

MSE402 – Engineering Project Management (3 units)
CSUN - Spring 2017 // Ticket 15612, Monday 7:00 p.m. – 9:45 p.m., Room: JD-3520

Instructor Ghassan “Gus” H. Elias: BS/MS; Industrial/Manufacturing Systems Engineering.
- Expertise: Engineering Consulting, Decision-Making/Risk Analysis and Facility Planning. Industrial Safety & Material Control - global certification programs for commissioning electronic & pneumatic devices in General (Non-Hazardous) Locations, Hazardous ‘Classified’ Areas & Potentially Explosive Atmospheres.
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- Faculty Office: JD-3308; Office Hours: Monday 6:00-7:00 p.m. (& by Appt.)
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Course Description The engineering project management process, from the feasibility stage through project close out. Topics include project initiation, project screening and selection, organizational and project structure, time and cost estimation, budgeting, developing work plans, scheduling resources, managing risk, tracking work, managing teams, partnership projects, and close out. Students learn to use appropriate software to assist with the project management process.

Prerequisite MSE362 (3 units) and/or the instructor’s consent.

Textbooks 1) **Required** - Project Management - The Managerial Process / 6th Edition
Clifford Gray & Erik Larson / ISBN: 978-0-07-809659-4
McGraw-Hill ID: 0-07-340334-2
2) **Recommended** - Microsoft Project 2007: Step by Step (w/CD)
Microsoft Press ID: 0-73-562305-8 / ISBN: 978-073-5623057
Carl Chatfield & Timothy Johnson

Lecture Slides The PowerPoint presentations for each chapter are available at:
<http://www.csun.edu/~ghe59995/MSE402/>

So that you take “helpful” notes during the class lectures, please print the assigned modules and have the slides handy during the weekly lecture sessions.

Learning Objectives This course is designed to contribute primarily to the students’:
- Knowledge of project management functions, project initiation, and project organizational environment
- Knowledge of, and ability to apply, techniques and principles required to use cost estimating methods & to reduce project duration
- Ability to learn independently and as a member of a collaborative team.
- Knowledge of contemporary issues & ability to communicate effectively.

IMPORTANT NOTICE: The last day to drop classes is 10-Feb-2017. Students must initiate this process; not faculty. Failure to formally drop a course will result in a “WU” grade which is equivalent to an “F” grade; thus detrimentally affecting your cumulative GPA.

STANDARD OPERATING PROCEDURES

1. Class members are expected to maintain personal and professional standards consistent with the Code of Ethics of the National Society of Professional Engineers, the Preamble and Fundamental Canons of which are as follows:

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct. Engineers, in the fulfillment of their professional duties, shall:

- *Hold paramount the safety, health and welfare of the public.*
- *Perform services only in areas of their competence.*
- *Issue public statements only in an objective and truthful manner.*
- *Act for each employer or client as faithful agents or trustees.*
- *Avoid deceptive acts.*
- *Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.*

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

- *using their knowledge and skill for the enhancement of human welfare;*
- *being honest and impartial, and serving with fidelity the public, their employers and clients;*
- *striving to increase the competence and prestige of the engineering profession; and*
- *supporting the professional technical societies of their disciplines.*

2. Students must take ORIGINAL NOTES and submit ONLY ORIGINAL WORK. Notes taken by other students in previous semesters are NOT allowed in the class.

3. Class members are expected to attend ALL class sessions, promptly & entirely and are responsible for the course material, reading assignments, class presentations, discussions, and practice problems. Tardy/Late submissions of assignments are unacceptable. NO EXCEPTIONS!

4. Class members must always be considerate and respectful to their colleagues.

5. Pagers, Cellular Phones, Alarms, etc., MUST BE TURNED OFF during class sessions throughout the semester. IMPORTANT NOTICE: The use of PC Laptops, cameras, video recorders, internet-ready devices, mobile phones, AND the exchange of textbooks or notes during the exams/quizzes is strictly prohibited. Violation of this policy will result in the student's dismissal from the class and issuance of an "F" grade. NO EXCEPTIONS!

6. Activate and use your CSUN email address for ALL academic correspondences. Do NOT use your personal email address to communicate with the instructor. Messages from non-CSUN email addresses will NOT be acknowledged. Instructor will only utilize SOLAR's email database to communicate with class members.

COURSE PROPOSED PLAN

Tentative schedule: dates/assignments/topics covered may change if deemed necessary.

