

IBH 3BE3 Operations Management Winter 2022

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 gain familiarity with common analytical tools necessary for solving operations problems.

TEACHING STUFFS AND CONTACT INFORMATION

Instructor: Dr. Armagan Ozbilge
ozbilgea@mcmaster.ca

Time & Location
Mondays 2:30–5:20pm, KTH 109

Instructor Office Hours:
Tuesdays 9:30–11:30am, virtual (TBA)

Teaching Assistant: Olena Skalianska skaliano@mcmaster.ca, Office hours: TBA

COURSE DESCRIPTION

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

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 analytical methods such as forecasting, production planning, inventory control, quality control, and reliability to solve real-world problems

REQUIRED COURSE MATERIALS AND READINGS

Avenue registration for course related materials

- <http://avenue.mcmaster.ca>
- MS Teams will be used to have office hours, facilitate communication and discussions only; there will be **no** virtual lectures, unless the situation necessitates!

The following textbook is **optional**:

Operations Management - Creating Value Along the Supply Chain, by Russell, Taylor, Bayley and Castillo, 2nd Canadian Edition.

Remark:

The course will be *loosely* based on the textbook. The lectures, lecture slides and other materials delivered by the instructor (such as practice problems) supercede the textbook for the purpose of learning and preparing for the exams. The lectures may cover some materials not included in the textbook.

EVALUATION

Component	Best of below weighting schemes		
Midterm Exam	40%	30%	Virtual, problems & may have Excel-approx. 2 hours and 30 mins,
Final Exam	30%	40%	Virtual, problems & may have Excel-approx. 2 hours and 30 mins
Quizzes x 4	7.5% each		Virtual, approximately 20-30 mins
Total	100%		

Quizzes: There are 4 individual quizzes in this course with 7.5% each. They are all 20 – 30 minutes long and aim to help you review the content on a regular basis. The first 2 quizzes will be before the Midterm Exam and the last two will be after it. Details and deadlines will be communicated on the avenue page of the course.

Exams: Both the Midterm Exam and the Final Exam are around 2.5 hours long and will be virtually done on Avenue to Learn. The Final Exam is not comprehensive; rather it only tests material since the Midterm Exam. However, you may need to use the solution methodologies introduced before Midterm to tackle some problems in the post-Midterm topics. Both exams may include ‘computer questions’ which test

students' ability to use Excel in the course. For such questions, the students will be asked to submit Excel files to Avenue.

Marks: Marks are posted on Avenue to Learn. Exams are not returned. Students can review their Exam with the instructor or TA during office hours within two weeks of the marks being posted on Avenue.

Random bonuses: You may occasionally receive bonus marks for being the first person to answer an in-class exercise.

Final Grades: 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.

... please note that the Commerce grade conversion is ...

LETTER GRADE	PERCENT	LETTER GRADE	PERCENT
A+	90 - 100	C+	67 - 69
A	85 - 89	C	63 - 66
A-	80 - 84	C-	60 - 62
B+	77 - 79	D+	57 - 59
B	73 - 76	D	53 - 56
B-	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.

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 [Academic Integrity Policy](https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/), 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.

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 link below;

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

Note: If a student is relieved from writing the midterm for a valid reason, his/her final exam may be cumulative (unlike the rest of the class)!

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. 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., on-line search, other software, etc.). For more details about McMaster’s use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

COURSE WITH AN ONLINE ELEMENT

Some courses may use on-line 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, user names 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, A2L and/or McMaster email.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in 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 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.

POTENTIAL MODIFICATIONS TO THE COURSE

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

COURSE TOPICS

COURSE ROADMAP (TENTATIVE)
Introduction and basic OM concepts
Linear Programming
Forecasting
Sales and Operations Planning (Aggregate Planning)
Inventory Management (Newsvendor & EOQ models, etc.)
Supply Chain Management
Project Management
Queueing Analysis