

**NYU****LEONARD N. STERN  
SCHOOL OF BUSINESS****Operations Management • Professor Juran**

## Syllabus

**MEETINGS** 3:00-4:20 PM, Tues.-Thurs. starting Sept. 4  
**INSTRUCTOR** David Juran <djuran@stern.nyu.edu>  
<<http://people.stern.nyu.edu/djuran/>>  
**TEACHING ASSISTANTS** Chris Clifton <clc701@stern.nyu.edu>  
Hannah Diaz <hbm265@stern.nyu.edu>

### **COURSE DESCRIPTION**

Organizations seek to gain and then maintain competitive advantage so that they can maximize the wealth of their stakeholders. Organizations use their operations to gain competitive advantage by obtaining cost leadership or parity; consistent quality superiority; shorter time to market; responsiveness and adaptability to customer needs and desires; sufficiency of capacity; utilization of innovative process and product technology; and ensuring environmental neutrality.

This course touches briefly on all of the above competitive advantage topics while incorporating key strategic, accounting, finance, marketing, human resource, and information processing concepts and consistently stressing a systematic, scientific approach to solving management problems.

We also introduce two spreadsheet modeling tools, Linear Programming and Monte Carlo Simulation.

### **RECOMMENDED TEXTBOOKS**

We will use the custom textbook, adapted from "Operations Management for Competitive Advantage", 11th edition, by Chase, Jacobs, and Aquilano (ISBN: 0-07-298393-0). The book is not "required", but some students find it useful.

We will also use Excel and other software, including the Littlefield online game.

### **WEBSITE/COURSE MATERIALS**

We will disseminate materials through the NYU Classes site, plus the Professor-maintained site: <<http://people.stern.nyu.edu/djuran/m2314home.htm>>

## GRADING

Class Participation, Attendance	20%
Written Assignments	40%
Quizzes	40%

Class Participation and Attendance: It will be difficult to do well in this course unless you engage actively in the class discussions, games, and other course-related activities. Students are expected to make a contribution to the collective learning of everyone.

Written Assignments: You will be assigned homework on a class-to-class basis for each topic, as detailed in the schedule below. The assignments are due on the dates (sessions) where the assignments appear in the syllabus. Watch for specific instructions from the TAs about submitting assignments. When discussion questions are involved, please answer briefly (two or three sentences).

Homework will be graded, and will not be accepted late. Use the study questions supplied as a guide. Be prepared to be called upon to present your approach to analyzing the case, or your conclusions derived from the case. Homeworks will usually be graded using the following somewhat subjective criteria:

- Check-Plus: Equivalent to 10 out of 10. Exceeds case expectations by providing unanticipated insight and/or unusually robust analysis compared with the rest of the class.
- Check: 9 out of 10. Fully meets the expectations of a thorough analysis and treatment of the key issues.
- Check-Minus: 8 or less. Below expectation by increasing degrees; significantly inferior to what other teams have done.

Quizzes: Instead of midterm and final exams, there will be a series of quizzes; generally one every three or four weeks. The quizzes will relate to reading assignments (both textbook and supplemental), case assignments, and lecture material.

**Tentative Class Schedule**  
(subject to minor changes)

			Topics	Deliverables
1	Tuesday	4-Sep	The Role of Operations within the Firm	
2	Thursday	6-Sep	Process Analysis I	
	Tuesday	11-Sep	NYU Holiday	
3	Thursday	13-Sep	Process Analysis II, Littlefield Overview	Scientific Management (reading) Milford Primary Care (A) (Group)
4	Tuesday	18-Sep	Process Analysis III	
5	Thursday	20-Sep	Optimization I	
6	Tuesday	25-Sep	Optimization II	
7	Thursday	27-Sep	Solver workshop	Start Littlefield I Solodrex [live case - no prep]
8	Tuesday	2-Oct	Solver workshop	Solodrex [live case - no prep]
9	Thursday	4-Oct	Quiz 1	
	Tuesday	9-Oct	NYU Holiday	
	Thursday	11-Oct	TBA	
10	Tuesday	16-Oct	Littlefield Debrief Managing Inventories	Littlefield I writeup (Group)
11	Thursday	18-Oct	Supply Chain Management	
12	Tuesday	23-Oct	Project Management	Wilson (Group)
13	Thursday	25-Oct	Basics of Simulation	Pioneer Hi-Bred (Group)
14	Tuesday	30-Oct	Beer Game	
15	Thursday	1-Nov	Crystal Ball workshop	Bonds [live case - no prep] Start Littlefield II
16	Tuesday	6-Nov	Crystal Ball workshop	Bonds [live case - no prep]
17	Thursday	8-Nov	Quiz 2	
18	Tuesday	13-Nov	Queueing Theory	
19	Thursday	15-Nov	Just-In-Time / Lean	
	Tuesday	20-Nov	TBA	
	Thursday	22-Nov	NYU Holiday	
20	Tuesday	27-Nov	Quality Management / Six Sigma	Southern Tier Airport (Group)
21	Thursday	29-Nov	Quality Management / Six Sigma	
22	Tuesday	4-Dec	Quality Management / Six Sigma	Littlefield II writeup (Group)
23	Thursday	6-Dec	Course Wrap-up	
24	Tuesday	11-Dec	Quiz 3	

## **Ethical Guidelines**

All students are expected to follow the **Stern Code of Conduct**

(<http://www.stern.nyu.edu/uc/codeofconduct>). A student's responsibilities include, but are not limited to, the following:

- A duty to acknowledge the work and efforts of others when submitting work as one's own. Ideas, data, direct quotations, paraphrasing, creative expression, or any other incorporation of the work of others must be clearly referenced.
- A duty to exercise the utmost integrity when preparing for and completing examinations, including an obligation to report any observed violations.

## **Students with Disabilities**

If you have a qualified disability and will require academic accommodation during this course, please contact the Moses Center for Students with Disabilities (CSD, [998-4980](tel:998-4980)) and provide me with a letter from them verifying your registration and outlining the accommodations they recommend.