# 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
                            Tuesday, 6:00-9:30 p.m.
                            Classroom: Bryan 206

Course Name: Information Systems Project Management

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Office Hours: 4:30-5:30 p.m. Mondays and Tuesdays or by appointment

Required Materials: i. Project Management in Practice , 2nd Edition., Mantel, Meredith,
                            Shafer & Sutton, Wiley Publications. ISBN: 0-471-22965-2.
                            Cover of textbook looks like this:
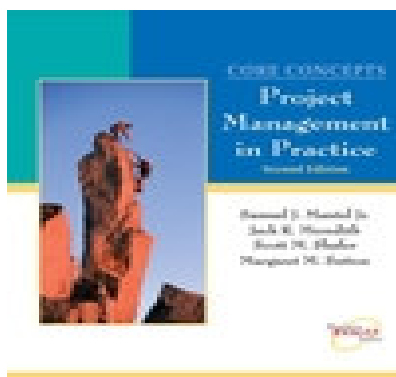
Optional Materials: None

Prerequisites: Admission to either MSITM, MBA or other approved graduate
                            program. Completion of MBA 607 preferred.

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 Manhattan Project
The Apollo space program
The construction of the new baseball stadium at Downtown Greensboro
ERP implementations
The Denver International Airport
The Atlanta Olympics
The Relocation of the old Chancellor's Residence 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

INSTRUCTIONAL METHODOLOGY:

The methods employed to achieve course objectives will include:
1. Class lectures highlighting critical course material
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

PERFORMANCE EVALUATION & GRADING:

1.   **Grades**- The course grade will be based on the following point distribution:

Construction Company Case	50
DU Singer analysis/Term Paper	100
Threaded Discussions and class participation	100
Final Exam	150
Total	400

Grade Assignment: A: 365-400, **A-:** 358-364; **B+**: 348-357; **B**: 328-347; **B-**: 316-327; **C**: 300-315

All submitted assignments must have your signature pledging that you have abided by the UNCG Honor code.

2.   **CLASS POLICIES**

1.   <u>Attendance</u> - You are responsible for all information and announcements that are made in class. Therefore you should attend class regularly. If you miss class contact someone or me as soon as possible for all relevant material.

2.   Reading Assignments for each class are given on the syllabus. You are expected to complete the readings before coming to class.

3.   Threaded Discussions: You will be expected to participate in threaded discussions through the web. Discussion questions based on material from each chapter will be assigned and you will be expected to respond to both the instructor's 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 mini-cases.

Case	**Theme**
Construction Company Case	Risk analysis/Contingency planning
DU Singer	Managing resource requirements

Mini-cases (part of threaded discussions)	**Theme**
The communication problem	Managing project communications
The Bad Apple	Managing teams on projects

TERM PAPER

Students who have experience with Microsoft Project will be offered the chance to a do term paper. They will be given a published paper and will be required to use the contents of the paper as the basis of assessing the "state of project management readiness" within their organizations.

Students choosing this option (not a group assignment) will be asked to write a short paper relating to project management within their organizations. The paper should deal with a specific aspect of project management within the organization such as the state of project management maturity within the organization; an assessment of the mix (portfolio) of projects being undertaken or recently undertaken within the organization; and project justification and selection procedures within the organization. Students will be provided with published materials for each topic that they can use as starting points for their papers.

 The paper would entail a brief review of the appropriate literature. The student will be expected to interview executives, project managers and other personnel within the organization. Any interviews or surveys should be well documented and referenced in the paper. Students should note that the focus of this paper is on assessment and that purely descriptive papers will result in low grades.

Feel free to discuss your term paper with me as it is being developed. The paper should be typed (maximum 12 point size lettering), and double-spaced on 8.5" by 11" paper. The paper should be between 12-14 pages in length. Do not add verbiage for the sake of length. Include diagrams, sketches, or other types of illustrations that will clarify your presentation. Citations should be appropriately referenced at the end of the paper, and pages, tables, and figures should be appropriately numbered. The term paper will be graded on organization, thoroughness, insightfulness of analysis/recommendations, and written communication skills. **A purely descriptive paper will earn a low grade. Papers should focus on analysis**. The term paper is to be submitted at the beginning of class on June 21, 2005. Late submissions will not be accepted. Each student/member of the group should attest to the statement that "I/WE HAVE ABIDED BY THE ACADEMIC HONOR POLICY ON THIS ASSIGNMENT" on a separate cover page of the term paper assignment.

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. Three levels of participation are required.

