ORIGINAL COURSE IMPLEMENTATION DATE: September 2023

REVISED COURSE IMPLEMENTATION DATE:

COURSE TO BE REVIEWED (six years after UEC approval)**:** January 2029

Course outline form version: 09/08/2021

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: ECON 326	**Number of Credits:** 3 Course credit policy (105)
Course Full Title: Introductory Econometrics **Course Short Title:** Econometrics	
Faculty: Faculty of Social Sciences	**Department (or program if no department):** Economics

Calendar Description:

Introduces econometric methods to analyze relationships between variables of interest and outcome variables using statistical software. Also includes a basic framework for quantitative analysis.

Prerequisites (or NONE):	ECON 100, ECON 101, and STAT 106.
Corequisites (if applicable, or NONE):	NONE
Pre/corequisites (if applicable, or NONE):	NONE

Antirequisite Courses *(Cannot be taken for additional credit.)*

Former course code/number:

Cross-listed with:

Equivalent course(s):

(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar	30
Tutorials/workshops	15
Total hours	**45**

Scheduled Laboratory Hours

Labs to be scheduled independent of lecture hours: ☒ No ☐ Yes

Course Details

Special Topics course: **No**

(If yes, the course will be offered under different letter designations representing different topics.)

Directed Study course: **No**

(See policy 207 for more information.)

Grading System: **Letter grades**

Delivery Mode: **May be offered in multiple delivery modes**

Expected frequency: **Annually**

Maximum enrolment (for information only)**: 28**

Prior Learning Assessment and Recognition (PLAR)

PLAR is available for this course.

Transfer Credit *(See **bctransferguide.ca**.)*

Transfer credit already exists: **No**

Submit outline for (re)articulation: **Yes**

(If yes, fill in transfer credit form.)

Department approval	**Date of meeting:**	September 2023
Faculty Council approval	**Date of meeting:**	October 14, 2023
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	January 27, 2023

Learning Outcomes *(These should contribute to students' ability to meet program outcomes and thus Institutional Learning Outcomes.)*

Upon successful completion of this course, students will be able to:

1. Describe the theory for the least squares method of estimation.
2. Explain the statistical inference methods in the context of the single equation multivariate linear regression model.
3. Generate and interpret results of econometric analysis using statistical software.
4. Compare correlation and causality.
5. Evaluate various quasi-experiment techniques to identify causality and eliminate endogeneity.
6. Develop econometric analysis skills for the evaluation of economic policies and prediction of economic variables.

Recommended Evaluation Methods and Weighting *(Evaluation should align to learning outcomes.)*

Final exam:	50%	Quizzes/tests:	30%	Assignments:	20%
	%		%		%

Details:

The final exam will test theoretical knowledge, while the quizzes and assignments will mix theoretical knowledge with the application using a statistical package.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Texts and Resource Materials *(Include online resources and Indigenous knowledge sources. Open Educational Resources (OER) should be included whenever possible. If more space is required, use the Supplemental Texts and Resource Materials form.)*

	Type	Author or description	Title and publication/access details	Year
1.	Textbook	James H. Stock, and Mark W. Watson	Introduction to Econometrics, Global Edition	2020
2.	Textbook	Gujarati, Damodar, and Dawn Porter	Basic Econometrics	2009
3.	Textbook	Angrist, Joshua and Jörn-Seffen Pischke	Mastering Metrics: The Path from Cause to Effect.	2014
4.	Textbook	Cameron, Colin, and Pravin Trivedi	Microeconometrics Using Stata	2010
5.	Textbook	Maddala, George S.	Introduction to Econometrics	1992

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Access to a statistical package. (e.g., R, or 6-month student access to Stata for $48 USD (https://www.stata.com/order/new/edu/profplus/student-pricing/))

Course Content and Topics

- Causal effect and idealized experiments
- Data: source and type
- Random variables, random sampling, and large-sample approximations
- Population mean, hypothesis tests, and confidence intervals
- Single linear regression model
- Multiple linear regression model
- Nonlinear regression functions
- Panel data
- Binary dependent variable
- Instrumental variables
- Quasi-experiments