# **Project Management**

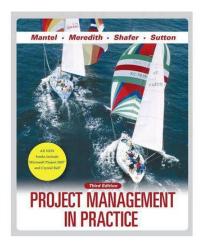
# University of North Carolina at Greensboro Bryan School of Business & Economics Department of Information Systems & Operations Management

Course Number:	ISM/MBA 654.41 This is an online course so there is no specific meeting time
Course Name:	Project Management
Instructor:	Dr. Kwasi Amoako-Gyampah
Office:	479 Bryan Building, Telephone: 334-5739 (work)
Fax:	334-4083
E-mail:	kwasi_amoako@uncg.edu
Office Hours:	There are no scheduled office hours. However, you can always contact me through email and I will do my best to respond to you within 24 hours.

#### **Required Materials:**

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Project Management in Practice, 3rd Edition Samuel J. Mantel, Jr., Univ. of Cincinnati Jack R. Meredith, Univ. of Cincinnati Scott M. Shafer, Wake Forest Univ. Margaret M. Sutton, Project Management Consultant ISBN: 978-0-470-12164-1 ©2008 336 pages. Cover of textbook looks like this:



\*\*\* A 4<sup>th</sup> edition has also been released so you may get the 4<sup>th</sup> edition if you choose. There is not much difference in content. \*\*\*\*

<b>Optional Materials</b> :	None
Prerequisites:	Admission to either MSITM, MBA, or other approved graduate program. Completion of MBA 607 or MBA 600 preferred. You must have some knowledge of basic statistics such as standard deviation, how to calculate Z values and read normal distribution tables as well as knowledge in other decision making tools such as decision trees and calculation of expected values.
Course Description:	Modern methods of defining, planning and managing large IT and other business projects. Computer software and network modeling are used to support the efficient scheduling of interdependent activities.

# **INTRODUCTION & RELATIONSHIP TO OTHER COURSEWORK**

Project Management deals with seeking new methods of planning, organizing, and controlling non-routine tasks. The management of a project differs in several ways from management of a typical enterprise. The goal of a project team is to accomplish its prescribed mission and then disband; though this is easier said than done. Project Management has been around for some time, though it has recently become more important because of the shifting emphasis on teams in accomplishing tasks. Some of the better known examples of tasks accomplished using project management techniques are:

- The construction of the Egyptian pyramids
- The Building of the Boeing 787 airliner
- The UNCG Banner System
- The construction of the baseball stadium at Downtown Greensboro

- ERP implementations at firms
- The Denver International Airport
- The Beijing Olympics
- The construction of the new School of Education Building at UNCG

This course covers some of the issues related to managing projects in organizations, and students will be expected to draw on materials from other business courses.

#### **GENERAL COURSE OBJECTIVES**

- 1. To understand the concepts of project planning and organization, budgeting and control, and project life cycles.
- 2. To learn concepts related to organizational workflow including the staffing process, project planning elements, and the project plan contents and project communications.
- 3. To master several basic project scheduling techniques including WBS, CPM, PERT, GANTT CHARTS, and resource constrained scheduling.
- 4. To understand the related concepts of organizational forms, conflict resolution, and issues related to leadership and task management in a project environment.
- 5. To improve written and oral communication skills through formal writing assignments and group discussions.
- 6. To become familiar with Microsoft Project in performing simple project management tasks
- 7. To support the following general academic goals of UNCG:

**Oral & Written Communications Content**: Oral and written communications for this course are addressed through the threaded discussions, cases, and class discussions as detailed above.

**Technology Applications**: This is addressed through the application of Microsoft Project in helping to understand project scheduling and resource requirements. We will also be using the Internet for our threaded discussions and rely on e-mail for extensive communications. Students will be expected, whenever possible, to use appropriate information technology in the completion of assignments.

**Ethical Perspectives:** Even though specific coverage of ethical issues will not be done in this class, students will be made aware of the importance of ethical considerations in making project management decisions, and in the completion of course requirements.

Global Perspectives: Discussion of global issues is limited in this course.

Demographic Diversity Perspectives: This course will not specifically address this issue.

**Political, Social, Legal, Regulatory & Environmental Perspectives**: These will be discussed as they apply to the justification procedures for project selection and the general management of projects.

