Course	**OPRE 6366.501 – Global Supply Chain Management**
Professor	Sonia E. Leach, Ph.D.
Term	Spring 2023
Meetings	Tuesday: 7:00 – 9:45 PM; JSOM 1.117

Professor Contact Information

Professor	Sonia E. Leach, Ph.D., Clinical Professor
Office Phone	972-883-5845
Email Address	sonia.leach@utdallas.edu
Office Location	JSOM 3.229
Office Hours	Office hours are available throughout the week by appointment. Office hours will be carried out using MS Teams. If you have an issue that requires personal attention not pertaining to other students in the course, please email me and I will return your message within one day to schedule an appointment time.

About the Instructor

Dr. Leach began her supply chain career in 1992 as a systems acquisition/procurement officer on active duty in the United States Air Force. After overseeing the development of several software systems, she transitioned to operations analysis and conducted large-scale simulations and statistical output analysis for improved military operations in support of U.S. Congressional budget decisions. Dr. Leach then worked in supply chain compliance for supplier relations, transportation, logistics, subcontractor performance and customer service for a world-wide retail organization. Dr. Leach joined UT Dallas in 2012 upon retirement from her 20-year active duty career in the United States Air Force and now holds the position of Clinical Professor. Dr. Leach maintains relationships with several supply chain professional organizations and has actively interacted with supply chain professionals for the past ten years while directing the Industry Mentor Program for UTD MS SCM students. Her teaching expertise includes probability and statistics, operations management, global supply chain management, spreadsheet modeling and analytics, and project management. Dr. Leach has earned a BS in Mathematics from The Pennsylvania State University, a MS in Operations Research from the Air Force Institute of Technology and a Ph.D. in Industrial Engineering from Arizona State University.

TA Information

Name, contact information, and office hours are posted on eLearning.

Course Modality

Instructional Mode	In-person classroom lectures
Course Platform	eLearning

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record. Please see http://go.utdallas.edu/syllabus-policies.

Pre-Requisite

OPRE 6302 and exposure to probability, or consent of the instructor.

Knowledge of equation solving, derivatives and integrals of polynomials, expectation, variance, covariance, probability distributions. Familiarity with linear and integer programming formulations.

Course Description

This course explores the key issues associated with the design and management of industrial Supply Chains (SC). SC are concerned with the efficient integration of suppliers, factories, warehouses and stores so that products are distributed to customers in the right quantity and at the right time. One of the primary objectives of SC management is to minimize the total supply chain cost subject to various service requirements. Students will be able to describe and explain fundamentals of SC and to derive and compute optimal policies/variables, performance measures such as costs/profits, and be aware of SC practices.

Learning Outcomes and Expectations

Active and informed participation is expected from every student. Class sessions will consist primarily of lecture, with some discussions and in-class exercises as appropriate to the topic being covered. Textbook readings are a major source of learning in this course. Therefore, students are expected to read the appropriate textbook chapters in preparation for exams. Students should expect to spend an average of 9 to 12 hours per week on class preparation and studying activities outside of class meetings.

Learning outcomes – upon completion of this course, students will be able to accomplish the following:

1. Explain the strategic framework used to analyze a supply chain.
2. Identify the key decision-making components for designing a supply chain network.
3. Plan, coordinate and manage the supply, demand and inventory in a supply chain.

Required Text/Material

Supply Chain Management: Strategy, Planning and Operation (7th Edition) by Chopra. ISBN: 9780134731889.

Textbooks and some other bookstore materials can be ordered online or purchased at the UT Dallas Bookstore.

Technical Requirements

Please review the important technical requirements on the Getting Started with eLearning webpage.

You are expected to possess a confident level of computer and Internet literacy for this course. **A computer and Microsoft Excel with the Solver Add-In are required.**

To activate the Solver Add-In:

- On a Window-based computer, open MS Excel, click on File, click on Options, click on Add-ins, then at the bottom of the window you will see a drop-down menu that is set on Excel Add-ins. Click on Go, put a checkmark in the box next to Solver, and click on OK. The Solver command will now be visible in the Data ribbon under the Analysis group on the far right of the toolbar.
- On an Apple/Macintosh computer, open MS Excel, click on Tools in the top menu, then click on Excel Add-Ins.... Put a checkmark in the box next to Solver and click on OK. The Solver command will now be visible in the Data ribbon on the far right of the toolbar.

Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the eLearning website. Please see the course access and navigation section of the Getting Started with eLearning webpage for more information. To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

eLearning Course Resources

Most everything you need for the course has been posted to eLearning, such as:

- PowerPoint slides for each lecture (in .pptx and .pdf format)
- Data files for lecture examples and all textbook problems
- Solutions for all textbook problems
- Formula sheet for the Module 3 Exam
- Supplemental readings and videos for each lesson
- Sample exam questions and solutions

Course Calendar

Module 1	**Fundamentals**
Week 1	**Week of Tuesday, January 17**
Lecture Topics	Course Overview and Syllabus Review Introduction Strategy
Textbook Reading	Chapter 1
Recommended Practice Problems	Discussion Questions 4, 6, 7
Week 2	**Week of Monday, January 23**
Lecture Topics	Strategy
Textbook Reading	Chapter 2
Recommended Practice Problems	Discussion Questions 1, 3, 8, 9
Week 3	**Week of Monday, January 30**
Lecture Topics	SC Drivers Case Study: 7-Eleven Japan
Textbook Reading	Chapter 3
Recommended Practice Problems	Discussion Questions 1, 2, 7, 8 Case Study Questions 2, 3, 4

Week 4	**Week of Monday, February 6**
Lecture Topic	SC Network Design
Textbook Reading	Chapter 4
Recommended Practice Problems	Discussion Questions 2, 3, 4, 5, 8, 11
Graded Assignment	**Module 1 Assignment:** will be available on eLearning on Tuesday, January 17 and due via eLearning by **Friday, February 10 at 11:59PM CST**.
Week 5	**Week of Monday, February 13**
Graded Assessment	**Module 1 Exam:** (2 hours) **Tuesday, February 14** at the UTD Testing Center.
Module 2	**Modeling**
Week 6	**Week of Monday, February 20**
Lecture Topic	Facility Location Models
Textbook Reading	Chapter 5
Recommended Practice Problems	Discussion Questions 3, 4, 5, 7 Exercises 2, 3, 7
Week 7	**Week of Monday, February 27**
Lecture Topic	Evaluating Uncertainty Using Decision Trees
Textbook Reading	Chapter 6
Recommended Practice Problems	Discussion Questions 2, 6, 7 Recommended Exercises 1, 3, 4
Week 8	**Week of Monday, March 6**
Lecture Topics	Aggregate Planning in a SC
Textbook Reading	Chapter 8
Recommended Practice Problems	Discussion Questions 1, 2, 7, 9 Exercises 1, 2, 3
Week 9	**Week of Monday, March 13**
SPRING BREAK	
Week 10	**Week of Monday, March 20**
Lecture Topic	Sales and Operations Planning
Textbook Reading	Chapter 9
Recommended Practice Problems	Discussion Questions 2, 3, 5, 8, 9 Exercises 4, 5, 6
Graded Assignment	**Module 2 Assignment:** will be available on eLearning on Monday, February 20 and due via eLearning by **Friday, March 24 at 11:59PM CST**.
Week 11	**Week of Monday, March 27**
Graded Assessment	**Module 2 Exam:** (2 hours) **Tuesday, March 28** at the UTD Testing Center.

Module 3	Performance Measures
Week 12	**Week of Monday, April 3**
Lecture Topic	Coordination in a SC
Textbook Reading	Chapter 10
Recommended Practice Problems	Discussion Questions 1, 3, 6, 7
Week 13	**Week of Monday, April 10**
Lecture Topic	Aggregation and Discounting
Reading	Chapter 11
Recommended Practice Problems	Discussion Question 1, 2, 3, 4, 8 Exercises 1, 2, 3, 9, 10, 12, 13, 14, 18
Week 14	**Week of Monday, April 17**
Lecture Topic	Safety Inventory
Textbook Reading	Chapter 12
Recommended Practice Problems	Discussion Questions 2, 6, 7, 9, 10, 11 Exercises 1, 2, 3, 4, 5, 6, 7, 10, 14, 15, 17, 25, 26
Graded Assignment	**Group Project/Paper:** due via eLearning on **Sunday, April 23 at 11:59PM CST**.
Week 15	**Week of Monday, April 24**
Lecture Topics	Newsvendor Model and Postponement
Textbook Reading	Chapter 13
Recommended Practice Problems	Discussion Quesitons 1, 2, 3, 6, 7 Exercises 1, 2, 4, 5, 6, 7, 9, 12, 14, 17
Graded Assignment	**Module 3 Assignment:** will be available on eLearning on Monday, April 3 and due via eLearning by **Friday, April 28 at 11:59PM CST**.
Week 16	**Week of Monday, May 1**
Graded Assessment	**Module 3 Exam:** (2 hours) **Tuesday, May 2** at the UTD Testing Center.

