Instructor: Trilce Encarnación, Ph.D.
Office: Express Scripts Hall (ESH), Room 206
Email: tencarnacion@umsl.edu (best way to reach me)
Emails sent during the workweek (M-F), will receive a response within 24 hours. Emails received over the weekend or during breaks will receive a response within 48 hours.

Class Day/Time:
This is a Hybrid-Flex class: Students can join in-person, via zoom, or asynchronously.
> We will meet Wednesdays from 6:00 PM – 8:30 PM in ABH – 00108.
> Students can join via Zoom: https://umsystem.zoom.us/j/94809550788
> Lecture recordings will be posted in Canvas.

Office Hours:
I will hold office hours by appointment.

Activities:
- Hybrid lectures and activities.
- Weekly assignments, which will vary between home works and case studies.

Learning Outcomes:
- Students will be able to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental social, political, ethical, health and safety, manufacturability, and sustainability.
- Students will have knowledge of contemporary issues.
- Students will be able to develop and use mathematical models to guide decision-making in supply chain systems and processes.

Course Description:
Supply Chain and Operations Management studies the processes and operations in both manufacturing and service sectors to enable inputs to be transformed into outputs (goods and services) efficiently and effectively. It addresses issues and decision needs in managing supply chains that integrate suppliers/vendors, manufacturers, distribution centers, retailers, and customers for physical entities (raw materials, parts, components, semi-finished and finished products) to be produced, distributed, and delivered at the right quantities, to the right locations, at the right time and with the right cost.

This course provides a balanced treatment of both the up-to-date managerial domain topics and analytical methodologies for decision-making. Topics include but are not limited to operations strategies, supply chain design, resource management, and machine scheduling, with applications of various analytical techniques including linear programming, inventory control, and decision analysis.

Prerequisites:
SCMA 5310 or taken concurrently

Textbook:
Operations and Supply Chain Management, 17th Edition
by Robert Jacobs (Author) ISBN13: 9781265071271

Course Schedule:

Week of	Topic	Book Chapter	Assignments
Jan 17	Supply Chain and Operations Management	CH 1,2	--
Jan 24	Design of Products and Services – Strategy	CH 3,5	Case Study 1
Sep 31	Manufacturing and Service Processes	CH 7,9	Homework 1
Feb 7	Process Design and Analysis	CH 11	Case Study 2
Feb 14	Supply Chain Design I	CH 14	Homework 2
Feb 21	Supply Chain Design II	Slides	--
Feb 28	Midterm Exam		Exam
Mar 6	Forecasting	CH 18	Homework 3
Mar 13	Sales and Operations Planning	CH 19	Case Study 4
Mar 20	Linear Programming	CH 19S	--
Mar 27	Spring Break		
Apr 3	Linear Programming	CH 19S	Homework 4
Apr 10	Inventory Management	CH 20	Case Study 5
Apr 17	Scheduling - Theory of Constraints	CH 22	Homework 5
Apr 24	Midterm Exam		Exam
May 1	Final Project Submission		Final Project Report

Understanding Your Progress Towards Learning (also known as Grading)

Homework (20%) are take home problem sets to help solidify your knowledge and skills. You will write up your work in a report to be submitted through Canvas.

Case Studies (20%) give experience with operations analysis in a real-world context. You will write up your work in a report to be submitted through Canvas.

You may work with other people when doing the analysis work for both homework and Case Study assignments, but it is crucial to exercise your skills on your own so you can do similar work on exams and in the future. You must write your own report, even if you work on the content with other students. Instances of copying and suspected copying will be reported to the Vice-Chancellor of Academic Affairs. Evidence of copying will result in a grade of "0" for the entire assignment for both students unless investigation by the Vice-Chancellor of Academic Affairs recommends otherwise.

There will be two *Midterm Exams (20% each)* that will test your proficiency in the materials, these exams will be open book to be submitted through Canvas. The exams are not cumulative. However, some concepts from the beginning of the course will reappear throughout the course and will therefore also reappear on later exams.

The _Term Project (20%)_ is a well-written, high-quality analysis that properly implements methods learned on the course. The topic will be provided by the instructor, to take a comprehensive look at the techniques learned in class. This will be an applied, data-driven set of problems that will require student creativity and problem solving beyond regular homework assignments. Students will be paired in groups of three team members to complete this assignment.

Important Notes about Assignments and the Grading Scheme

Deadlines: All assignment deadlines will be posted on canvas. Late assignments will have their grades multiplied by 0.8 if handed in no more than 1 week late, or by 0.5 if handed in up to two weeks late. However, a reasonable degree of flexibility will be maintained about the deadlines to accommodate special situations that students may face. Deadline extensions should be requested before the assignment is due via email.

Grading All assignments will be conducted or submitted on Canvas. Feedback to students will be provided by means of rubrics, grades, and/or comments, all posted in Canvas. Feedback will be available within not more than a week after the assignment's deadline. Participation in online discussions will be assessed using rubrics that will be detailed in the instructions of each activity.

