UNIVERSITY OF MASSACHUSETTS LOWELL Manning School of Business

POMS.3010.204 Operations Management Fall 2024

CREDITS: 3

WEBSITE: https://uml.umassonline.net

CLASS LOCATION: PTB-160

CLASS TIME: Mon & Wed 2:00pm – 3:15pm

INSTRUCTOR: Dr. Nichalin S. Summerfield

Email: nichalin_summerfield@uml.edu

Office hours: Mon & Wed 3:20pm-4:50pm at PTB-432

PRE-REQUISITES: Pre-req: POMS.2010 Introduction to Business Analytics, or

Matriculated BS (Industrial Engineering), or Instructor

Permission.

COURSE DESCRIPTION:

Principles of production/operations management. Nature and function of production systems; operational planning and control; plant layout; materials handling; inventory and quality control.

COURSE OBJECTIVES:

The primary objectives of the course are for each student:

- 1. To understand the strategic nature of operations in today's competitive environment. (Why OM "matters"), and
- 2. To develop a set of fundamental concepts, and tools of analysis useful in improving operating systems. (How to help make operations better.)

To achieve these objectives, we will examine manufacturing and service operations in a variety of environments and organizations. We will cover topics such as product and process design, quality management, supply chains and inventory management. Through case studies, in-class exercises, and analytical problems, students will learn about operations management tools and the context in which they are used.

Relationship of course to program

This course is part of the undergraduate curriculum and is required of all business majors. The Bachelor of Business Administration program includes the following learning goals:

- Communication skills
- Analytical skills
- Team management skills
- Information technology skills
- Global awareness
- Ethical reasoning skills

This course supports the learning goals of Analytical skills, Team management skills, Information technology skills, and Global awareness.

COURSE MATERIAL:

Core Materials Everything will be posted on Blackboard Learn system.

URL: http://uml.umassonline.net

** Please check Blackboard system, at least, every other day **

Optional Books Cachon, G. & Terwiesch, C. 2020. *Operations Management*, 2e.

McGraw-Hill Higher Education. (No connect)

Required Software: Microsoft Office. Note that Microsoft Office 365 is available to

UML students. You can follow the instructions here: https://www.uml.edu/IT/Services/Software/myoffice-for-

students.aspx

Calculator: A calculator is required. You may use a basic or graphing

calculator (TI-83/TI-84).

CLASSROOM POLICY:

This course will be conducted in a series of lectures supplemented by in-class assignments, assigned readings, or videos. Please plan to spend an hour on self-studying the course materials for every hour of time spent in class. Do not fall behind in understanding the materials. Get your questions answered <u>immediately</u>. Send an email to me if you need help. You can also utilize the tutoring services offered at the tutoring center.

For communication via UML email system, you can expect to hear back from me within 72 hours. If I am unable to respond within 72 hours, I will let you know beforehand. Please check your mail often.

Class participation & attendance:

Attendance is strongly recommended and expected, as regular attendance is one of the most important contributors to student success. You are also expected to actively participate in class discussions. However, **do not come to class if you are ill.**

If you are unable to come to class, please watch the recorded video. Attendance will be tracked. **There is no direct grade penalty for being absent.** However, there may be the graded in-class assignments that you will have to catch up and submit afterwards. Lack of class attendance may impact financial aid eligibility in some students.

https://www.uml.edu/Catalog/Undergraduate/Policies/Academic-Policies/Attendance-Policies.aspx. In addition, student-athletes must adhere to the Athletic Academic Policy.

In the event of a **prolonged medical or personal absence**, please contact me as soon as possible so we can discuss whether it is advisable for you to remain in class, and, if so, to develop a plan for making up any missed work. You must keep me informed of your prolonged absence regularly and provide as much advance notice as possible.

If I should become ill or need to miss class, I may run the class on Zoom. I will communicate with you via email as soon as possible with clear instructions. If I cancel a class, the make-up class will be scheduled.

In case that we run a Zoom class, you must sign into Zoom app using your UML email address. You should update your cellphone number on your Zoom profile at https://uml.zoom.us. This will allow you to dial in to the class if needed. When you log in, you may be put into a virtual waiting room. I will let you into the session right at the start time. You are free to share your camera, but it is not required. However, a working microphone is required. You will need to click "unmute" when you talk and put "mute" back when you are done talking. Do not log into Zoom and walk away.

Credit Hour Policy:

Federal definition of a credit hour requires that for every course credit awarded, a course must offer 15 hours of instructor-led course activities and 30 hours of out-of-class student work. This means that a standard 3 credit hour course requires 45 hours of instructor-led course activities and 90 hours of out-of-class student work.

Academic Integrity Policy:

Students are responsible for the honest completion and representation of their work and are held to the highest standards of integrity. Please review the <u>University policy regarding academic integrity</u>. It is the students' responsibility to familiarize themselves with these policies. If you choose to remain in this course, you must agree that you will neither give nor receive any unauthorized help on your homework, papers, exams, or other work.

This policy notes that "academic dishonesty includes but is not limited to cheating, fabrication, plagiarism, and facilitating dishonesty." All academic dishonesty will be reported to the Office of the Provost. For international students, please beware that any suspension due to academic dishonesty will result in termination of F-1 or J-1 status.