GRADING POLICIES

Grading Criteria

Assessment Activity	
Assignments (5% each)	15%
Module 1 Exam	25%
Module 2 Exam	25%
Module 3 Exam	25%
Group Project	10%
TOTAL	**100%**

Letter Grades

Weighted Average	Course Letter Grade
≥ 93	A
90 – 92.9	A-
87 – 89.9	B+
83 – 86.9	B
80 – 82.9	B-
77 – 79.9	C+
70 – 76.9	C
< 70	F

A C grade is the lowest passing grade in a graduate-level course. Undergraduates taking this graduate course will be subject to the same grading policy as graduate students.

Accessing Grades

Students can check their grades by clicking My Grades under Course Tools after the grade for each assessment is released.

Exams

Three (3) exams will be given in this course. All exams are closed book, closed notes. The exams will require you to demonstrate your understanding of the concepts presented in the associated learning Module. You will have two (2) hours to complete each exam.

Testable materials include: lecture, assigned chapter readings, supplemental readings in eLearning, and posted videos in eLearning.

A formula sheet relevant to the material being tested will be provided to you for the Module 3 Exam. This formula sheet is available for preview in eLearning.

You are authorized to use MS Excel, the downloaded pdf formula sheet (for Module 3 Exam only), any calculator (but not a smartphone) and scratch paper (for Module 2 and 3 Exams only) on exams.

All exams must be taken at the Student Success Center Testing Center in Synergy Park North Two during the designated timeframe given for each exam. You must reserve a seat for each exam at least 72 hours in advance of each exam at http://registerblast.com/utdallas/exam.

The value of each exam is given in the table below.

Your grade for each exam will be available in My Grades in eLearning after all students have completed the exam and the exams have been reviewed and released by your instructor. Prior to this happening, you may not see your exam listed in My Grades in eLearning – this is normal even if you have completed and submitted your exam. You will receive an emailed course announcement once the instructor has released the exams grades. Once released, your grade will be visible in My Grades in eLearning. To view your exam, click on My Grades, click on the name of the exam, then click on your score. Please note the points awarded for each question, and not just the correct/incorrect marking, as your grade may have been overridden by the instructor during the review. Questions regarding a graded exam must be submitted by email. A response to your inquiry will be emailed and may include comments typed within the Feedback section of your exam question.

Summary of exam composition:

- Module 1 Exam: 30-35 MC/TF questions, 4 short answer questions
- Module 2 Exam: 30-35 MC/TF questions, 4 calculation problems
- Module 3 Exam: 30-35 MC/TF questions, 8 calculation problems

Group Project/Paper

There will be one group project in this course worth 10% of your course grade. Your groups will be randomly assigned and will not be changed based on student preference. The groups will be tentatively set at the beginning of the course, but will not be finalized until after Census Day, which is approximately three weeks into the semester. The details of the group project are available in eLearning. The due date of the group project is listed in eLearning and in the Course Calendar presented above.

Graded Assignments

After returning an assignment, students have 7-days (5-business days) to question the grade.

Rescheduled Exams

A reschedule exam will be provided to any student who has a conflict with a scheduled exam. Please contact the instructor via email as soon as you are able prior to the scheduled exam data to arrange for a rescheduled exam.

Makeup Exams

Multiple opportunities to take the same exam in an attempt to earn a better grade are not allowed. Only one attempt is allowed per exam. Makeup examinations will **NOT** be offered for this course under any circumstances. (Note: The UTD Testing Center refers to Makeup exams as those on alternate test dates from the original class schedule. These are not second opportunities for a student to take and exam.)

Late Work

If you need to miss an assignment deadline, you must pre-notify the instructor before the deadline. You should provide the reason for missing the deadline and an alternative date for submitting the assignment. The instructor must approve the extension and the new deadline. If you do not pre-notify the instructor, the assignment will be reduced in grade by 10% for each day (or portion of a day) late.

Additional Information

Extra credit will **NOT** be offered for this course under any circumstances.

COURSE/UNIVERSITY POLICIES

Accessibility Accommodations

It is the policy and practice of The University of Texas at Dallas to make reasonable accommodations for students with properly documented disabilities. However, written notification from the Office of Student AccessAbility (OSA) is required. If you are eligible to receive an accommodation and would like to request it for this course, please discuss it with me and allow one week advance notice. Students who have questions about receiving accommodations, or those who have, or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact the Office of Student AccessAbility for a confidential discussion. OSA is located in the Student Services Building, suite 3.200. They can be reached by phone at (972) 883-2098, or by email at studentaccess@utdallas.edu.

Class Materials

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes.

Class Participation

Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

The instructor may record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students. Please see http://go.utdallas.edu/academic-support-resources.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please review the catalog sections regarding the credit/no credit or pass/fail grading option and withdrawal from class. Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.