

Course Outline

Course Code	RSM 415 H1 S
Course Name Strategic Decisions in Operations	
Term, Year	Winter, 2025
Course Meets L101 Mondays 9:00 am-11:00 am / WO 30	
Web page URL	https://q.utoronto.ca/courses/373234

Instructor Details

Name	Email	Phone	Office Hours	Virtual Office
Susan F. Lu	susanfeng.lu@rotman.utoronto.ca	416-978-5128	Mondays from	Mondays from
	(Please start subject with RSM415)		3-4 pm, Room 415, North	4-5 pm and by appointment
			Building	

My zoom link: TBD

Course Description and Learning Outcomes

The Strategic Decisions in Operations course provides a comprehensive framework and analytical tools to evaluate and optimize strategic decisions in operations, focusing on configuring the "Operating System" of a firm for maximum value creation. Students will explore how to align resources and process decisions with organizational goals, ensuring they are rooted in operational reality.

In today's competitive global market, the operations function is vital to organizational success. Businesses must meet diverse customer needs, deliver value, and excel in cost, quality, flexibility, and delivery, all while responding to shortened product life cycles. This course emphasizes the interconnectedness of operations with other functions such as finance, marketing, accounting, and human resources.

Key topics include:

- Resource selection and organization, encompassing worker skills and technology.
- Process execution to achieve strategic goals.
- Continuous process improvement to manage quality and maintain competitiveness.
- Information flow management to optimize resource coordination.
- Inventory management within supply chains.

Through case studies, quantitative models, and simulation games, students will develop the skills to make strategic decisions that drive organizational performance and innovation. By the end of the course, students will be able to:

- 1. Consider the basic trade-offs facing operations managers; for example, between fast delivery time and cost.
- 2. Be able to determine if a production system is appropriate for a firm's choice of the target market and competitive priorities.
- 3. Determine the capacity of a process. Understand how flowtime, flowrate and inventory are related.
- 4. Be able to differentiate between managing a bottleneck and managing a non-bottleneck.
- 5. Understand how to manage uncertainty and variability in a production/service system.
- 6. Determine the optimal inventory quantity and time to place an order.
- 7. Learn how to strategically run a supply chain

Course Prerequisites

The prerequisite for this course is RSM 270: Operations Management.

Intended audience: Students interested in (1) operations and supply chain management; (2) management consulting; (3) running their own business; and (4) the operational side of private equity, given its ROIC objective where operations typically require the largest investment in assets.

Relationship to other OM&S courses: This elective course builds on the core operations class and also assumes students are familiar with the basics of Economics and Statistics. The strategic decisions studied in this course require a detailed analysis and understanding of the underlying operations. Thus, this course provides a more strategic level thinking/discussion than the quantitative models students learn in RSM 270. It complements (but it does not overlap with) functionally specialized electives such as *Supply Chain Management* (RSM 370), *Service Operations Analytics* (RSM 412), and/or *Management Science* (RSM 470).

Course Materials

Suggested Readings

The purchase of the following textbook is optional:

• Matching Supply with Demand: An Introduction to Operations Management

Materials included in lecture slides are mostly based on the contents of the above textbook. In addition to this textbook, I will provide you with separate teaching notes for lecture contents that may not be included in the textbook. Note that slides posted for each lecture and teaching notes are sufficient for exams; therefore, students are not required to read additional materials from the textbook if they do not wish to.

Electronic Course Materials

This course will be using the following electronic course materials:

Cases:

Case studies have been selected with the objective of exposing you to a wide array of challenging decisions in Manufacturing and Service operations. These operational problems are ubiquitous in the business world, and the solution techniques that you learn to solve these cases have pervasive applications. These solution methods will facilitate the analysis of other similar business problems. There is one recurring theme in all of these case studies: how to optimally configure the "Operating System" (a combination of assets and processes) to help a firm deliver on its "Value Proposition" to its customers. Specifically, you will learn that each Business Strategy (i.e., price, quality, timeliness, and variety) requires a tailor-made Operations Strategy (i.e., cost, process quality, responsiveness, and flexibility), and the alignment between these two strategies is the key to success. Having solved these case studies, you will be primed to develop solution methods for a whole slew of business problems that can potentially ameliorate a firm's operational effectiveness while simultaneously accounting for its Competitive Positioning.

The selected cases for this course are as follow:

- 1. Benihana of Tokyo, 673057
- 2. Shouldice Hospital Ltd., 683068
- 3. National Cranberry Cooperative, 675014
- 4. Sport Obermeyer, 695022

The above cases must be purchased using the following link: <u>https://www.iveypublishing.ca/s/ivey-coursepack/a1ROF000002ebqv2AA</u>

- > Textbook:
 - Matching Supply with Demand: An Introduction to Operations Management
 - By Cachon and Terwiesch, 4th Edition.
 - Publisher: McGraw-Hill Education;

As the instructor, I firmly believe that the textbook is a useful companion to the course as it reinforces/expands some of the concepts that I cover in class; as such, I recommend (but do not require) it. Note that teaching slides and other reading materials will be 100% sufficient for solving case studies and ensuring success on the final exam. The textbook can be purchased using the following link: https://www.amazon.com/Matching-Supply-Demand-Introduction-Operations/dp/1260084612

> Game:

The Beer Game offers an engaging and hands-on way for students to experience the dynamics of supply chain management. With roles as brewer, distributor, wholesaler, and retailer, players navigate the complexities of inventory management and decision-making in a realistic supply chain environment. This interactive simulation allows students to apply theoretical concepts to practical challenges, sharpening their strategic thinking and problem-solving skills. I'll be providing the game for the entire class, ensuring everyone gets the chance to learn and compete in this immersive experience.

