# ECON 2613 (A1) - Empirical Analysis in Economics and Business

Department of Economics Acadia University Fall 2019

Instructor Dr. Justin Beaudoin

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Office Location BAC 346

Office Hours Mon/Wed, 10:30am - 12:00pm (and by appointment)

Course Website Access via ACORN

Class Location BAC 138

Class Times Mon/Wed, 1:00 - 2:30pm

## **Course Materials**

ACORN will be used for class announcements and will contain all course materials: syllabus, class notes/slides, practice problems, and materials for quizzes, tests and exams.

## Office Hours

I encourage you to attend office hours if you have questions regarding the course material. Please email me or see me in person to arrange a time to meet. Should any issues or concerns arise throughout the course, you are encouraged to consult with me as soon as possible so that we can work together to find the resources to help you succeed.

# Course Description

This course aims to provide an introduction to empirical analysis in Economics and Business making extensive use of Microsoft Excel. Topics include both descriptive and inferential statistics, culminating in hypothesis testing and an introduction to regression analysis. Note: Credit cannot be obtained for both Econ 2613 and Math 1213.

# Course Learning Objectives

The material in this course serves as the foundation and a prerequisite for several upper-level elective courses in economics, including ECON 2623: Introduction to Econometrics. A solid understanding of the material in this course is important for further studies in economics, and the skills developed in the course have wide applicability for a variety of careers. By the end of the course, students will have learned the basic analytic skills and techniques that will allow them to be both producers and consumers of quantitative information.

More specifically, upon course completion students are expected to be able to:

- critically evaluate statements that contain quantitative information,
- understand data tables and graphical representations of data,
- produce accurate and understandable summaries of data,
- understand the limitations of available data,
- appreciate the inherent uncertainty of observed data,
- use statistical tools to assist in decision-making, and
- apply statistical reasoning in everyday life.

#### **Textbook**

The required textbook is available at the bookstore: "Business Statistics: A First Course", by Levine, Szabat and Stephan.

Our course will follow the organization of the 8th edition of the textbook fairly closely according to the scheduled outlined below, though previous editions of the textbook are very similar and can be used for the course.

# Economics Help Desk (Tutoring)

The course teaching assistant (TA), Emilia Ganslandt, will be available on Monday and Wednesdays from 4:30-6:30pm (Sept 11 - Dec 9) in BAC 137 to help you with the course material.

#### Statistics Workbooks

Optional (but highly recommended) workbooks are available for purchase in the Economics Department office (BAC 338). The workbooks contain practice problems (with accompanying solutions) for each chapter covered in the course.

# Quizzes

During the semester, there will be six quizzes. There will be no advance warnings for the quizzes. The quizzes will be brief and based on recent material covered in class or assigned readings. Of the six quizzes, the four highest scores will count towards your final grade. There will be no make-up quizzes offered for any missed quizzes.

#### Midterm Tests

There will be two midterm tests in the course. Test 1 will be in class on Wed, Oct 2 and Test 2 will be in class on Wed, Nov 6.

Practice test(s) and a study guide will be provided prior to the tests to facilitate studying. No make-up tests will be provided; the weight of any missed tests will be reassigned to the weight of the final exam in determining your overall grade for the course. The midterm tests and final exam will contain problem-solving questions, as opposed to memorizing definitions and formulae. Tests will be open book/notes and will require the use of a laptop with spreadsheet software.

## Final Exam

The Final Exam will be scheduled by the University in the exam period from Dec 11 - 20. Unless there is a valid reason (approved in advance), students are required to take the exam at the time assigned by the University. The Final Exam will cover the entire course. Practice exam(s) and a study guide will be provided in advance.

# Grading

Quizzes (4)	20%
Midterm Tests (2)	40%
Final Exam	40%

If your score on the Final Exam is higher than your average score on the Midterm Tests, then the weight of the Final Exam will be increased to 60% and the weight of the Midterm Tests will be decreased to 20%. This reassigning of weights will be done automatically in a manner that maximizes your grade for the course (this adjustment can only increase your overall grade).

The grade scale for the course is as follows:

Letter Grade	$\mathbf{GPA}$	% Range	Rating
A+	4.33	95 - $100%$	
A	4.0	90 - $94%$	Excellent
A-	3.67	85 - $89%$	
B+	3.33	81 - $84%$	
В	3.0	78 - $80%$	$\operatorname{Good}$
В-	2.67	74 - $77%$	
C+	2.33	70 - $73%$	
C	2.0	66 - $69%$	Average
C-	1.67	62 - $65%$	
D+	1.33	58 - $61%$	
D	1.0	54 - $57%$	Pass
D-	0.67	50 - $53%$	
F	0.0	0 - $49%$	Failure

## **Class Material**

The following list outlines the material that we will cover in the course, with the class discussions highlighting the most important topics within each chapter:

- Chapter 1: Defining and Collecting Data
- Chapter 2: Organizing and Visualizing Variables
- Chapter 3: Numerical Descriptive Measures
- Chapter 4: Basic Probability
- Chapter 5: Discrete Probability Distributions
- Chapter 6: The Normal Distribution
- Chapter 7: Sampling Distributions
- Chapter 8: Confidence Interval Estimation
- Chapter 9: Fundamentals of Hypothesis Testing: One-Sample Tests
- Chapter 10: Two-Sample Tests and One-Way ANOVA
- Chapter 12: Simple Linear Regression (time permitting)

Class notes will be posted on ACORN prior to each class. The posted class notes may be incomplete relative to the notes presented in class. In the event that you must miss a class, it is recommended that you consult with me or a classmate to obtain any missed notes.

#### Class Schedule

The following is a preliminary schedule for the course topics that may be updated as the course proceeds. Readings refer to the textbook and are listed as suggestions to keep you up-to-date with the course; the materials in that day's class may not perfectly coincide with the listed reading. The posted class notes will contain any information about any potential changes to the schedule in advance.

Class #	Date	Notes
		Week 1 · · · · · · · · · · · · · · · · · ·
		W CCM 1
1	Wed, Sept 4	Discussion of Syllabus
		Week 2 · · · · · · · · · · · · · · · · · ·
2	Mon, Sept 9	Chapter 1
3	Wed, Sept 11	Chapter 2
		Week 3 · · · · · · · · · · · · · · · · · ·
4	Mon, Sept 16	Chapter 2
5	Wed, Sept 18	Chapter 3

Class #	Date	Notes
		····· Week 4 ·····
6	Mon, Sept 23	Chapter 3
7	Wed, Sept 25	Chapter 3
		····· Week 5
8	Mon, Sept 30	Midterm Review
9	Wed, Oct 2	Midterm Test 1
		····· Week 6 ·····
10	Mon, Oct 7	Chapter 4
11	Wed, Oct 9	Chapter 4
		Week 7
_	Mon, Oct 14	No class
12	Wed, Oct 16	Chapter 5
		····· Week 8 ·····
13	Mon, Oct 21	Chapter 6
14	Wed, Oct 23	Chapter 7
		····· Week 9 ·····
_	Mon, Oct 28	No class
_	Wed, Oct 30	No class
		····· Week 10 ·····
15	Mon, Nov 4	Midterm Review
16	Wed, Nov 6	Midterm Test 2
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		····· Week 11 ·····
-	Mon, Nov 11	No class
17	Wed, Nov 13	Chapter 8
		Week 12 ·····
18	Mon, Nov 18	Chapter 8
19	Wed, Nov 20	Chapter 9
		Week 13
20	Mon, Nov 25	Chapter 9
21	Wed, Nov 27	Chapter 10

Class #	Date	Notes
		Week 14
22	Mon, Dec 2	Chapter 12
23	Wed, Dec 4	Chapter 12
		Week 15
24	Mon, Dec 9	Final Exam Review
		Final Exam: Date TBA (Dec 11 - Dec 20) · · · · · · · · · · · · · · · · · · ·

#### Course Policies

Course dates/policies are outlined at the beginning of the course and are the student's responsibility; please communicate any issues, concerns or scheduling conflicts well before the relevant deadline so that we can address the issue appropriately. Any requests for regrading must include a written explanation as to why re-grading is appropriate, and the entire quiz/test/exam will be re-graded (so that the overall grade may increase, decrease, or remain the same). This request must be submitted within one week of the date that the quiz/test/exam was returned in class.

Please communicate with me if an illness or other issue will cause you to miss multiple classes. I expect students to exercise proper classroom etiquette in respect of their classmates and the instructor; while laptops/tablets may be used for note-taking, I ask that you minimize cell phone use in class, as it detracts from the classroom experience (and has been shown to significantly lower students' grades...).

## Accessibility

If you are a student with documentation for accommodations who anticipates needing supports or accommodations, please contact Marissa McIsaac, Accessibility Resource Facilitator at 902-585-1520, disability.access@acadiau.ca or Emily Duffett, Accessibility Officer, 902-585-1823, disability.access@acadiau.ca. Accessible Learning Services is located in Rhodes Hall, rooms 111-115.

#### Academic Ethics

It is the responsibility of students to familiarize themselves with the University's policy on academic ethics. Copying, plagiarism and other academic offences will not be tolerated. Penalties are severe and may result in suspension from a program/course and expulsion. A complete list of Academic Regulations can be found on the Policies page of the University's website. I strongly recommend that all class members review the sections in the 2019-20 academic calendar dealing with Academic Policy and Regulations. It is a serious offence to

engage in academic misconduct.

Last updated: September 11, 2019