I. General Information

Course Number: IS485  
Course Title: Information Systems Projects  
Units: 3  
Prerequisite: IS301, IS380  
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II. Catalog Description

A comprehensive systems project of moderate complexity for a client-server environment using a team approach for requirements analysis, system design, and prototype creation. Project planning and management techniques. Letter grade only (A-F).

III. Curriculum Justification(s)

Recent statistics on IS/IT projects reveal over 30% of projects get cancelled. Among those that are complete, less than 20% complete on time, and more than half cost at the average 200% of the original estimates. Furthermore, planned features of IT/IS projects are less than expected. The course covers fundamentals of successful IT/IS project management with focus on meeting three learning goals: critical thinking, team and interpersonal skills, and quantitative and technical skills.

The critical thinking skills is met by developing project strategies and using appropriate process and models depending upon types of IT/IS projects in all phases of development. The team and interpersonal skills is met by team term-project assignment. The quantitative and technical skills are met by performing planning, estimation, scheduling, metrics, control, risk and quality and management. As part of the course, students will be exposed to concepts and methodologies on IT/IS development while embarking and focusing on implementation of project management models and methodologies to successfully develop information systems.

The focus of the course will be on the following topics:

- Business aspect of information systems projects
• Technical aspect of information systems projects
• Management aspect of information systems projects
• Types of information systems projects
• Project strategy development
• Models, process, and metrics and standards
• Project planning
• Project estimation
• Project scheduling
• Risk management
• Software quality management
• Project implementation and maintenance
• Software process improvement
• Use of an integrated development environment (IDE) and project management tool.

IV. CBA Undergraduate Program Learning Goals:

Upon completion, the student will meet the following three specific CBA learning goals as discussed in curriculum justifications:

| Learning Goal #1 – Critical Thinking |
| Learning Goal #3 – Team and Interpersonal Skills |
| Learning Goal #6 – Quantitative and Technical Skills |

V. Course Objectives

Upon completion, students should be able to

▪ Examine the type of IT/IS project development for selection of an appropriate model.

▪ Put together a project plan to satisfy project control, risk and quality.

▪ Perform project estimation.

▪ Place the estimation in a calendar to arrive at project schedule.

▪ Implement the project and perform project monitoring.

▪ Produce project reports.

▪ Use of development tools and project management tools.
VI. Outline of Subject Matter

This is a broad outline of topics to be covered. Subject matter and sequence of topics may vary by instructor.

Project definition (feasibility)

This includes project description, strategy, justification and project planning and selection of development tools and project management tools.
Phase report is expected.

Phase project implementation

Depending upon the types of project and models used, the project implementation follows the selected model and process.
This include phase deliverables and reports for each phase.

Project evaluation

Evaluation in terms of time, cost and performance is expected.
Evaluation report and project presentation are performed by all teams.

VII. Methods of Instruction

The course is instruction-led, team-assigned and project-based. It is preferable that entering students have taken a programming course, and a system analysis and design course, in addition to the database course (IS380) required and the Business communications course (IS301) listed as pre-requisites. Nevertheless, lectures should include a review of software development process and tools for students who lack programming (i.e. IS340 or IS483), and analysis and design course (IS385).

To exploit and achieve learning objectives listed above, class time will be devoted primarily to cases selected for discussion on each topic/subject matter.

VIII. Extent and Nature of Technology Use

An IDE (Integrated development tool, such as Microsoft Studio) and a project management tool should be used in addition to the university web-hosting development environment.
IX. Textbooks

The textbooks listed below or similar textbooks can be selected for the course.

Required Text


Optional/additional Text


X. Instructional Policies Requirements

A. Assessment Criteria (grading)

Evaluation (Midterm and Final exams)

There will be generally two midterms and a final exam required (at 20%, 25% and 25% respectively). These exams may be in any format as see fit by the instructor but preferably in multiple choice format.

Evaluation (Term-project)

The class is divided by small teams from 3-4 students each. The term project (30% of final grade) is a web-based client-server application with database access. Phase reports during the semester, and final project presentation are major results for evaluation of term project.

B. Required Statement

In compliance with university policy: Final grades will be based on at least three, and preferably four or more, demonstrations of competence. In no case will the grade on any class tests count for more than one-third of the course grade.

C. Attendance, Withdrawal, Late Assignments

Students are expected to attend courses and turn in assignments on time. Specific attendance and late assignment policies are up to each individual instructor’s discretion. The withdrawal policy is the same as that of the university.
D. Disabilities

Students with disabilities are responsible for notifying their instructor as early as possible of their needs for an accommodation of a verified disability. A student with a disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.