OBJECTIVE

Course Description: Information architecture options for systems development will be examined with consideration of security. Project management will be addressed in theory and applied. A major project will be completed incorporating software, hardware and networking components. To be taken the last semester of course work.

Course Objectives: Upon successful completion of this course, students will be able to:

1) Define a robust software and network architecture (Exams 2, 3 & 4)
2) Plan development of IS projects (Exam 1, Project)
3) Describe and execute development of IS projects using appropriate methodologies (Project, Exams 2 & 3)
4) Build applications using appropriate software and networking tools (Project)
5) Discuss a current topics related to development methodologies, project management and/or architecture (Summary papers / Presentations)

Course Outcomes:

1) understand various systems architecture models
2) understand various network architecture models
3) design OO-based systems
4) Develop OO programs for processing data
5) Create planning and execution documents for IS projects

RESOURCES

Coordinating Instructor: Kerry Henson, PhD
Office: WDE 3108
Phone: 660/422-2705
Email: dochenson@charter.net

Office hours: MWF 9:00-9:50; 11:00 - 12:00

Other Instructors: Someswar Kesh, PhD
Office: WDE 2705
Phone: 441-0721
Email: kesh@ucmo.edu

Office: WDE 2707
Phone: 
Email: 

WebSite: http://cis.ucmo.edu/henson/4690/ Passkey: Black Board
**Textbooks:**  Designing for Cisco Internetwork Solutions (DESGN), 2nd ed., by Diane Teare. ISBN: 978-1587052729.

**Purchase:**  
1. Paper, notebooks, etc for project documentation
2. Scantrons, as specified by the instructors

**EXPECTATIONS**

**Course Requirements**

1. Prerequisites for this course:
   - CIS 2615, CIS 3650 and (CIS 4685 or concurrently) OR
   - CIS 3670, CIS 4680 and (CIS 4660 or CIS 4670)

2. You are responsible for reading each chapter and preparing assignments from the text. All assignments are due on the date specified by the instructor.

3. All writing assignments must be typed unless otherwise specified by the instructor. The computer lab is available for word processing and students are encouraged to use the microcomputers.

**Attendance:**  This class is important. You are expected to attend class and participate in class discussions. There tends to be a strong correlation between class attendance and final grade. Obtaining notes missed because of a class absence is your responsibility. It is a good idea to obtain a classmate’s phone number for this purpose.

Being late for class is not fashionable. It disrupts the class activities. Tardiness will result in a recorded absence, if attendance is taken. Each individual is expected to make whatever arrangements are necessary to arrive in class on time.

If you decide to discontinue attending, then drop the course. If the course is not dropped, a course grade will be assigned based upon the number of points obtained.

**Honesty:**  University policy deals severely with students caught cheating, copying papers or programs, or participating in dishonest behavior. All ideas expressed in assignments should originate from you. If verbatim text from another source is incorporated into your work, it must be in the form of a quote and be properly referenced. Ideas originating outside of you must also be properly referenced. Failure to do so is an act of plagiarism, that is, claiming someone else’s intellectual property as your own. All individual work is to be unique to you. All group work is to be unique to your group. Any work on your group assignments by someone outside your group is a violation of the policy. No reference material may be used during an examination unless provided by the instructor.

The instructor may use electronic tools to check for plagiarism. Such tools may be web-based and require that the student’s submission be copied to a database maintained by a third party.
If a student is suspected of dishonesty, the student will be notified. Any questions and explanations should be directed to the instructor. A meeting with the instructor may be scheduled. Responses to such an offense may include a zero on the assignment or test, a grade of "F" in the course, or recommendation for removal from the degree program. All instances of dishonesty will be reported to the Vice President for Student Affairs. For more information see the University Calendar/Handbook.

**Use of Computing Resources:** When using university computing and network resources students are required to comply with the acceptable use policy (AUP) as set forth by the University and MORENet. For more information see the University Calendar/Handbook.

**ACTIVITIES AND ASSESSMENTS**

<table>
<thead>
<tr>
<th>Tests and Homework:</th>
<th>Grading:</th>
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<tbody>
<tr>
<td>4 exams</td>
<td>90%-100% =A</td>
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<tr>
<td>Projects</td>
<td>80%-89% = B</td>
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<tr>
<td>Papers/Presentations</td>
<td>70%-79% = C</td>
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<tr>
<td></td>
<td>60%-69% = D</td>
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<td></td>
<td>0%-59% = F</td>
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Exams will consist of essay and/or multiple choice items. In addition short answer questions may also be included. Creating diagrams and solving problems will be required. The nature of this course dictates that the material covered is somewhat related; however, the focus of each exam will be upon the material covered in the previous section.

Current topics will be assigned for short, individual presentations and/or papers.

Students, working in groups, will complete a substantial analysis, design and development project. Planning and preliminary design will be conducted during the first half of the semester. The development work will take place in the second half of the semester. Projects must be implemented on the hardware supplied.

A peer review of contributions to the project will be conducted at the end of the semester. Individual scores on the group project will be based upon your group’s project score and your contribution to the group project assessed through the peer review. You are required to participate in the presentation and attend the Checkout.

Homework is due at the beginning of the period. Homework not turned in at the beginning of class will be considered late. Late work will not be accepted.

Exams, quizzes, and homework may be made-up in the case of an extreme emergency (as deemed by the instructor) or a university excused absence. In either case the instructor must be notified before class, a Request for an Excused Absence form must be completed, and support documentation must be provided.

**On occasion** an end-of-the-semester curve is applied to all grades in the class; however, to be eligible for the curve the student must have completed all projects, taken all exams and quizzes, and not have an excessive number of absences. Individual assessments are not curved.
## Schedule of Topics (Tentative)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Jan 11 -</td>
<td>Introduction to course, Project</td>
<td>Project Management slides</td>
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<td>Jan 21</td>
<td>Management, Project discussion</td>
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<td>Jan 26 -</td>
<td>Network Architecture</td>
<td>Read Teare; Exam 1 (Jan 28)</td>
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<td>Feb 4</td>
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<td>Feb 9 -</td>
<td>Systems Architecture</td>
<td>Read McGovern 1 - 6; Exam 2 (Feb 11)</td>
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<td>Feb 18</td>
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<tr>
<td>Feb 23 -</td>
<td>Systems Architecture, Agile Methods,</td>
<td>Read McGovern 7 - 11; Exam 3 (Feb 25)</td>
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<td>Mar 4</td>
<td>XML</td>
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<td>Mar 9</td>
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<td>Preliminary Design Presentation</td>
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<tr>
<td>Mar 11</td>
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<td>Exam 4</td>
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<td>Mar 30</td>
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<td>Development Review</td>
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<td>Apr 8</td>
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<td>Development Review</td>
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<td>Apr 20</td>
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<td>Development Review</td>
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<td>Apr 29</td>
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<td>Project Presentation Documentation Due</td>
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<td>Project Freeze</td>
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<tr>
<td>May 4</td>
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<td>Checkout</td>
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****** Last day to drop a class with a W **** Mar 30 ******
STATEMENT OF UNDERSTANDING

In signing this statement I am stating that I understand all points presented in the syllabus and that I have completed all the prerequisites for this course.

Signature:__________________________________________________________
Date:     _____________________

POSTING OF GRADES

A student's course grade falls under federal privacy laws. You may choose to have your grades posted. Grades in this course will be posted by a special number assigned to you. Your social security number will not be used. Please indicate your preference below.

I prefer my grades be posted     ______
not be posted ______

Signature:__________________________________________________________
Date:     _____________________