• Design a program to solve a nutrition related problem in the community. • List factors that influence food availability in a developing country.</li> <li>• Utilize current research to propose a public health/health promotion program at a facility or agency.</li> <li>• Search nutrition surveillance data from the CDC, WHO, and/or other government agencies or organizations to identify key health and safety issues impacted by access to food, water and nutrition.</li> <li>• Use health informatics and data analytics to gather population information about nutrition and health outcomes.</li> <li>• Collect and analyze data related to the values, beliefs, limitations and strengths of the population.</li> <li>• Identify the risk factors or risk conditions that the program plan will address. • Obtain data from the National Institutes of Health and national disease reporting systems, including the Centers for Disease Control and Prevention, state health departments and vital records.</li> <li>• Select methods and strategies for the intervention (e.g., education, information delivered by multimedia modes).</li> <li>• Apply for grants and/or seek funding partners.</li> <li>• Complete a cost analysis to develop, implement and sustain program.</li> <li>• Collaborate with stakeholders using data analytics in the process of data collection, extraction, transformation, analysis, interpretation and reporting.</li> </ul>	<p>Real or simulated community, national or international project, research, presentation, field placement</p> <ul style="list-style-type: none"> <li>• Evaluate the effectiveness of an existing public health or wellness program and present finding with recommendations.</li> <li>• Plan the implementation of a nutrition program at a school to evaluate a nutrition-related behavior.</li> </ul> <p>• Assess, plan, or evaluate an obesity prevention program to improve the nutritional health of low-income populations.</p> <ul style="list-style-type: none"> <li>• Evaluate a current public health hazard and management in a written paper; include recommendations for improvement and application to other public health issues.</li> </ul> <p>• Create a mock plan to address foodborne illness within a community, state or country.</p> <p>• Develop an emergency preparedness plan for community food security and participate in or coordinate the management of the situation as demonstrated during emergency drills.</p>
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<b>Applies community and population nutrition health theories when providing support to community or population nutrition programs.</b>			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>
<p><b>4.2</b> Engages in legislative and regulatory activities that address community, population and global nutrition health and nutrition policy. (D)</p>	<p>4.2.1 Interprets legal terminology used to establish nutrition regulations and policies for populations. (K)</p> <p>4.2.2 Navigates governmental, intergovernmental and nongovernmental organizations to promote nutrition legislation and regulations that address public, population and global nutrition health. (D)</p> <p>4.2.3 Analyzes political interests and their impact on program development, goals and objectives. (D)</p>	<ul style="list-style-type: none"> <li>• Identify search engines to access nutrition related local, national and global legislation and regulations.</li> <li>• Review local, national and global legislation and establish policies for public health programs.</li> <li>• Identify governmental, intergovernmental and nongovernmental organizations that advocate/influence nutrition legislation and regulations that address public, population and global nutrition health.</li> <li>• Recall the steps to passing legislation or regulations.</li> <li>• Communicate nutritional implications of legislation to representatives at the local, state or national level.</li> <li>• Engage in individual advocacy (e.g., changing the situation for an individual) and systems advocacy (e.g., changing policy and practice at the local, national or international level; and changing the situation for groups of individuals).</li> <li>• Use advocacy tools to effect positive change in community-based, national and global nutrition health programs and policies (e.g., survey tools, legislative tracking/posting websites, social media outreach, email communications to stakeholders, a blog, create and delivery surveys, advocacy events).</li> </ul>	<p>Project work, literature review, paper, presentations</p> <ul style="list-style-type: none"> <li>• Write a letter to a legislator promoting legislative change and awareness.</li> <li>• Develop an internet blog.</li> <li>• Respond to a call for policy consultation.</li> <li>• Create a proposal for a newcommunity program, including stakeholder consultation, considering accessibility, sustainability and target audience.</li> <li>• Create and distribute surveys to gain awareness of advocacy issues and general sentiments.</li> <li>• Organize or participate in advocacy events such as press conferences, marches and advocacy days.</li> <li>• Engage in a practice debate defending (or arguing against) a specific nutrition legislative issue.</li> <li>• Write a short paper detailing the pros and cons of a specific nutrition policy.</li> </ul>

