

Saint Leo University

COM 424

Information Technology and Project Management

Course Description:

The rapidly changing field of information technology requires a solid knowledge foundation. This course reviews contemporary project management and the relevant issues of effective management of information technology project activities.

Prerequisite:

COM 203 or MGT 301

Textbooks:

Schwalbe, K., Information Technology Project Management (9th ed.). Boston, MA: Cengage Learning. ISBN: 9781337101356

Course Objectives:

The student will be able to describe and utilize the activities encompassed by project management technology and techniques. Specific learning objectives for this course are:

1. Describe and evaluate the trends in the use of information technology including changing technology platforms, emerging technologies, purchasing policies, applications development, and the interaction among them.
2. Describe and evaluate the changing information technology architecture.
3. Describe and evaluate how to manage information technology operations and development.
4. Utilize the Microsoft Project application to illustrate and apply these knowledge areas while demonstrating the core value of excellence in project development.
5. **VALUES OUTCOME:** Students will demonstrate an understanding of the Saint Leo University core value of excellence by using project management principles to minimize cost, time, and scope overruns in information technology projects.

Core Value:

Excellence: Saint Leo University is an educational enterprise. All of us, individually and collectively, work hard to ensure that our students develop the character, learn the skills, and assimilate the knowledge essential to become morally responsible leaders. The success of our University depends upon a conscientious commitment to our mission, vision, and goals.

Evaluation:

Assignments	% of Final Grade
Exam 1	10%
Exam 2	10%
Assignments	50%
Final Project	20%
<u>Discussions</u>	<u>10%</u>
TOTAL	100%

Grading Scale:

Grade	Score (%)
A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	60-66
F	0-59

Description of Assignments:

Assignment:

There are eight assignments in each module. The assignments require each student to complete the Running Cases located at the end of various chapters from the textbook. All tasks from the Running Case(s) that are assigned in each module must be completed. In the file name of the document, the students must include his/her name and assignment number. For example, *JohnDoe_Assignment8.doc*. There are seven templates located in the Doc Sharing to assist each student as they complete the tasks in the assignments.

Additionally, beginning in Module 2, each students must complete the Microsoft Project Tutorial. Microsoft Project is a tool that can be used to assist in planning and management for medium sized projects. A temporary copy of Project is included with the course materials. Appendix A contains instructions on how to use this tool for many of the requirements of the course. This tool is required to complete many of the assignments. Students should work through the Appendix as they progress through the course as the different assignments are mirrored in the material in the Appendix. Note that not all of the chapters use Project for their solutions.

Note: Students will not be graded on completing the Appendix, but if students choose not to use this tool, it might affect the students' final grade. A good technique is to read the chapter, then work through the Appendix for how to accomplish the assigned tasks in Project, and, finally, work on the assignments using Project when it is appropriate.

Exams:

There are two exams that students must complete in this course. Exam 1 is located in Module 1. Exam 2 is located in Module 8. During each exam, each student will be given seven short-essay questions. Each student must choose to respond to five of the seven short-essay questions. If the student answers more than five questions in the exam, only the first five will be graded.

Final Project:

The Final Project will be due in Module 8. It will consist of a Final Project Plan and a PowerPoint Presentation.

The Final Project Plan will summarize all the Running Case submissions. To complete the Final Project Plan, each student should edit and compile all the completed Running Cases into one summary report on their Microsoft Project Running Cases. This project plan will include the edited and finalized components of what each student created in the separate parts of the Running Cases. Students discuss the Saint Leo core value of excellence as they complete their summary.

Note that some parts of what each student completed in their Running Cases will not necessarily appear in the Final Project Plan. For example, the material in Chapter 4 is an important task but is not relevant for the Final Project Plan. Similarly, in Chapter 5, each students was given an original WBS and then required to change it. In this example, only the WBS that the student changed should be included in the Final Project Plan.

Students must also submit a PowerPoint Presentation showing the major results of the Final Project Plan. This is a typical process for presenting any material to management. Remember that a picture is worth a thousand words. The PowerPoint Presentation should highlight the major points of the Final Project Plan. Students should expect questions and either cover them in the presentation or be prepared to answer them from their instructor. Limit the presentation to no more than ten slides with no more than eight items per slide (not including the first slide which should list the project title and your name).

Discussions

In each module, students are required to participate in each discussion with an original initial post. Students are expected to cite all references using APA format. Each students must post a response to the initial post of at least two classmates in each module.

Course Schedule:

Module 1 Introduction to Project Management, Its Context in Information Technology, and Project Integration Management

Objectives: When you complete this module, you should be able to:

- Explain what a project is, provide examples of information technology projects, list various attributes of projects, and describe the triple constraint of projects.
- Explain project management and discuss key elements of the project management framework, including project stakeholders, the project management knowledge areas, common tools and techniques, and project success.
- Explain the systems view of project management, how it applies to information technology project, and why stakeholder management and top management commitment are critical for a project to be successful.
- Explain the importance of creating a project charter to formally initiate projects and the process of creating a preliminary project scope statement.
- Explain project execution, its relationship to project planning, the factors related to successful results, tools, and techniques to assist in project execution, and the process of monitoring and controlling project work.

