




# Management Science (MGSC) 301

## Statistics for Business and Economics I (Revision 8)

**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:** None

**Precluded:** **MATH 215** and **MATH 216**. (MGSC 301 may not be taken for credit if credit has already been obtained for MATH 215 or MATH 216.)

**Challenge:** MGSC 301 has a challenge for credit option.


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



**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

This is a three-credit, introductory course in statistics designed to provide students with the basic concepts and methods of statistical analysis. The course and the textbook are tailored to meet the needs of students in administrative studies. Accordingly, application problems are borrowed from business and economics, with many exercises based on real data. Credits earned in MGSC 301 may be applied toward the **Canadian Operational Research Society (CORS)**  diploma.

## Outline

- Lesson 1: Data and Statistics
- Lesson 2: Descriptive Statistics: Tabular and Graphical Methods
- Lesson 3: Descriptive Statistics: Numerical Measures
- Lesson 4: Introduction to Probability
- Lesson 5: Discrete Probability Distributions
- Lesson 6: Continuous Probability Distributions
- Lesson 7: Sampling and Sampling Distributions
- Lesson 8: Interval Estimation
- Lesson 9: Hypothesis Testing
- Lesson 10: Statistical Inference about Means and Proportions with Two Populations
- Lesson 11: Inferences about Population Variances

## Evaluation

To **receive credit** [↗](#) for MGSC 301, you must submit all assignments, achieve a minimum grade of D (50 percent) on both the midterm and the final examination and achieve a minimum overall grade of **D (50 percent)** [↗](#) for the entire course.

Activity	Weight
Assignment 1	10%
Assignment 2	10%
Midterm Exam	30%
Assignment 3	10%
Assignment 4	10%
Final Exam	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 Resources

All other learning resources will be available online.

## 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 301 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

- › [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 8, February 9, 2021*

*Updated November 28, 2024*

View **previous revision** [↗](#)

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