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<b>FG Unit 5: Leadership, Business, Management and Organization</b>			
<b>Demonstrates leadership, business and management principles to guide practice and achieve operational goals.</b>			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>



<p><b>5.1*</b> Demonstrates leadership skills to guide practice. (D)</p>	<p>5.1.1 Exhibits self-awareness in terms of personality, learning, leadership style and cultural orientation. (S)</p> <p>5.1.2 Demonstrates understanding of social cues and team dynamics. (K)</p> <p>5.1.3 Communicates at the appropriate level and understands emotions and emotional situations. (D)</p> <p>5.1.4 Develops conversational and interpersonal skills. (D)</p> <p>5.1.5 Reflects on situations and critically evaluates outcomes and possible alternate courses of action. (D)</p> <p>5.1.6 Understands the mentoring role and practices mentoring and precepting others. (D)</p>	<ul style="list-style-type: none"> <li>• Engage in situational leadership, personality, generational learning and learning style activities to understand group dynamics and personal preferences and skills. • Recognize different communication strategies and personality styles in the individuals on their team and how it impacts performance.</li> <li>• Participate in an interprofessional project, initiative or a committee.</li> <li>• Demonstrate conflict management skills.</li> <li>• Demonstrate understanding of the phases of team dynamics (forming, storming, norming and performing).</li> </ul>	<p>Self-reflective/assessment exercise, case studies, role play, field placement</p> <ul style="list-style-type: none"> <li>• Lead a group project. Other students evaluate leadership skills and team productivity. Identify all four stages of the team dynamics.</li> <li>• Observe several team meetings and note different leadership styles and the impact on team dynamics.</li> <li>• Lead or engage in a team building exercise.</li> <li>• Mentor a first-year student.</li> </ul>
<p><b>5.2*</b> Applies principles of organization management. (D)</p>	<p><u>Planning</u></p> <p>5.2.1 Establishes operational plan considering budget, inventory control, labor and regular daily tasks. (D)</p> <p>5.2.2 Aligns plans with the organizational strategic plan, mission and vision. (D)</p> <p><u>Organizing</u></p> <p>5.2.3 Assigns responsibilities to various team members according to scope of practice and personal competence. (D)</p> <p>5.2.4 Sets and monitors clear targets for team members, departments and the organization aligned with common objectives and goals. (D)</p> <p>5.2.5 Demonstrates an understanding of how individuals and groups interact within the organization. (D)</p>	<p><u>Planning</u></p> <ul style="list-style-type: none"> <li>• Develop an operational plan for an organization that includes a budget and staff resource allocation.</li> <li>• Develop criteria or measures to evaluate the plan, aligned to organization's strategic plan, mission and vision.</li> </ul> <p><u>Organizing</u></p> <ul style="list-style-type: none"> <li>• Identify key staff members and their scope of practice in a variety of practice settings. • Utilize principles of organization management, prepare tools and documents for use in operation of a nutrition services program (e.g., job description, work schedules, quality assurance standards and monitoring tools and performance evaluations.) • Develop performance review templates with measures mapped to organizational strategic plan.</li> <li>• Participate in multi-department team meetings; recognize the impact of the different department cultures.</li> </ul>	<p>Case study, project work, role play, group projects, field placement.</p> <ul style="list-style-type: none"> <li>• Conduct a mock accreditation audit. • Review a current budget and assign required budget changes. Require student to reallocate and trim budget accordingly.</li> <li>• Conduct a mock interview using behavior based methodology.</li> <li>• Lead a team building activity.</li> <li>• Develop and implement a project using management principles to achieve the project goals and objectives.</li> <li>• Conduct a risk assessment for each project.</li> <li>• Conduct a SWOT analysis for the development of a new program, services or product.</li> <li>• Complete a project using FOCUS-PDCA, Lean Six Sigma or other PI/QI</li> </ul>

