

Empirical Analysis in Economics & Business - ECON 2613  
Department Economics  
Acadia University  
Winter 2024

## Professor Information

**Name:** Dr. Barry Watson

**Email:** barry.watson@acadiau.ca

**Office Location:** BAC 343

**Office Hours:** Tuesdays & Thursdays, 12-4pm (or by appointment). I am in my office most days, and so long as my door is open (which it normally is), I am available for drop-in consultations.

## Course Information

**Course Title:** Empirical Analysis in Economics & Business

**Course Number:** ECON 2613

**Location:** Beveridge Arts Centre (BAC) 236

**Meeting Times:** Monday & Wednesday, 1:00-2:20pm

## Course Description

Broadly defined, empirical analyses (i.e., quantitative methods) employ the use of data upon which hypotheses can be made and tested. Increasingly available, data is empowering. Through the use of quantitative methods, we can overcome inherent biases that arise from anecdotal evidence. Likewise, we do not necessarily need to rely on the information provided to us by others. Instead, we are increasingly able to collect data, which allows us to make our own interpretations, and thereby improves our decision-making (and knowledge-base).

For instance, it has long been argued that rising levels of minimum wage cause rising levels of unemployment. However, the data suggests that such increases are rather small (and in some instances, negligible). Also, many have historically argued that well-educated parents pass along an intelligence gene to their children. However, the data would suggest that the children of intelligent parents tend to receive more education when young; that is, there is a lack of evidence that such a gene exists. Additionally, there has been a historical argument that car accidents are most likely to happen close to home, because this is a time during which the individual pays less attention to their driving. However, the data would suggest that accidents are more likely to happen closer to home because this is statistically the most likely vicinity within which a person would be driving!

While I could provide many more illustrations (and will throughout the course), it should be increasingly clear that a strong understanding of this material has ‘real world’ application; thus, it is important for more advanced studies in business and economics. Further, the skills developed in the course have wide applicability for a variety of careers. A skill-set in empirical analysis is among the most employable traits in today’s job market, with careers in data science rising exponentially. By the end of the course, students will have learned the analytic skills that will allow them to both derive and interpret quantitative information. Note: Credit cannot be obtained for both ECON 2613 and MATH 1213.

## Textbook

Levine, D. & Szabat, S. Business Statistics: A First Course, 8th Edition. Pearson Education Canada.

The textbook is available at the campus bookstore. Please note that previous editions of the textbook are very similar and can be used for the course.

## Grading

Assignments (Best 4 of 5)	20%	(5% each)
Midterms (2)	40%	(20% each)
Final Exam	40%	

Assignments are intended enhance the topics covered in class with practical application. The midterms will be held during class hours and will consist of a series of short-answer questions. The first midterm will take place on [February 7th](#) and the second will be on [March 13th](#). The final exam will be cumulative, with the exact date set by the Registrar’s Office. Like the midterm, questions will be in short-answer format.

## Course Topics

<u>Topics</u>	<u>Chapter</u>
Data collecting	1
Data visualization	2
Descriptive statistics	3
Probability	4
Discrete distributions	5
Normal distribution	6
Sampling distributions	7
Confidence intervals	8
Hypothesis testing	9
Measures of association	10

## Grading Scale

Grades for individual course components may fall between 0 and 4.33. Final grades will be reported as a letter grade. The letter grading system is provided below.

Grade	GPA	%	Performance
A+	4.33	90-100	
A	4.00	85-90	Excellent
A-	3.67	80-84	
B+	3.33	77-79	
B	3.00	73-76	Good
B-	2.67	70-72	
C+	2.33	67-69	
C	2.00	63-66	Satisfactory
C-	1.67	60-62	
D+	1.33	57-59	
D	1.00	53-56	
D-	0.67	50-52	Pass
F	0.00	0-49	Failure

## Accessibility

The Accessibility Learning Office is committed to creating a welcoming and inclusive environment for all students, including those with disabilities. Their office strives to ensure that all students have equal access to educational opportunities and resources. Students who require accommodations to complete coursework, or fully participate in class, are encouraged to contact them directly. Please visit the Accessible Learning Services website (<https://www2.acadiau.ca/student-life/accessiblelearning.html>) or email them at [Accessible.learning@acadiau.ca](mailto:Accessible.learning@acadiau.ca) for more information.

## Equity, Diversity, and Inclusion

Acadia University is committed to providing a safe and inclusive community. This can only be achieved where there are simultaneous efforts to eliminate all forms of discrimination and harassment from our campus community, including the elimination of all discrimination, harassment and violence based on one's identity, including but not limited to, gender, race, class, ethnicity, sexual orientation, disability, gender identity, gender expression, and Indigeneity.

The Equity Office serves to prevent discrimination, sexual harassment, and personal harassment from occurring. For more information, as well as resources for those who have experienced (or witnessed) the above, please contact Polly Leonard at [equity@acadiau.ca](mailto:equity@acadiau.ca).

## Health & Well-being

Acadia provides a host of services for student health, well-being, and safety. The university's physicians provide services for: medical diagnosis and treatment of health concerns, reproductive health (pap tests, birth control, pregnancy tests), sexual health (confidential testing for all sexually transmitted infections and HIV), and emergency contraception. For more information, please contact [studenthealth@acadiau.ca](mailto:studenthealth@acadiau.ca), or go to <https://www2.acadiau.ca/student-life/health-wellness/clinic.html>

The Counselling Centre offers a confidential, safe, and caring place for students to access mental health support. To book an appointment, please go to <https://www2.acadiau.ca/student-life/health-wellness/mental-health.html>, or contact [counselling@acadiau.ca](mailto:counselling@acadiau.ca).

## Academic Ethics

Students should familiarize themselves with the Acadia's policy on academic ethics. Plagiarism and other academic offences are not tolerated. Penalties are severe and may result in suspension or expulsion. A complete list of regulations can be found in the student handbook at <https://www2.acadiau.ca/elc/current-student.html>.

## Important Dates

Jan 17	Last day to add/change winter courses Last day to withdraw from winter courses without receiving a "W" Last day to withdraw from Fall/Winter courses and receive a "W". Any courses withdrawn after today will receive an "F" grade.
Feb 19	Heritage Day – No classes
<a href="#">Feb 20 - 33</a>	<a href="#">Winter study break - No classes</a>
Mar 8	Last day to withdraw and receive a "W"; withdrawals thereafter receive an "F"
Mar 29	Good Friday - No classes
Apr 5	Last day of classes
Apr 8	First day of exams
Apr 18	Last day of exams