

**University of Waterloo**  
**Department of Economics**  
**ECON 322-001**  
**Econometric Analysis 1**  
**Spring 2018**  
**11:30-12:50pm Tuesday, Thursday QNC 1502**

**Instructor:** Kate Rybczynski

**Office:** 242 Hagey Hall

**Office Hours:** 1:00-2:00 pm, Tuesday, Thursday, or by appointment

**Office Phone:** 519-888-4567x32146

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**Web Page:** <http://www.arts.uwaterloo.ca/~krybczyn/322/>

(This web page is password protected, attend the first class, check learn, or e-mail me for the password)

**Tutorial Sessions:** All tutorials are held in PAS 12s37

2500 TUT 101 12:30-1:20 Wednesdays

2501 TUT 102 10:30-11:20 Wednesdays

2502 TUT 103 11:30-12:20 Wednesdays

**Course Description:**

This course covers the core tools needed to estimate linear models using ordinary least squares and to interpret estimates for cross-sectional data. Students will learn to interpret the coefficients of linear models for continuous and discrete regressors, to conduct reliable inference for different specifications of the error term, and to understand the advantages and limitations of each econometric technique. The course concludes with an introduction to the method of instrumental variables. Students will be introduced to a statistical software package and will be required to complete regular computer-based assignments throughout the course. These assignments are aimed to provide hands on experience working with social sciences data, understanding the statistical properties of the data, and estimating and reporting on estimated parameters in linear regression models.

**Course Goals and Learning Outcomes**

ECON 322 covers the tools needed for proficient empirical analysis. Students will learn to construct and work with linear regression models, to understand the scope and limitations of these models, and to interpret and explain the results of these models. Upon completion of this course, students should be able to:

- Present and interpret basic statistical properties of a variety of data sets and the variables contained therein.
- Conduct linear regression analysis.
- Present and interpret the estimated coefficients of linear regression models.
- Describe the scope and limitations of these models.

**Text:**

- The text book for this course is Introductory Econometrics, a Modern Approach, 6<sup>th</sup> Edition, by Jeffrey Wooldridge. A previous edition of the text is on reserve at Dana Porter Library. I have placed an additional text on reserve for your reference (Introduction to Econometrics by Stock and Watson).

**Resources Available On Line:**

- Lecture slides
- Announcements
- Study Questions
- LEARN – password for course website & communication

**Course Requirements and Assessment:**

<i>Assessment</i>	<i>Date &amp; Location</i>	<i>Weighting</i>
Assignments	weekly	20%
Term Test 1	June 5, in class	20%
Term Test 2	June 28, in class	20%
Final Exam	TBD	40%
<b>Total</b>		<b>100%</b>

**Course Outline:**

Week	Topic	Readings
1-3	Introduction & Review -Math, Probability, & Stats Review -Goals of Econometrics -Data Types	Appendices & Chapter 1
4-9	Regression Analysis -Simple Regression Model -Multiple Regression Model -Inference	Chapters 2,3,7,4,6
9-11	Issues in Regression Analysis -Specification Issues -Multicollinearity -Heteroskedasticity -Autocorrelation -Data Issues -Sample Selection	Chapter 3,8,6,9
12-13	Instrumental Variables -Selection and Omitted Variable -Bias -Measurement Error -Instrument Validity	Chapter 15

**ECON 322 Policies:*****Assignments-***

- Assignments will be posted on-line one week before they are due.
- Assignments must be submitted on LEARN (for your specific tutorial session) by Wednesday morning at 10am.
- Although students are encouraged to work together, each student must submit their own assignment with individualized answers. Any two or more students who submit identical assignments are in violation of Policy 72 and disciplinary measures may be imposed under Policy 71 (see below).
- Late or missing assignments will receive a grade of zero, with the exception of approved medical documentation. The instructor retains the right to except non-medical documentation at their discretion.

***Attendance -***

- Attending classes and tutorials, asking relevant questions, and participating in the class improves understanding of the course material for you and for your classmates.

**Missed Term Test -**

- The weight of one missed term test will shift automatically to your final exam provided you have written the other term-test. No make-up will be held.
- It is in your best interest to write both term tests because I will also shift the weight of either or both of your term tests to the final exam if you do better on the final exam. Term tests are good practice for the final.
- If you miss both term tests, a grade of zero will apply to the second term test unless the student can provide approved medical documentation.

**Missed Final Exam Policy -**

- A student who misses the final exam must follow the Economics Department Deferred Final Exam Policy procedures.
- The Deferred Final Exam Policy is found at <https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy>
- The deferred exam will be substantially different than that written by the rest of the class.

**Territorial Acknowledgement:**

We acknowledge that we are living and working on the traditional territory of the Neutral, Anishinaabe and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes six miles on each side of the Grand River. Learn more about the [Anishinaabe](#), [Haudenosaunee](#), [Six Nations](#), and [territorial acknowledgement](#).

**Accommodation for Students with Disabilities:**

*Note for students with disabilities -* [The AccessAbility Services office](#), located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

**Academic Integrity:**

*Academic Integrity* - In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity](#) webpage and the [Arts Academic Integrity](#) webpage for more information.

*Discipline* - A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

*Grievance* - A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. [Read Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

*Appeals* - A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

**Cross-listed course:**

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

**Mental Health Support:**

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

**On Campus**

- Counselling Services: [counselling.services@uwaterloo.ca](mailto:counselling.services@uwaterloo.ca) / 519-888-4567 ext 32655
- [MATES](#): one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek from Student Life Centre

**Off campus, 24/7**

- [Good2Talk](#): Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 x6880
- [Here 24/7](#): Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- [OK2BME](#): set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 x 213

Full details can be found online at the Faculty of ARTS [website](#)

Download [UWaterloo and regional mental health resources \(PDF\)](#)

Download the [WatSafe](#) app to your phone to quickly access mental health support information