<b>FG Unit 5: Leadership, Business, Management and Organization</b>			
<b>Demonstrates leadership, business and management principles to guide practice and achieve operational goals.</b>			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>

<p><b>5.2 (cont.)</b></p>	<p>5.2.6 Takes into consideration individual and organizational culture and behaviors when planning and managing. (D)</p> <p><u>Management</u></p> <p>5.2.7 Engages in, manages or leads human resource activities adhering to applicable legislation and regulations. (D)</p> <p>5.2.8 Integrates change management theories and conflict resolution skills to manage and promote positive change. (S)</p> <p>5.2.9 Uses persuasive communication skills to influence or produce a desired outcome during negotiations and conflict resolution discussions. (D)</p> <p>5.2.10 Understands and respects roles and responsibilities of inter professional team members. (D)</p> <p><u>Controls</u></p> <p>5.2.11 Collects, understands and analyzes financial data to support fiscally responsible decision making. (D)</p> <p>5.2.12 Conducts cost effectiveness and cost benefit analyses to identify ways to meet budget priorities. (D)</p> <p>5.2.13 Analyzes components of a productivity system including units of service and work hours and makes recommendations. (D)</p> <p>5.2.14 Sets controls to analyze the progress and effectiveness of the operational plan and budget. (D)</p> <p>5.2.15 Collects and analyzes data to evaluate outcomes and determine if established goals and objectives are met. (D)</p>	<p><u>Management</u></p> <ul style="list-style-type: none"> <li>• Develop an education or remediation plan to ensure staff maintain and meet competence.</li> <li>• Apply change management theories and principles when implementing or promoting organization or department change (e.g., merging departments or organizations, staff workload changes, implementation of new services, equipment, products, change in client/patient population).</li> <li>• Demonstrate interviewing skills by engaging in the hiring process.</li> <li>• Develop a staffing schedule.</li> <li>• Address staff or organizational conflict by identifying the potential source(s) of the conflict, required communication skills, and potential resolution.</li> </ul> <p><u>Controls</u></p> <ul style="list-style-type: none"> <li>• Identify department outcome measures based on department goals and organizational strategic plan.</li> <li>• Conduct a cost benefit analysis on food service operation.</li> <li>• Conduct a review and analysis of monthly expenditures and budget for a food service operation.</li> <li>• Analyze department statistics (e.g., client/patient satisfaction surveys, department/organizational goals) against benchmark.</li> <li>• Participate in an accreditation process or audit.</li> <li>• Assess productivity of staff against facility standard.</li> <li>• Make recommendations for distribution of workflow.</li> <li>• Conduct a job analysis of operations and make written recommendations for improved productivity through improved time management.</li> <li>• Identify factors affecting the cost of producing a meal in an organization (e.g., school, hospital).</li> <li>• Create production schedule.</li> <li>• Conduct a personal time management study; assess outcomes and create a change plan.</li> <li>• Develop and implement quality improvement activities in a nutrition program; recommend changes to improve quality of services; create an implementation plan.</li> </ul>	<p>methodology. Present the project (e.g., poster, presentations, paper).</p>
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**FG Unit 5: Leadership, Business, Management and Organization**

