

**Commerce 4QA3
Operations Modelling & Analysis
Winter 2021 Course Outline**

**Operations Management Area
DeGroote School of Business
McMaster University**

COURSE OBJECTIVE

- To develop an understanding of operations management principles.
- To gain familiarity with common analytical tools necessary for solving production operations problems.

INSTRUCTORS AND COURSE INFORMATION

Instructor		Teaching Assistants	
<p>Dr. Amir Gandomi <u>gandomi@mcmaster.ca</u> Virtual Office: Zoom (Session ID TBA) Office Hours: Thu 3:00pm-4:00pm</p>		<p>Armagan Ozbilge <u>ozbilgea@mcmaster.ca</u> Virtual Office: MS Teams Office Hours: Mon 3:00pm-4:00pm</p>	
Times and Locations			
Section	Days	Time	Room
4QA3 C01	Thu	11.30 - 14.20	Zoom (Session ID TBA)
Course Website: http://avenue.mcmaster.ca			

COURSE ELEMENTS

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

COURSE DESCRIPTION

Production and Operations Management is the profession that designs, plans and operates production systems to achieve the goals of the organization. Goals are to provide certain products (i.e. goods and services) to certain customers in certain geographical areas. Production systems take labour, material, and equipment and, through a conversion process, produce these products (i.e. goods and services). Topics to be covered include designing products, designing and locating facilities, quality control, project planning, supply chain management, forecasting customer demands, and production and inventory management.

LEARNING OUTCOMES

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

- Understand the strategic importance of operations;
- Participate in designing an operating system;
- Manage a supply chain; and
- Manage and control quality.

REQUIRED COURSE MATERIALS AND READINGS

Operations Management: Processes and Supply Chains, 12th Edition
 by Lee J. Krajewski, Manoj K. Malhotra, Larry P. Ritzman
 Released January 2018
 Publisher: Pearson
 ISBN: 9780134741062

- Purchase a copy at the bookstore

Avenue registration

- <http://avenue.mcmaster.ca>

EVALUATION

Components and Weights

Midterm Exam	35%
Homework Assignments	30%
Final Exam	35%
Total	100%

NOTE: 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>

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 Administrative Assistant.

Assignments

There will be four assignments in this course. Submissions will be via Avenue. You can answer by hand and use a scanner or mobile apps such as CamScanner or Scanner Pro to convert it to a SINGLE file. Preferably, you can use MS Word or similar programs to type your answers and upload them on Avenue.

Midterm and Final Exam

The midterm and final exams will be held online.

- They consist of conceptual questions and problems that are based on textbook and lecture material.
- The final exam is NOT cumulative.
- Examinations are closed book. A formula sheet will be provided with the exams. Normal tables will be provided if needed.

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

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

REQUESTS FOR RELIEF FOR MISSED ACADEMIC TERM WORK

Students may request relief from a 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/>

STUDENT ACCESSIBILITY SERVICES

Students who require academic accommodation must contact Student Accessibility Services (SAS) to 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.

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 reserves the right to modify elements of the course during the term. There may be changes to 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.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in Commerce 4QA3 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.

TENTATIVE COURSE SCHEDULE

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WEEK	TOPIC	TEXT REFERENCE	ASSIGNMENTS
1	Introduction to OM Operations Strategy	Chapter 1	
2	Quality Control	Chapter 3	
3	Forecasting	Chapter 8	Assignment 1 Due
4	Capacity Planning	Chapter 4	
5	Waiting Lines	Supplement B	Assignment 2 Due
MID-TERM RECESS			
6	Midterm Exam		
7	Constraint Management	Chapter 5	
8	Inventory Management I	Chapter 9: 9.1–9.5	
9	Inventory Management II	Chapter 9: 9.6–9.7	Assignment 3 Due
10	Resource Planning	Chapter 11	
11	Supply Chain Management	Chapter 12	
12	Project Management	Chapter 7	Assignment 4 Due
13	Final Exam		