



ISOM 365 Business Project Management Fall 2009

Department of Information Systems, Business Statistics, and
Operations Management

COURSE: ISOM 365 Business Project Management (3-0-0:3)
This course covers basic principles and practices of project management. Special emphases are on project planning, scheduling, and control while addressing both the technical and the social aspects of managing business projects.

Fall 2009

Time: 1:30–2:50 p.m. Monday and 9:00–10:20 a.m. Friday

Venue: 4116 (Microsoft .NET Lab)

Course web: <http://teaching.ust.hk/~isom365>

INSTRUCTOR: Dr. Ronald S. Lau (rlau@ust.hk)
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Phone: 2358-8348
Office hours: 10:30 – 12:00 a.m. MWF or by appointment

TEACHING ASSISTANT: Edmond Ho (imhcf@ust.hk)
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TEXTBOOK: *Project Management: The Managerial Process* by Gray and Larson (McGraw-Hill, 2008)

GRADING POLICY: Final course grade will be determined by the following criteria and distribution. University's guidelines on grade distribution will be observed if the class performance is significantly deviated from the University's recommended grade distribution.

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|------------------------------------|------------|
| Class attendance and participation | 10% |
| Group project and presentation | 20% |
| MS Project lab assignments | 20% |
| Comprehensive final exam | <u>50%</u> |
| Total | 100% |

Class attendance is expected. Each absence (for whatever reasons) beyond two allowable absences will result in a one-point reduction from your total course score unless you have a valid, compelling reason.

LEARNING GOALS:
(with matching PILO)

1. Master key concepts, techniques, and decision tools used by project managers and team members (PILO-1,4,7).
2. Identify critical behaviors for successfully managing projects, and to prepare you to effectively participate as a project team member (PILO-3,5,6).
3. Use MS Project software for managing projects (PILO-7).
4. Become an effective team leader and member by participating in group assignments and presentations (PILO-2,5).

COURSE INTENDED LEARNING OUTCOMES

By completing this course, you should be able to:

1. Define a project and differentiate projects from routine operations.
2. Understand the technical and people issues of managing a project.
3. Develop a career based on the skills and knowledge of project management.
4. Recognize the importance of aligning the strategic direction of an organization with project selection and the measurement of their effectiveness.
5. Apply an objective priority methodology to project selection.
6. Demonstrate knowledge of the important processes which should be managed throughout the project life cycle.
7. Create a work breakdown structure (WBS) and establish accountability for people or organizational units.
8. Understand different estimation approaches and techniques for time, cost, and resources.
9. Determine a project schedule using CPM and PERT by identifying the critical paths and related control measures.
10. Describe approaches for project risk identification, analysis, and assessment.
11. Identify the resources required for a project and to produce a work plan and resource schedule.
12. Contrast the difference in managing time and resource constrained projects.
13. Explain alternative methods for crashing activities to reduce a project's duration.
14. Calculate and interpret the earned value and different project performance indexes.
15. Describe different best practices for project audit and closure.
16. Identify some of the qualities of an effective project manager.
17. Understand the strengths and weaknesses of different project management structures.
18. Develop leadership ability for managing a high performance project team.
19. Foster the necessary skills to handle issues and conflicts among project team members and stakeholders.
20. Use Microsoft Project as tool in planning and managing different stages of a project.
21. Understand the challenges and approaches for managing multiple projects.
22. Collaborate with other group members in developing ideas and completing the group project.
23. Write a professional report and make a presentation on your project.
24. Use online learning materials to continue practicing the skills in using Microsoft Project.

ISOM 365 Course Outline (Fall 2009)