**Demonstrates leadership, business and management principles to guide practice and achieve operational goals.**

Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<p><b>5.2 (cont.)</b></p>	<p>5.2.16 Reevaluates the plan to make modifications to ensure positive outcomes and that goals and objectives are met. (D)</p> <p><u>Time Management</u></p> <p>5.2.17 Applies principles of time management to monitor and enhance personal productivity and productivity of others. (D)</p> <p>5.2.18 Prioritizes activities to effectively manage time and workload. (D)</p> <p><u>Motivation and Recognition</u></p> <p>5.2.19 Promotes team involvement and values the skills of each member. (D)</p> <p>5.2.20 Models behaviors that maximize group participation by consulting, listening and communicating clearly. (D)</p> <p>5.2.21 Takes innovative approaches to build support and maintain a diverse workforce. (D)</p> <p>5.2.22 Coaches and advises team leaders on resolving differences or dealing with conflict. (D)</p>	<p><u>Time Management</u></p> <ul style="list-style-type: none"> <li>• Measure productivity and ability to meet established organizational goals based on established criteria.</li> <li>• Meet assignment and project timelines.</li> </ul> <p><u>Motivation and Recognition</u></p> <ul style="list-style-type: none"> <li>• Lead or participate in team building activities</li> <li>• Identify key staff members and their scope of practice in a variety of practice settings.</li> </ul>	
<p><b>5.3*</b></p> <p>Applies project management principles to achieve project goals and objectives. (D)</p>	<p>5.3.1 Leads the development and completion of a project plan and budget. (D)</p> <p>5.3.2 Identifies the project strengths, weaknesses, opportunities and threats. (D)</p> <p>5.3.3 Identifies and manages potential and real risks to the plan, individuals or organization. (D)</p> <p>5.3.4 Conducts regular review of project to note strengths and opportunities for improvement and to implement adjusted actions. (D)</p>	<ul style="list-style-type: none"> <li>• Develop and implement a project using management principles to achieve the project goals and objectives.</li> <li>• Use a variety of project management tools (e.g., Charter, Project Plan, Gantt Chart, Stakeholder Analysis).</li> </ul>	<p>Project work, group work, project work, field work</p> <ul style="list-style-type: none"> <li>• Create a project plan for a research project or course project.</li> <li>• Lead a stakeholder analysis session with project team members.</li> </ul>

<b>FG Unit 5: Leadership, Business, Management and Organization</b>			
<b>Demonstrates leadership, business and management principles to guide practice and achieve operational goals.</b>			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>
<p><b>5.4</b> Leads quality and performance improvement activities to measure evaluate and improve a program services products and initiatives(D).</p>	<p>5.4.1 Identifies and communicates quality and/or performance improvement indicators and benchmarks using evidence-informed practice. (D)</p> <p>5.4.2 Develops quality and/or performance improvement measurement tools and analyzes data to inform baselines and to identify root causes and potential solutions. (D)</p> <p>5.4.3 Develops, implements and communicates a quality and/or performance improvement action plan for further improvement and monitors impact. (D)</p> <p>5.4.4 Develops, implements and communicates an ongoing measuring and monitoring system to ensure ongoing quality and performance improvement. (D)</p> <p>5.4.5 Applies change management theories and principles to effectively implement change. (D)</p>	<ul style="list-style-type: none"> <li>• Engage in Quality Improvement process activities.</li> <li>• Strategize to correct deviation from established goals.</li> <li>• Develop a business plan, performance metrics and the measures that will aid in determining achievement of the goals.</li> <li>• Conduct a financial feasibility study and make recommendations for improvement, following the strategic goals.</li> <li>• Develop and implement risk management plans for nutrition programs. • Complete a SWOT (Strengths, Weaknesses, Opportunities, Threats), Focused PDCA (Plan, Do Check, Act), or Lean analysis.</li> </ul>	<p>Project work, course work, group activity, field placement</p> <ul style="list-style-type: none"> <li>• Create a continuous quality improvement plan that studies production indicators and analyzes the results with respect to established goals.</li> <li>• Complete a risk analysis for a new program, service or product.</li> <li>• Create a feasibility study focused on the increase or decrease staff.</li> </ul>
<p><b>5.5</b> Develops and leads implementation of risk management strategies and programs. (D)</p>	<p>5.5.1 Assesses potential and real risks to an individual, group and or organization. (D)</p> <p>5.5.2 Identifies and takes action to manage, reduce and or eliminate risk to self, others and the organization. (D)</p> <p>5.5.3 Develops risk management plans and protocols. (D)</p>	<ul style="list-style-type: none"> <li>• Create a plan to address the potential or real risks to the individual, staff, organization, community and population.</li> <li>• Conduct a safety review or audit to ensure safety guidelines are followed.</li> </ul>	<p>Project work, mock or simulation, case study, field placement</p> <ul style="list-style-type: none"> <li>• Develop a safety inspections checklist or audit tool.</li> <li>• Create a plan to address potential or real risks (e.g., food allergies, safety, breach of confidentiality, staff harassment,)</li> </ul>

