

BA 5602 – Operations Management
Tuesday & Thursday 12.40 – 13.55 @ G109

Instructor:	Dr. Gülşah Karakaya
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Office Hours:	Monday: 14.00 – 15.00
Course Web Page:	https://odtuclass.metu.edu.tr
Course Description:	
<p>Operations management is the design and management by an organization of all activities required to transform input resources into output products and services. Operations research, or management science, is the application of analytical methods to help make better decisions and solve complex problems within organizations. This course provides a comprehensive exploration of both fields, tailored for MBA students. It integrates theoretical concepts with practical applications to equip students with the essential tools for effective decision making in operations.</p>	
Course Student Learning Objectives: (CSLO)	
<p><i>Upon successful completion of this course, students should be able to:</i></p> <p>Course Specific Skills:</p> <ol style="list-style-type: none">1. Understand the relevance of operations to all members of the organization and gain a clear understanding of the operations functions in service and manufacturing firms and how it integrates with the overall business.2. Develop the skills to apply specific operational tools and techniques to daily activities of firms. <p>Discipline Specific Skills</p> <ol style="list-style-type: none">3. Analyze decision problems in operations.4. Develop foundation skills for advanced operations management courses such as supply chain management, project management, services management, etc. <p>Personal and Key Skills:</p> <ol style="list-style-type: none">5. Develop problem solving skills.6. Develop writing and discussion skills.7. Learn to apply the abstract concepts learned in the classroom to everyday decisions made by people and organizations.8. Prepare and present a group term-project that involves the application of the techniques learnt in the course to a particular decision problem consisting of real data and real decision makers.	
Learning and Teaching Methods:	
<p>This course is going to make use of formal lectures, in-class discussions and problem solving, class exercises, term-project presentations.</p>	
Required Reading:	

A - Operations Management: Sustainability and Supply Chain Management, 14th Edition, Jay Heizer, Barry Render & Chuck Munson, Pearson, 2023.

B - Operations Management, 10th Edition, Jay Heizer & Barry Render, Pearson, 2011.

C - Managerial Decision Modeling with Spreadsheets, 3rd Edition, Nagraj Balakrishnan, Barry Render & Ralph M. Stair, Pearson, 2013.

Assessment and Grading (tentative):

There will be one midterm exam, a final exam, and a term project. The exams will consist of essay-type questions. The term project will be the application of the techniques learned in the class to a real-life setting.

Form of Assessment	% Contribution	Size of the assessment	CSLOs covered by the assessment	Feedback Method
Midterm	30	Individual, 75-min exam	1-6	Written
Final	35	Individual, 75-min exam	1-6	Written
Project	20	Written report and in-class presentation	1-8	Written and oral
Assignments, in-class exercises, etc.	10	Homework problems	1-8	Written and oral
Attendance, Participation	5	Class participation during lectures	1-8	Oral

Course Policies:

No “extra” work above the aforementioned will be accepted or credited.

Attendance and Participation: Students are expected to attend the lectures and be active in the discussions.

Missed Exams: In case you cannot attend one of the examinations, you will be eligible to a make-up examination if and only if you can present an official (dean's or president's office approved) excuse or METU Medical Center certified Health Report. There will be one single, comprehensive and detailed make-up examination during the final period and it will be counted towards whichever exam(s) you are missing.

Late Submission Policy: Late submissions will NOT be accepted.

Term Project: TBA

STUDENT DISABILITIES: Any student, who, because of a disabling condition, may require special arrangements in order to meet course requirements, should contact the instructor as soon as possible. Students should present the appropriate documentation from the university's Disability Support Office (Engelsiz ODTÜ Birimi, ODTÜ Kütüphanesi, Solmaz İzdemir Salonu, Tel: 210.7196; engelsiz@metu.edu.tr) verifying their disability, and outlining the special arrangements required. Please note that no accommodations will be provided to the disabled students prior to the completion of this approved University process.