These materials will cost an approximate total of \$25.76 CAD (mandatory). You can consider bundling the book with one of your classmates if you want to buy it. The use of these materials complies with all University of Toronto policies, which govern fees for course materials.

Evaluation and Grades

Final Term Test

and learning objectives of the course.							
Work	Percentage of grade	Due Date					
Class Participation (10%)	10%	Ongoing					
Class Attendance + Beer Game (4%+4%)	8%	Beer game on Mar 24					
Case Write Up (4 cases, 10% each)	40%	Jan 13, Jan 27, Feb 10, Mar 10					
Quizzes (4 quizzes, each 3%)	12%	Ongoing					

Date: TBD

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.

Course Format and Expectations

Below, you can find detailed explanations regarding my expectations (and other useful information) for each course deliverable.

30%

Workload. This course challenges you to think through and recommend important operational decisions based on thorough qualitative and quantitative analysis. *Strategic Decisions in Operations is a topic that is best learned by doing.* The workload is relatively heavy, but good planning will make it very manageable, and your payoff could be significant. The mix of in-class case discussions and written case studies, quizzes, game and the final exam has been designed to develop the skills and understanding you need to gain significant expertise in recommending operational solutions that shore up a firm's business strategy.

- Expect to spend around 7-10 hours on each of the written case analyses and 3-5 hours on other in-class discussion cases. These are just guidelines – it may take you more or less time.
- Reading and analyzing cases will help students develop a deeper understanding of the subject matter. The final exam will include some general questions from these cases.
- o If you follow lectures closely, preparing for the final exam should take a little time.

Class Participation (individual, 10%). Your participation grade will depend on your preparedness for participating in class discussions; the quality of your contributions to other discussions; and regular attendance in lectures. There should be enough opportunities for you to participate. To increase opportunities for effective participation, I will occasionally cold-call students. If you feel uncomfortable with being called on in class, please let me know in advance so we can find a solution. Generally, you should contribute to the creation of a positive learning environment. This mostly concerns your *positive externality on the learning of others*. Some key characteristics of valuable contributions are:

- Relevance: Are your comments timely and linked to the comments of others?
- Advancement: Do your comments take the discussion further or deeper?
- Fact-based: Have you used specific data to support the assertions that you are making?

- *Logic*: Is your reasoning consistent and logical?
- Originality: Do your comments merely restate the facts, or do they provide new insights?

Attendance and classroom etiquette (individual, 8%): You are strongly encouraged but not required to attend lectures. We will discuss four cases in class. You will have enough opportunities for class participation to achieve a satisfactory participation grade. If you do attend lectures, please observe the following rules: *(i) Be on time and (ii) stay for the entire session*.

- Attendance policy (4%): 0 to 1 absence: 4%. 2 absences: 3.5%. 3 absences: 3%. 4 absences: 2.5%. 5 absences: 2%. 6 absences: 1%. 7 to 8 absences: 0%. More than 8 absences: failure.
- Beer game (4%): the game is provided on Mar 24. Attendance is mandatory.

Quizzes (individual, 12%): We will have **four** short quizzes for this course. Each quiz bears 3% of the total grade. <u>There will be no makeup for quizzes</u>. These quizzes are based on important highlights/takeaways in the assigned case studies and lectures. Each quiz may take 15 minutes and will be given at the end of a lecture. It is through these quizzes that I can ascertain your level of preparedness for in-class case discussions and your enthusiasm for proactive learning.

Case analyses (group, 40%): There are **four** case analyses expected to be done in groups of preferably 3 students. The team size may vary based on final enrollment. In your assignments, you will be expected to also figure some things out on your own prior to our class discussion rather than only apply concepts already covered. This format is designed to help you develop important problem-solving skills in Strategic Decision in Operations.

Final assessment (individual, 30%): The final exam is **take-home, and it will be administered online via Quercus.** Your final exam will consist of conceptual and quantitative questions. Conceptual questions include all topics covered in the lectures, case studies, and class discussions.

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.

To book an appointment for writing or presentation coaching, go to uoft.me/writing centres and select "Rotman Commerce Centre for Professional Skills" and register for a WCONLINE account or log in to your account (if you have one). For group assignments, assign one student from the group to book an appointment for the whole group.

1. Register for an account using your @mail.utoronto.ca email address and follow the confirmation prompts you receive via email. At the bottom of the registration page, click on "yes" next to "include iCal links with appointment confirmation messages".