**FG Unit 6: Critical Thinking, Research and Evidence-Informed Practice**

**Integrates evidence-informed practice, research principles, and critical thinking into practice.**

Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
<p><b>6.1</b> Incorporates critical thinking skills in practice. (D)</p>	<p>6.1.1 Considers multiple factors when problem solving. (D)</p> <p>6.1.2 Incorporates the thought process used in critical thinking models. (D)</p> <p>6.1.3 Engages in reflective practice to promote change and continuous learning. (D)</p>	<ul style="list-style-type: none"> <li>• Identify a problem, including contributory factors and assess multiple solutions and outcomes.</li> <li>• Weigh benefits and disadvantage of potential options and rationale actions. • Reflect on past experiences and relevant education to make informed decisions. • Problem solve with clients/patients whose needs are complex.</li> <li>• Assimilate, analyze and interpret data from various sources and make a decision and a plan.</li> <li>• Analyze data related to a critical incident and develop options to manage the situation and to reduce future risks.</li> <li>• Identify own strengths and areas for improvement; complete a plan to address the identified needs.</li> <li>• Consider a nutrition problem (e.g., obesity, poor calcium intake, unsafe food served at a facility); develop solutions to this problem that take into account viewpoints and positions of various stakeholders.</li> <li>• Consider the arguments for and against exposing a colleague/classmate engaged in unethical behavior. Develop recommendations on this issue that could serve as a guide for others.</li> </ul>	<p>Critical thinking is assessed in all papers, course work, case studies, self-reflection, projects, nutrition care plans, field placement</p> <ul style="list-style-type: none"> <li>• Write a reflective practice exercise related to critical thinking and problem solving (e.g., Identify the problem, what were the contributing factors, why is this an important problem, how will the problem and solutions affect client/patient care, what policies or legislation did you consider).</li> <li>• Interview several different leaders, compare leadership skills and complete a self-assessment to identify desired leadership characteristics.</li> <li>• Complete bio-ethics case studies.</li> <li>• Review a case study involving a client in a complex situation or managing a complex disease/health issue, identify relevant data, problem and options and recommendations.</li> <li>• Review and contemplate the effect of making schedule changes on the running of a department.</li> <li>• Write a literature review.</li> <li>• Write a manuscript.</li> </ul>

<b>FG Unit 6: Critical Thinking, Research and Evidence-Informed Practice</b> Integrates evidence-informed practice, research principles, and critical thinking into practice.			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>
<p><b>6.2*</b> Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D)</p>	<p>6.2.1 Identifies, explains and applies the steps of the scientific method and processes. (D)</p> <p>6.2.2 Articulates a clear research question or problem and formulates a hypothesis. (D)</p> <p>6.2.3 Identifies and demonstrates appropriate research methods. (D)</p> <p>6.2.4 Interprets and applies research ethics and responsible conduct in research. (D)</p> <p>6.2.5 Collects and retrieves data using a variety of methods (qualitative, quantitative) and technologies. (D)</p> <p>6.2.6 Analyzes research data using appropriate data analysis techniques (qualitative, quantitative, mixed). (D)</p> <p>6.2.7 Translates and communicates research findings and conclusions through a variety of media. (D)</p>	<ul style="list-style-type: none"> <li>• Design a study including research question, analysis plan and IRB submission; complete study and enter and analyze data.</li> <li>• Assess research articles and formulate educated decisions.</li> <li>• Read journal articles, analyze, summarize and draw a conclusion.</li> <li>• Interpret a piece of research to a lay audience.</li> <li>• Create a detailed research design and submit for ethics board approval. • Identify a research project and methodology; follow research protocols.</li> </ul>	<p>Research project, literature search, presentation</p> <ul style="list-style-type: none"> <li>• Conduct a research project, write report and present finding to the group.</li> <li>• Review research and organizational guidelines when developing teaching goals and objectives for an education program.</li> <li>• Develop and submit an IRB application. • Present a research poster or abstract and defend conclusions.</li> <li>• Write and submit manuscript for a publication.</li> <li>• Develop an annotated bibliography.</li> </ul>