Academic Honesty: All UNCG students are expected to conduct themselves with the highest standards of academic honesty. Academic misconduct, including cheating, forgery and plagiarism will not be tolerated. Students are required to pledge their assignments and examinations using the UNCG honor code.

## **INSTRUCTIONAL METHODOLOGY**

The methods employed to achieve course objectives will include:

- 1. Lecture materials highlighting critical course material made available in the Learning Area in Blackboard
- 2. Textbook reading
- 3. Threaded discussions on the Web.
- 4. Cases selected to bring out important concepts and familiarity with tools
- 5. Some reading assignments from sources other than the textbook

## **GRADING & PERFORMANCE EVALUATION, and EXPECTATIONS FOR** ASSIGNMENTS

#### 1. GRADES

The course grade will be based on the following point distribution:

Film Prioritization	30	Due 5/22/11
Construction Company Case	30	Due 5/29/2011
DU Singer analysis	55	Due 6/12/2011
Threaded Discussions	55	all completed by 6/19/2011
Final Exam	100	June 24, 2011
Total	220	

Grade Assignment: A: 199-220, A-: 195-198; B+: 191-194; B: 180-190; B-: 174-179; C: 164-173 F: Below 164 All submitted assignments must have your signature pledging that you have abided by the UNCG Academic Honor code.

#### 2. CLASS POLICIES

- 1. <u>Attendance</u> You are responsible for all course information and announcements that are posted online or sent through email. All email communication will be sent through the UNCG email system only.
- 2. <u>Reading Assignments</u> for each week are given on the syllabus. You are expected to complete the readings before the end of the week.
- 3. <u>Threaded Discussions</u>: You are expected to participate in threaded discussions through the web. You will be assigned a discussion question each week covering material from different components of the course each chapter. You are expected to respond to both the instructor-assigned questions as well as responses from your colleagues. Threaded Discussion questions will form part of the final exam questions (See section under Threaded Discussions below for details).

#### 3. THEMES

The following themes will be emphasized in the course through the use of the cases and minicases.

Case/Assignment	Theme
Film Prioritization	Project selection & justification
Construction Company Case	Risk analysis/Contingency planning
DU Singer	Project Planning & Managing resource
	requirements

#### 4. THREADED DISCUSSIONS

Each student is required to participate in the threaded discussions. The goal of the threaded discussions is for us to learn from each other in an effective and efficient manner. Students are encouraged to participate in all the web discussions. We will use BlackBoard for all web discussions and postings. In addition to the required postings, participation in the web discussions will help you prepare for the final exam. Two levels of participation are required.

 There is a list of 19 "Threaded Discussion" questions listed at the end of this syllabus. Three (and sometimes more) of these discussion questions are listed for each week on Blackboard. Each student will be assigned one question per week (five in total for each student for the whole semester) and is required to post a response to the assigned questions. You will be assigned your questions by the instructor. All responses for that week must be posted by 10 p.m. the **Wednesday** of that week. Each posting should be a meaningful discussion of the original question and should be at least 2 paragraphs long. One sentence paragraphs do not count. You may draw on any references to provide justification for your posting. Each posting is worth 6 points. Grading will be based on depth of posting, ability to integrate concepts and the extent to which the posting goes beyond the obvious.

2. The second level of discussion is for you to provide additional comments on any discussion question (a question not previously assigned to you), or provide a counterargument to a previous posting or provide some personal experiences with regard to a given posting or topic. You will be expected to make five of such postings (one per week) to fulfill this part of the assignment. Each such posting is worth 5 points. For this part of the discussion you cannot contribute to a discussion if there are already <u>4</u> previous contributions to that particular discussion. We don't want to be reading the same things over and over. You cannot contribute to a posting from a previous week's discussions. In other words, we want the discussions to be current with the topics under discussion so everyone will follow along. This posting is due by 10 p.m. Saturday.

