MODELS FOR SUPPLY CHAIN MANAGEMENT

ESI6323 Section: 1FE2/1HYB/2FED/CAMP/OVER Class Periods: M, W, F | Period 6 (12:50 – 1:40 PM)
Location: Online/CSE E107
Academic Term: Spring 2021

Instructor:

Dr. Mengyu Li

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(352)-294-6391

Office location: 379 Weil Hall

Office Hours (starting Mar 8, 2021): Thursdays, 3 – 5 pm (online via Canvas Zoom Conferences)

Teaching Assistants:

Farnaz Babaie Sarijaloo

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Office Hours: (starting Jan 18, 2021): Wednesdays, 10 am – 12 pm (online via Canvas Zoom Conferences)

Course Description

This course covers essential elements of supply chain design and operation, which consists of controlling and coordinating activities such as order processing, purchasing, material storage and handling, production planning, packaging, transportation and setting customer standards. We will learn how these activities are effectively modeled, planned and controlled in manufacturing and service industries. The decisions and strategies regarding inventory and transportation, which are the most important parts of business logistics for a firm, are highlighted. During the course, we will discuss many case studies of manufacturing and service firms in the United States and abroad with a focus on their supply chain design and operation activities.

Course Objectives

This course is intended to provide students with:

- an understanding of key supply chain concepts,
- an appreciation of the need to take a comprehensive view of decisions for supply chain design and operation,
- an ability to model and optimize the design and operation of supply chain systems, and
- an opportunity to develop their critical and creative thinking skills by applying supply chain concepts to real-world applications.

Materials and Supply Fees

N/A.

Required Textbooks and Software

- Required Textbooks: None
- Required Software: You must have access to Excel (for some activities and homework assignments) and Honorlock online proctoring services (for online exams). A detailed Honorlock program guideline can be found in the course Canvas site.

Recommended Materials

- Title: Supply Chain Management: Strategy, Planning, and Operation.
- Author: Sunil Chopra.
- Publication date and edition: 7th Edition. Boston: Pearson Education, 2017.
- ISBN number: 9780134731889

Course Schedule

Week	Date (Mon - Fri)	Topic
1	Jan 11 - 15	Chapter 1. Understanding the Supply Chain
		Chapter 2. Supply Chain Performance: Achieving Strategic Fit and Scope
		Chapter 3. Supply Chain Drivers and Metrics
		*Online Discussion 1
2	Jan 18 - 22	Chapter 4. Designing Distribution Networks and Applications to Online Sales
	(Jan 18 holiday)	Chapter 5. Network Design in the Supply Chain
		*Omni Channel Discussion
		*Online Discussion 2
3	Jan 25 - 29	Chapter 6. Designing Global Supply Chain Networks
		*Homework 1
		Modeling Tutorials (Chapter 5/ Chapter 6)
		*Homework 2
5	Feb 8 - 13	Chapter 7. Demand Forecasting in a Supply Chain
6	Feb 15 - 19	Chapter 8. Aggregate Planning in a Supply Chain
		*Homework 3
7	Feb 22 - 26	Review for Midterm
		*Online Quiz
8	Mar 1 - 5	Chapter 9. Sales and Operations Planning in a Supply Chain
		*Midterm Exam
9	Mar 8 - 12	Chapter 10. Coordination in a Supply Chain
		Midterm Exam Review
		*Homework 4
		*Online Discussion 3
10	Mar 15 - 19	Chapter 11. Managing Cycle Inventory in a Supply Chain
		*Homework 5
11	Mar 22 - 26	Chapter 12. Managing Uncertainty in a Supply Chain
		*Online Discussion 4
12	Mar 29 – Apr 2	Chapter 13. Determining the Optimal Level of Product Availability
		*Homework 6
13	Apr 5 - 9	Chapter 14. Transportation in a Supply Chain
		*Homework 7
14	Apr 12 - 16	Chapter 15. Sourcing Decisions in a Supply Chain
		Chapter 16. Pricing and Revenue Management in a Supply Chain
	10.01	*Online Discussion 5
15	Apr 19 - 21	Review for Final Exam
	Final Exam	Apr 28, 2021, 12:30pm-2:30pm

Attendance Policy, Class Expectations, and Make-Up Policy

- Attendance and participation are highly valued in this course. Therefore, attendance is required for any live session offered throughout the semester. The date/time for any live session can be found on the course Canvas site. Attendance is considered in the calculation of the student's final grade. If a student misses 20% or more of the live class sessions (an absence), there will be grade penalties, and the instructor reserves the right to issue a failing grade for lack of attendance/participation.
- Attendance is required exams online via Canvas Honorlock online proctoring services. Excused absences must be consistent with university policies in the Graduate Catalog
 (http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance) and require appropriate documentation. Additional information can be found here:
 https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx Only University excused absences will be allowed for exam make-ups.
- Class Expectation: Stay a head of the game! Each week has a lot of materials to cover. It can be made easier if you start on time and stay on schedule. You can find the detailed course schedules in the previous table.

