EASTERN MEDITERRANEAN UNIVERSITY
Department of Industrial Engineering
IENG450 Industrial Management
COURSE OUTLINE

COURSE CODE	IENG450	**COURSE LEVEL**	Fourth Year
COURSE TITLE	**Industrial Management**	**COURSE TYPE**	**Area Elective**
CREDIT VALUE	(3, 0, 0) 3	**ECTS Credit Value**	6
PRE-REQUISITE(S)	-	**CO-REQUISITE(S)**	No
PREPARED BY	**Dr. Faramarz KHOSRAVI**	**SEMESTER / ACADEMIC YEAR**	Spring 23-24

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ASSISTANT(S)	---			
COURSE SCHEDULE	Tuesdays 16:30-19:20 Office Hour: Mondays 14:30-16:30			
COURSE WEB LINK	https://staff.emu.edu.tr/faramarzkhosravi/en/teaching/ieng450			

COURSE DESCRIPTION

This is a service course offered to non-IE engineering students. The aim is to prepare the students to assume positions in industry as engineering managers. The topics covered include the historical development of industrial management, introductory operations management, functions of technology management, managing technological change, managing engineering projects, and managing the engineering career.

COURSE OBJECTIVES

The main aim of this course is:

1. To provide students with the necessary modern managerial skills:
2. Increase productivity in organization through employee empowerment and effective communication
3. Develop plans that will put the organization ahead of the international marketing game.
4. Overcome obstacles to professional and personal growth.
5. Attain organizational strategic goals.
6. Develop action plans for organizational change.

COURSE LEARNING OUTCOMES

On successful completion of this course, all students will have developed **knowledge** and **understanding** of:

- Concept of engineering management (CO No. 1, 4, and 5).
- Methods to motivate technical people (CO No. 2 and 4).
- Basic concepts of planning (CO No. 5 and 6).

On successful completion of this course, all students will have developed **their skills in**:

- Forecasting (CO No. 3 and 5)
- Managing an organization (CO No. 1, 5, and 6)
- Being able to decide the validity of received data (CO No. 3).

On successful completion of this course, all students will have developed their **appreciation** of, and respect for **values and attitudes** to:

- Human factors (CO No. 1, 2, and 4)
- Decision making (CO No. 3, 5, and 6)
- Well-organized systems (CO No. 2, 3 and 5).

RELATIONSHIP OF COURSE TO PROGRAM OUTCOMES:

The course makes significant contributions to the following program *outcomes*:

(a) an ability to apply knowledge of mathematics, science, and engineering
(d) an ability to function on multidisciplinary teams
(e) an ability to identify, formulate, and solve engineering problems
(f) an understanding of professional and ethical responsibility
(g) an ability to communicate effectively
(h)the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
(i) a recognition of the need for, and an ability to engage in life-long learning

TEXTBOOK/S

Daniel L. Babcock, Lucy C. Morse. *Managing Engineering and Technology, Fourth Edition,* Pearson International Edition, Upper Saddle River, NJ 07458.

REFERENCES (available at EMU Library)

METHOD OF ASSESSMENT

All Examinations will be based on lectures, discussions, textbook and assigned work. To enter a formal examination, a student has to present her/his EMU student Identification card to the invigilator.

Quizzes: There will be **three** quizzes designed to test familiarity and basic understanding of various topics. Best 2 quiz grades will be considered for evaluation. There will be no quiz make-ups.

Midterm Exam: The midterm exam will be held in the week designated by the university administration. It will cover all of the material up to the date of examination.

Final Exam: The final exam will include the course material after the midterm exam.

Assignments: Two assignments are given to the students. The instructor will activate a folder in the LMS one day before to the final exam, and students are required to upload an editable word document to that folder.

Note 1: The students need a calculator so they should bring their calculators to quizzes and other exams.

Note 2: Voluntary presentations are rewarded up to 5 points. Topics are determined by the instructor. Students who are interested in presenting can meet the instructor in person on Mondays from 14:30 to 16:30. Each student will only be allowed to take advantage of this opportunity once throughout the semester.

Note 3: Students are only allowed to bring one A4-sized paper to all quizzes, midterm, and final exams to use as an information sheet and write whatever they wish on both sides (only the student's own handwriting will be accepted; no paper larger than A4 is permitted).

Any objection to the grade or mark should be made latest within a week following its announcement.

Grading Policy:

- Assignments 10 %
- Quizzes 30 %
- Midterm Exam 30 %
- Final Exam 30 %

COURSE CONTENT (WEEKLY TEACHING PLAN)

Week	Topics
1	Course outline, Course planning, and Chapter 1: Engineering and Management
2	Chapter 2: Historical Development of Engineering Management
3	**Quiz 1**
4	Chapter 3: Planning and Forecasting (Part 1)
5	Chapter 3: Planning and Forecasting (Part 2)
6-7	**Midterm Exam Weeks**
8	Chapter 4: Decision Making
9	Chapter 4: Decision Making (Part 2)
10	Chapter 4: Decision Making (Part 3); Presentation
11	**Quiz 2**
12	Chapter 5: Organizing; Chapter 6: Human Aspect of Organizing; Presentation
13	Chapter 7: Leadership; Presentation
14	Chapter 8: Controlling
15	**Quiz 3**
16-17	**Final Exam Weeks**

LEARNING TEACHING METHODS

The function of teaching is to enable students to learn. Therefore students are required to read the chapters of the textbook before coming to class and solve the related end of chapter questions after each lecture. The instructor will lecture in class by writing on the board and some lectures will be given as a MS power point presentation.

ATTENDANCE

Attendance will be taken every lecture hour. Note that university regulations allow the instructor to give a grade of NG to a student whose absenteeism is more than 30% of the total lecture hours or who do not complete sufficient work.

Relationship of Course to Program Outcomes

Student Outcomes	Level of Contribution		
	No	Moderate	High
(1) an ability to apply knowledge of mathematics, science, and engineering	☐	☐	☑
(2) an ability to function on multidisciplinary teams	☑	☐	☐
(3) an ability to identify, formulate, and solve engineering problems	☐	☑	☐
(4) an understanding of professional and ethical responsibility	☐	☐	☑
(5) an ability to communicate effectively	☑	☐	☐
(6) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	☐	☑	☐
(7) a recognition of the need for, and an ability to engage in life-long learning	☐	☑	☐

ACADEMIC HONESTY - PLAGIARISM

Cheating is copying from others or providing information, written or oral, to others. Plagiarism is copying without acknowledgement from other people's work. According to university by laws cheating and plagiarism are serious offences punishable with disciplinary action ranging from simple failure from the exam or project, to more serious action (letter of official warning suspension from the University for up to One Semester). Disciplinary action is written in student records and may appear in student transcripts. This is intentionally failing to give credit to sources used in writing regardless of whether they are published or unpublished. Plagiarism (which also includes any kind of cheating in exams) is a disciplinary offence and will be dealt with accordingly.) **I read and understood the rules of the course.**

PLEASE KEEP THIS COURSE OUTLINE FOR FUTURE REFERENCE AS IT CONTAINS IMPORTANT INFORMATION