

# Course Outline

Course Code	RSM 270 H1 S	
Course Name	Operations Management	
Term, Year	Winter, 2023	
Course Meets	T 9-11 am SS 1087	
	T 1-3 pm RW 140	
Web page URL	https://q.utoronto.ca	

#### Instructor Details

Name	Email	Phone	Office Hours
Prof. Vinh Quan	vinh.quan@utoronto.ca	416-287-7338	Tuesdays, 11a – 1pm

## Course Scope, Mission and Learning Outcomes

Operations is the term that refers to the process by which an organization converts inputs (e.g., labor, material, knowledge, equipment) into outputs (goods and/or services) for both internal and external markets. In this course, we will study how to manage this process. We will study strategic issues related to how firms determine the way in which they will compete as well as tactical and operational decision making. Topics include: Operations Strategy, Processes in Manufacturing and Services, Waiting-Line Management, Scheduling, Capacity Planning, Inventory Management and Revenue Management.

The objectives of this course are:

- to develop your decision-making skills.
- to expose you to the main concepts of operations management in manufacturing and service organizations.
- to provide you with useful tools for problem solving in business and government environments.

## Course Prerequisites

Completion of the Rotman Commerce Guaranteed Admissions requirements.

#### **Course Materials**

## Required Readings

Operations Management, RSM270, by McGraw-Hill/Irwin. ISBN-13: 9781260068115, ISBN-10: 1260068110. This is a tailored textbook to our needs, based on Operations and Supply Chain Management, 15th Edition by Jacobs, Chase, 2018, McGraw-Hill Irwin.

### **Evaluation and Grades**

Grades are a measure of the knowledge and skills developed by a student within individual courses. Each student will receive a grade on the basis of how well they have command of the course materials, skills and learning objectives of the course.

Work	Percentage of grade	Due Date
Case	15%	Mar 14
Mid-Term Test	35%	Tentative Date: Week of Feb 13
Assignment	5 x 3% = 15%	Jan 31, Mar 7, 21, 28, Apr 4
Final Term Test	35%	Examination Period

## **Course Format and Expectations**

#### Writing Assignments or Presentations

The Case is intended to help you develop your communication skills. How well you communicate your ideas, in writing or orally, will be considered in the evaluation of the assignment. In your written assignments, you should aim for clarity, strong organization, concision, professionalism, and correct grammar. Your presentations should reflect strong planning and organization, clarity of speech, and an engaging demeanour. Sources, whether in written or presentation assignments, should always be correctly attributed.

Support is available through the RC Centre for Professional Skills (CPS) for students who would like help or feedback on their writing or speaking (presentations). CPS offers both individual and group appointments with trained writing instructors and presentation coaches who are familiar with the RC program and common types of business assignments. You can also access your college Writing Centres for help with written assignments.

You can <u>book an appointment with a writing or presentation coach</u> through the RC Centre for Professional Skills Writing Centre. For more information about writing centres, student supports, and study resources, see the <u>Writing and Presentation Coaching academic support page</u>.

#### Team or Group Assignments

The Case may require students to work in teams of up to 4. Learning to work together in teams is a crucial transferrable skill you will use not only in your coursework, but also in your future careers. Support is available if you encounter common teamwork challenges such as:

- Team members feeling left out of the team.
- Team members not responding in a timely manner to communication.
- Division or quality of work among team members being unequal or unfair.

Consult the <u>Centre for Professional Skills Teamwork Resources page</u> for tips, strategies, and best practices. You can also <u>book an appointment with a teamwork mentor</u> through the RC Centre for Professional Skills Writing Centre. Teamwork mentors can help you resolve or mitigate conflict, strategize on planning, or improve team communication.

If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, consult with your Accessibility Advisor about the teamwork in this course.

# Missed Tests and Assignments (including mid-term and final-term assessments)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may request special consideration.

In such cases, students must:

1. Notify the instructor AND the Rotman Commerce Program Office **on the date** of the missed course deliverable, e.g. missed test, final assessments, assignment or class (in the case of participation marks).

 Complete a <u>Request for Special Consideration Form</u> and submit it along with your Absence Declaration on <u>ACORN</u> (please read the instructions on how to use the Absence Declaration in ACORN) within **2 business days** of the originally scheduled course deliverable. Please email your documents to <u>rotmancommerce.info@utoronto.ca</u>

Students who do not provide this information will be given a grade of 0 (zero) for the missed course deliverable.

The weight of the missed assignment/test will be shifted to final exam.

#### Late Assignments

All assignments including the Case are due on the date and at the time specified in Quercus. Late submissions will not be accepted.

Students who, for reasons beyond their control, are unable to submit an assignment by its deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments.

## Statement on Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

## Commitment to Accessibility

The University is committed to inclusivity and accessibility, and strives to provide support for, and facilitate the accommodation of, individuals with disabilities so that all may share the same level of access to opportunities and activities offered at the University.

If you require accommodations for a temporary or ongoing disability or health concern, or have any accessibility concerns about the course, the classroom or course materials, please <a href="mailto:emailto:

## **Academic Integrity**

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

<u>The University of Toronto's Code of Behaviour on Academic Matters</u> outlines the behaviours that constitute academic misconduct, the process for addressing academic offences and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments

• Using someone else's ideas or words without appropriate acknowledgement.

- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

#### On test and exams

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

#### Misrepresentation

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) medical notes.

All suspected cases of academic dishonesty will be investigated by the procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any question about what is or is not permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other U of T or RC resources such as the RC Centre for Professional Skills, the College Writing Centres or the Academic Success Centre.

#### **Email**

At times, the course instructor may decide to communicate important course information by email. As such, all U of T students are required to have a valid UTmail+ email address. You are responsible for ensuring that your UTmail+ email address is set up and properly entered on ACORN. For more information visit the Information Commons Help Desk.

Forwarding your utoronto.ca email to a Gmail or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Gmail accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

## Recording Lectures

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission, and may not do so unless permission is granted. Students who have been previously granted permission to record lectures as an accommodation for a disability are excepted. This includes tape recording, filming, photographing PowerPoint slides, Quercus materials, etc.

If permission for recording is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in any way. It is forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.



## Weekly Schedule

Session	Date	Topic	
1	Jan 10	Introduction & Overview: productivity & Competitiveness, strategy & operations.  Overview of manufacturing: process & discrete products industries, product variety, facility layouts.  Production performance measures: Production rate, cycle time, capacity, lead time, utilization.	
2	Jan 17	Waiting Line Models I – Exponential & Poisson Distribution, (M/M/1) and (M/M/S) Models	
3	Jan 24	Waiting Line Models II – (M/G/1), (M/D/1), (M/G/k):(FCFS/k/∞), (M/M/1):(FCFS/N/∞) models	
4	Jan 31	Total Quality Management & Statistical Process Control	
5	Feb 7	Supply Chain Management	
6	Week of Feb 13	Midterm test, 2 hours, out of class time	
7	Feb 28	Demand Forecasting	
8	Mar 7	Inventory Management I – Cycle counting, EOQ model, EOQ with back-orders, Quantity discounts	
9	Mar 14	Inventory Management II – Probabilistic EOQ, service level approach, periodic review systems	
10	Mar 21	Inventory Management III, single period models for discrete and continuous demand, production rate EOQ	
11	Mar 28	Linear Programming - LP model formulation, solving LP using graphical method, dual price	
12	Apr 4	Applications of LP in Operations Management: make or buy decisions, personnel scheduling, production & inventory scheduling, solution using LINGO software.	

Please note that the last day you can drop this course without academic penalty is March 19, 2023.



#### Other Useful Links

- Become a volunteer note taker
- Accessibility Services Note Taking Support
- Credit / No-Credit in RSM courses
- Rotman Commerce Academic Support

## **URL** links for print

- Request for Special Consideration Form: <a href="https://rotmancommerce.utoronto.ca/current-students/forms-requests-and-appeals/forms/">https://rotmancommerce.utoronto.ca/current-students/forms-requests-and-appeals/forms/</a>
- ACORN: <a href="http://www.acorn.utoronto.ca/">http://www.acorn.utoronto.ca/</a>
- Email Accessibility Services: accessibility.services@utoronto.ca
- Accessibility Services website: <a href="http://studentlife.utoronto.ca/as">http://studentlife.utoronto.ca/as</a>
- University's Plagiarism Detection Tool FAQ: <a href="https://uoft.me/pdt-faq">https://uoft.me/pdt-faq</a>
- The University of Toronto's Code of Behaviour on Academic Matters: http://www.governingcouncil.utoronto.ca/policies/behaveac.htm
- Information Commons Help Desk: <a href="http://help.ic.utoronto.ca/category/3/utmail.html">http://help.ic.utoronto.ca/category/3/utmail.html</a>
- Become a volunteer note taker: <a href="https://studentlife.utoronto.ca/program/volunteer-note-taking/">https://studentlife.utoronto.ca/program/volunteer-note-taking/</a>
- Accessibility Services Note Taking Support: <a href="https://studentlife.utoronto.ca/service/note-taking-support/">https://studentlife.utoronto.ca/service/note-taking-support/</a>
- Credit / No-Credit in RSM courses: <a href="https://rotmancommerce.utoronto.ca/current-students/degree-requirements/credit-no-credit-option/">https://rotmancommerce.utoronto.ca/current-students/degree-requirements/credit-no-credit-option/</a>
- Rotman Commerce Academic Support: <a href="https://rotmancommerce.utoronto.ca/current-students/academic-support/">https://rotmancommerce.utoronto.ca/current-students/academic-support/</a>
- Book an appointment with a writing or presentation coach: <a href="http://uoft.me/writingcentres">http://uoft.me/writingcentres</a>
- Writing and Presentation Coaching academic support page: <a href="https://rotmancommerce.utoronto.ca/current-students/academic-support/writing-and-presentation-coaching/">https://rotmancommerce.utoronto.ca/current-students/academic-support/writing-and-presentation-coaching/</a>
- Centre for Professional Skills Teamwork Resources page: https://rotmancommerce.utoronto.ca/teamwork-resources
- Book an appointment with a Teamwork Mentor: http://uoft.me/writingcentres