IEOR 150 COURSE INFORMATION
FALL 2018

Instructor:	Candace A. Yano
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Office Hours: M 2:00-3:00 at F590 Haas and 5:00 – 6:00 at 4123 Etch. (except Sept. 3, Nov. 5 and Nov. 12)
W 4:15 – 5:30 pm at 4123 Etch.
or by appointment.
Extra office hours will be scheduled prior to due dates for cases and prior to exams.

Teaching Assistant: Erik Bertelli (e-mail; erikbertelli@berkeley.edu)

Textbooks: Production and Operations Analysis by Steven Nahmias and Tava Olsen (Waveland Press, 2015)

Recommended (available from the Engineering Library):
Plant and Service Tours in Operations Management by Roger Schmenner (Prentice Hall), any edition. Chapters on Continuous Flow Process, Batch Flow Process, Job Shop and Machine Paced Line Flow Process will be extremely useful, especially for students who have had little or no experience in a manufacturing setting. It is light, relatively non-technical reading. Similar material can be found in various textbooks on production and operations management by Schmenner.

Reader: Information on how to purchase will be provided in class.

Grading:

Midterm 1	15%
Midterm 2	15%
Final Exam	35%
Homework / Cases	25%
Class Participation	10%

Homework: Approximately bi-weekly. Late homework will be penalized 10% for each weekday late. Homework will not be accepted after solutions have been distributed.

Exams: Make-up exams will not be administered without reasonable and verifiable cause. Please plan your commitments accordingly. If you anticipate unavoidable conflicts, please see me at least two weeks prior to the exam. Exams are scheduled as follows:

Midterm 1: **Tuesday, October 2** in class
Midterm 2: **Tuesday, November 6** in class
Final Exam: **Wednesday, December 12**, 8-11 am

COURSE OUTLINE AND READING ASSIGNMENTS
(Note: underlined items are in reader or will be provided)

Date	Topics	Reading Assignments (Nahmias & Olsen)
8/23 (Th)	Introduction, ABC, EOQ Time-Based Competition	1-46 (skim), 286-290, 198-216
8/28 (Tu)	Deterministic Inventory Models	218-226, 230-235
8/30 (Th)	Stochastic Continuous Review Models	267-280
9/4 (Tu)	Periodic Review Models	258-265, 282-284
9/6 (Th)	" " " "	" "
9/11 (Tu)	Review of Inventory Models	
9/13 (Th)	Product Cycling Problem	231-235
9/18 (Tu)	Case: Glu-Lam	
9/20 (Th)	Forecasting	52-64, 66-74
9/25 (Tu)	Case: Midwest Stamping	
9/27 (Th)	Forecasting, cont.	85-90
10/2 (Tu)	Midterm 1 (material through 9/25 but not including Forecasting)	
10/4 (Th)	Aggregate Production Planning	128-154
10/9 (Tu)	Case on Forecasting:	To be distributed
10/11 (Th)	Material Requirements Planning; Just-in-Time	437-449, 461-467, 468-479
10/16 (Tu)	Case: Lawn King	
10/18 (Th)	Lot Sizing	450-451, 484-487
10//23 (Tu)	Case: B's Wax Candle Company	
10/25 (Th)	Supply Chain Management; Postponement	315-329, 347-363
10/30 (Tu)	Case: Benetton (A)	
11/1 (Th)	Review for Midterm 2	
11/6 (Tu)	Midterm 2 (material through 10/25)	
11/8 (Th)	Job Shop Scheduling	490-516
11/13 (Tu)	Job Shop Scheduling, cont.	
11/15 (Th)	Project Scheduling	543-556, 566-574

Date	Topics	Reading Assignments
11/20 (Tu)	Case: Morrison Company	
11/22 (Th)	HOLIDAY--THANKSGIVING	
11/27 (Tu)	Assem. Line Balancing	528-532
11/29 (Th)	Review	
12/12 (Wed)	Final Exam, 8-11 am	

Case Studies:

The case studies in this course were selected to provide you an opportunity to apply the concepts and methodologies from the course to "real-life" problems. You are *encouraged* to work on the cases in groups of about four people. We will discuss each of these cases in class, and a significant portion of your class participation grade depends on your input during these discussions.

In most instances, you will be asked to turn in a brief report of your analysis as part of a homework assignment. If so, you may turn in a group report. On the other hand, at other times, you will be expected to prepare for an in-class discussion of the case, but will not be required to turn in a report.

You will find that the cases may include extraneous information and incorrect statements of opinion by the "characters" in the case. You will have to decide what is useful and relevant. You will also find that the concepts and methodologies discussed in class may have to be adapted to accommodate other factors. Justification of your assumptions and your approach are important. The process by which you arrive at your conclusions may be as important as the conclusions themselves.

Computers and Software:

Some of the homework problems and many of the cases will be easier to analyze if you develop simple computer programs to perform the tedious computations. You are welcome to use any type of software with which you are familiar to solve homework problems and analyze the cases. Any programs that you write (including "programs" or templates for spreadsheets) should be turned in along with your results. Please remember, however, that on exams, you will need to solve numerical problems with a calculator.

Copying of software, spreadsheets, or solutions developed by your classmates is expressly prohibited.

Exam Logistics:

The textbook, course notes, lecture notes, and a calculator are allowed at the exams. Cell phones must be turned off and placed in your backpack.

Questions or complaints about the grading of midterms may be submitted *in writing* no earlier than 24 hours after the exam has been returned.