

University of Guelph
College of Management and Economics
DEPARTMENT OF ECONOMICS & FINANCE

ECON*3740 (1) Introduction to Econometrics

Winter 2012

Instructor: Fraser Summerfield, Rm. 706, Ext. 53235

E-Mail: fsummerf@uoguelph.ca

Office Hours: Tues., Thurs., 1:30 – 2:30

Lectures: MWF 12:30-1:20 in MacK223

Labs: Lab 1 – F – 11:30-12:20 in MacK028

Lab 2 – M – 2:30-3:20 in MacK028

It is your responsibility as a student to be aware of and to abide by the University's policies regarding academic misconduct, e-mail communication, maintaining copies of out-of class assignments, what to do when you cannot meet a course requirement and the drop date for this semester. To better understand these policies, visit:

<http://www.economics.uoguelph.ca/student-responsibilities-policies.asp>

COURSE OUTLINE

COURSE DESCRIPTION:

The purpose of this course is to familiarize undergraduate students with basic techniques of econometric analysis. We will learn how to test economic hypotheses, and estimate simple economic models and relationships. The goal of the course is to combine theory and practical applications to enable students to perform basic analysis of real world data.

This course requires a basic understanding of calculus and familiarity with algebra. Those students who did not take ECON*2740 or STAT*2040 recently are advised to review these principles since this course relies heavily on these concepts.

Lab sessions will be held weekly in addition to the main lectures. Through the labs, you will gain experience with econometric software by examining models applied to real data sets. These sessions will be essential to for the project component of the course.

Homework will be assigned throughout the semester. The exercises are not graded but form excellent practice questions for the examinations in the course.

Student assessment will include two in-class midterm exams, a final exam and an independent project. The project requires students to formulate a research question,

collect the appropriate data and provide analysis of this data using the techniques taught in class. This project should be a student's own original work and the University of Guelph plagiarism policy applies in full. There will be a presentation on how to find and collect your data on **Monday March 5** in class. Please plan to attend.

PREREQUISITES: ECON*2310, ECON*2410, (ECON*2740 or STAT*2040),
(ECON*2770 or MATH*1210)

REQUIRED TEXTBOOK:

(UE) "Using Econometrics, A Practical Guide", by A.H. Studenmund, 6th edition.

ASSESSMENT: (Details to follow in class)

20% Midterm 1	February 10 (In Class)
20% Midterm 2	March 16 (In Class)
20% Empirical Project	April 2 (Due at 11:00 am)
40% Final exam	April 9- 2:30-4:30 pm (Location TBA)

TOPICS:

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| 1. Review of Statistical Principles | (UE Ch17) |
| 2. Introduction to basic regression analysis | (UE Ch1) |
| 3. Ordinary Least Squares Regression | (UE Ch2) |
| 4. Classical regression assumptions in detail | (UE Ch4) |
| 5. Hypothesis Testing | (UE Ch5) |
| 6. Specification | (UE Ch6,7) |
| 7. Logit and Probit Models | (UE Ch13) |
| 8. Violations of classical assumptions: Multicollinearity,
Heteroskedasticity, Serial Correlation | (UE Ch 8,9,10) |

WEB SITE:

Announcements and grades will be posted on the course website at Courselink.

EVALUATION: You will be asked to complete an evaluation of this course at some time during the last two weeks of the semester. The Department of Economics policy regarding the conduct and use of these evaluations will be found at

<http://www.economics.uoguelph.ca/course-evaluation.asp>