Department of Mathematics, Computer Science and Information Systems

A. Protocol

Course Name: Systems Development and Implementation
Course Number: CIS492
Credits: 3
Prerequisites: CIS 490 Systems Analysis II with a C- or better and CIS 332 Web Programming II with a C- or better.

Maximum Class Size (face-to-face): 22
Maximum Class Size (online): 35
*Justification for online class size is due to the highly-technical nature of the course.

B. Objectives of the Course

Upon completion of this course the student will be able to:

a) Justify academic program proficiency through successful completion of the proposed project
b) Write individual weekly progress reports and a project users’ manual
c) Demonstrate oral communications skills through a presentation of the project
d) Apply project planning and teamwork skills

C. Catalog Description

This course is a continuation of the Systems Analysis II course and the capstone course of the program. The project proposal developed and designed in the Systems Analysis II class will be implemented in this course. The student will produce a project users’ manual and will demonstrate proficiency in the academic program through the development of the project.

Prerequisites: CIS 490 Systems Analysis II with a C- or better and CIS 332 Web Programming II with a C- or better. Three credits.

D. Outline of the Course

a) Implementation of the project proposal designed in the Systems Analysis II:

The team of instructors will meet with the students in the assigned class time. Teams will be assigned to an instructor based on the topic of the project and the expertise of the instructor. During the scheduled class time, the students will work on their projects. One team at a time will meet with their assigned project director, instructor. They will provide the instructor with individual weekly written project progress reports. These project reports will be discussed with the instructor. The instructor will consult with the students and oversee the projects. The individual weekly progress reports will be at least two double spaced pages in length detailing the activities of the individual and the team. There will be at least 30 double spaced word processed pages for the individual weekly reports over the course of the semester per student. These individual reports will be reviewed by the instructor and returned to the students for possible revisions. The students will complete the project that was proposed in the Systems Analysis II. Class time will also be used so that the instructor can assist the students with the development and debugging of the project. Half way through the course each team will present a preliminary users’ manual for their project. This manual is to detail the installation, use and maintenance of the project. This document should be at least 30 double spaced pages in length. This
document will be reviewed by the instructor and returned to the team for possible revisions. At the completion of the course, the students will deliver the working project along with the revised users’ manual to the assigned project director for assessment. A classroom demonstration of the completed project will also be presented.

E. Teaching Methodology

1) Traditional Classroom Methodology

This course will be taught using some lecture/discussion method followed with a majority of class time using hands-on lab activities on the presented concepts. Some cooperative group method will be employed during appropriate sections of the course.

2) Online Methodology

This course will be taught using a variety of methods including lecture videos, activities, group collaborative learning, and discussion boards. Quality Matters™ Statement – The online course follows the standards of the Quality Matters™ rubric. An online homework system is required in this course.

F. Text

A vast array of texts from a variety of publishers is available to teach this course. Some of these include:


G. Assessment Activities

1) Traditional Classroom Assessment

Various assessment methods are used, at the discretion of the instructor, and can include exams, quizzes, tutorials, homework assignments, programs/projects/labs. An online homework submission system is used in this course.

2) Online Assessment

Various assessment methods are used, at the discretion of the instructor, and can include exams, quizzes, tutorials, homework assignments, programs/projects, wikis, online journals and labs. An online homework system is required in this course.

OSD
Revised December 2012

STUDENTS WITH DISABILITIES
Students with disabilities:

- Reserve the right to decide when to self-identify and when to request accommodations.
- Will register with the Office for Students with Disabilities (OSD) each semester to receive accommodations.
- Might be required to communicate with faculty for accommodations, which specifically involve the faculty.
- Will present the OSD Accommodation Approval Notice to faculty when requesting accommodations that involve the faculty.

**Office for Students with Disabilities**

Requests for approval for reasonable accommodations should be directed to the Office for Students with Disabilities (OSD). Approved accommodations will be recorded on the OSD Accommodation Approval notice and provided to the student. Students are expected to adhere to OSD procedures for self-identifying, providing documentation and requesting accommodations in a timely manner.

**Contact Information:**

- Location: Azorsky Building – Room 105
- Phone: (724) 938-5781
- Fax: (724) 938-4599
- Email: osdmail@calu.edu
- Web Site: [www.calu.edu](http://www.calu.edu) (search “disability”)

**H. Supportive Instructional Materials, e.g. library materials, Web sites, etc.**

**Library Materials:**
Books located in the PILOT catalogs, library databases (Ebscohost, CIOS, Proquest, Lexis-Nexis) which include books, journals, magazines, and newspapers. Examples of holdings at the Louis L. Manderino Library are:

Additional Information for Course Proposals

J. Proposed Instructors: Dr. Gina Boff, Dr. Gary DeLorenzo, Dr. Lisa Kovalchick or any other tenure-track CIS faculty from the Department of Mathematics, Computer Science and Information Systems.

K. Rationale for Course: Course already exists and being updated for Global Online delivery.

L. Specialized Equipment or Supplies Needed: None

M. Answer the following questions using complete sentences:

1. Does the course require additional human resources? No, the course is already being taught.

2. Does the course require additional physical resources? No. The current physical resources on campus can accommodate the teaching of this course.

3. Does the course change the requirements in any particular major? No.

4. Does the course replace an existing course? No, this course does not replace any existing courses.

5. How often will the course be taught? This course will be taught once every year.

6. Does the course duplicate an existing course in another Department or College? No.

7. What is the recommended maximum class size for this course? Recommended class size for this course is 35 for online sections, due to the highly-technical nature of the course.

N. If the proposed course includes substantial material that is traditionally taught in another discipline, you must request a statement of support from the department chair that houses that discipline. This course does not include substantial material from another discipline.

O. Please identify if you are proposing to have this course considered as a menu course for General Education. If yes, justify and demonstrate the reasons based on the categories for General Education. The General Education Committee must consider and approve the course proposal before consideration by the UCC. No; this course will not be offered on the GenEd menu.