



IBH 3BE3: Operations Management Winter 2024/ Course Outline

Operations Management Area DeGroote School of Business / McMaster University

COURSE OBJECTIVE

- To develop an understanding of the set of operations management activities that creates value in the form of goods and services by transforming inputs into outputs.
- To become familiar with common analytical tools necessary for solving operations problems.
- To become familiar with the applications of operations management concepts and techniques to address issues in humanities.

Instructor and Contact Information



Instructor:
Renata Guidi
soaresdr@mcmaster.ca

Office Hours: By appointment

Teaching Assistant Office Hours:

Name: Maryam Mashayekhi Email: masham3@mcmaster.ca Office Hours: Wednesdays - 3pm to 4pm GSB

Class Time/ Location: Fridays 2:30 – 5:20 pm. See A2L for location.

COURSE ELEMENTS

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

COURSE DESCRIPTION

Operations management (OM) is the science and art of better creating and delivering goods and services to customers. Basic topics in OM include project management, process management, quality control, demand forecasting, supply chain management, inventory management, revenue management, and queueing analysis. This field of study is subject to ongoing changes and challenges. Maintaining a sustainable environment while efficiently converting resources into high-quality products, increasing profitability while providing a safe workplace, and honoring stakeholder commitments are a few to mention. This course will study the aforementioned topics in detail.





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 other parts of the organizations
- Apply analytical and decision-making methods to solve real-world problems, particularly those related to humanities

REQUIRED COURSE MATERIALS AND READINGS

The following textbook is recommended but is not required.

Operations Management – Sustainability and the Supply Chain Management, by Heizer, Render, Munson and Griffin, 4nd Canadian Edition (2023).

- Any new book, used book, electronic book, etc. can be used. The electronic book is an e-text specifically designed for this course and has a lower price, it is sold in the Bookstore for around \$100. Click on the link to go to the bookstore: https://shorturl.at/nqLY7
- This course uses http://avenue.mcmaster.ca to post the outline, lecture notes, and feedback.

Notes:

- 1. The textbook serves as reference and provide details for the materials covered in the lectures. The lectures, 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 MyOMLab is **not** mandatory for this course.

<u>Software:</u> Students are encouraged to use their computer in class. The following software is used in the course:

Excel: Excel 2010 or later is preferred. Microsoft Office 365 is available for students.

ASSESSMENT

Component	Type	Weight	Timing / Due Data	Content
Participation	individual	10%	all classes	Active involvement in class discussions. Attendance is a necessary but not sufficient condition for this component.
Assignments	individual	25%	Roughly every week, depending on the contents	homework assignments





EDUCATION WITH F	URPOSE			Gen
Midterm Exam	individual	30%	Friday, March 1st During class (2:30 -5:20 pm)	On the technical contents
Final Project	group & individual	35%	Presentations (group): 65% • Friday, April 5 th (2:30-5:20 pm) Written Report (individual): 35% Due date: April 5 th , 11:59 pm	Case study project: analysis, presentation, and report.





The midterm exam will cover technical materials. Multiple sheets containing formulas, templates, and procedures will be provided in the examination. The use of a McMaster standard calculator is allowed during examinations in this course. See McMaster calculator policy at the following URL:

http://www.mcmaster.ca/policy/Students-AcademicStudies/examinationindex.html

<u>Final Project:</u> The final project includes a comprehensive analysis, presentation, and summary report about a case-study and has two main parts: 1. **Presentation**, which is **group work**, and 2. **Written Report**, which is **individual work**. The final project will be evaluated for

- 1. Completeness and correctness of the analysis (both quantitative and qualitative),
- 2. Innovation in analytical thinking,
- 3. Managerial/policy insights,
- 4. Communication (in the presentation and summary report)
- 5. Ability to facilitate discussions.

Groups will be determined randomly and be assigned a date for their presentation.

The complete details of the final project will be shared through a separate document before the midterm.

<u>Note about Marks:</u> Individual marks are posted on Avenue to Learn, and the final marks (letter grades) are posted on Mosaic. Exams are not returned. Students can review their exams with the instructor or TA during office hours within two weeks of the marks being posted on Avenue.

<u>Final Grades:</u> At the end of the course, overall percentage grades are converted to a letter grade in accordance with the following conversion scheme:

GRADE CONVERSION

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme.

LETTER GRADE	PERCENT	LETTER GRADE	PERCENT
A+	90 - 100	C+	67 - 69
A	85 - 89	C	63 - 66
A-	80 - 84	C-	60 - 62
$\mathrm{B}+$	77 - 79	\mathbf{D} +	57 - 59
В	73 - 76	D	53 - 56
В-	70 - 72	D-	50 - 52
		F	00 - 49

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 "Requests for Relief for Missed Academic Term Work" and the following link: http://ug.degroote.mcmaster.ca/forms-and-resources/missed-course-work-policy/

ACADEMIC INTEGRITY

You are expected to exhibit honesty and use ethical behavior in all aspects of the learning process. The 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., a 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>, 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 the 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., A2L, 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., online 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

Some courses may use online elements (e.g., e-mail, Avenue to Learn (A2L), LearnLink, web pages, capa, Moodle, ThinkingCap, 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 online 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 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 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, labor disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L, and/or McMaster email.

RESEARCH USING HUMAN SUBJECTS

All researchers conducting research that involves human participants, their records, or their biological material are required to receive approval from one of McMaster's Research Ethics Boards before (a) they can recruit participants and (b) collect or access their data. Failure to comply with relevant policies is a research misconduct matter. Contact these boards for further information about your requirements and the application process.

- McMaster Research Ethics Board (General board): https://reo.mcmaster.ca/
- Hamilton Integrated Research Ethics Board (Medical board): http://www.hireb.ca/

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in Commerce IBH 3BE3 will be considered to be an implicit acknowledgement of the course policies outlined above or of any other that may be announced during the lecture and/or on A2L. It is your responsibility to read this course outline, familiarize yourself with the course policies, and act accordingly.





A 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

Date	Topics/Readings Readings are in the textbook. Lecture Notes are on Avenue.
Week 1(Jan 12)	Introduction to course Ch. 1: Operations and Productivity
Week 2 (Jan 19)	Ch. 3: Project Management Assignment 1 (5%) – Available from Jan 20 10am until Jan 24 11:59pm
Week 3 (Jan 26)	Ch. 4: Forecasting
Week 4 (Feb 2)	Chs. 5 and 5s: Design of Goods and Services and Sustainability Assignment 2 (5%) – Available from Feb 3 10am until Feb 7 11:59pm
Week 5 (Feb 9)	Chs. 7 and 7s: Process Analysis
Week 6 (Feb 16)	Ch. 6: Quality Management Midterm Exam Review Assignment 3 (5%) – Available from Feb 17 10am Feb 21 11:59pm
Week 7 (Feb 23)	Midterm Recess
Week 8 (Mar 1)	Midterm Exam (in-class) Cover all topics so far
Week 9 (Mar 8)	Chs. 11 and 11s: Supply Chain Management
Week 10 (Mar 15)	Ch. 12: Inventory Management (EOQ Model) Assignment 4 (5%) – Available from Mar 15 10am until Mar 20 11:59pm
Week 11 (Mar 22)	Chs. 12 and 13: Revenue Management Assignment 5 (5%) – Available from Mar 23 10am until Mar 27 11:59pm
Week 12 (Mar 29)	Public Holiday: Good Friday – No Class
Week 13 (Apr 5)	Final Project: Group Presentations (Peer Feeback)

Notes:

Contingent on the course progress, the weekly schedule and the topic are subject to changes at the discretion of the instructor.



