

# Commerce 2OC3 Operations Management Winter 2020

## 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

Sections C01 & C02: Dr. Behrouz Bakhtiari [bakhtib@mcmaster.ca](mailto:bakhtib@mcmaster.ca)

#### Time & Location

C01: MoTh 12:30PM – 01:20PM, MDCL1102

Tu 01:30PM – 02:20PM, MDCL1102

C02: MoWeTh 01:30PM – 02:20PM, MDCL1102

#### Office Hours:

Mondays, 11:00AM – 12:00PM, TSH607

Tuesdays, 12:00PM – 01:00PM, TSH607

Sections C03, C04: Dr. Yun Zhou [Zhouy185@mcmaster.ca](mailto:Zhouy185@mcmaster.ca)

#### Time & Location

C03: TuWeFr 03:30PM - 04:20PM, MDCL1102

C04: MoWe 02:30PM - 03:20PM, MDCL1102

Fr 04:30PM – 05:20PM, MDCL1102

#### Office Hours:

Wednesdays 04:30PM – 05:30PM, DSB-428

Fridays 02:15PM – 03:15PM, DSB-428

**Teaching Assistants:** TBA on avenue news section

### COURSE ELEMENTS

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

## COURSE DESCRIPTION

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

## 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>

Three different textbook packages available in the bookstore.

Operations Management: Sustainability and Supply Chain Management, Third Canadian Edition  
Jay Heizer, Barry Render, Paul Griffin

Package 1: Hard copy text (includes MyOMLab)

ISBN 9780134838076

Package 2: Loose-Leaf Student version plus MyOMLab with etext

Package 3: MyOMLab Standalone plus etext

### Remarks:

1. The textbook serves as a reference and provides details for the materials covered in the lectures. The lectures, lecture slides and other materials delivered by the instructors (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.

<b>EVALUATION</b>
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Components	Scheme
Assignments 1-4	25%
Midterm #1	35%
Final	40%
Total	100%

**Exams: Midterm and Final**

Final and midterm are mandatory. Formula sheet will be provided. *All problems with grades must be reported within 2 weeks of the posting of grades.*

Only the use of a McMaster standard calculator is allowed during midterms and final in this course. See McMaster calculator policy at the following URL:

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

**Midterm Exam Schedule**

Midterms	Date	Time	Rooms
Midterm	TBA	TBA	TBA

The midterm exam will include all the material covered **up to and including week 6** (week of February 10).

**Final Exam**

The final exam will be held during the final exam period in April. The exact date, time and location will be determined by the Registrar's Office. The final exam will cover selected topics from the material covered in weeks 1 to 6, and will include all the material covered starting week 7 (Week of February 24). The selected topics from weeks 1 to 6 covered in the final exam will be announced on Avenue to Learn.

**Assignments**

There will be 4 assignments throughout the semester. Assignments will be accessible through Avenue to Learn. Assignment dates will be announced through the announcement section on the course webpage on Avenue to Learn.

**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
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. Instructors are required to provide evaluation feedback for at least 10% of the final grade to students prior to Week #9 in the term. 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 behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

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.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at:

[www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations

## **REQUESTING RELIEF FOR MISSED ACADEMIC WORK**

Students may request relief from the regularly scheduled midterm, test, assignment or other course components. Please refer to the policy and procedure on the DeGroote website at the link below;

<http://ug.degroote.mcmaster.ca/forms-and-resources/misled-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)!

## **STUDENT ACCESSIBILITY SERVICES**

Student Accessibility Services (SAS) offers various support services for students with disabilities. Students are required to inform SAS of accommodation needs for course work at the outset of term. Students who require academic accommodation must contact Student Accessibility Services (SAS) to

[www.degroote.mcmaster.ca](http://www.degroote.mcmaster.ca)

make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail [sas@mcmaster.ca](mailto:sas@mcmaster.ca)

For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities;

<http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf>

## **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.

## **DETAILS FOR ONLINE COMPONENT**

In this course we will be using avenue to Learn. Students should be aware that, when they access the electronic components of this course, 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 this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

## Course Topics

<b>TENTATIVE COURSE SCHEDULE (<u>DEPENDING ON PROGRESS, THE WEEKLY SCHEDULE MAY CHANGE</u>)</b>
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WEEKS	TOPIC	TEXT REFERENCE
1	Introduction (Basic concepts and methods)	Chapters 1 and 2
2,3	Project Management	Chapter 3
3,4	Process Analysis: Overcoming the bottleneck	Chapter 7 and 7s
4,5	Quality Management and Statistical Quality Control	Chapter 6 and 6s
6	Forecasting	Chapter 4
6,7	Supply Chain Management	Chapter 11 and 11s
7,8	Inventory Management (Newsvendor & EOQ models, etc.)	Chapter 12
8,9	Sales and revenue management	Chapter 13
10,11	Queueing Theory and Little's Law	Quantitative Module D
11,12	Simulation and additional topics in OM	Quantitative Module F