<u>Week</u>	<u>Date</u>	<u>Topic Area</u>	<u>Format & Assignments</u>
01	01/23	Course Introduction Welcome session – getting acquainted with the course & instructor Presentation: - Introduction to Project & Self Management. - The Art of Communication - Review Of Grammar - Chapter 1. Modern Project Management <u>Reading Assignment:</u> Chapter 2 – Organizational Strategy & Project Selection	
02	01/30	Project Overview & Setup ... Formation of work-teams (Term Project), 4-6 students per group Presentation: Chapter 2 – Organizational Strategy & Project Selection <u>Reading Assignment:</u> Chapter 3 – Organizational Structure & Culture	
03	02/06	Presentation: Chapter 3 – Organizational Structure & Culture <u>Reading Assignment:</u> Chapter 4 – Defining The Project Selection of PM topics for the group term project	
04	02/13	Presentation: Chapter 4 – Defining The Project <u>Reading Assignment:</u> Chapter 5 – Estimating Project Times & Costs Status Report #1: Team proposals for the Final/term project - What does your project entail? - Identify the assigned tasks: who is doing what?	
05	02/20	Presentation: Chapter 5 – Estimating Project Times & Costs <u>Reading Assignment:</u> Chapter 6 – Developing a Project Plan	
06	02/27	Presentation: Chapter 6 – Developing a Project Plan <u>Reading Assignment:</u> Chapter 7 – Managing Risk	
07	03/06	Presentation: Chapter 7 – Managing Risk <u>Reading Assignment:</u> Chapter 8 (Scheduling Resources) & 9 (Reducing Project Duration)	
08	03/13	Midterm Exam (35%) Chapters 1-7 Open Book & Notes	
09	03/20	SPRING BREAK☺ ☺ ☺ ☺ ☺ ☺..... No Class Instruction!	
10	03/27	Midterm Graded & Returned OPEN LECTURE & MATERIAL REVIEW Presentation: Chapter 8 (Scheduling Resources) & 9 (Reducing Project Duration) <u>Reading Assignment:</u> Ch. 10 – Leadership & Project Managers Ch. 11 – Managing Project Teams	
11	04/03	Presentation: Ch. 10 – Leadership & Project Managers	
12	04/10	Presentation: Ch. 11 – Managing Project Teams <u>Reading Assignment:</u> Chapter 13 – Progress & Performance Measurement & Evaluation . Status Report #2: a revised milestone chart / progress report	
13	04/17	Presentation: Chapter 13 – Progress & Performance Measurement & Evaluation Chapter 14 – Project Audit & Closure	
14	04/24	Selected Team presentations - Power Point	
15	05/01	Selected Team presentations - Power Point (soft copy and hard copy <u>due</u> by all groups) Self/Peer assessment <u>due</u> (submitted by all class members)	
16	05/08	Course wrap-up & review	
17	05/15	Final Exam (35%) Chapters 8-14, . Open Book & Notes - Mon. 8:00-10:00p.m. =====	

COURSE EVALUATION COMPONENTS

(Plus/minus grading is used – see pages 5 & 6 for important information)

10% Homework & Special Assignments

35% Midterm Exam – multiple choice, true/false and write-up essay/analytical questions.
Covers specific reading assignments, discussion & lecture material.

Open book & open notes: **ONLY ORIGINAL WORK/NOTES ARE ALLOWED!**

20% Term Project - *Guidelines given in class:*

- Team Presentation (Power-Point) – **ALL team members must present!**
- A formal written proposal for the project selection is required (4-6 pages)
- A full written report is not required --- just the Power-Point presentation
- All class members must attend the presentations by other groups -- else **5 points** will be deducted for students missing the class or for leaving early then.

Notes: - All groups must provide the instructor with the **hard and soft copies** of the term project power-point presentation
- All students must fill out the Self/Peer Evaluation Form and submit to the instructor by the announced date.

35% Final Exam – multiple choice, true/false and write-up essay/analytical questions.
Covers specific reading assignments, discussion & lecture material.

Open book & open notes: **ONLY ORIGINAL WORK/NOTES ARE ALLOWED!**

Letter-Grade Scale (NO CURVING!):

$A \geq 92$	$89 \leq A- < 92$	$85 \leq B+ < 89$
$80 \leq B < 85$	$78 \leq B- < 80$	$75 \leq C+ < 78$
$70 \leq C < 75$	$60 \leq D < 70$	$F < 60$

***** This course syllabus is your contract with the CECS, MSEM and the instructor. Students must read the syllabus thoroughly and adhere fully to ALL of the stated terms and listed guidelines. No Exceptions! *****

**NOTE: ALL STUDENTS MUST INDIVIDUALLY SUBMIT THE
“SELF & PEER EVALUATION FORM” ON THE DUE DATE.**

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For Your Information

* 'A' grade range (A to A-) is reserved for work that is exceptional. This means that it (1) is professional and reflects the writer's/s' careful consideration of audience and purpose; (2) shows perfect to near-perfect understanding of the necessary concepts and analytical tasks; (3) where appropriate, it shows the capacity to think creatively or to see implications beyond the immediate scope of the question; (4) contains all necessary information (invention); (5) is arranged in a logical manner (6), is memorable; (7) delivery is visually appealing; and (7) is free of mechanical errors and is formatted as specified. Work must be flawless to attain an A/A-. Work with minor flaws that is nonetheless excellent in other ways will earn an A-.

