

## **CSIT 4333 – INFORMATION TECHNOLOGY PROJECT MANAGEMENT**

**CREDIT HOURS:** 3  
**PREREQUISITES:** Nine advanced hours of CSIT.  
**GRADE REMINDER:** Must have a grade of C or better in each prerequisite course.

### **CATALOG DESCRIPTION**

This course addresses the need for IT developers and analysts to develop and manage large IT-related projects. This course will cover developmental lifecycles, and discuss requirements collection and analysis. It will also include coverage of multiple areas of IT project management such as quality management, HR management, project scope management, etc. Project management approaches and stakeholder management will also be addressed. May not be used to satisfy computer science requirements for a computer science or computer information systems major or minor.

### **PURPOSE OF COURSE**

This course will provide students majoring in Information Technology with an in-depth understanding of project and project management, as it applies to IT and computer-based systems. The course will include a hands-on project involving group work. The course will parallel material covered in the PMBOK (Project Manager's Body of Knowledge), but will focus on processes that work for large-scale IT systems development. The course will cover the full lifecycle approach to project management, from feasibility analysis through "lessons-learned" project wrap-up meetings.

### **EDUCATIONAL OBJECTIVES**

Upon successful completion of the course, students should be able to:

1. Identify the skills and knowledge necessary for project management.
2. Describe techniques of requirements identification, including interviews, observation, questionnaires, and applicable sampling methods.
3. Perform cost/benefit analyses of proposed systems, including comparison of alternative means of system acquisition, such as purchase of commercial off-the-shelf (COTS) software.
4. Demonstrate the use of basic time and size estimation techniques.
5. Describe the roles of various Project Management tools, including the PMBPK (Project Managers Body of Knowledge) processes and procedures
6. Demonstrate an ability to perform risk analysis and configuration management needs for medium to large-scale projects
7. Describe the ramifications of design decisions pertaining to product architecture, data storage and access, and information presentation.
8. Demonstrate the ability to plan and lead a project from initiation to closure.

### **COURSE CALENDAR**

This course meets for a minimum of 37.5 lecture contact hours during the semester. Students have significant weekly reading and extracurricular assignments in which they explore different approaches to

physical and electronic (information technology) security. Students are expected to complete weekly homework assignments, must select a security-related topic and give a 10-15 minute presentation, are required to prepare a hypothetical “Security Plan” for a fictitious company, which must include a thorough Risk Management plan, and complete 2-3 periodic exams in addition to the final exam. Students are expected to prepare for any class assignments or quizzes over the material covered in class, the reading material, or the extracurricular assignments. Successful completion of these activities requires at a minimum six additional hours of outside of classroom work each week.

<b>CONTENT</b>	<b>HOURS</b>
Introduction to Project Management .....	5
Basics of Project/Program Management	
A systems-perspective of PM	
Components of a PM Activity .....	5
Feasibility Analysis	
Gathering and Presenting Facts	
Process Groups	
Project Initiation and Integration, Using the PMBOK.....	8
Starting a project	
Project Framework	
Project Charter	
Initial PM plan	
Cost and size estimation	
Managing Project Scope .....	4
Scope Creep	
Risk Analysis and Risk Management as the Project Progresses	
Configuration Management	
Time Management	
Management Aspects .....	4
Quality Management	
HR Management – the Human Side of Project and Project Management	
Other Aspects of Project Management .....	4
Management Styles	
Communications – both Top-Down and Bottom-Up	
Capstone Project .....	12
Description of Project	
Problem Development	
Presentation of Results	
Exams (plus final).....	3
	<b>TOTAL 45</b>

**REFERENCES**

Fundamentals of Project Management, no specific author, published by Routledge, 2010.

PMBOK (Project Managers Body of Knowledge), Project Management Institute Standards Committee, published by the Project Management Institute, 2014.

Project Management for Engineering and Technology, by David L. Goetsch , Pearson, 2014.

Readings in Current Trends