• Late Assignment Policy: The assignments are to be submitted on or before the posted due date. Students are responsible for all material presented in each session. <u>Late submission penalty of 25% per day (4 days maximum allowance)</u> will be applied to late submissions. If the grades have been released/assignments have been evaluated, your assignment is excessively late, a zero will be given. It is your responsibility to visit the course website regularly, read the posted announcements and be aware of assignment submission deadlines and procedures.

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
Homework Assignments (7)	100 each	18% (3% each, 6 out of 7)
Online Activity (6)	100 each	12% (2% each, 6 in total)
Midterm Exam	100	30%
Final Exam	100	40%
		100%

Homework Assignments. Homework assignments are selected from the Exercises included at the end of the chapters from the textbook. Consider the following for homework submissions:

- A response to a question is expected to provide an explanation of any model and/or methodological approach utilized, and to clearly identify the solutions. An explanation of a model requires defining all decision variables, parameters, constraints and the objective function. Any additional Excel® sheets should be included as appendix.
- As far as the homework grading is concerned, the important thing is to formulate a correct model. Therefore, you should make sure that your model is properly formulated and documented, so that a grader can easily interpret it and determine whether it is a correct formulation.
- You should submit your homework on Canvas by 11:59pm on the due date. The file(s) should be named as "LASTNAME_FIRSTNAME_ESI6323_HW#". Pages should be ready to print (you may check this using the Print Preview option). Your name should be on the header of each page.
- Any submitted homework assignments that are identical (or nearly so), either to each other, or to a solution key will receive a credit of zero.

Online Activities. Online Activities are delivered via course Canvas site with a format of Online Discussions or Quizzes. Students will be given 7 days (1 week) to participate from the date that the online activities are posted. This also encourages you to visit the course website and watch lecture videos on a regular basis.

Activity Calendar. This is a tentative outline, and the instructor reserves the right to make changes as she deems necessary.

Week	Date (Mon - Fri)	Activity
1	Jan 11 – 15	Sunday, Jan 17, 11:59pm: Online Discussion 1.
2	Jan 18 - 22 (Jan 18 holiday)	Sunday, Jan 24, 11:59pm: Online Discussion 2.
3	Jan 25 – 29	Sunday, Jan 31, 11:59pm: Homework 1.
4	Feb 1 – 5	Sunday, Feb 7, 11:59pm: Homework 2.
5	Feb 8 – 13	
6	Feb 15 – 19	Sunday, Feb 21, 11:59pm: Homework 3.
7	Feb 22 – 26	Sunday, Feb 28, 11:59pm: Online Quiz.
8	Mar 1 – 5	Midterm Exam.
9	Mar 8 – 12	Sunday, Mar 14, 11:59pm: Online Discussion 3 & Homework 4.
10	Mar 15 – 19	Sunday, Mar 21, 11:59pm: Homework 5.
11	Mar 22 – 26	Sunday, Mar 28, 11:59pm: Online Discussion 4.
12	Mar 29 – Apr 2	Sunday, Apr 4, 11:59pm: Homework 6.
13	Apr 5 – 9	Sunday, Apr 11, 11:59pm: Homework 7.
14	Apr 12 – 16	Sunday, Apr 18, 11:59pm: Online Discussion 5.
15	Apr 19 - 21	
	Apr 28 (12:30pm-2:30pm)	Final Exam.

Grading Policy

Percent	Grade	Grade Points
93.0 - 100.0	Α	4.00
90.0 – 92.9	A-	3.67
87.0 - 89.9	B+	3.33
83.0 - 86.9	В	3.00
80.0 - 82.9	B-	2.67
77.0 - 79.9	C+	2.33
73.0 - 76.9	С	2.00
70.0 – 72.9	C-	1.67
67.0 - 69.9	D+	1.33
63.0 - 66.9	D	1.00
60.0 - 62.9	D-	0.67
0 - 59.9	Е	0.00

More information on UF grading policy may be found at:

http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://gatorevals.aa.ufl.edu/. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://gatorevals.aa.ufl.edu/.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus: https://www.dso.ufl.edu/documents/UF Complaints policy.pdf.

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process.