SCUPI
Sichuan University - Pittsburgh Institute

IE 1035 – Engineering Management

Fall 2020

Course Syllabus

(Subject to be changed)

Instructor

Dr. Steve H. Wang (Email: steve.wang@scupi.cn, Tel:13241870375)
Office: Zone 4, TBA
Office Hours: Monday, Wednesday 13:50 to 16:25; Thursday 08:15 to 11:00

Teaching Assistant

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Office: TBA or WeChat
Office Hours: TBA or WeChat

Lecture

Thursdays, 13:50 to 16:25, 三教 101

Course Description

This course focuses on management theory which may be applied to engineering and technical organizations. Specific topics include: the management process and management functions (planning, organizing, leading, and controlling); project management; managing technical people; engineering ethics, globalization, and/or other contemporary management concepts. In addition to basic lecture of textbook materials, these concepts are strengthened through classroom exercises and discussions of case studies and current events as well as a required book report and group project. Participation in classroom discussions is required. Three credit hours.

Course Prerequisites

IE junior status or instructor's permission.

Course Objectives

1. Learn to work and manage in an engineering environment, i.e., at the intersection of the engineering and management disciplines.
2. Understand and be able to apply the management functions of planning, organizing, leading, and controlling.
3. Learn how to manage the three dependent elements of any project: cost, schedule, and technical performance.
4. Develop an appreciation of the importance of life-long learning.

Applicable ABET Outcomes

1. An ability to function on multi-disciplinary teams
2. An understanding of professional and ethical responsibility

3. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
4. A recognition of the need for, and an ability to engage in life-long learning
5. A knowledge of contemporary issues

Textbook

Morse, L.C. and Babcock, D.L. (6th Edition, 2014), *Managing Engineering and Technology*, Pearson Higher Education, Inc., New York.

Grading

Participation in Classroom Discussions/Exercises:	10%
Assignments:	20%
Book report:	10%
Group Project:	20%
Examination # 1:	10%
Examination # 2:	10%
Final Examination:	20%

Exams

There will three exams, all are CLOSED BOOK, CLOSED COMPUTER. If you must miss an exam, you should make alternative arrangements with the instructor before the exam is given. If you miss an exam without prior notification, you will receive a score of "zero" for that exam except under extenuating circumstances.

Assignments

Six to eight regular assignments will be given and will be collected at the beginning of class on the due date. Late assignments will not be accepted without prior approval. For problems, show all work for each problem. For case studies or essay style assignments, your responses must be typed and presented in a professional, readable format in an 11 or 12 pt. font (handwritten responses to essay questions will not be accepted). Failure to complete the assignments can have an adverse effect on your final course grade while completing all assignments can improve your final course grade.

Group Project

Group project will be described in separate handouts as they are assigned.

Participation

Regular attendance as well as active classroom participation is expected. Any required student absences should be reported to the instructor in advance via email or if not possible in advance, shortly thereafter. Maximum ten points will give to the students who attended all of the classes and accumulated the highest points of the answer questions during the class. The rest of students will gain the points by the ratio of their points and the highest points times ten.

Avoiding Plagiarism

1. Unacknowledged direct copying from the work of another person, or the close paraphrasing of somebody else's work, is called plagiarism and is a serious offence, equated with cheating

in examinations. This applies to copying both from other students' work and from published sources such as books, reports or journal articles.

2. Paraphrasing, when the original statement is still identifiable and has no acknowledgement, is plagiarism. A close paraphrase of another person's work must have an acknowledgement to the source. It is not acceptable for you to put together unacknowledged passages from the same or from different sources linking these together with a few words or sentences of your own and changing a few words from the original text: this is regarded as over-dependence on other sources, which is a form of plagiarism.

Tentative Course Schedule

Week	Date	Topics	Chapter
1	9/10	Introduction and Syllabus	1
2	9/17	The History of Engineering Management	2
3	9/24	Leading Technical People	3
4	10/1	***National Week Holiday***	
5	10/8	***National Week Holiday***	
6	10/15	Planning and Forecasting	4
7	10/22	Exam 1 (Chapters 1 – 4)	
8	10/29	Decision Making	5
9	11/5	Organizing	6
10	11/12	Some Human Aspects of Organizing	7
11	11/19	Controlling	8
12	11/26	***Exam 2 (Chapters 5 – 8)***	
13	12/3	Managing Research and Development	9
14	12/10	Managing Engineering Design	10
15	12/17	Planning Production Activity	11
16	12/24	***Group Presentation***	
17	12/31	***Final Exam***	