2. Once your registration is complete, select the schedule: Writing and Presentation Coaching on the drop-down menu.

3. Click on the white box for an appointment slot. Each appointment will be 45 mins. You may attach a draft of your assignment or any other documents. If your draft is not ready, you may also share a Google link (or other live document sharing link) of your draft during your appointment.

4. You will receive a confirmation email with your appointment details and meeting link.

For questions or registration support, please email rotmancommerce.cps@utoronto.ca.

In addition to appointments offered by the RC Centre for Professional Skills, all RC students have access to their College Writing Centres. Students who require additional support and/or tutoring with their writing skills are encouraged to visit the Academic Success Centre (http://www.studentlife.utoronto.ca/asc) or one of the College Writing Centres (writing.utoronto.ca/writing-centres). These Centres, as well as the RC Centre for Professional Skills, are teaching facilities – not editing services – where trained staff can assist students in developing their academic writing skills.

There is no charge for the instruction and support.

Team or Group Assignments

All analysis cases require students to work in teams of 3. The team size may vary based on final enrollment. 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 quizzes and final-term assessments)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may request special consideration **within 2 business days** of the missed midterm/test/assignment due date.

In such cases, students must:

- 1. Complete the Request for Special Consideration form: <u>https://uoft.me/RSMConsideration</u>
- 2. Provide documentation to support the request, eg. Absence Declaration from <u>ACORN</u>, medical note etc.

Please note: As of September 2023, students may use the Absence Declaration on ACORN ***one time per term*** to report an absence and request consideration. Any subsequent absence will require a <u>Verification of Illness form</u> or other similar relevant documentation.

Students who do not submit their requests and documentation within 2 days may receive a grade of 0 (zero) on the missed course deliverable. Students who do not provide this information will be given a grade of 0 (zero) for the missed course deliverable. When a student misses an exam, the instructor will either offer a make-up test or re-weight the other deliverables to account for the missed exam. This choice will be made by the instructor.

Late Assignments

All assignments are due on the date and at the time specified in Quercus. The instructor reserves the right to penalize late submissions by 25% per day if the assignment is not received on the specified date, at the specified time.

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 email <u>Accessibility</u> <u>Services</u> or visit the <u>Accessibility Services website</u> for more information as soon as possible. Obtaining your accommodation letter may take up to several weeks, so get in touch with them as soon as possible. If you have general questions or concerns about the accessibility of this course, you are encouraged to reach out to your instructor, course coordinator, or Accessibility Services.

Generative AI / ChatGPT

Students are permitted to utilize Generative Artificial Intelligence (AI) tools while completing assignments within this course. However, it is essential to comprehensively document this usage and subsequently upload the documentation as an appendix (or a separate file) upon request for each assignment. Should the instructor require the submission of this documentation, students are obliged to promptly provide the file to the instructor. This documentation should include what tool(s) were used, how they were used, and how the results from the AI were incorporated into the submitted work. Failure to adhere to this guideline, and instances where the usage of AI is detected without appropriate citation, could result in the forfeiture of 100% of the grade allocated for that particular assignment, both for you and your teammates. It is important to emphasize that the use of Generative AI tools is exclusively permissible for assignments and case studies; their utilization is strictly prohibited during examinations, whether administered online or in-person.

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 <u>Code</u> of <u>Behaviour on Academic Matters</u>. If you have any questions 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.

Sessio	Date	Торіс	Readings	Assignments	
n				Individual	Group
1	Jan 6	Bottleneck Management	OM: Chapter 3		Jan 13, Case Write-up
2	Jan 13	Benihana of Tokyo	Case: 673057	Case Discussion	Finalize Groups
3	Jan 20	Process Analysis	OM: Chapter 4 & 5	Quiz 1	Jan 27, Case Write-up
4	Jan 27	Shouldice Hospital	Case: 683068	Case Discussion	Finalize Groups
5	Feb 3	Queuing Theory	OM: Chapter 9	Quiz 2	Feb 10, Case Write-up
6	Feb 10	National Cranberry Corp.	Case:675014	Case Discussion	
No Lecture	Feb 17-21	Reading week			
7	Feb 24	Inventory Management		Quiz 3	
8	Mar 3	The Newsvendor Model	Chapter 14		Mar 10, Case Write-up
9	Mar 10	Sport Obermeyer	Case: 695022	Case Discussion	
10	Mar 17	Quality Management	Chapter 7	Quiz 4	
11	Mar 24	Beer Game	Chapter 19	Play Game	Distribute Practice Exam
12	Mar 31	Supply Chain Management	Final Review	Game Discussion	

Weekly Schedule

Please note that the last day you can drop this course without academic penalty is March 10, 2025.

Other Useful Links

- Become a volunteer note taker
- <u>Accessibility Services Note Taking Support</u>
- <u>Credit / No-Credit in RSM courses</u>
- Rotman Commerce Academic Support
- Where to find teaching assistant opportunities

URL links for print

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