

SYLLABUS

IEOR E4210: Supply Chain Management

CVN

This course covers the major issues in supply chain management, including: definition of a supply chain; role of inventory; advanced production-inventory models; supply contracts; bullwhip effect and information sharing; vendor-managed inventories and other distribution strategies; third-party logistics providers; managing product variety; information technology and supply chain management; international issues.

Prerequisites

IEOR 3402 (Production-Inventory Planning and Control), IEOR 4000 (Production Management), or permission of instructor. Also, familiarity with basic probability and optimization.

Course Content

- Introduction to Supply Chain Management (SCM)
- Distribution Network Design in a Supply Chain
- Aggregate Planning and Product Variety Management
- Inventory Management: Deterministic & Stochastic; Multi-Period & Multi-Echelon
- Strategic Alliances and Outsourcing Strategies
- Supply Chain Coordination and Contracts
- Customer Value and Supply Chain Management
- Information Technology and Decision-Support Systems for SCM

Textbooks

- Required Textbook: Sunil Chopra and Peter Meindl. *Supply Chain Management: Strategy, Planning, and Operations*, Second edition, Pearson Prentice Hall, 2004.
- Required Cases: Available online from www.hbr.com for \$6.50 each
 - Janice H. Hammond and Ananth Raman. "Sport Obermeyer Ltd.". Harvard Business School Case 9-695-022.
 - Janice H. Hammond. "Barilla SpA (A)". Harvard Business School Case 9-694-046.
 - V. G. Narayanan and Ananth Raman. "Hamptonshire Express". Harvard Business School Case 9-698-053.
- Other References
 - David Simchi-Levi et al., *Designing and Managing the Supply Chain: Concepts, Strategies, and Test Studies*, Second edition, McGraw-Hill, 2003.
 - Jeremy F. Shapiro, *Modeling the Supply Chain*, Duxbury, 2001.
 - Terry P. Harrison, et al. ed. *The Practice of Supply Chain Management: Where Theory and Application Converge*, Kluwer Academic Publishers, 2003.
 - Edward A. Silver et al., *Inventory Management and Production Planning and Scheduling*, Third edition, John Wiley & Sons, 1998.
 - A. G. de Kok and S. C. Graves, ed., *Supply Chain management: Design, Coordination and Operation*, Elsevier, 2003.

Grading

Article Reviews/Project:	20 %
Midterm Exam:	30 %
Final Exam:	50 %

ASSIGNMENTS: There will be approximately 8-12 assignments. While these assignments are not to be handed in, they are an important part of the course.

You should select one of the following two options:

ARTICLE REVIEWS (INDIVIDUAL): If you select this option, you will submit two article reviews in total. Find newspaper or magazine articles related to supply chain management. The article should be dated between **January and August** of this year. The first review should be about 2 pages in length, and the second review, 3 pages (double-spaced). Each review should include a concise summary of the chosen article along with relevance to class discussion. Please include a copy of the original article in your submission; the article will *not* be returned to you.

PROJECT (GROUP): If you select the group project option, you will write a coherent well-documented report (9-12 pages) on a topic, chosen with consultation of the instructor. You are also required to submit a 1/2-page proposal. The project can be analytic, empirical, computational or qualitative. You are encouraged to work as a group of two or three students.

MIDTERM EXAM: TBD.

FINAL EXAM: TBD.

MAKE-UP EXAMS: The instructor requires written documentation of the student's reason for missing the exam, as well as notification prior to the scheduled exam. If the instructor decides that the reason(s) for the absence is/are valid, the student will be scheduled for the make-up exam. However, the make-up exam will not be easier than the regular exam.

REGRADING: If you feel that your performance has been under-evaluated, please resubmit your work, along with a written statement directly to the course instructor within three days after receiving your grades, explaining clearly why you feel that your grade should be adjusted. In order to prevent "cherry-picking", the course instructor will re-grade your entire assignment/exam, which may possibly lower your grade. If you are not satisfied with the regarding, please feel free to talk to the instructor in person.