AI Usage:

In this course, we recognize the potential of generative artificial intelligence (GAI) tools to enhance learning experiences and foster creativity. Students are encouraged to explore and utilize these tools responsibly to support their academic growth and develop new skills.

When using GAI tools for assignments and projects, students must adhere to the following guidelines:

- Use GAI tools for brainstorming, idea generation and preliminary research.
- Critically evaluate and independently verify the information generated by AI to ensure accuracy and reliability.
- The final submission must demonstrate the student's original thought, analysis and synthesis of knowledge, even if informed by AI-generated content.
- All uses of GAI tools must be transparently cited, detailing the AI tools used, the assistance received and how AI informed your final submission.

*** The use of any AI tools in completing the exams is strictly prohibited. ***

If you have any questions or concerns about using GAI tools in this course, please consult with me for guidance.

Students with disabilities:

If you are registered with Disability Services and will require course accommodations, please notify me via the <u>Accommodate semester request process</u> as soon as possible so that we might make appropriate arrangements. It is important that we connect to discuss the logistics of your accommodations; please speak to me during office hours or privately after class as I respect and want to protect your privacy. If you need further information or need to register for academic accommodations, please visit the <u>Disability Services</u> Website.

Additionally, depending on your needs, you may benefit from <u>Assistive Technology resources</u>.

Tutoring:

The Centers for Learning and Academic Support Services (CLASS) will be offering <u>tutoring</u> and <u>Writing Center</u> services both in-person and virtually. I strongly urge you to take advantage of this opportunity to reinforce your learning. A <u>tutoring request form</u> is also available if there are no tutors listed for the class for which you need help.

Student Mental Health and Wellbeing:

We are a campus that cares about your well-being and success. Your personal health and well-being are of utmost importance to faculty and campus administrators. Please know that I'm available to talk about your stresses or concerns related to your coursework in my class. Here are some resources to support your well-being:

• <u>Counseling Services</u> provides crisis intervention, assessment, referrals, short-term individual counseling, group therapy, and on-call clinicians outside of business hours. To schedule an appointment, call the Wellness Center at 978-934-6800 during normal

- business hours. The 24/7 phone number to get help from on-call clinicians when experiencing a mental health crisis is 855-890-2879.
- <u>UMatter2</u> is a university-wide initiative to support students and promote mental health. The office may be reached at 978-934-6671. You will find information at that website on how to access <u>Togetherall</u>, an online community which is a peer-to-peer platform dedicated to mental health support.
- Your college's Academic Advising Office for 1st and 2nd year students and your faculty advisor for junior and senior students.
- Centers for Learning and Academic Support Services (<u>CLASS</u>) provides advising services including planning, course selection, SIS functions, changing majors, and course deletion/repetitions. They can be reached at 978-934-2936 or <u>Advisement@uml.edu</u>
- The mission of the <u>Office of Student Life & Wellbeing</u> is to advance the holistic concept for student success by infusing health promoting actions and collaboration into campus culture. They can be reached at 978-934-4342 or <u>Wellbeing@uml.edu</u>

Consider also reaching out to a friend, faculty, or family member you trust for help getting connected to the support that can help. UMass Lowell is a campus that cares about the mental health and wellbeing of all individuals in our campus community.

Diversity, Inclusion, and Classroom Community Standards:

UMass Lowell—and I personally—value human diversity in all its forms, whether expressed through race and ethnicity, culture, political and social views, religious and spiritual beliefs, language and geographic characteristics, gender, gender identities and sexual orientations, learning and physical abilities, age, and social or economic classes. Enrich yourself by practicing respect in your interactions, and enrich one another by expressing your point of view, knowing that diversity and individual differences are respected, appreciated, and recognized as a source of strength.

<u>The Office of Multicultural Affairs (OMA)</u> supports and advocates for students while leading diversity-related programming. At the same time working to create an inclusive environment for LGBTQ+ individuals via the LGBTQ+ Resource Center. Contact (978) 934-4336 or Multicultural_Affairs@uml.edu.

Student Feedback on Instruction (Course Evaluations):

Student feedback on teaching is a highly valued and helpful mechanism for monitoring and improving the quality of the Manning School of Business programs and instructional effectiveness. To that end, *Student Feedback on Instruction (SFI)*, i.e., course evaluations are administered during the last few weeks of classes. Students are encouraged to participate actively in this process.

University Privacy Statement:

I will be recording our course for the purposes of making course content available for all students. UMass Lowell recognizes the importance of mutual trust between students and faculty. Neither faculty nor students may record video or audio of a course or private conversation without all parties' consent. Massachusetts is a two-party consent state, which means it is illegal

to record someone without their permission. Recordings of classroom lectures are the intellectual property of the instructor. Instructors have the right to prohibit audio and video recording of their lectures unless the requesting student is registered with Disabilities Services and the recording of class sessions is an approved accommodation. In addition, sharing of or selling recordings of classroom activities, discussions, or lectures with any other person or medium without permission of the instructor is prohibited.