1. Three (and sometimes more) discussion questions are listed for each scheduled class meeting. Each student is required to post a response to one of the listed questions. You will be assigned your questions on the first class night. The response should be posted, at the latest time, twenty-four hours before the next scheduled class meeting (except the ones assigned for the first class meeting). Since there are five scheduled meetings (the sixth meeting is the final exam) you will be expected to make FIVE such postings to fulfill this part of the assignment. 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 10 points. **See list of threaded discussion questions at the end of the syllabus.**

2. Each student will be assigned an article to read on a given topic. The articles are listed as suggested readings below. Each student is supposed to provide a two-page summary of the article. The summary should be posted on Blackboard. All summaries are to be completed before the second class meeting. In your posting, provide a summary of the main highlights of the article for about 1½ pages. In the last ½ page, discuss the important lessons, why you think some of the ideas in the article are applicable (or realistic), not applicable to either project management in general or to your organization. This assignment is worth 30 points.

3. The third level of discussion is for you to additional comments on any discussion question (not previously assigned to you), or provide a counter argument 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 to fulfill this part of the assignment. Each posting is worth 6 points. **For this part of the discussion you cannot contribute to a discussion if there are already 5 previous contributions to that particular discussion**. You are encouraged to spread your discussions throughout the semester.

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.

TENTATIVE CLASS SCHEDULE:

Session #	Date		Topics and Assignments
1	5/17	A.	Introduction -

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 Chapters 1 pages 1-18, pages 26-32
iii.   You should also have visited BlackBoard to preview all the course
materials, the Discussion Questions and printed copies of notes as
appropriate.

Study Guide: Identify answers to the following questions in your readings.

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 a project life cycle?
vi.   What are the major decisions over the project life cycle?
vii.   What factors are important in selecting projects?
viii.   What are the different types of models for selecting projects, why are they

useful and what are their limitations?
ix.   identify and describe the components of the project portfolio process
x.   What are the components of the project maturity model?
xi.   What is a scope statement?
xii.   Why is project risk assessment in project management
xiii.   What are the different approaches for assessing project risks?

B.   *Project Scheduling*
Reading Assignments: i.   Read Chapter 5 of textbook pages 134-143

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?

B.   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

Review readings # 1 through 4 on the "list of readings"

Session #	Date		Topics and Assignments
2	5/24	A.	*Project Scheduling with Uncertainty .*
		B.	*Project Crashing*
		C.	*Introduction to Microsoft Project (Class meets in the lab)*

i.   Read Chapter 5 pages 144-156; pages 162-173
ii.   Read Chapter 6 pages 180-192

A. 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?

Class meets in the LAB – Room 221 for the second half of the session. Please bring a diskette or a flash drive to class as well as the class notes from the previous session.

**Review readings # 5, 6, 7, 8

Session #   Date   Topics and Assignments

3   5/31   *Project Resources, Critical Chain, Project Manager, Organization,*
                       Project Team & Microsoft Project

Reading Assignments: i.   Chapter 6, pages 192-223
                     ii.   Chapter 2, pages 38-65

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?

C. Project Manager & Project Team
    iii.   What are the roles and responsibilities of the project manager?
    iv.   What are the skills and characteristics required for a successful project manager?
    iv.   What types of problems does a project manager typically face and how do these
            problems arise?
    v.   Design a matrix of problems/challenges and skill requirements
    vi.   Who should be on a project team
    vii.   How do you manage team members who do not report to you?
    viii.   How do you manage project team meetings?

 D.   *Microsoft Project for Windows* - Class meets in the LAB - Room 221 for the
            second half of the session. Please bring a diskette or flash drive to the LAB.

    Review readings #9, 10, 11, 12.

Session #   Date   Topics and Assignments
       4   6/7   Project Planning and Budgeting
Assignments:
       A.   Read Chapter 3 – Project Planning, pages 67-97 of textbook
                    Read Chapter 4 Budgeting, pages 98-123 of textbook.

       Study Guide:
       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?
       v.   Different ways of developing budgets - managerial issues
       vi.   How do you link project schedules with budgets

Review readings # 13-15

Session #	Date	Topics and Assignments
5	6/14	Project Monitoring & Control, Communications; Conflict Management, & Project Termination

Read Chapter 7 – Project monitoring & control, pages 228-255
Read Chapter 8- Project termination, pages 262-275

Study Guide

    i.   Why should projects be monitored?
    ii.   What should you look for when monitoring projects?
    iii.   Monitoring schedules - do you need to crash project?
    iv.   What is an earned value chart? How is it useful?
    v.   What should be the key goals and components of a communication plan for a project
    vi.   What are the different types of conflict over the project life cycle?
    vii. For each stage what are the main types of conflicts and why do they occur?
    viii. How can you resolve these conflicts?
    ix.   What are the main reasons why projects are terminated?
    x.   How should you organize the project termination process
    xi.   What types of lessons are worth learning at the conclusion of a project?

Review readings # 16-20

DU Singer Assignment Due
** Term Paper Due**

Session #	Date	Topics and Assignments
6	6/21	Final Exam

Final Exam - The Final exam will be a closed book in-class 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.

