SIE 465/565 Supply Chain Management
Spring 2026

Department of Systems and Industrial Engineering
The University of Arizona

Class Time:	MWF 9:00 - 9:50 AM
Class Location:	Biol Sci West, Rm 237
Instructor:	Dr. Yue Wang, Assistant Professor
Email:	ywang23@arizona.edu
Office Location:	ENGR 127
Office Hours:	[In-person & Zoom] Mon. 3:00 - 4:00 PM MST, or by appointment. (Zoom link: D2L -> UA Tools -> Zoom)
Teaching Assistant:	Ahmed Alhamadah
Email:	alhamadah@arizona.edu
Office Hours:	[Zoom] Wed. & Fri. 2:00-3:00 PM MST (Zoom link: D2L -> UA Tools -> Zoom) [In-person] By appointment.
Prerequisites:	SIE 305, SIE 340. Basic knowledge of mathematical programming, probability, statistics, and algebra. Prior computer programing experience is a plus.

Course Description

This course introduces the core concepts, strategies, and tools of modern supply chain management. Topics include supply chain network design, demand forecasting, aggregate planning, inventory management, transportation, sourcing, and pricing. Students will learn how supply chains create value, support organizational goals, and coordinate the flow of products, information, and finances. The course also explores emerging topics in supply chain management such as sustainability and the role of information technology.

Learning Objectives

Upon successful completion of this course, students will be able to:

1. Understand fundamental concepts and strategic roles of supply chain management.
2. Apply analytical frameworks and decision-making tools to evaluate and improve supply chain operations.
3. Develop and use quantitative models to support decision-making in supply chain contexts.
4. Solve complex supply chain problems, integrating technical and managerial perspectives.

Course Materials

- **Required Textbook:** Chopra, Sunil. (2025). *Supply Chain Management: Strategy, Planning, and Operation, 8th ed*. Published by Pearson.

- **Supplemental Materials:** Videos and reading materials will be assgined in selected modules corresponding to the topics. Students are encouraged to complete these. Quizzes questions may be based on these materials.

- **Software**: Microsoft Excel will be the primary tool for assignments and exercises. For selected topics, the instructor will also provide Python-based solutions using Google Colab. The use of Python, or another programming language such as C++, Julia, or MATLAB, is optional but encouraged. Students who choose to complete assignments or projects using a programming language instead of Excel may earn bonus points, as specified in the assignment guidelines.

Course Outline

- Unit 1: Introduction to Supply Chain Management
  - Module 1: Understanding the Supply Chain
  - Module 2: Achieving Strategic Fit in a Supply Chain
  - Module 3: Supply Chain Drivers and Financial Performance
- Unit 2: Designing the Supply Chain Network
  - Module 4: Network Design in the Supply Chain
  - Module 5: Designing Global Supply Chains
- Unit 3: Planning and Coordinating Demand and Supply
  - Module 6: Demand Forecasting
  - Module 7: Planning Supply – Aggregate Planning
  - Module 8: Sales and Operations Planning
  - Module 9: Coordination in a Supply Chain
- Unit 4: Planning and Managing Inventories
  - Module 11: Managing Economies of Scale – Cycle Inventory
  - Module 12: Managing Uncertainty – Safety Inventory
- Unit 5: Module 13: Transportation in the Supply Chain
- Unit 6: Managing Cross-Functional Drivers in a Supply Chain
  - Module 14: Sourcing Decisions
  - Module 15: Pricing and Revenue Management
- Unit 7: Emerging Topics in Supply Chain Management
  - Module 16: Sustainability and Supply Chains
  - Module 17: Information Technology in Supply Chains

Course Assessment

	Undergraduate	Graduate
Homework Assignments	20%	20%
Quizzes	25%	25%
Quantitative Case Studies	25%	25%
Course Project	30%	30%

Remarks:

- Quiz problems and project requirements will vary between 465 and 565 students.

Grading Scale

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- E = < 60%

Course Website

The course will use D2L (http://d2l.arizona.edu). You can login to the system using your NetID username and password. Please check the course website regularly, as it will be used to post announcements, quizzes and exams, homework assignments, lecture slides, and other course materials. **Any information posted on the course website will be treated as if it is announced in the class and you are responsible to be aware of it.**

Video Recording of Lectures

Each class session will be recorded and uploaded to the Panopto folder assigned to the course. From the course D2L page you will see the "Panopto Video" options listed under UA Tools.

Homework Policies

- Students may work together on homework assignments, but **identical submissions will receive zero points**.
- The penalty for late submission (within 72 hours) is 30% of the points allocated to the assignment. **Submission will not be accepted if it is more than three days late**.

Quiz Policies

- No pop-up quizzes. You will be told in advance about the time window for quizzes.
- Quizzes are open books and open notes. However:
    - Use of email or any other communication apps (texting, WhatsApp, GroupMe, etc.) is prohibited during quiz time.
    - Use of Generative AI (ChatGPT, etc.) or search engine (Google, Bing, etc.) is prohibited during quiz time.
- Detailed instructions will be provided by the instructor prior to or during each quiz.

Absence and Make-Up Policies

- Missing a quiz is only allowable with an excuse pre-approved by the UA Dean of Students office. For more information, please refer to Attendance Policies and Practices.
- Missing a regular quiz without an approved absence will result in a grade of zero with no option to retake.

Classroom Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Code of Academic Integrity

Graded work must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: https://deanofstudents.arizona.edu/policies/code-academic-integrity. There is zero tolerance towards plagiarism and any act of intellectual dishonesty.

Accessibility and Accommodations

Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcomed to contact Disability Resources (520-621-3268) to establish reasonable accommodations. For additional information on Disability Resources and reasonable accommodations, please visit http://drc.arizona.edu/. If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Threatening Behavior Policy:

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students.

Nondiscrimination and Anti-harassment Policy:
The University is committed to creating and maintaining an environment free of discrimination; see http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy.

Subject to Change Statement:
Information contained in the course syllabus, except the grading policy, may be subject to change.