| Week | Reading | Topics |
|---|--|--|
| Week 1 September 4 | Chapter 1 | Introduction <ul style="list-style-type: none"> ■ Concepts of project management ■ Small and simple projects (vs. large projects) |
| Week 2 September 7 & 11 | Chapter 16 (pp. 535-537) Chapter 2 | Becoming a Project Management Professional <ul style="list-style-type: none"> ■ Career issues and paths ■ Project management process: PMI framework Project Selection and Portfolio Management <ul style="list-style-type: none"> ■ Project portfolio management ■ Project selection methodology |
| Week 3 September 14 & 18 | MS Project notes Chapter 4 | Project Management in a Nutshell <ul style="list-style-type: none"> ■ Overview of project life cycle ■ Learning the basics of MS Project Defining the Project <ul style="list-style-type: none"> ■ Project scope, priority and work ■ Work breakdown structure and responsibility matrix |
| Week 4 September 21 & 25 | Chapter 5 Chapter 6 | Estimating Project Times and Costs <ul style="list-style-type: none"> ■ Guidelines and best practices for estimating ■ Top down vs. bottom up estimations Developing a Project Plan <ul style="list-style-type: none"> ■ Project network diagrams ■ Project scheduling tools: CPM and Gantt chart ■ Extended techniques and consideration |
| Week 5 September 28 & October 2 | | Developing a Project Plan (Continued) MS Project Lab #1 |
| Week 6 October 5 & 9 | Chapter 7 Chapter 8 | Managing Risk <ul style="list-style-type: none"> ■ Risk management process ■ Managing time uncertainty with PERT Analyzing Resources <ul style="list-style-type: none"> ■ Time-constrained vs. resource-constrained projects ■ Using the resource schedule to develop a project cost baseline |

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|---|------------------------------|---|
| Week 7 October 12 & 16 | | Analyzing Resources (Continued) MS Project Lab #2 |
| Week 8 October 19 & 23 | Chapter 9 | Optimizing Tradeoffs <ul style="list-style-type: none"> ■ Options for accelerating project completion ■ Time cost tradeoff problem |
| Week 9 October 30 | | MS Project Lab #3 |
| Week 10 November 2 & 6 | Chapter 13 Chapter 14 | Tracking and Evaluating Project Performance <ul style="list-style-type: none"> ■ Using the earned value concepts for project control ■ Performance indexes and forecasting tools Project Audit and Closure <ul style="list-style-type: none"> ■ Best practices for project audit and closure |
| Week 11 November 9 & 13 | Chapter 3 | MS Project Lab #4 Organizational and People Issues <ul style="list-style-type: none"> ■ Project managers and organizational issues ■ Managing a project team |
| Week 12 November 16 & 20 | Chapters 10 and 11 | Organizational and People Issues (Continued) <ul style="list-style-type: none"> ■ Leadership and conflict management exercises |
| Week 13 November 23 & 27 | Chapter 8 (pp. 252-254) | Managing Multiple Projects <ul style="list-style-type: none"> ■ Developing multi-project resource schedules MS Project Lab #5 |
| Week 14 November 30 & December 4 | | Student Project Presentation |
| Week 15 December 7 | | Student Project Presentation / Review |

GROUP PROJECT

You need to complete one of the following three project choices and make a presentation in class:

- Choice 1: The Blue Zuma Project case (pp. 553-557)
- Choice 2: The Conveyor Belt Project case (pp. 558-564)
- Choice 3: Your own project idea

For those groups working on the computer project case (Choice 1 or 2), you are required to document your answers using Microsoft Project and present them in class. You do not need to answer all the questions as stated in the case but keep in mind that the more you address those challenging questions, the higher the score you will receive.

For those groups working on your own project idea (Choice 3), you will need to obtain the instructor's approval before initiating the project. Given the level of effort required, those groups working on their own project idea (with quality work) will normally receive a higher score for the group project. Your presentation should focus on the aspects of organizing the project and demonstrate in class the essential outcomes or products of your project.

Intra-group evaluation

The normal group size should be 3 to 5 students. To ensure all group members contribute evenly to the completion of the group project, an intra-group evaluation will be carried out on the request of the group majority. See the following sample.

| Name of Evaluator: _____ | | | | | |
|--|--|---------------------------------------|---|----------------------------------|---|
| <i>Instructions:</i> Write the names of each member in your group, including yourself (for reference only), in the boxes in the first column. Using the key that follows, circle the number that represents your opinion on your and other group member's performance on each item. | | | | | |
| Scale: 3=Outstanding 2=More than satisfactory 1=Satisfactory 0=Less than satisfactory | | | | | |
| Group Members (Listed by name) | Worked cooperatively to complete assignments | Attended and participated in meetings | Supported and respected other members' efforts and opinions | Prepared adequately for meetings | Made substantial contributions to group's understandings - shared ideas, resources, information |
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| Additional Comments: | | | | | |