## TENTATIVE CLASS SCHEDULE

Sessio	n # Week of 5/16	Topics and Assignments
1A.	Introduction- Projects & Proje	ct Management
1 <b>B</b> .	Project Selection & Justification	on -
1C.	Project Scheduling	

#### Assignments

- i. Be prepared to share with the rest of the class any roles, and responsibilities you have had in your organization as a project leader, team member etc.
- ii. Read Text Chapter 1 pages 1-18, pages 27-38
- iii. You should also have visited Blackboard to preview all the course materials, the Discussion Questions and familiarized yourself with the materials on the Learning Area in Blackboard (sections A1-A3)
- iv. Read Units 1 and 2 in the Learning Area
- v. Install MS Project on your computer from the CD that was included with your textbook. You can obtain a free trial version online if you don't have the CD. Run the Project program browse through the Help section
- vi. <u>View the short Camtasia video on how to determine project schedules</u>
- vii. <u>View the short Camatasia video on preparing project schedules using MS</u> <u>Project.</u>

## **Study Guide**

Identify answers to the following questions in your readings.

## 1A. Introduction- Projects & Project Management

- i. What is a Project?
- ii. What makes projects different from day to day operations in organizations?
- iii. What is Project Management?
- iv. Why and when do organizations need to use Project Management?
- v. What is the project management life cycle and the major decisions over the life cycle?

## **1B. Project Selection & Justification**

- vi. What factors are important in selecting projects?
- vii. What are the different types of models for selecting projects, why are they useful and what are their limitations?
- viii. Identify and describe the components of the project portfolio process
- ix. What are the components of the project maturity model?
- x. What is a scope statement?
- xi. Why is project risk assessment in project management
- xii. What are the different approaches for assessing project risks?

#### Note:

Under normal class schedules we will follow the project management life cycle in discussing the topics for the class. However, because of the short nature of the course and the time needed to complete the assignments we have to deviate and mix up the topics. So, we are covering scheduling next so you will be able to do the assignments due in the next few days.

### 1C. Project Scheduling

#### Assignments

- i. Read Chapter 5 of textbook pages 145-154
- ii Read the material in Unit 6 (Scheduling) in the Learning Area

#### **Study Guide**

- i. What does Project Scheduling entail?
- ii. How can Network Techniques CPM and PERT be used to facilitate project scheduling?
- iii. What is a Critical Path and what role does it play?
- iv. What role do Gantt Charts play in project scheduling?

#### \*\*Film prioritization assignment due by the end of the week\*\*

Session #	Week of 5/23	<b>Topics and Assignments</b>

- 2A. Project Crashing
- 2B. Project Scheduling with Uncertainty.

#### 2C Project Resources

#### Assignments

- i. Review examples on project scheduling techniques provided to you in the Learning Area (Unit #6).
- ii. Review the document on using Microsoft Project to prepare project schedules
- iii. Read Chapter 5 pages 155-167; pages 173-188
- iv. Read Chapter 6 pages 190-202
- v. Read Chapter 6, pages 202-237
- vi. Read Unit 7 in the Learning Area

## **Study Guide**

- A. Critical Path Analysis Monitoring schedules
- i. Why is it necessary to sometimes crash projects
- ii. What are the steps involved in project crashing
- iii. Project crashing tradeoffs
- B. PERT Scheduling
- i. How can you enhance project completion information
- ii. How do you determine project completion probabilities
- iii. How can you use activity duration variances in project mgt?
- C. Managing Project Resources
- i. What is Resource Loading?
- ii. How do you manage variability in resource requirements and insufficient resources?
- iii. What is the "Critical Chain" and how does it aid project management?

## \*\*Construction Company assignment due by the end of the week\*\*

Sessio	n # Week of 5/30	<b>Topics and Assignments</b>
3A	Project Manager, Organization	, Project Team

3B Project Planning

#### Assignments

- i. Read Chapter 2, pages 40-71
- ii. Read Chapter 3 Project Planning, pages 72-106 of textbook
- iii. Read Unit 3 in the Learning Area
- iv. Read Unit 4 in the Learning Area

## **Study Guide**

A. Project Manager & Project Team

- i. What are the roles and responsibilities of the project manager?
- ii. What are the skills and characteristics required for a successful project manager?
- iii. What types of problems does a project manager typically face and how do these problems arise?
- iv. Design a matrix of problems/challenges and skill requirements
- v. Who should be on a project team
- vi. How do you manage team members who do not report to you?
- vii. How do you manage project team meetings?
- B. Project Planning
  - i. What is the purpose of project planning?
  - ii. What are the main project planning activities?
  - iii. What is a work breakdown structure, Can you develop one for a given project?
  - iv. What are linear responsibility charts?