Grading Scale: Final letter grades will be assigned based on the UMSL scale:

A = 100%	A- < 94%	B+ < 90%	B < 87%	B- < 84%	C+ < 80%
C < 77%	C- < 74%	D+ < 70%	D < 67%	D- < 64%	F < 61%
EX = Excused		DL = Delayed		FN = Failure/Non-Participation	

Participation Expectations
If you are unable to participate in any scheduled class activity, you must notify the instructor within the week of that class module. The instructor reserves the right to make judgments to accept and/or make–up assignments missed because of failed participation in the course activities.

Attendance Policies
Present in class for any component of our course is determined by participation in an "academically related activity," i.e. submission of an assignment or assessment. The last day of attendance is the last day a student is academically participating in the online course. Moreover, documentation that a student has logged into the Canvas course site alone is not sufficient by itself to demonstrate academic attendance. Lack of attendance to scheduled zoom meetings or submission of work in Canvas could result in an automatic course drop.

Course Plan for the Unexpected

Please stay informed about university policies, instructions and resources as they relate to the COVID-19 pandemic: https://www.umsl.edu/hcdas/coronaupdates.html It is important to me that you stay on track toward your degree completion. I will post regular announcements through Canvas but please do not hesitate to reach out through email with any questions you may have.

Technology Requirements:

As a student in an online course, you are expected to have reliable internet access almost every day. Please reach out to your academic advisor or student success network if you need hardware or access to the Internet. If you have computing problems, it is your responsibility to address these through the ITS Helpdesk (helpdesk@umsl.edu) or to use campus computing labs. Problems with your computer or other technology issues are not an excuse for delays and missed deadlines for the course. If you have a problem, get help in solving it immediately. At a minimum, you will need the following software/hardware to participate in this course:

- Computer with an updated operating system (e.g. Windows, Mac, Linux)
- Updated Internet browsers (Google Chrome (required) or Mozilla Firefox)
- Ability to navigate Canvas (Learning Management System)
- Microsoft Excel
- Minimum Processor Speed of 1 GHz or higher recommended.
- Reliable and stable internet connection.
- Adobe Reader or alternative PDF reader (free)

Academic Integrity/Plagiarism

We want our learning environment to be honest and fair. The assessments in our course provide you with an opportunity to showcase what you know and learn from what you may not yet have mastered. When you submit work with your name on it, this is a written statement that credit for the work belongs to you alone. If the work was a product of collaboration (such as a group project), each student is expected to clearly acknowledge in writing all persons who contributed to its completion. Each assignment and exam in our course will include clear guidelines about the rules around each assessment including what materials are appropriate to use. It is always required that the work you submit is your own, uses proper citation, avoids collusion or falsification. If you have a question about an assignment, do not hesitate to contact me for clarification. You are responsible for being attentive to and observant of University policies about academic honesty as stated in the University's Campus Policies and Code of Student Conduct found in the UMSL Bulletin.

Plagiarism, collusion, cheating, and falsification are not acceptable and will result in failure of an assignment and possible administrative sanctions such as dismissal from the university.

- Plagiarism: representing the ideas or work of another as your own, intentionally or unwittingly, without proper, clear, explicit acknowledgement.

- Facilitation/Collusion: supporting malpractice by another student, for example, allowing your work to be copied.
- Duplication of Work: presenting the same work for a different assessment.
- Cheating: using any unauthorized sources of information (such as previous or existing exams for this course) and providing or receiving unauthorized assistance on any form of academic work or engaging in any behavior specifically prohibited by the faculty member (e.g., uploading or using test or online homework questions on study sites such as Chegg.com, copying someone else's answers on tests and quizzes, copying/pasting exam or online homework questions from this semester for your peers or publicly in online forums).
- Falsification: any untruth, either verbal or written, in one's academic work including presenting fabricated/made-up data or presenting someone else's work as your own. Unless the instructor explicitly states otherwise, it is dishonest to collaborate with others when completing any assignment or test, performing laboratory experiments, writing and/or documenting computer programs, writing papers or reports and completing problem sets.
- Academic dishonesty is a serious offense that may lead to probation, suspension, or dismissal from the University. Academic dishonesty can take a number of forms described above: plagiarism, cheating, unauthorized possession or distribution of academic materials including the unauthorized use, selling or purchasing of examinations or other academic work, using or stealing another student's work, unauthorized entry or use of material in a computer file, and using information from or possessing exams that an instructor did not authorize for release to students.
- All instances of academic dishonesty will be reported to the Office of Academic Affairs who will determine whether you will appear before the Student Conduct Committee for possible administrative sanctions such as dismissal from the university. The instructor will make an academic judgment about the student's grade on that work in this course. The campus process regarding academic dishonesty is described in the "Policies" section of the Academic Affairs website

Online Class Netiquette/Behavior
- Be self-reflective before you post an emotional response and reread what you have written to be sure it is positive. Think of your comments as printed in the newspaper. Your online comments will be seen, heard and remembered by others in the class.
- Use effective communication.
  - Avoid the use of all caps or multiple punctuation elements (!!!, ??? etc).
  - Be polite, understate rather than overstate your point, and use positive language.
  - If you are using acronyms, jargon or uncommon terms, be sure to explain them so everyone can understand and participate in the discussion.
- Ask for clarification to a point if you feel emotional from a classmate's post. It is likely that you misunderstood his/her point. This strategy will also help you step away from the intensity of the moment to allow for more reflection.

