Commerce 2OC3
Operations Management
Winter 2024 Course Outline

Operations Management Area
DeGroote School of Business
McMaster University

INSTRUCTOR AND CONTACT INFORMATION

Section C07: Mon, Tue, Thu 12:30 PM – 1:20 PM

Ms. Ahana Malhotra
Instructor
malhoa25@mcmaster.ca
Office: GSB 105H
Office Hours: 1:40 PM – 3:40 PM on Thursdays

Teaching Assistants

TA information, tutorial schedule, and office hours to be announced on Avenue to Learn (A2L)
Course website: A2L

COURSE ELEMENTS

Credit Value:	3	Leadership:	Yes	IT skills:	No	Global view:	Yes
A2L:	Yes	Ethics:	No	Numeracy:	Yes	Written skills:	No
Participation:	Yes	Innovation:	Yes	Group work:	Yes	Oral skills:	Yes
Evidence-based:	Yes	Experiential:	No	Final Exam:	No	Guest speaker(s):	Yes

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COURSE INFORMATION

Lectures: 50min x3/week
Tutorials: 1hr/week
Course Delivery Mode: In-person
Course Description:

The course will cover both manufacturing and service operations topics at the strategic, tactical and operational levels. Topics include capacity planning, layout of facilities, forecasting, aggregate planning, scheduling, inventory control, purchasing, supply chains and quality control. Emphasis will also be

placed on process improvement and project management. The course will look at supply chain issues related to globalization and sustainability including environmental and social issues.

MEETING DETAILS

C07: Meets from 12:30 p.m. to 1:20 p.m. every Monday, Tuesday, and Thursday

The **first class** for each section will be:

C07: Monday, January 8, 2024

IMPORTANT LINKS

- Mosaic
- Avenue to Learn
- Student Accessibility Services - Accommodations
- McMaster University Library

COURSE LEARNING OUTCOMES

Upon completing this course, the students will be able to
- Develop a solid understanding of the role of operations management in manufacturing and service organizations
- Identify the connections between operations management and the other parts of the organization
- Apply optimization and statistical models to solve real-world business problems related to forecasting, production planning, inventory control, quality control, etc.

COURSE LEARNING GOALS

The course aims at:
- developing an in-depth understanding of the set of operations management activities that creates value in the form of goods and services by transforming inputs into outputs.
- developing modelling and problem-solving skills useful for reducing operational inefficiency.
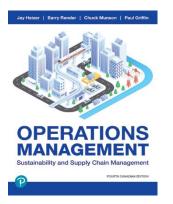- gaining familiarity with common analytical tools necessary for solving operational problems.

The course combines theory, real-life examples/cases, modelling exercises, etc. to prepare students for applying operations management to help organizations improve operational efficiency.

REQUIRED MATERIALS AND TEXTS

Required:
Operations Management: Sustainability and Supply Chain Management, Fourth Canadian Edition.
Jay Heizer, Barry Render, Chuck Munson, Paul Griffin

Textbook Listing: https://textbooks.mcmaster.ca

- Package 1: Hard copy text
  ISBN 9780137508938
- Package 2: E-text (course id: malhotra00759)
  ISBN 9780137319152

Optional:

Demand Prediction in Retail: A Practical Guide to Leverage Data and Predictive Analytics. Maxime C. Cohen, Paul-Emile Gras, Arthur Pentecoste, Renyu Zhang. **Full-text e-book available through McMaster Library**

Notes:

1. The textbooks serve as references and provide details for the materials covered in the lectures. The lecture slides and other materials delivered by the instructor (such as practice problems) prioritize over the textbook for the purpose of preparing for the exams. Topics not covered during the lectures will not be tested in the exams or assignments. The lectures may cover some materials not included in the textbook.

2. The use of MyLab Operations Management is not mandatory for this course.

CLASS FORMAT

Overview of course activities:

ACTIVITY	DELIVERY	DESCRIPTION	TOOLS
Lectures	In-person	In-person classes	Top Hat for participation
Tutorials	In-person	1-hour sessions with TA, discuss practice problems and course materials; starting the week of Jan. 30; no participation marks	
Assessments	In-person/A2L	Details in "Course deliverables"	In-person/A2L

COURSE EVALUATION

Your grade of the course will be the **<u>higher</u>** one between the two grades calculated from Schemes 1& 2 below.

Scheme 1:

Grade Components	Weight	Description
Assignments 1-4	24%	4 x 6% each; Timed quiz on A2L
Case assignment	6%	Post and submitted on A2L
Midterm	32%	Multiple-choice and true/false questions
Final	38%	Multiple-choice, true/false, and computational/written-response questions
Total	100%	

Scheme 2:

Grade Components	Weight	Description
Class Participation	5%	Attendance by Top Hat
Assignments	24%	4 x 6% each; Timed quiz on A2L
Case assignment	6%	Post and submitted on A2L
Midterm	30%	Multiple-choice and true/false questions
Final	35%	Multiple-choice, true/false, and computational/written-response questions
Total	100%	

COURSE DELIVERABLES

Class Participation
Class participation marks are based on unannounced exercises/quizzes in class through Top Hat.

