ISOM 4750 Business Project Management
Fall 2024

Department of Information Systems, Business Statistics, and Operations Management

COURSE:

ISOM 4750 Business Project Management
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, behavioral aspects of managing business projects.

Meeting time and venue:
(M) 1:30-2:50 pm, LSK-1034 (Classroom)
(F) 9:00-10:20 am, LSK-G005 (Computer lab)

INSTRUCTOR:

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TEACHING ASSISTANT:

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TEXTBOOK:

Project Management: The Managerial Process, 9th edition, by Gray and Larson, McGraw-Hill, 2024 (purchase of e-book license).

GRADING POLICY:

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

Self-test reading assignments	20
Case analyses (2)	10
Lab assignments	20
Final exam	50
Total	100

Each self-test reading assignment needs to be completed via the publisher's textbook web site by the date as indicated in the assignments. You can top up your quiz score (maximum 5 points) with participation, which is determined primarily by your contribution to class discussions and the active use of Discussions in Canvas. The top up points will be awarded at the end of the term according to the relevance, quality, and pattern of your contributions.

ACADEMIC INTEGRITY:

Students at HKUST are expected to observe the Academic Honor Code at all times (https://acadreg.ust.hk/generalreg.html for more information). Zero tolerance is shown to those who are caught cheating on any form of assessment and a zero mark will be given. In particular, any act of cheating on exam will automatically result in an F grade for this course. All written assignments will be screened by Turnitin for plagiarism and points will be deducted when the similarity index is considered high (e.g., more than 25%).

COURSE OUTLINE

Week	Monday (Classroom)	Friday (Computer Lab)
1	**Introduction** ■ Read chapter 1 ■ Basic concepts of project management ■ Examples of major projects ■ Career issues and PMI	**Project selection & portfolio management** ■ Read chapter 2 ■ Project portfolio management ■ Project selection methodology
2	**Defining the project** ■ Read chapter 4 ■ Project scope, priority, work package, and team ■ WBS and OBS	**Learning the basics of MS Project** ■ Read MS Project notes ■ Getting started with MS Project
3	**Estimating project times and costs** ■ Read chapter 5 ■ Time and cost concepts ■ Top down vs. bottom up estimations, and learning curve effect ■ WBS coding	**Developing a project schedule** ■ Read chapter 6 ■ Project network diagrams ■ Project scheduling tools: CPM and Gantt chart ■ Extended techniques and consideration
4	**Developing a project schedule (continued)** ■ Task relationship	**MS Project lab #1** ■ Creating and defining projects
5	**Managing project risk** ■ Read chapter 7 ■ Risk management process ■ Computing the likelihood of completing a project on time	**MS Project lab #2** ■ Working with estimates and dependencies ■ Working with deadlines, constraints, task calendars, and resources
6	**Managing project risk** ■ Advanced examples ■ PERT	**Public holiday (no class)**
7	**Scheduling resources and costs** ■ Read chapter 8 ■ Time-constrained vs. resource-constrained projects ■ Using the resource schedule to develop a project cost baseline ■ Resource loading	**MS Project lab #3** ■ Working with resources ■ Customizing and formatting

8	**Critical chain method** ■ Read appendix 8.1	**Reducing project duration** ■ Read chapter 9 ■ Options for accelerating project completion ■ Time cost tradeoff problem ■ Crashing vs. leveling
9	**Progress and performance measurement and evaluation** ■ Read chapter 13 ■ Using the earned value concepts for project control ■ Performance indexes and forecasting tools	**MS Project lab #4** ■ Analyzing resource utilization ■ Tracking progress
10	**Organizational issues** ■ Read chapter 3 ■ Organization: Structure and culture	**Project leadership** ■ Read chapter 10 ■ Being an effective project manager ■ Assessing leadership effectiveness
11	**Case discussion** ■ Esquel Group *(case analysis due before class)*	**MS Project lab #5** ■ Predicting behavior by using task types and scheduling formulas
12	**People issues** ■ Read chapter 11 ■ Managing project teams ■ Conflict resolution	**MS Project lab #6** ■ Managing multiple projects
13	**Case discussion** ■ KooDesign *(case analysis due before class)*	**Project closure** ■ Read chapter 14

WRITTEN ASSIGNMENTS

General information:

While here is no page limit for the case analysis, it should be about two pages long, single spaced between lines but double spaced between paragraphs. *Please note that all written assignments will be checked by Turnitin for plagiarism. Penalty will be imposed for any submission with a high similarity score.* To avoid receiving a high similarity score, please do not copy and paste the case assignment questions or extensive use of exact wordings in the case.

For facilitating your case analysis, a list of suggested questions are given (below) but you don't need to follow them exactly. You can organize your answer any way you think best. Make sure your analysis is concise (use of bullet points for the answers is allowed) and avoids repeating information that already given in the case. A submission link is provided in Canvas for you to upload the analysis. Late assignment will not be accepted unless it is accompanied by a valid (e.g., medical) excuse.

Case assignment 1. Esquel Group: Fostering a culture of excellence
Due before class

(a) What made it so challenging for Esquel to plan and execute the Integral project?

(b) What were the significant risks that Esquel encountered when the Integral project needed to depend so much on external vendors?

(c) What Teresa could do differently in project control to complete the remaining construction and development activities?

Case assignment 2: KooDesign: Fast tracking a product design project
Due before class

(a) How did the client and KOODESIGN perceive the priority of performance, time, and cost in this project?

(b) How to compress the project duration to meet the client's expected market launch date?

(c) What are the disadvantages or limitations of fast tracking?

(d) How to deal with the resource overallocation issues once the project duration is compressed?

(e) How to use Microsoft Project to level the resource utilization on the existing project schedule?

Grading Criteria and Rubrics for Case Analysis

Evaluation summary (max 20 points for each criterion for a total of 100 points). *For reference only, as not all case questions will require all evaluation criteria below.*

Scoring rubrics	Well exceed expectation (19 – 20)	Exceed expectation (17 – 18)	Meet expectation (15 – 16)	Below expectation (0 – 14)
Identification of the main issues and/or problems	Identify and understand completely the main issues and problems	Identify and understand most of the main issues and problems	Identify and understand some of the main issues and problems	Identify and understand only few of the main issues and problems
Analysis of the issues	Insightful and thorough analysis of all the issues	Thorough analysis of most of the issues	Superficial analysis of some of the issues	Incomplete analysis of the issues
Comments on effective solutions or business practices	Well documented, identified, reasoned and appropriate comments/proposal on solutions to all issues	Appropriate, well thought out comments on solutions/proposal for solutions to most issues	Superficial and/or inappropriate solutions to some of the issues	Little or no action suggested, and/or inappropriate solutions to the issues
Make use of other relevant course learning materials	Apply extensively concepts learned in class or from other relevant learning materials	Apply some concepts learned in class or from other relevant learning materials	Apply a very limited amount of concepts learned in class or from other relevant learning materials	No application at all of any concepts learned in class or from other relevant learning materials
Use of language	Free of any grammatical or spelling error; good choice of words	A few grammatical or spelling errors; should have better choice of words	Some grammatical or spelling errors	Many grammatical or spelling errors

Total: Use the following ranges to reflect the overall performance. 95-100 (exceptional report writing and extremely effective); 90-94 (very good report writing and very effective); 80-89 (good and effective); 70-79 (acceptable and somewhat effective); below 70 (weak and not effective).