* A grade in the B range means that the work is acceptable at the graduate level (B- range) to very good (B/B+). This work satisfies all (B+) or most (B/B-) of the requirements of the question/research task, shows the capability to think beyond the task by relating it to other areas of knowledge in or outside of the course; is neatly presented and shows above-average use of academic English. If the work is decently written, is formatted basically correctly, and covers most of the required content, but has several minor flaws or one major flaw, the grade will be B-.

* A grade in the C range means that the work, while covering much of the required ground, does not show graduate-level analytic and expressive ability. That is, major and minor items may be missing or incorrect; and while the language may communicate most points adequately, it does not qualify as above-average academic work.

* A grade in the D range shows that the work does not, overall, achieve an acceptable level of coverage of the requirements AND/OR the language is insufficient to make the writer's points understandable to the reader. The content may be either incorrect to an unacceptable degree, or very incomplete.

* A grade of F indicates that so little of the required content is covered that grading the paper is an exercise in futility. It may mean that very major points have clearly not been grasped or have been misunderstood by the student. An F may also indicate that the ideas are expressed in such a way that they are not at all understandable to the reader. A grade of F is also awarded when assigned work is not handed in, or not handed in by the set deadline.

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Oral Presentations Scoring Rubric

Weak (1)	The presentation does not respond to many of the requirements of the assignment, and/or is poorly tailored for the intended audience	The depth of analysis and evaluation of the presented material is not sufficient, and discussion contains unnecessary or trivial material	The presentation is poorly structured; organizational flaws undermine its effectiveness and clarity	Visual aids are not designed to effectively convey the information intended by the speaker	Speaker is not prepared and has to read from visual aids or cue cards, does not use voice or body language effectively to engage audience in topic	Speaker is not dressed appropriately for the audience, does not present him/herself in a serious and professional manner	The presentation just seems to end abruptly without any summation for the audience
Adequate (2)	The presentation responds to the assignment and addresses the topic, but has significant weaknesses with respect to some of the requirements and/or appropriate technical level	Presented material is analyzed and evaluated at a reasonable level but is not used effectively to support many of the main points	The presentation has a defined structure, but the organization is not optimal for supporting the presentation's content	The visual aids are generally supportive of the presentation, but some of them are difficult to read, too busy, and/or not necessary for the intent of the talk	Speaker is reasonably prepared but tends to look at visual aids for prompting, and is not able to communicate all of the intended content	Speaker is reasonably dressed, but some lapses in decorum detract from the presentation's impact	The presentation has a brief conclusion but is not substantial in content
Good (3)	The presentation responds to the assignment and addresses the topic, but has minor weaknesses with respect to some of the requirements and/or appropriate technical level	Presented material is analyzed and evaluated and appropriate reasons, discussion of alternatives, explanations, and examples are given for most of the main points	The presentation is generally well-structured, with only a few flaws in overall organization	The visual aids are informative and generally supportive of the presentation, but could be improved to more effectively complement the speaker's content	Speaker is prepared and familiar with the content of the visual aids, but may occasionally stray from topic and/or have other deficiencies in speaking style	Speaker is appropriately dressed, generally acts professionally, but exhibits some minor lapses in decorum	The presentation has a conclusion but some of the key points are not highlighted effectively
Excellent (4)	The presentation responds to the assignment and addresses the topic and all requirements, at an appropriate technical level for the intended audience	Presented material is completely analyzed and evaluated, providing support for main points with reasons, discussion of alternatives, explanations, and examples as appropriate	The presentation is well-structured; its organization contributes to its purpose. The problem is clearly stated and technical content is well ordered for clarity	The visual aids (e.g. PowerPoint slides) are informative, well designed, easy to read, and complement the speaker's content. The number of slides is consistent with the time limit of the presentation	Speaker is well prepared, establishes effective eye contact with the audience, speaks clearly and audibly, stays on topic and finishes the presentation on time	Speaker is appropriately dressed, avoids distracting body language during presentation, comports him/herself professionally throughout the presentation	Key points are clearly re-stated at the end of the talk so that the audience clearly understands the purpose of the technical work
	RESPONSE TO ASSIGNMENT: Oral presentations are expected to completely address the topic and requirements set forth in the assignment, appropriate for the intended audience.	ANALYSIS AND DISCUSSION: Oral presentations are expected to provide an appropriate level of analysis, discussion and evaluation as required by the assignment.	ORGANIZATION: Oral presentations are expected to be well-organized in overall structure, beginning with a clear statement of the problem and ending with a clear conclusion.	STYLE/FORM AND FORMAT: Presentations are expected to be stylistically effective – that is, to consist of visual aids with well-chosen words and graphics which complement the speaker, and consistent with the time limit of the presentation.	SPEAKING SKILLS: Presenters are expected to use an effective speaking style which exhibits enthusiasm, generates interest in the audience, and communicates the intended information.	PROFESSIONALISM: Presenters are expected to dress appropriately for the audience and act in a manner expected in a professional setting	CONCLUSIONS: Presentations are expected to draw appropriate conclusions and recommendations based on its content