Syllabus Change Policy:

This syllabus is a guide to provide an overview of the course. However, circumstances and events may make it necessary for me to modify the syllabus during the semester and may depend, in part, on the progress, needs, and experiences of the students. Changes to the syllabus will be made with advance notice.

EVALUATION POLICY:

Your final course grade will be based on the following:

Requirement	% Total Grade
Homework assignments (drop 1 lowest grades)	15%
In-class assignments (drop 2 lowest grades)	15%
Project presentation and reflective essay	20%
Midterm exam	25%
Final exam	25%
Total:	100%

Your final course letter grade will be determined as follows:

Numeric Grade:	Letter Grade:
93 - 100	A
90 - below 93	A-
87 - below 90	B+
83 - below 87	В
80 - below 83	B-
77 - below 80	C+
72 - below 77	C
69 – below 72	C-
64 – below 69	D+
59 – below 64	D
0 - below 59	F
Failed due to Academic Misconduct	FX
(may not be replaced or deleted)	

Homework assignments

Homework assignments will be on Blackboard. There will be both multiple-choice and fill-in-the-blank calculation questions. Your assignment submission will be graded within 7 days after the due date. The lowest grade will be dropped. Late work will be accepted without penalty up until the end of April.

In-class assignment

In-class assignment will be posted on blackboard. You are expected to work in a group to complete the in-class assignments. One of the group members will submit the work for the whole group by uploading to Blackboard. **They will be graded on completeness, not on right/wrong answers.** Your assignment submission will be graded within 7 days after the due date. Please be sure to include the first and last names of the group members who participate. If you are absent on that day, you must submit the work independently within 2 weeks to receive credits. The 2 lowest grades will be dropped. Late work will be accepted without penalty up until the end of April.

Project presentation and reflective essay:

Projects must be completed in groups of up to four people. Students will interview a local or regional business about its operations and operational challenges. The presentation should highlight the company's vision/mission (if applicable), its manufacturing or service process, how it manages inventory, how it procures raw materials, how it schedules employees, how it handles product/service issues, how it manages quality, and how it stores and uses data. No two groups may interview the same company.

During the last week of class, you will present your project to the class. Your deliverables will include a 10-minute presentation and a reflective essay. The essay should be a one-page, single-spaced report (11 pt., Times New Roman) that discusses what intrigued you about the project and how it may impact your studies or career.

Midterm and Final Exams

The midterm and final exams will follow the same format and be taken online via Blackboard. The midterm exam will be administered in the classroom, so please bring a fully charged laptop on the exam date. The final exam, however, will be online and taken at home. You may take the final exam on any day during its availability period.

For both exams, as soon as you submit your work, your multiple-choice and fill-in-the-blank responses will be graded automatically. Any short-answer questions will be graded manually within 7 days after the exam due date. You will not be able to see your grade or results until after the exam availability period ends.

The number of questions on each exam will be announced during the week of the exam. Approximately 3/4 of the questions will be multiple-choice or true/false, and 1/4 will be short-answer or fill-in-the-blank. The final exam is non-cumulative.

You will have 1 hour and 15 minutes (75 minutes) to complete each exam. You must submit the exam within 75 minutes of starting. Once the exam begins, it cannot be paused, and it will be submitted automatically when the allotted time ends. If your internet connection is interrupted during the exam, you will need to log back in as soon as possible to continue where you left off.

General final exam policy

- You may consult your notes, your assignments, or any of the other course materials to complete the exam. However, if you must look up every answer, you will run out of time.

- Some parts of the exam may be checked via a plagiarism checking software.
- During the exam allotted time, you may not communicate with anyone other than the course instructor. Everything you write must be in your own words.
- During the exam availability period, you must not communicate at all with your classmates about the exam.
- You may not copy and/or distribute the exam to anyone, even after the exam due dates.
- Any violation will be handled according to Academic Integrity Policy.

Make-ups for midterm and final exams:

There will be no make-up for the midterm and final exams unless prior arrangements have been made with me.

CLASS SCHEDULE:

Week	Date	Topics
1	9/4	Syllabus
2	9/9 – 9/11	Ch 1 Introduction to Operations Management
3	9/16 – 9/18	Ch 2 Introduction to Processes
4	9/23 - 9/25	Ch 3 Process Analysis
5	9/30 - 10/2	Ch 8 Lean Operations and the Toyota Production System
6	10/7	Ch 9 Quality and Statistical Process Control
	10/9	Review
7	10/15 (Tuesday)	Supplemental materials – Location Strategy
	10/16	In-class Online Midterm Exam Chapters 1, 2, 3, 8, and 9
		(Please bring a fully charged laptop to class.)
8	10/21 - 10/23	Ch 10 Introduction to Inventory Management
9	10/28 - 10/30	Ch 11 Supply Chain Management
10	11/4 - 11/6	Ch 12 Inventory Management with Steady Demand
11	11/13	
12	11/18 – 11/20	Ch 13 Inventory Management with Perishable Demand
13	11/25	
14	12/2 - 12/4	Supplemental materials – Data analytics in OM
		Review
15	12/9 -12/11	Project Presentation
16	Available from 12/14 to 12/20	Home Online Final Exam Chapters 10-13

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