ACADEMIC DISHONESTY: The Department of Business Administration has no tolerance for acts of academic dishonesty. Such acts damage the reputation of METU, the department and the BS degree and demean the honest efforts of the majority of the students. The minimum penalty for an act of academic dishonesty will be a zero for that assignment or exam.

CHEATING: All university, faculty/institute, and department principles on academic honesty will be strictly enforced. The usual consequence for academic dishonesty is failure of the course and referral of the case to the Dean of the Faculty for additional disciplinary action. Examinations are individual and are to be completed without outside assistance of any sort. Persons observed cheating during examinations will receive a failing grade in the course. Homework assignments are individual, unless otherwise specified by the instructor, and are to be completed without outside assistance of any sort, as well. Persons observed cheating in their homework assignments will receive a score of zero for the portion of the semester grade that is allocated to such assignments.

PLAGIARISM: The instructor assumes that students will do their own work. By placing their names on assignments (individual or team), students are affirming that the contents are their original work. Any previous work available from files or past students, as well as materials available on the internet may be used only as a suggestive model. Violation of this provision will be considered as unethical behavior, subject to disciplinary action. If you have any doubt about the use of a specific material, see the instructor ahead of time. Any material used from outside sources should be referenced appropriately. Persons observed to plagiarize while preparing assignments will be referred to the Dean of the Faculty for additional disciplinary action and also they will receive a score of zero for the portion of the semester grade that is allocated to such assignments.

METU HONOR CODE

Every member of METU community adopts the following honor code as one of the core principles of academic life and strives to develop an academic environment where continuous adherence to this code is promoted.

"The members of the METU community are reliable, responsible and honorable people who embrace only the success and recognition they deserve, and act with integrity in their use, evaluation and presentation of facts, data and documents."

CIVILITY IN THE CLASSROOM: Students are expected to assist in maintaining a classroom environment which is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from using laptop computers and cellular phones, making offensive remarks, reading newspapers, sleeping, or engaging in any other form of distraction. Inappropriate behavior in classroom shall result, minimally, in a request to leave class.

KNOW YOUR RIGHTS AND RESPONSIBILITIES! <http://oidb.metu.edu.tr/en/academic-rules-and-regulations>

NOTE THE IMPORTANT DATES ON THE ACADEMIC CALENDAR!
<http://oidb.metu.edu.tr/en/academic-calendar>

Good luck 😊

The following table gives the **tentative schedule** for the semester and is **subject to change**. The lectures will stress the most important and/or most difficult material. Appendices are required only if they are assigned.

Tentative Course Schedule				
Month	Day	Topic	Reading/ Assignment	CSLO
October	1-3	Introduction to Operations Management & Management Science	A1,C1*	1
	8	Managerial decision modeling	C1	1-3
	10-15	Linear programming (LP)	C2	1-5
	17	Spreadsheet modeling	C3	1-5
	22-24	LP applications	C3	1-5
	29	National holiday		
	31	Transportation, assignment models	C5	1-5
November	4	Midterm 1 @TBA		1-6
	5-7	Process strategies	A7	1-5
	12-14	Location & layout strategies	A8,A9	1-5
	19-26	Forecasting	A4	1-5
	28	Inventory Management	A12	1-5
December	3-5	Inventory Management (cont.)	A12	1-5
	10-17	Quality management	A6	1-5
	19-26	Project management	A3	1-5
January	31-2	Term project presentations		1-8
	TBA	Final @TBA	All after Midterm 1	1-6

*A1: Chapter 1 of *A - Operations Management: Sustainability and Supply Chain Management, 14th Edition*, Jay Heizer, Barry Render & Chuck Munson, Pearson, 2023.

C1: Chapter 1 of *C - Managerial Decision Modeling with Spreadsheets, 3rd Edition*, Nagraj Balakrishnan, Barry Render & Ralph M. Stair, Pearson, 2013.