

EASTERN MEDITERRANEAN UNIVERSITY

Department of Industrial Engineering

IENG450 Industrial Management





Course Code	IENG450	Course Level	Fourth year
Course Title	Industrial Management	Course Type	Elective
Credit Value	(3, 0, 0) 3	ECTS Value	
Pre-requisites	-	Co-requisites	-
Prepared by	Kağan Doğruyol	Semester and Year	Spring 2019 - 2020

Course Web Link: http://staff.emu.edu.tr/kagandogruyol/en/teaching/ieng450 Office Hours: Mondays 09:30-10:20, Thursdays 09:30-10:20 & 12:30-13:20							
	Name (group)	e-mail		Office	Telephone		
Instructor	Kağan Doğruyol	kagan.dogruyol@emu.edu.tr		B-207	1586		

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 <u>OUTCOMES</u>:

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 cover the whole course material. In form it will be a longer version of the midterm exam.

Make-up Exams: Make-up examinations will only be offered to students who provided adequate documentation for the reason of their absence within four working days at the latest after the examination date. One final exam type make-up exam will be offered after the final exams for the missed midterm and/or final exam. University regulations apply for graduate make-ups.

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

Grading Policy:

Attendance	5 %
Assignments	10%
Quizzes	20 %
Midterm Exam	25 %
Final Exam	40 %

COURSE CONTENT (WEEKLY TEACHING PLAN)

Week	Topics
1	Engineering and Management
2	Historical Development of Engineering Management
3	Historical Development of Engineering Management (Continued)
4	Planning and Forecasting
5	Planning and Forecasting (continued)
6	Holiday
7	Decision Making
8	Tools for Decision Making
8-10	Midterm exam week
10	Organizing
11	Human Aspects of Organization
12	Motivating and Leading Technical People
13	Controlling
14-15	Financial Controls
16	FINAL EXAM WEEK

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.

Students will be given at least 2 homeworks. The assignments must be handed in latest on the date specified by the course instructor. Late submissions will be penalized by 50 percent per day.

ATTENDANCE

Signature:

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 25% of the total lecture hours or who do not complete sufficient work.

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.)	
read and understood the rules of the course.	
Name, surname:	
Student ID.	