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<b>FG Unit 6: Critical Thinking, Research and Evidence-Informed Practice</b> Integrates evidence-informed practice, research principles, and critical thinking into practice.			
<b>Competencies</b>	<b>Performance Indicators</b>	<b>Learning Activities and Practice Illustrations</b>	<b>Demonstration/Assessment</b>

<p><b>6.3</b> Applies current research and evidence informed practice to services. (D)</p>	<p>6.3.1 Uses research terminology when communicating with other professionals and publishing research. (D)</p> <p>6.3.2 Critically examines and interprets current research and evidence-informed practice findings to determine the validity, reliability and credibility of information. (D)</p> <p>6.3.3 Integrates current research and evidence informed practice findings into delivery of safe and effective nutrition care. (D)</p> <p>6.3.4 Analyzes and formulates a professional opinion based on the current research and evidence based findings and experiential learning. (D)</p>	<ul style="list-style-type: none"> <li>• Implement a change in a nutrition program based on research and/or evidence based practices; support and justify the decision to change.</li> <li>• Dispel myths using scientific / evidence-informed information.</li> <li>• Interpret, perform and analyze nutrition research and translate research to the public or communicate in the scientific journal.</li> <li>• Examine other research projects and their analyses.</li> <li>• Design research and incorporate/utilize appropriate statistical analysis. • Critically evaluate and read research.</li> <li>• Create a nutrition plan of care based on evidence-based literature and evidence informed practice.</li> <li>• Apply research and evidence-informed practice when planning a community, national or global nutrition plan.</li> </ul>	<p>Course work, oral defense, papers, patient/client education materials, research project, presentation, analysis of other research</p> <ul style="list-style-type: none"> <li>• Review a published research article and identify the implications to practice or to a client/patient population.</li> <li>• Develop an educational hand-out on a clinical nutrition topic related to evidence based literature.</li> <li>• Create a hand-out (cheat sheet) for a professional use in clinical practice.</li> <li>• Conduct a peer review of another student research paper.</li> <li>• Create PowerPoint analyzing and comparing/contrasting two studies.</li> <li>• Communicate the research methods and results to others.</li> <li>• Analyze the food journal of a client with diabetes for protein and carbohydrate intake and make dietary recommendations based on the interpretation of the client's food journal and blood glucose monitoring results.</li> </ul>
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**FG Unit 7: Core Professional Behaviors**