- Sign your name. It is easier to build a classroom community when you know to whom you are responding.
- Foster community. Share your great ideas and contribute to ongoing discussions. Consider each comment you make as one that is adding to, or detracting from, a positive learning environment for you and your classmates.
- Be constructive. You can challenge ideas and the course content, but avoid becoming negative online. When you disagree politely, you stimulate and encourage great discussion. You also maintain positive relationships with others with whom you may disagree on a certain point.
- Keep the conversation on topic by responding to questions, adding thoughtful comments about the topics at hand. Online dialogue is like conversation. If there is a certain dialogue going on, please add to it, but if you have something new to say, please post it in another thread.
- Define your terms. When using acronyms or terms that are particular to your field (or new to our course), please define them for others.

Canvas

If you have problems logging into your online course, or an issue within the course site, please contact the Technology Support Center:
Phone: (314) 516-6034
Email: helpdesk@umsl.edu
Website: http://www.umsl.edu/technology/tsc/

Academic Support

The Online Writing Center (OWC)

At the OWC Canvas site, students can send their papers to our tutors, who will read them and send them back with suggestions. Students can also access Turnitin, which identifies quoted material in their essays.

- 222 Social Sciences and Business Building (SSB)
- Website: https://www.umsl.edu/~umslenglish/Writing Center/
- Visit the OWC course site on Canvas to submit drafts online. To find the OWC course, click on Courses-All Courses. Then click to join this course
- The OWC usually responds within 48 hours. Please allow ample time.

Math Academic Center (Math Lab)

The Math Academic Center offers free individual assistance on a walk-in basis to students needing help with any mathematics from basic math through calculus or any course involving mathematical skills.

- 222 Social Sciences and Business Building (SSB)
- Website: http://www.umsl.edu/mathcs/math-academic-center/

Student Resources
Access, Disability and Communication
Your academic success is important to me. We all learn differently and bring different strengths and needs to the class. If there are aspects of the course that prevent you from learning or make you feel excluded, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course.

If you have a documented disability that may have an impact upon your work in this class, please contact Disability Access Services (DAS) immediately. Students must provide documentation of their disability to the office of Disability Access Services in order to receive official University services and accommodations. The staff is available to answer questions regarding accommodations or assist you in your pursuit of accommodations. Information about your disability is confidential.
Once DAS reviews your medical documentation, they will provide you with the information and steps to inform me about the accommodations to which you are entitled. Your accommodations will begin as soon as we discuss your approved accommodations.

- 144 Millennium Student Center (MSC)
- Phone: (314) 516-6554
- Email: Tara Cramer, cramert@umsl.edu, or Adam Mann, mannad@umsl.edu
- Website: http://www.umsl.edu/services/disability/

Office of International Students and Scholar Services
If you have difficulty communicating in English with the instructor of this course, contact ISS.

- 362 Social Sciences & Business Building (SSB)
- Phone: (314) 516-5229
- Email: iss@umsl.edu
- Website: http://www.umsl.edu/~intelstu/contact.html

Student Enrichment and Achievement
SEA provides comprehensive support and intervention strategies that support your road to graduation!

- 107 Lucas Hall
- Phone: (314) 516-5300
- Email: umslsea@umsl.edu
- Website: https://www.umsl.edu/services/sea/

Office of Multicultural Student Services (MSS) and the University Tutoring Center (UTC)
MSS provides comprehensive student retention services to diverse student populations; through their tutoring center, the MSS offers comprehensive tutoring services free to students at UMSL.

- 225 Millennium Student Center (MSC)
- Phone: (314) 516-6807
- Email: multicultural@umsl.edu
- Website: https://www.umsl.edu/~mcraa/index.html

Mandatory Reporting

Under Title IX, all UMSL faculty, staff, and administrators (with limited exception) are obligated to report any incidents of sexual harassment, sexual misconduct, sexual assault, or gender discrimination to the Student Affairs office and/or other University officials. This ensures that all parties are protected from further abuses and that victim(s) are supported by trained counselors and professionals. Note: There are several offices at UMSL (e.g., Counseling Services, Health Services, Community Psychological Service, Center for Trauma Recovery, and Student Social Services) whose staff are exempt from Title IX mandated reporting, when the information is learned in the course of a confidential communication.