MODELS FOR SUPPLY CHAIN MANAGEMENT

ESI6323 Section: 7918

Class Periods: See course schedules for details

Location: HyFlex
Academic Term: Summer 2021

Instructor:

Dr. Mengyu Li

mengyu.li@ufl.edu (Please contact through the Canvas message)

(352)-294-6391

Office location: 379 Weil Hall

Office Hours: Thursdays 5-6 pm (online via Canvas Zoom Conferences)

Teaching Assistants:

Jaeyoung (Jae) Park jaeyoung.park@ufl.edu

Office Hours: Tuesdays 8-9 pm; Saturdays 8-10 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

Month Date (the lectures will be		Topic		
	available on Canvas)			
April	Sunday	CM1. Understanding the Supply Chain		
	4/11	CM2. Supply Chain Performance: Achieving Strategic Fit and Scope		
		CM3. Supply Chain Drivers and Metrics		
		*Online Activity 1		
May	Saturday 5/15	CM4. Designing Distribution Networks and Applications to Online Sales		
		CM5. Network Design in the Supply Chain		
		CM6. Designing Global Supply Chain Networks		
		*Online Activity 2		
	Sunday 5/16	CM7. Demand Forecasting in a Supply Chain		
		CM8. Aggregate Planning in a Supply Chain		
		*Online Activity 3		
June	Saturday 6/12	CM9. Planning Supply and Demand in a Supply Chain		
		*Midterm Exam		
	Sunday	CM10. Coordination in a Supply Chain		
	6/13	CM11. Managing Inventory in a Supply Chain		
		*Online Activity 4		
July	Saturday	CM12. Managing Uncertainty in a Supply Chain		
	7/10	CM13. Determining the Optimal Level of Product Availability		
		*Online Activity 5		
	Sunday	CM14. Transportation in a Supply Chain		
	7/11	CM15. Sourcing Decisions in a Supply Chain		
		*Online Activity 6		
August	Saturday	CM16. Pricing and Revenue Management in a Supply Chain		
	8/14	*Final Exam		

Attendance Policy, Class Expectations, and Make-Up Policy

- Attendance is required for 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 lecture weekend has a lot of material to cover. These weekends can be made easier if you start them 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 Discussions or Quizzes. Students will be given 14 days (2 weeks) 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.

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

Week	Date (Mon - Sun)	Activity
1	April 5 – April 11	April 11, Sunday: Lecture.
2	April 12 – April 18	
3	April 19 – April 25	
4	April 26 – May 2	May 2, Sunday 11:59pm: Homework 1.
5	May 3 – May 9	
6	May 10 - May 16	May 15, Saturday: Lecture.
		May 16, Sunday: Lecture.
7	May 17 – May 23	May 23, Sunday 11:59pm: Homework 2.
8	May 24 – May 30	
9	May 31 – June 6	June 6, Sunday 11:59pm: Homework 3.
10	June 7 – June 13	June 12, Saturday: Midterm Exam.
		June 13, Sunday: Lecture.
11	June 14 – June 20	June 20, Sunday 11:59pm: Homework 4.
12	June 21 – June 27	
13	June 28 – July 4 (holiday)	July 6, Tuesday 11:59pm: Homework 5.
14	July 5 – July 11	July 10, Saturday: Lecture.
		July 11, Sunday: Lecture.
15	July 12 – July 18	July 18, Sunday 11:59pm: Homework 6.
16	July 19 – July 25	
17	July 26 – August 1	August 1, Sunday 11:59pm: Homework 7.
18	August 2 – August 8	
19	August 8 – August 15	August 14, Saturday: Final Exam.

Grading Policy

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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 <u>umatter@ufl.edu</u> 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.