Assignments
There will be 4 assignments throughout the semester. Assignments will be accessible through Avenue to Learn (A2L). Each assignment is a timed quiz on A2L. Students need to start the quiz between the start and end dates shown above; once a quiz starts, it needs to be submitted within 5 hours.

Tentative Assignment schedule:

Assignment #	Start Date	End Date
A1	26-Jan	02-Feb
A2	16-Feb	23-Feb
A3	8-Mar	15-Mar
A4	29-Mar	05-Apr

Case Analysis
Students will work individually on a case assignment. The case will be posted and submitted on A2L. The due date will be announced shortly.

Midterm Exam
The midterm exam will be comprised of **multiple-choice and true/false** questions.

Tentative schedule:

	Date	Time	Rooms
Midterm	TBD	TBD	TBD

Final Exam
The final exam will include **multiple-choice, true/false, and computational/written-response** questions.

The final exam will be held during the final exam period in April. The exact date and format will be determined by the Registrar's Office. The final exam may cover selected topics from the materials before midterm and will include all the materials after midterm. The selected topics from the first half of the course to be covered in the final exam will be announced on Avenue to Learn.

LATE ASSIGNMENTS

Missed assignments and exams will receive a grade of zero unless the student has submitted and been approved for a Notification of Absence or MSAF. Late assignments will **not** be accepted.

COMMUNICATION AND FEEDBACK

Students who wish to correspond with instructors or TAs directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of information as well as confirms the identity of the student. Emails regarding course issues should NOT be sent to the Area Administrative Assistants. All students must receive feedback regarding their progress prior to the final date by which a student may cancel the course without failure by default.

• *For Level 1 and Level 2 courses, this feedback must equal a minimum of 20% of the final grade.*
• *For Level 3 courses and above, this feedback must equal a minimum of 10% of the final grade.*

Instructors may solicit feedback via an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

REQUESTION RELIEF FOR MISSED ACADEMIC WORK

In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work" and the link below;

http://ug.degroote.mcmaster.ca/forms-and-resources/missed-course-work-policy

COURSE MODIFICATION

From time to time there may be a need to remove/add topics or to change the schedule or the delivery format. If these are necessary, you will be given as much advance notice as possible.

GENERATIVE AI

Students may freely use generative AI in this course so long as the use of generative AI is referenced and cited following citation instructions given in the syllabus. Use of generative AI outside assessment guidelines or without citation will constitute academic dishonesty. It is the student's responsibility to be clear on the expectations for citation and reference and to do so appropriately.

ACADEMIC INTEGRITY

Students are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. **It is your responsibility to understand what constitutes academic dishonesty.**

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of

zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

For information on the various types of academic dishonesty please refer to the *Academic Integrity Policy*, located at https://secretariat.mcmaster.ca/university-policies-procedures- guidelines/

The following illustrates only three forms of academic dishonesty:
- plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
- improper collaboration in group work.
- copying or using unauthorized aids in tests and examinations.

AUTHENTICITY/PLAGIARISM DETECTION

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. Avenue to Learn, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software.

All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

COURSES WITH AN ON-LINE ELEMENT

The course will use on-line elements (e.g. email, Avenue to Learn (A2L), web pages, Top Hat, MS Teams, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, usernames for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

ONLINE PROCTORING

Some courses may use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins.

CONDUCT EXPECTATIONS

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the Code of Student Rights & Responsibilities (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online.**

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Students with disabilities who require academic accommodation must contact Student Accessibility Services (SAS) at 905-525-9140 ext. 28652 or sas@mcmaster.ca to make arrangements with a Program Coordinator. For further information, consult McMaster University's Academic Accommodation of Students with Disabilities policy.

ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students should submit their request to their Faculty Office *normally within 10 working days* of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

COPYRIGHT AND RECORDING

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

EXTREME CIRCUMSTANCES

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, Avenue to Learn and/or McMaster email.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in Commerce 2OC3 will be considered to be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.**

Lack of awareness of the course policies **cannot be invoked** at any point during
this course for failure to meet them. It is your responsibility to ask for clarification on any policies that
you do not understand.

COURSE SCHEDULE

Commerce 2OC3
Operations Management
Winter 2024 Course Schedule (Tentative)

WEEK	TOPIC	TEXT REFERENCE
1	Introduction (Basic concepts and methods)	Chapters 1, 16
2,3	Project management	Chapter 3
4,5	Process analysis	Chapters 7 and 7s
5,6	Waiting line management	Quantitative module D Lecture materials on A2L
7	Mid-term recess (Feb. 19 - Feb.25)	
8	Quality Management and Control	Chapters 6 and 6s
9	Forecasting	Chapter 4 Selected materials from "Demand Prediction in Retail" by Cohen et al.
10,11	Inventory Management (EOQ m, newsvendor, etc.)	Chapter 12
12	Revenue management	Chapters 12, 13
13	Supply chain management, Additional topics in OM	Chapters 11, 11s

Notes:
1. The chapters/quantitative modules mentioned above refer to the corresponding parts in the main textbook (by Heizer et al.).
2. Contingent on the course progress, the weekly schedule and the topic are subject to changes at the discretion of the instructor.