Assignments:

Items to be Completed:	Due No Later Than:
Post an introduction to the class	Thursday 11:59 PM EST/EDT
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 1	Sunday 11:59 PM EST/EDT

Module 2 Project Scope Management

Objectives:

When you complete this module, you should be able to:

- Explain the scope planning process and describe the contents of a scope management plan.
- Describe the process for developing a project scope statement using the project charter and preliminary scope statement.
- Describe the scope definition process and work involved in construction a work breakdown structure using the analogy, top-down, bottom-up, and mind-mapping approaches.
- Explain the importance of scope verification and how it relates to scope definition and control.
- Explain the importance of scope control and approaches preventing scope-related problems on information technology projects.
- Describe how software can assist in project scope management.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 2	Sunday 11:59 PM EST/EDT
Begin working on Microsoft Project Tutorial	

Module 3 Project Time Management

Objectives:

When you complete this module, you should be able to:

- Explain how project managers use network diagrams and dependencies to assist in activity sequencing.
- Explain how various tools and techniques help project managers perform activity duration estimating.
- Construct a Gantt chart for planning and tracking schedule information, find the critical path for a project, and describe how critical chain scheduling and the Program Evaluation and Review Technique (PERT) affects schedule development.
- Explain how reality checks and discipline are involved in controlling and managing changes to the project schedule.
- Describe how project management software can assist in project time management and review words of caution before using this software.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 3	Sunday 11:59 PM EST/EDT
Continue working on Microsoft Project Tutorial	

Module 4 Project Cost and Quality Management

Objectives:

When you complete this module, you should be able to:

- Explain basic project cost management principles, concepts, and terms.
- Discuss different types of cost estimates and methods for preparing them.
- Describe quality planning and its relationship to project scope management.
- Discuss the importance of quality assurance.
- Identify the tools and techniques for quality control, such as Pareto analysis, statistical sampling, Six Sigma, quality control charts, and testing.
- Explain how leadership, the cost of quality, organizational influences, expectations, cultural differences, standards, and maturity models relate to improving quality in information technology projects.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 4	
Complete Exam 1	
Continue working on Microsoft Project Tutorial	

Module 5 Human Resource and Communications Management

Objectives:

When you complete this module, you should be able to:

- Explain the importance of good human resource management in projects, including the current state and future implications of the global IT workforce.
- Discuss human resource planning and be able to create a project organizational chart, responsibility assignment matrix, and resource histogram.
- Explain and apply several tools and techniques to help manage a project team and summarize general advice on managing teams.
- Explain the elements of project communications planning, including how to create a communications management plan and perform a stakeholder communications analysis.
- Describe various methods for distributing project information and the advantages and disadvantages of each, discuss the importance of addressing individual communication needs, and calculate the number of communications channels in a project.
- Describe various methods of improving project communications, such as managing conflicts, running effective meetings, using email and other technologies effectively, and using templates.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 5	Sunday 11:59 PM EST/EDT
Continue working on Microsoft Project Tutorial	

Module 6 Risk Management

Objectives:

When you complete this module, you should be able to:

- Describe the risk identification process, tools, and techniques to help identify project risks, and the main output of risk identification: a risk register.
- Discuss the qualitative risk analysis process and explain how to calculate risk factors, create probability/impact matrixes, and apply the Top Ten Risk Item Tracking technique to rank risks.
- Explain the quantitative risk analysis process and how to apply decision trees, simulation, and sensitivity analysis to quantify risks.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 6	Sunday 11:59 PM EST/EDT

Module 7 Project Procurement Management

Objectives:

When you complete this module, you should be able to:

- Describe the work involved in planning purchases and acquisitions for projects, the contents of a procurement management plan and contract statement of work, and calculations involved in a make-or-buy analysis.
- Discuss what is involved in planning contracting, including the creation of various procurement documents and evaluation criteria for sellers. Explain how reality checks and discipline are involved in controlling and managing changes to the project schedule.
- Describe the importance of good contract administration.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Post initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 7	Sunday 11:59 PM EST/EDT

Module 8**Project Stakeholder Management****Objectives:**

When you complete this module, you should be able to:

- Identify the importance of project stakeholder management throughout the life of the project.
- Explain the process of identifying stakeholders, how to create a stakeholder register, and how to perform a stakeholder analysis.
- Describe the contents of a stakeholder management plan.
- Explain the process of managing stakeholder engagement and how to use an issue log effectively.
- Explain methods for controlling stakeholder engagement.
- Describe types of software available to assist in project stakeholder management.

Assignments:

Items to be Completed:	Due No Later Than:
Read the assigned materials	
Review textbook Quick Quiz Questions	
Submit Assignment 8	Sunday 11:59 PM EST/EDT
Post initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Assignment 8	Sunday 11:59 PM EST/EDT
Submit Final Project	Sunday 11:59 PM EST/EDT
Complete Exam 2	Sunday 11:59 PM EST/EDT