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1 Welcome

Welcome to EM 665, Integrated Supply Chain Management. This graduate-level course is relatively challenging as it blends logistics and supply chain management foundational concepts with analytical problem-solving techniques.

2 Instructor Contact

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Office hours: Zoom by appointment

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3 Catalog Course Description

This course illustrates the theory and practice of designing and analyzing supply chains. It provides tool sets to identify key drivers of supply chain performance such as inventory, transportation, information and facilities. Recognizing the interactions between the supply and demand components, the course provides a methodology for implementing integrated supply chains, enabling a framework to leverage these dynamics for effective product/process design and enterprise operations.

4 Student learning Outcomes

By the end of this course, students will be able to:

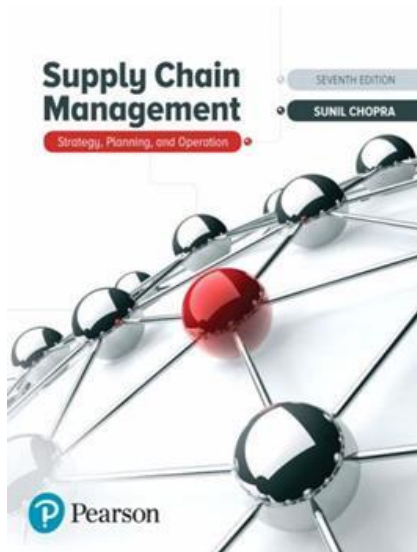
- Identify and discuss supply chain drivers (facilities, inventory, transportation, sourcing, pricing and information) and their effect on supply chain performance.
- Develop performance metrics for supply chains, and design networks for integration.
- Perform demand forecasting, aggregate planning, and evaluate the effect on inventory/supply.
- Investigate all factors of supply chain integration through the research and presentation of case studies for various industry types and corporation sizes.

5 Optional Text

Chopra, Sunil and Peter Meindl (2018), *Supply Chain Management*, 7th Edition: Pearson Prentice Hall.

ISBN-13: 978-0-13-473188-9

ISBN-10: 0-13-473188-3



6 Course Materials

6.1 Weekly Lectures Slides and Recommended Problems

Lecture slides, and videos of a review of the lecture slides, for the course are provided in Canvas; and contain examples of problems that may assist in homework and test completion. You are strongly encouraged to thoroughly understand and review the recommended problems. It is **extremely** important that you work these questions and quantitative problems, as the homeworks and exams may reflect these types of problems.

6.2 Canvas

The class Canvas site contains information on assignments and due dates, as well as other course information. You are responsible for checking the site and for completing assignments according to the instructions and schedule on the site. Unless otherwise indicated, all assignments are to be submitted via Canvas. *It is the student's responsibility to check that an assignment has been successfully uploaded to Canvas. It is the student's responsibility to check that the correct assignment has been uploaded to Canvas.*

6.3 Software and Templates and Technology

The course will use several Excel spreadsheets and templates accompanying the textbook. These will be available to you on Canvas. MS-Excel's Solver and Statistical Analysis ADDIN are used in this course. *(It should be already resident on your machine in the ToolPack, but it may need to be activated and installed, if not already.)*



Integrated Supply Chain Management – EM 665 Spring 2024
 Dr. Kathryn Abel
 Stevens Institute of Technology
 Systems Engineering and Engineering Management

7 Calendar, Assignments, and Grading

Note: This schedule may be revised to accommodate class progress, etc. We will attempt to stay as close to this schedule as possible. (Note: M06 and M07 have been excluded intentionally.)

