



Carleton
UNIVERSITY

SPROTT
SCHOOL OF BUSINESS

CARLETON UNIVERSITY
INTRODUCTION TO OPERATION MANAGEMENT
BUSI2301B
FALL 2020

Instructor: Ahmad Teymouri

Office: Online

Office Hours: Please send an email for appointment.

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Phone Number: -

TA: TBD

Office Hours: TBD

Email: TBD

Modality: *Online (__ hrs asynchronous and/or __ hrs synchronous)

- Synchronous means that the professor and the student interact with each other in real time through live Zoom sessions. We will meet synchronously every Monday at 18:05.
- Asynchronous delivery does not take place simultaneously. For this course, the material including recordings of the synchronous sessions, additional videos, PowerPoint slides, documents, spreadsheets and other material will be posted on cuLearn.

Pre-requisites & precluded Courses: Second year standing and STAT 2606. Restricted to selected Sprott programs.

Course Calendar description from the 2020/2021 University calendar: Concepts, models, and managerial issues in planning, designing, operating and controlling systems of manufacturing goods or providing services. Emphasis on basic ideas and tools.

Course Description: This course is an introduction to the field of operations management. This course discusses how contemporary organizations can effectively and efficiently manage designing goods and services, designing manufacturing processes, scheduling and forecasting, improving and assuring quality, and supply chain management. The topics covered including strategic issues and operational decisions are theoretical and quantitative in nature. This course is important for professionals in all business concentrations as it explains frameworks and analytical tools that help understand core operational concepts in contemporary organizations.



Learning Outcomes:

- Define the operations function in an organization and understand its impact
- Apply technical and quantitative models to solve problems related to operations management
- Recognize the usefulness, limitations and pertinence of quantitative models to operations settings
- Develop and apply analytical and synthesis skills to operations settings
- Understand and perform a process analysis and estimate productivity indexes.
- Forecast demand for a product/service based on time series.
- Apply robust inventory management methods. Understand the concepts of lean operations. Measure and interpret quality in each production or service delivery setting

Reading(S)/Textbook(S)/Required Materials (Incl. Technical Requirements, I.E., Webcam):

Textbook: W.J. Stevenson, M. Hojati, and J. Cao. 2015, Operations Management, 6th Cdn Ed, McGraw- Hill Ryerson, Toronto.

ISBN-10: 1-25-927015-7

ISBN-13: 978-1-25-927015-4

Course Requirements & Methods of Evaluation (including due dates):

| | |
|-------------------------------|-----|
| Quiz (3×15%) | 45% |
| Individual Assignment (1×10%) | 10% |
| Final Exam | 45% |

Quizzes

The objective of the quizzes is to encourage studying the course material on a regular basis and practice for exams. There will be three quizzes to be done individually online as indicated in the course schedule. Each quiz contains 40 -50 multiple choice, short answer, and matching questions (theory and problems).

Individual Assignment

Students should complete an individual assignment, worth 10% of the final mark. The assignment covers forecasting, process design and facility layout, decision analysis, linear programming and applications, statistical quality management, and MRP chapters. Students will learn the topics gradually during the course and they are expected to complete their assignment on time. A written report is to be handed in by each student. Report organization, neatness, and professionalism are particularly important.

Final Exam

The final exam will be comprehensive. Both quantitative and qualitative questions can be expected. The date, time, and location of the final exam will be announced by the university. The Registrar's Office will determine the student's eligibility for a deferred final examination following the rules of the University. Students are advised that exam papers will not be returned back to them after being marked. They will be available for consultation only at the instructor's online office during office hours.

Course Schedule:

| Week | Date | Topic | Note |
|-------------|--------------------|--|---|
| 1 | Monday: 2020/09/14 | Chapter 1: Introduction to OM Chapter 2: Competitiveness, Strategy, and Productivity | |
| 2 | Monday: 2020/09/21 | Chapter 3: Demand Forecasting | Self-study chapter 4 |
| 3 | Monday: 2020/09/28 | Chapter 6: Process Design and Facility Layout | |
| 4 | Monday: 2020/10/5 | Chapter 5: Strategic Capacity Planning Supplement 5: Decision Analysis | Quiz 1 (Chapter 1,2,4) |
| 5 | Monday: 2020/10/12 | Statutory Holiday. University Closed | |
| 6 | Monday: 2020/10/19 | Chapter 12: Inventory Management | |
| 7 | Monday: 2020/10/26 | Study Break | |
| 8 | Monday: 2020/11/02 | Chapter 12: Inventory Management | Self-study chapter 7 |
| 9 | Monday: 2020/11/09 | Chapter 13: Aggregate Operations Planning | |
| 10 | Monday: 2020/11/16 | Chapter 13: Aggregate Operations Planning Supplement 6: Linear Programming and Applications | Quiz 2 (Chapter 5,6,7) |
| 11 | Monday: 2020/11/23 | Chapter 14: MRP/ERP | Self-study chapter 8 |
| 12 | Monday: 2020/11/30 | Chapter 14: MRP/ERP Chapter 9: Management of Quality | |
| 13 | Monday: 2020/12/07 | Chapter 10: Statistical Quality Control | |
| 14 | Friday: 2020/12/11 | Chapter 11: Supply Chain Management Final Exam – Review and Q&A | Quiz 3 (Chapter 8,9) Individual Assignment Due |
| | TBD | Final Exam | |

ADDITIONAL INFORMATION

Course Sharing Websites

Materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Required calculator in BUSI course examinations

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

Group work

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

| | | | |
|--------------|-------------|-------------|-------------|
| A+ = 90-100 | B+ = 77-79 | C+ = 67-69 | D+ = 57-59 |
| A = 85-89 | B = 73-76 | C = 63-66 | D = 53-56 |
| A - = 80-84 | B - = 70-72 | C - = 60-62 | D - = 50-52 |
| F = Below 50 | | | |

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

Academic Regulations

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and its survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline

Academic Integrity

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: <https://carleton.ca/registrar/academic-integrity/>.

Sprott Student Services

The Sprott student services office, located in 710 Dunton Tower, offers academic advising, study skills advising, and overall academic success support. If you are having a difficult time with this course or others, or just need some guidance on how to successfully complete your Sprott degree, please drop in* any weekday between 8:30am and 4:30pm. Our advisors are happy to discuss grades, course selection, tutoring,

concentrations, and will ensure that you get connected with the resources you need to succeed! <http://sprott.carleton.ca/students/undergraduate/learning-support/>

* Note that the office is physically closed. However, e-drop in is available between 8:30-4:30 until social distancing requirements are updated by the Province.

Centre for Student Academic Support

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas.

Important Information:

- Students must always retain a hard copy of all work that is submitted.
 - All final grades are subject to the Dean's approval.
 - For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <https://carleton.ca/its/get-started/new-students-2/>
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