




# Management Science (MGSC) 312

## Statistics for Business and Economics II (Revision 7)

**Status:** Replaced with new revision, see the [course listing](#) [↗](#) for the current revision 

**Delivery mode:** Individualized study online [↗](#) with eText [↗](#)

**Credits:** 3

**Area of study:** Applied Studies (Business and Administrative Studies)

**Prerequisites:** MGSC 301 or MATH 215 or MATH 216


**Precluded:** MATH 315 (MGSC 312 may not be taken for credit if credit has already been obtained for MATH 315.)

**Challenge:** MGSC 312 has a challenge for credit option.

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

## Overview



MGSC 312 is a second-level introductory course in statistics, designed as a continuation of MGSC 307. Together, these courses provide students with basic concepts and methods of statistical analysis. The course and the textbook are tailored to meet the needs of students in administrative studies. Accordingly, all the applications problems are borrowed from business and economics, with many exercises based on real data.

Credits earned in MGSC 312 may be applied toward the **Canadian Operational Research Society (CORS)**  diploma.

## Outline

- Lesson 1: Tests of Goodness of Fit and Independence
- Lesson 2: Analysis of Variance and Experimental Design
- Lesson 3: Simple Linear Regression
- Lesson 4: Multiple Regression
- Lesson 5: Forecasting
- Lesson 6: Nonparametric Methods
- Lesson 7: Index Numbers
- Lesson 8: Statistical Methods for Quality Control

## Evaluation


To **receive credit**  for this course, you must submit all assignments, achieve a minimum grade of 50 percent on **each** of the two examinations (midterm and final), and achieve a minimum overall grade of **D (50 percent)**  for the entire course.


**Completing all assignments is mandatory.** You are strongly encouraged to complete the assignments before writing the exams. If you do not complete an assignment, you will not be able to finish the course until you do so.

The following chart summarizes the evaluation activities:

Activity	Weight
Assignment 1	10%
Assignment 2	10%

Activity	Weight
Midterm Exam	30%
Assignment 3	10%
Assignment 4	10%
Final Examination	30%
<b>Total</b>	<b>100%</b>

The **midterm and final examinations** for this course must be requested in advance and written under the supervision of an AU-approved exam invigilator. Invigilators include either ProctorU or an approved in-person invigilation centre that can accommodate online exams. Students are responsible for payment of any invigilation fees. Information on exam request deadlines, invigilators, and other exam-related questions, can be found at the [Exams and grades](#)  section of the Calendar.



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

## Materials

Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W. (2020). *Statistics for business and economics* (14th ed.).

Cengage. ISBN: 978-1-337-90106-2  (eText)

### eText

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

### Other Materials

Students will access all other course materials online.

**Note:** You must have Microsoft Excel installed on your computer in order to complete course requirements.

# 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 312 challenge registration, you must achieve a grade of at least **D (50 percent)** on the examination.

Online Exam

 [Challenge for credit course registration form](#)

## Important links

- › [Academic advising](#)
- › [Program planning](#)
- › [Request assistance](#)
- › [Support services](#)
- › [CPA Requirements](#)

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 7, July 30, 2021*

*Updated November 7, 2024*

View **previous revision** 

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