

# Management Science (MGSC) 368

**Introduction to Production and Operations Management** (Revision 10)

Register by August 10 to start by September 1

**Delivery Mode:** Individualized Study Online [↗](#) with **eText** [↗](#)

**Credits:** 3

**Area of Study:** Applied Studies (Business & Administrative Studies)

**Prerequisites:** **MGSC 301** or **MATH 215**. Students should be comfortable with basic algebra.

**Precluded:** None

**Challenge:** MGSC 368 has a Challenge for Credit option.


**Faculty:** **Faculty of Business** [↗](#)

**Status:** Open 

**Notes:** Students registering in grouped study mode are advised that there may be some differences in the evaluation and course materials information indicated below. To obtain the most up-to-date information, contact the Faculty of Business Student Support Centre at 1-800-468-6531.

## Overview

MGSC 368 is a three-credit management science course that examines the subject of production and operations management (POM) and discusses its importance to the overall strategy and competitiveness of a firm. In addition, this course focuses on specific tools used to manage and enhance a firm's operations and production, such as facility layout, product design, aggregate planning, inventory management, and forecasting.

Credits earned in MGSC 368 may be applied toward the **Canadian Operational Research Society (CORS)**  diploma. For more information regarding the CORS diploma, direct e-mail to [walid@athabascau.ca](mailto:walid@athabascau.ca).

Before enrolling in MGSC 368, you should have credit in MGSC 301, MATH 215, or equivalent. You are also expected to be comfortable with basic algebra. Neither calculus nor business math is required, but background knowledge in either subject will be useful.

## Outline

MGSC 368 comprises 10 lessons, as listed below:

- Lesson 1: Introduction to Operations and Supply Chain Management
- Lesson 2: Product Design and Process Analysis and Selection
- Lesson 3: Facility Layout
- Lesson 4: Demand Management and Forecasting
- Lesson 5: Aggregate Planning
- Lesson 6: Inventory Systems for Independent Demand
- Lesson 7: Material Requirements Planning
- Lesson 8: Operations Scheduling
- Lesson 9: Quality Management and Statistical Quality Control
- Lesson 10: Project Management



## Evaluation

To **receive credit** [↗](#) for MGSC 368, you must achieve a minimum grade of D (50 percent) on each examination and a minimum overall grade of **D (50 percent)** [📄](#) for the entire course. The following chart summarizes the evaluation activities:

Activity	Weight
Assignment 1	20%
Midterm Exam	30%
Assignment 2	20%
Final Exam	30%
<b>Total</b>	<b>100%</b>

To learn more about assignments and examinations, please refer to Athabasca University's [online Calendar](#) [↗](#).

**In response to COVID-19 containment directives, temporary online exam(s) are available for this course.**

## Materials

Jacobs, F.R., & Chase, R.B., (2018). *Operations and supply management* (15<sup>th</sup> ed.). New York: McGraw-Hill/Irwin. ISBN: 9781259924262 [📄](#) (eText)

### eText

Registration in this course includes an electronic textbook. For more information on [electronic textbooks](#) [↗](#), please refer to our [eText Initiative site](#) [↗](#).



## Other Resources


All other learning resources will be available online.

### Challenge for Credit



## Challenge for Credit

### Overview

The Challenge for Credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about [Challenge for Credit](#)  can be found in the Undergraduate Calendar.

### Evaluation

To [receive credit](#)  for the MGSC 368 challenge registration, you must achieve a grade of at least **D (50 percent)**  on the examination.





### Paper Exam



[Challenge for Credit Course Registration Form](#)

### Important Links

## Important Links

- > [Academic Advising](#) 
- > [Program Planning](#) 
- > [Request Assistance](#) 
- > [Student Services](#) 

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized-study counterparts.

*Opened in Revision 10, March 20, 2019*

*Updated July 15, 2021, by Student & Academic Services*

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