**Demonstrates professional behaviors and effective communication in all nutrition and dietetics interactions.**

Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
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<p><b>7.1</b> Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D)</p>	<p>7.1.1 Demonstrates ethical behaviors in accordance to the professional Code of Ethics. (D)</p> <p>7.1.2 Engages in self-reflective practice activities to develop and maintain ongoing competence and professional behaviors. (D)</p> <p>7.1.3 Adheres to nutrition related legislation, regulations and standards of practice. (D)</p> <p>7.1.4 Applies client/patient-centered principles to all activities and services. (D)</p> <p>7.1.5 Identifies and takes steps to manage unethical, incompetent and unsafe behavior. (S)</p> <p>7.1.6 Practices in a manner that respects diversity and avoids prejudicial treatment. (D)</p> <p>7.1.7 Adheres to legislative requirements and facility/employer guidelines regarding protection of privacy and security of information. (D)</p> <p>7.1.8 Maintains confidentiality and security in the sharing, transmission, storage and management of protected health information. (D)</p>	<ul style="list-style-type: none"> <li>• Demonstrate understanding of Continuing Competence.</li> <li>• Set SMART (specific, measurable, achievable, relevant, time-based) goals based on feedback from preceptors, peers and/or clients/patients.</li> <li>• Attend ongoing trainings, seminars and webinars to keep abreast in the field of nutrition and be competent.</li> <li>• Complete a self-assessment of own knowledge, skill and judgment.</li> <li>• Consider and incorporate personal experiences.</li> <li>• Incorporate client's/patient's needs and wishes in the nutrition care plan.</li> <li>• Demonstrate understanding of mandatory reporting obligations (e.g., child or elderly abuse, professional misconduct).</li> <li>• Accept responsibilities and accountability for own actions and decisions.</li> <li>• Recognize and maintain professional boundaries; demonstrate an understanding of transfer and counter transference.</li> <li>• Critically evaluate ethical situations and manage ethical dilemma.</li> <li>• Understand bioethics and health case law; and the implications to practice.</li> <li>• Apply principles of informed consent process to ensure the client/patient can accept or refuse services.</li> <li>• Demonstrate understanding of privacy and confidentiality legislation and organizational policies.</li> <li>• Obtain client/patient consent for the collection, use, and disclosure of personal information.</li> <li>• Demonstrate understanding of confidentiality laws and regulations such as the Health Insurance Portability and Accountability Act (HIPAA).</li> </ul>	<p>Course work, self-reflection/assessment activities, CDR Professional Development Portfolio, case study, project work, field placement</p> <ul style="list-style-type: none"> <li>• Research state and CDR licensure and recertification requirement.</li> <li>• Review ethical case studies and identify the ethical behaviors presented in the case (trust, respect, accountability etc.). <ul style="list-style-type: none"> <li>• Review current legal cases and identify the impact to ethical practice (e.g., confidentiality, right to life)</li> </ul> </li> <li>• Review case studies that present an ethical dilemma, weigh the pros and cons of the situation and make recommendations for managing the situation.</li> <li>• Complete a self-reflective exercise to identify one's own beliefs and values, and how these attributes impact professional relationships and practice.</li> <li>• Complete a learning module on the topic (confidentiality, privacy, HIPAA).</li> </ul>
<p><b>7.2</b> Uses effective communication, collaboration and advocacy skills. (D)</p>	<p>7.2.1 Applies effective and ethical communication skills and techniques to achieve desired goals and outcomes. (D)</p> <p>7.2.2 Works with and facilitates intraprofessional and interprofessional collaboration and teamwork. (D)</p> <p>7.2.3 Participates in advocacy activities to change or promote new legislation and regulation. (D)</p>	<ul style="list-style-type: none"> <li>• Communicate in a clear, effective and respectful manner.</li> <li>• Select mode of communication to meet the needs of the audience.</li> <li>• Identify and address barriers to communication.</li> <li>• Adapt communication styles to meet the needs of diverse individuals, groups and populations.</li> <li>• Ensure timely, clear, accurate and valid documentation using correct spelling and grammar.</li> <li>• Demonstrate proficient use of nutrition informatics.</li> <li>• Demonstrate networking skills to build liaisons.</li> </ul>	<p>Role play, case studies, prepare education materials, presentations, field placement, chart review</p> <ul style="list-style-type: none"> <li>• Mentor a first-year student.</li> <li>• Speak with a legislator.</li> <li>• Attend a legislative assembly meeting/ event.</li> <li>• Conduct an in-service.</li> <li>• Conduct a chart review with a preceptor.</li> </ul>

<b>FG Unit 7: Core Professional Behaviors</b> <b>Demonstrates professional behaviors and effective communication in all nutrition and dietetics interactions.</b>			
Competencies	Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
7.2 (cont.)	7.2.4 Selects mode of communication appropriate to the messaging to meet the needs of the audience. (D)	<ul style="list-style-type: none"> <li>• Understand the mentoring role and practice mentoring others.</li> <li>• Communicate to others the role, scope of practice, areas of expertise and value of the RDN and NDTR.</li> <li>• Lead and participate in advocacy activities to change or promote new legislation and regulation.</li> </ul>	<ul style="list-style-type: none"> <li>• Write a blog post related to nutrition and dietetic advocacy.</li> </ul>