

20C3 – Winter 2024



Commerce 2OC3 Operations Management Winter 2024 Course Outline

Operations Management Area DeGroote School of Business McMaster University

INSTRUCTOR AND CONTACT INFORMATION

Section	Time	Location
C01	TuThFr 11:30AM - 12:20PM	To be announced on Mosaic
C03	TuThFr 2:30PM - 3:20PM	To be announced on Mosaic

Dr. Lingling Shi

Instructor

lingling.shi@mcmaster.ca Office: DSB 419 Office Hours: 9:20AM-11:20AM Thursday Tel: (905) 525-9140 x26727

Teaching Assistants

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

COURSE ELEMENTS

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





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

C01: Meets from 11:30 a.m. to 12:20 p.m. every Tuesday, Thursday, and Friday

C03: Meets from 2:30 p.m. to 3:20 p.m. every Tuesday, Thursday, and Friday

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

C01: Tuesday, January 9, 2024

C03: Tuesday, January 9, 2024

IMPORTANT LINKS

• <u>Mosaic</u>

- Student Accessibility Services Accommodations
- <u>McMaster University Library</u>

[•] Avenue to Learn







COURSE LEARNING OUTCOMES

Upon successful completion of this course, students will be able to complete the following key tasks:

- 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 **M**ATERIALS AND **T**EXTS

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: shi18428) 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	1hr sessions with TA: discuss practice problems and course materials; No participation marks	
Assessments	In-person/A2L	Details in "Course deliverables"	In-person/A2L

COURSE EVALUATION

Your grade of this course will be the higher one between the two calculated from Schemes 1& 2 below.





Scheme 1:

GRADE COMPONENT	WEIGHT	DESCRIPTION
Assignments 1-4	24%	4 x 6% each; Timed quiz on A2L
Case Analysis	6%	Post and submitted on A2L
Midterm	32%	Multiple-choice and true/false questions
Final Exam	38%	Multiple-choice, true/false, and computational/written-response questions
Total	100%	

Scheme 2:

GRADE COMPONENT	WEIGHT	DESCRIPTION
Class Participation	5%	Attendance by Top Hat
Assignments	24%	4 x 6% each; Timed quiz on A2L
Case Analysis	6%	Post and submitted on A2L
Midterm	30%	Multiple-choice and true/false questions
Final Exam	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 <u>selected topics</u> 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.

REQUESTING 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 <u>"Requests for Relief for Missed Academic Term</u> <u>Work"</u> 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

You are expected to exhibit honesty and use ethical behavior 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 behavior 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 <u>Academic Integrity Policy</u>.

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



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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 <u>Code of Student Rights & Responsibilities</u> (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 behaviors 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 <u>Student Accessibility</u> <u>Services</u> (SAS) at 905-525-9140 ext. 28652 or <u>sas@mcmaster.ca</u> to make arrangements with a Program Coordinator. For further information, consult McMaster University's <u>Academic</u> <u>Accommodation of Students with Disabilities</u> 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 <u>RISO</u> 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 International Human Services Accounting Winter 2024 Course Schedule

WEEK	Торіс	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.