Threaded Discussion Questions

1. How is project management different from everyday management?
2. Why do you think so many projects are unsuccessful?
3. What do you think accounts for the differences in companies' abilities to manage projects?
4. What are the shortcomings of using financial measures to justify project selection and what suggestions can you offer to address these shortcomings?

5. Suppose you think your company should expedite the implementation of a project but management prefers a slow, phased approach. What arguments will you use to win management to your side?

6. What is safety time with regard to project scheduling? Is safety time necessary for projects? What types of safety times are most appropriate?

7. What are the different ways that a manager can use slack or float times on a project?

8. 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?

9. What tools or mechanisms can a project manager use to motivate people on a project who do not report directly to him or her?

10. Some have argued that to be successful, a project should have the "right team members". What criteria would you use to judge if a person is a "right team member"?

11. Take a look at the "The Bad Apple" vignette and post your response to the web.

12. Although many 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?

13. 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?

14. 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?

15. What is scope creep? How does it occur and how can it be avoided?

16. Most managers agree that project planning is very critical to the achievement of project management goals and yet managers do not adequately pay much attention to project planning. Why do you think this happens and what measures should project sponsors put in place to ensure that project planning is given the attention it deserves.

17. 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?

18. What are the merits and demerits of using various communication formats (e-mail, face-to-face meetings, intranets etc. in project communications)?

19. Choose any one of the vignettes listed under "The Communication Problem" and respond to the vignette.

20. Why do you think scheduling issues cause the most conflicts on projects? What techniques would you suggest for addressing scheduling issues?

ISM/MBA 654 Project Management -Summer 2005
List of Readings (All the articles are available on BlackBoard)

1. "CHAOS- A recipe for success" by the Standish Group. Article is at
   http://www.standishgroup.com/newsbytes/recipeannounce_pub.php

2. "The real success factors on projects" by Terry Cooke-Davies, International Journal of
   Project Management, vol. 20, #3, pp 185-190.

3. Critical failure factors in information system projects", by K. T. Yeo. International Journal of
   Projects Management, vol. 20, 2002, pp 241-246..

4. "Current practice in project management- an empirical study" by D. White & J. Fortune.
   International Journal of Project Management vol. 20, 2002, pp 1-11.

5. "A model for investment justification in information technology projects", by A.
   Gunasekaran, P. D. Love, F. Rahimi & R. Miele. International Journal of Information
   Management, vol. 21, 2001, pp. 349-364.

6. "Calculating Project Management's Return on Investment" by Ibbs, C. W. & Kwak, Y. H.
   Project Management Journal (www.ce.berkeley.edu/pmroi/calculating-PMROI.pdf) June
   2000.

7. "Software project risks and development focus", J. J. Jiang & G. Klein. Project Management
   Journal, 32(1), 4-9, 2001.

8. "Ten UnMyths of Project Estimation" by Phillip Armour, Communications of the ACM,
   45(11), 2002.

9. "Important Behavioral Skills for IS Project Managers: The Judgments of Experienced IS
   Professionals", Jiang, James J., Klein, Gary, Margulis, Steve, Project Management Journal,
   March 1998.

10. "Influence methods of project managers: perceptions of team members and project managers"
    by D. Sotiriou & D. Wittmer. Project Management Journal, vol. 32, #3, pp. 12-20, 2001.

11. "Trust building on corporate collaborative project teams", by V. L. Herzog, Project
    Management Journal, 32(1), 28-37.

12. "The Project Manager and the project-network" by Sarah Blackburn, International Journal of
    Project Management, vol. 20, 2002, pp. 199-204.

13. "A taxonomy of Internet Applications for Project Management Communication" by Steve Griffin, Project Management Journal, vol. 33, #4, December 2002. .

14. "Project Communication Management: Five Steps" by Michael S. Terrell, PMP PM Network, October 1999, pp 71-77

15. "Software project management audits- update and experience report" by James McDonald, The Journal of Systems and Software, vol. 64, 2002, pp. 247-255.

16. "Why bad projects are so hard to kill" by Isabelle Royer, Harvard Business Review, February 2003.

17. "Anatomy of a Failure" by Lauren Gibbons, CIO Enterprise Magazine, November 15, 1997.

18. "Harvesting project knowledge: a review of project learning methods and success factors" by M. Schindler & M. J. Eppler. International Journal of Project Management, vol. 21, 2003, pp. 219-228

19. An assessment of post project reviews" by J. S. Busby, Project Management Journal, vol. 30, #3, pp. 23-29.

20. "Quadrant Homes Applies Lean Concepts in a Project Environment" by Brown, Schmitt, Schonberger & Davis, Interfaces, 34(6), 2004, 442-450.