## Session # Week of 6/6 Topics and Assignments

4A Project Budgeting

4B Project Monitoring & Control

## Assignments

- i. Read Chapter 4 Budgeting, pages 107-132; 137-144 of textbook.
- ii. Read Unit 5 in the Learning Area
- Read Chapter 7 of Textbook Project monitoring & control, pages 238-271
- iv. Read Unit 8 in the Learning Area

## **Study Guide**

- i. Different ways of developing budgets managerial issues
- ii. How do you link project schedules with budgets
- iii. Why should projects be monitored?
- iv. What should you look for when monitoring projects?
- v. Monitoring schedules do you need to crash project?
- vi. What is an earned value chart? How is it useful?
- vii. Be prepared to do simple calculations on Earned Value Management

## \*\*DU Singer Assignment Due by the end of the week\*\*

# Session # Week of 6/13 Topics and Assignments

## 5A Project Communications

- 5B Managing Conflicts in Project Environments
- 5C Project Termination

## Assignments

i. Read Chapter 8- Project termination, pages 272-2	290
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- ii. Read Unit 9 in the Learning Area
- iii. Read Unit 10 in the Learning Area
- iv. Read Unit 11 in the Learning Area

## **Study Guide**

- i. What should be the key goals and components of a communication plan for a project
- ii. What are the mechanisms for improving project communication?
- iii. What are the different types of conflict over the project life cycle?
- iv. For each stage what are the main types of conflicts and why do they occur?
- v. How can you resolve these conflicts?
- vi. What are the main reasons why projects are terminated?
- vii. How should you organize the project termination/closeout process
- viii. What types of lessons are worth learning at the conclusion of a project?

# Session # Week of 6/20 Topics and Assignments

6 No assignments due this week.

Review course material and prepare for final exam. Review final exam study guide

**Final Exam** - The Final exam will be a closed book, closed notes examination. The exam will consist of short problems, short essays, and mini-cases. The content will be based on material drawn from our class lectures and handouts, textbook readings and cases, and the threaded discussions.

## Final Exam scheduled for June 24, 2011.

## **Threaded Discussion Questions**

1. Why do you think so many projects are unsuccessful?

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- 2. What are the shortcomings of using financial measures to justify project selection and what suggestions can you offer to address these shortcomings?
- 3. Are project risks relatively uniform (do they change) over the project life cycle? What is the significance of this phenomenon to a project manager?
- 4. Are project task times typically under- or overestimated? Or, they are pretty accurate? How does an organization's culture influence task duration estimates?
- 5. What is safety time with regard to project scheduling? Is safety time necessary for projects? What types of safety times are most appropriate?
- 6. The three main project management goals are on time, within budget and achieving performance specifications. Should a project manager give up some functionality (e.g. technical requirements) in order to meet schedule milestones and when is this appropriate or inappropriate?
- 7. What do you think accounts for the need for project expediting (or crashing) in project environments. How can an organization minimize the need for project crashing?
- 8. Although some studies recommend that personnel be assigned full time to projects, very few companies assign employees full time to projects? Why do you think this occurs?
- 9. Why is that sometimes adding more human resources to a project that is already late causes that project to become even further delayed? So, when is it more appropriate to add more human resources to a project?
- 10. What skills are needed by a project manager in order to be successful? Can these skills be learned or do you think some are innate?
- 11. What tools or mechanisms can a project manager use to motivate people on a project who do not report directly to him or her?
- 12. Most managers agree that planning is critical to achieving project management goals, yet managers don't pay adequate attention to project planning. Why does this happen and what measures should project sponsors use to ensure that planning is prioritized?
- 13. Several projects typically exceed the budget. What accounts for this? Is it because of poor estimates, the justification process, poor project execution, economic influences, or other reasons?
- 14. What is scope creep? How does it occur and how can it be avoided?
- 15. A colleague argues that project meetings are a complete waste of time. Do you agree? If so why, if not why not? What should be the purpose of project meetings?
- 16. What are the merits and demerits of using various communication formats (e-mail, face-to-face meetings, intranets etc. in project communications)?.
- 17. Why do you think scheduling issues cause the most conflicts on projects? What techniques would you suggest for addressing scheduling issues?
- 18. Now that you have been exposed to some of the important aspects of managing projects, what do you think accounts for the differences in companies' abilities to manage projects?
- 19. Why do you think companies and organizations hang on to failing projects?