UNIVERSITY OF MASSACHUSETTS LOWELL Manning School of Business

POMS.3010.301 Operations Management (Honors) Spring 2023

CREDITS: 3

WEBSITE: https://uml.umassonline.net

CLASS LOCATION: Olsen Hall 404

CLASS TIME: Tue & Thu 2:00pm - 3:15pm

INSTRUCTOR: Dr. Nichalin S. Summerfield

Email: nichalin_summerfield@uml.edu

Office hours: Tue & Thur 12:00pm-1:30pm at PTB-432

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

permission of instructor.

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 assigned readings or videos. Some lectures will be supplemented by calculator demonstrations. 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.

We will be communicating 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.

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 case 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 come up with a plan for you to make up missed work. I will be very accommodating to students who are experiencing pandemic-related challenges, but you must communicate your requests with me regularly and with 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.

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) provide tutoring services, including an online searchable tutoring schedule that includes resources available on all campuses (Online searchable tutoring schedule). A tutoring request form is also available if there are no tutors listed for the class for which you need help.

Student Health and Safety:

The safety and health of the UMass Lowell community is our shared priority. In seeking to provide the fullest academic and campus life experience possible, UMass Lowell will rely on all members of our community to act responsibly. For the latest updates on UMass Lowell's COVID policies, please visit www.uml.edu/coronavirus.

UMass Lowell has implemented reasonable health and safety protocols in accordance with national and state public health guidelines. These standards apply to anyone who is physically present on campus or participating in a UMass Lowell-sponsored activity.

- **Daily Symptom Checker:** All campus community members should use the <u>daily</u> symptom checker every day prior to leaving your home, apartment or room.
- Vaccination: UMass Lowell requires all students who live, learn, work or conduct research on campus, access campus resources, or participate in campus events be vaccinated for COVID-19 with a complete initial vaccine series. The university also highly recommends COVID-19 boosters for all eligible students. Please visit Mass. Vaccine Finder to find vaccine locations.
- Face Coverings: Face coverings are optional for all campus locations, including the Tsongas Center, the Inn and Conference Center, and campus transportation. Face coverings will continue to be required in the Wellness Center. Additional information regarding face covering policy is available on the UML COVID-19 website. Students can continue to wear face coverings at their own discretion.
- **Accommodations:** Students who wish to request academic accommodations due to a documented disability, including those that are at an increased risk of severe illness to COVID-19 due to their disability, should register with <u>Disability Services</u>.

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:

- Counseling Services 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 *Togetherall*, 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 (CLASS) provides advising services including planning, course selection, SIS functions, changing majors, and course deletion/repetitions. They can be reached at 978-934-2936 or Advisement@uml.edu
- 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.

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	С
69 – below 72	C-
64 – below 69	D+
59 – below 64	D
0 - below 59	F
Failed due to Academic Misconduct (may not be replaced or deleted)	FX

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.

Dell project presentation and reflective essay

This semester, you will be working on a special real-world project with a leading computer technology company, Dell.

- You will learn about Dell and its operational areas. Then, you will be assigned into teams
 of 3-4 students. Each team will elect a team lead and choose the team's focus project
 area.
- You will meet with Dell managers on Zoom every two weeks (outside of class time), learn about the innovations and challenges within your focus project areas, and apply your knowledge to propose solutions to the challenges. The team leads are responsible for setting up these cadence meetings with the managers.
- During the last week of class, you will present your project to the class and Dell's team. Your deliverables will consist of the 10-minute presentation and a reflective essay which is a one-page single-space typed report (11pt., Times New Roman) on what you have learned from the project and how it may impact your study/career.
- Your project grade will base on your presentation, your reflective essay, feedback from Dell's team, and team members' peer evaluation.
- Please note that recording of the cadence meetings with managers is NOT allowed due to confidentiality.

Midterm and Final Exams

The midterm and final exams are in the same format. They will be taken online on Blackboard. As soon as you submit your exam, your multiple-choice and fill-in-the-blank grades will be calculated. Any short-answer questions will be graded manually within 7 days after the due date. You will not be able to see your grade or your results until after the availability period of the exam.

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

You will have 1 hour and 30 minutes (90 minutes) to complete the exam, i.e., you need to submit the exam within 90 minutes after you start. The exams cannot be paused once they begin, and they will be submitted automatically when the allotted time ends. If your internet is disconnected during the exam, you will have to re-login as soon as possible to continue the exam where you left of. The exams can be taken any day during the exam availability dates.

General exam policy

- You may consult your notes, your assignments, or any of the other course materials to complete the exams. However, if you must look up every answer, you will run out of time.
- Some parts of the exams 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 dates, you must not communicate at all with your classmates about the exams.
- You may not copy and/or distribute the exams 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:

Note: Feb 21st follows Monday's schedule.

Week	Date	Topics
1	1/17	Syllabus
	1/19	Ch 1 Introduction to Operations Management
2	1/24 - 1/26	Ch 2 Introduction to Processes
3	1/31 - 2/2	Dell Project Overview
		Ch 3 Process Analysis
4	2/7 - 2/9	Ch 8 Lean Operations and the Toyota Production System
5	2/14 - 2/16	Ch 9 Quality and Statistical Process Control
6	2/23	
7	2/28	Review
	Available from 3/1 to 3/5	Midterm Exam Chapters 1, 2, 3, 8, and 9
	3/5 - 3/11	Spring break
8	3/14 - 3/16	Ch 10 Introduction to Inventory Management
9	3/21 - 3/23	Ch 11 Supply Chain Management
10	3/28 - 3/30	Ch 12 Inventory Management with Steady Demand
11	4/4	
	4/6	Ch 13 Inventory Management with Perishable Demand
12	4/11 - 4/13	
13	4/18 - 4/20	Supplemental materials
14	4/25 - 4/27	Project Presentation (Date to be confirmed)
		Review for the final exam
15	Available from 4/30 to 5/6	Final Exam Chapters 10-13