Date	Topic & Textbook Chapters Covered	Deliverable (Due Sunday by 10pm)
Jan 15-21	Course Introduction – Live @ Jan. 17th, 8pm	Live review of deliverables, software requirements, etc
Jan 22-28	M01 - Understanding the Supply Chain (Chapter 1)	
Jan 29-Feb 4	M02 – Supply Chain Drivers and Metrics (Chapter 2)	
Feb 5-11	M02 – Supply Chain Drivers and Metrics (Chapter 3) (cont.)	
Feb 12 – 18	M03 – Supply Chain Network Design (Chapter 4)	
Feb 19 – 25	M03 – Network Design in the Supply Chain (cont.) (Chapter 5&6)	Homework 3
Feb 26 - Mar 3	M04 - Demand Forecasting in a Supply Chain (Chapter 7)	Homework 4
Mar 4-10	M04 - Demand Forecasting in a Supply Chain (cont.) (Chapter 7)	
Mar 11-17	Spring Break	
Mar 18 - 24	M05 - Aggregate Planning in a Supply Chain (Chapter 8)	Homework 5
Mar 25 – 31	Happy Holidays	
Apr 1-7	M08 – Managing Economies of Scale in a Supply Chain: Cycle Inventory (Chapter 11)	Homework 8
Apr 8 - 14	M09 – Managing Economies of Scale in a Supply Chain: Safety Inventory (Chapter 12)	
Apr 15 – 21	M09 – Managing Economies of Scale in a Supply Chain: Safety Inventory (Chapter 13)	Homework 9
April 22 - 28	Exam	Exam (timed and to be completed independently on specified day)
May	No Final (Good Luck on the rest of your exams)	



8. Grading for the course will consist of the following items:

- Excel Homework (group excel work) = 5 assignments = 75%
Due by indicated Sunday at 10pm, submit as many times as you want
Only one member of team needs to submit (Final team assignment in early Feb)
Once submitted, all team members can see assignment (all responsible)
- Exam (Timed – independent qualitative work) = 1 assignment = 25%
T/F and multiple-choice questions, potentially a few quantitative questions
Exact composition will be released closer to quiz
Once started, must complete quiz within designated time
Independent work, but open Book, open notes, allowed
Must be completed on specified weekend day (details provided later)

Students are NOT allowed to work with or talk to others during exam.

If an excel template is provided, *you must use that template*. All numeric values in Excel templates must be calculated using a formula in Excel, not a typed in number. Please include your name(s) in the name of your assignment file. Homework assignments will vary in length and difficulty. Once an assignment grade is posted, you will have one week to question your grade. ***After that, the grade becomes final and unchangeable.***

8.2 Late Policy

Students will have up to 24 hours past the deadline to submit late assignments for 50% credit. After 24 hours, students will receive a zero.

8.3 The Grading Scale

You will receive no less than the grade listed within the appropriate interval, provided there are no Academic Integrity Violations. I reserve the right to adjust the grading scale in favor of the class if warranted.

Grade	Numeric Range
A	93 - 100
A-	90 - 92.9
B+	87 - 89.9
B	83 - 86.9
B-	80 - 82.9
C+	77 - 79.9
C	73 - 76.9
C-	



9 Academic Integrity

Undergraduate Honor System

Enrollment into the undergraduate class of Stevens Institute of Technology signifies a student's commitment to the Honor System. Accordingly, the provisions of the Stevens Honor System apply to all undergraduate students in coursework and Honor Board proceedings. It is the responsibility of each student to become acquainted with and to uphold the ideals set forth in the Honor System Constitution. More information about the Honor System including the constitution, bylaws, investigative procedures, and the penalty matrix can be found online at <http://web.stevens.edu/honor/> ([Links to an external site.](#))

The following pledge shall be written in full and signed by every student on all submitted work (including, but not limited to, homework, projects, lab reports, code, quizzes and exams) that is assigned by the course instructor. No work shall be graded unless the pledge is written in full and signed.

“I pledge my honor that I have abided by the Stevens Honor System.”

Reporting Honor System Violations

Students who believe a violation of the Honor System has been committed should report it within ten business days of the suspected violation. Students have the option to remain anonymous and can report violations online at www.stevens.edu/honor ([Links to an external site.](#)).

Graduate Student Code of Academic Integrity

All Stevens graduate students promise to be fully truthful and avoid dishonesty, fraud, misrepresentation, and deceit of any type in relation to their academic work. A student's submission of work for academic credit indicates that the work is the student's own. All outside assistance must be acknowledged. Any student who violates this code or who knowingly assists another student in violating this code shall be subject to discipline.

All graduate students are bound to the Graduate Student Code of Academic Integrity by enrollment in graduate coursework at Stevens. It is the responsibility of each graduate student to understand and adhere to the Graduate Student Code of Academic Integrity. More information including types of violations, the process for handling perceived violations, and types of sanctions can be found at www.stevens.edu/provost/graduate-academics ([Links to an external site.](#)).