

<u>Instructor</u>	William Hauser Room 144, 15 St. Mary's Street 617-358-0663 wmhauser@bu.edu
<u>Graduate Teaching Fellow</u>	TBD
<u>Class Hours & Location</u>	Thursday, 2:00PM to 4:00, 15 St. Mary's Street, ECL 125; Labs and plant tours may extend to 5:00.
<u>Office Hours</u>	Tuesday 1:30PM to 4:30PM, or as arranged by appointment
<u>Website</u>	Assignments and class notes will be posted to the course website: blackboard.bu.edu .
<u>Textbook and Cases</u>	Textbook: Nahmias, <i>Production and Operations Analysis</i> , 5 th or 6 th edition. Available through the campus bookstore, or through online sites..
<u>Description</u>	An introduction to problems faced by operations managers in manufacturing environments and to mathematical models and tools used to analyze such problems. Topics include forecasting of demand, aggregate planning, linear programming, inventory control, push and pull production control systems, and lean manufacturing concepts. Underlying management science theory is supplemented by plant tours and a semester project.
<u>Course Outline</u>	Attached, but subject to change as the semester progresses.
<u>Grading</u>	65% of the grade will be determined by performance on graded homework sets. 20% will be determined by performance on a team project, and the remaining 15% will be determined by attendance and active participation during class sessions. In some cases, the numerical answers will be provided in advance, so successful completion of the homework requires demonstrating that you understand the method behind the answer and can arrive at it independently.
<u>Note on Collaboration</u>	Work that you turn in must be your own. Although you may discuss the content of a problem and various approaches to solving it with classmates, you are expected to formulate, analyze, and write all solutions to homework problems yourself. Copying the solution of another student, or from any other source, is cheating and will not be allowed. If you are in doubt about what is permitted, ask first. In team projects, <i>each</i> person is expected to contribute, though one grade will be awarded to all members of the team.

Date	Session	Topic
Sep 03	1	Introduction to the course: Curve fitting to experimental data with analysis and computation tools (MS Excel). Extensions to higher dimensions and curves other than straight lines. Introduction to the team project.
Sep 10	2	Production Planning: Data smoothing, forecasting, and evaluation of error.
Sep 17	3	Production Planning: Data smoothing, forecasting, and evaluation of error – continued.
Sep 24	4	Production Planning: Inventory Control Subject to Known Demand. Preparation for plant visits: Types of processes. Product & Process life cycles
Oct 01	5	Plant visit
Oct 08	6	Inventory Control – Continued. Use of linear programming to optimize production plans.
Oct 15	7	Additional applications of linear programming
Oct 22	8	Production Control Systems, Material Requirements Planning, Explosion of the Bill of Materials Preparation for second factory tour.
Oct 29	9	Second factory visit
Nov 05	10	Debriefing on factory tour Lean Production: Concepts, Terminology, and in-class simulation
Nov 12	11	Probability Concepts in Operations Management
Nov 19	12	Probability Concepts: Inventory Control Subject to Uncertain Demand
Nov 26		Thanksgiving Holiday
Dec 03	13	Additional Depth Topics
Dec 10	14	Presentation of Team Projects Course summary and critique

Revision History

31 Aug 2009 Issue 1 Original Release