Empirical Analysis in Economics & Business - ECON 2613 Department Economics Acadia University Winter 2025

Professor Information

Name: Dr. Barry Watson
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Office Location: BAC 343
Office Hours: Tuesdays & Thursdays, 9-11am & 2:30-5pm and Monday & Wednesdays, 1pm-5pm (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 Cenre (BAC) 138 Meeting Times: Tuesday & Thursday, 1:00pm-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 6th 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

Topics	Chapter
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	
А	$4.0 \ 0$	85-90	Excellent
A-	3.67	80-84	
B+	3.33	77-79	
В	$3.0 \ 0$	73-76	Good
B-	2.67	70-72	
C+	2.33	67-69	
\mathbf{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	$0.0\ 0$	0-49	Failure

Equity, Diversity, and Inclusion

We are committed to fostering an inclusive and equitable learning environment where the principles of human rights and social justice are paramount. We recognize and respect the diverse backgrounds, identities, and experiences of all students. Our collective goal is to create a space where every individual feels valued, heard, and supported.

All students are encouraged to contribute to and uphold an atmosphere of mutual respect and empathy. Discrimination, harassment, or any form of intolerance will not be tolerated. If you have any concerns or require accommodations to ensure your full participation in this course, please do not hesitate to reach out. Together, let's work towards understanding and advancing human rights and equity, both within and beyond the classroom.

Acadia's Human Rights and Equity Office is responsible for the management and implementation of Acadia's Policy Against Harassment and Discrimination. This Policy is underpinned by a commitment to deconstructing the problematic structures of systemic racism and discrimination within the University Community. Acadia upholds a commitment to fostering a culture within the University Community that is welcoming and reflective of the diverse individuals that comprise this community and to fostering cultural safety, anti-oppression and anti-racism within the University Community, making it our goal to achieve a culture where our diversity is our strength.

For more information, as well as resources for those who have experienced (or witnessed) the above, please contact Polly Leonard at equity@acadiau.ca.

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 or email them at Accessible.learning@acadiau.ca for more information.

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, or visit their website.

The Counselling Centre offers a confidential, safe, and caring place for students to access mental health support. To book an appointment, please click here, or contact 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.

Important Dates

Jan 15	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 17	Heritage Day – No classes			
Feb 18 - 21	Winter study break - No classes			
Mar 7	Last day to withdraw and receive a "W"; withdrawals thereafter receive an "F"			
Apr 4	Last day of classes			
Apr 7	First day of exams			
Apr 17	Last day of exams			