UNIVERSITY OF GUELPH
College of Management and Economics
Department of Economics

Economics 2740.01 – Economic Statistics **Fall 2012**

Instructor: Dr. Alex Maynard. MacK 741, Ext. 53014
Class Time/Location: Tuesday and Thursday 10:00-11:20, MacK116
Lab Times: Lab 1: 12:30-1:20pm MacK231
Lab 2: 11:20-12:20pm MacK231
Office Hours: Thursdays, 3:30-5:30 PM
Class Email: eco2740_AT_gmail_DOT_com
Class Web Page: http://www.amaynard.ca/teaching/2740/2740.html (logon: student, password: gryphons123)

Important Notice from the Department

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.uoguelph.ca/ecomonics/node/1115

The electronic recording of classes is expressly forbidden without the prior consent of the instructor. This prohibition extends to all components of the course, including, but not limited to lectures, seminars, office hours, and lab instruction, whether conducted by the instructor or a seminar leader or demonstrator, or other designated person. When recordings are permitted they are solely for the use of the authorized student and may note be reproduced, or transmitted to others, without the express written consent of the instructor.

Course Objective

This goal of this course is to introduce students to both probability theory and statistics, as it used in business and economics. If we think about most of the important decisions we make in real life, they almost all involve planning for an uncertain future. Probability theory provides an intuitive and powerful tool for thinking about such decisions and consequently plays an important role in fields such as business, finance, economics, and insurance. It also forms the basis for statistics, which offers a meaningful ways to analyse the massive amounts of data available to businesses, governments, and researchers. Statistics is used to inform important decisions in areas as diverse as business marketing, financial asset allocation, pharmaceutical drug testing, monetary policy, and the pricing of insurance premiums, to name just a few examples. This course will prepare students both to conduct and understand the type of statistical analysis that is often critical to successful decision making in business and government.

Prerequisites

The prerequisite for this course is a 1000-level university mathematics course. This is required to ensure that you have recent mathematical experience.

Readings and Textbooks

The textbook is:

Gerald Keller, Statistics for Management and Economics, Ninth Edition. South Western.

Another very useful (and also free) reference are the lecture notes posted by Professor Prescott, which he has kindly made available at:

http://trex.econ.uoguelph.ca/dprescot/274w11/cormat/cm.htm

Topics Covered

Please note that some topics discussed in lecture may not be included in the textbook and some topics in the readings may not be discussed in lecture. In order to do well in this course, it is strongly suggested that you both complete the readings and attend the lectures. It could be a costly mistake to assume that you can use the book as a substitute for the lectures or vice-versa. The following schedule is only approximate. Below is a preliminary list of topics covered. These may be updated as the course progresses. I will set the pace according to the comfort level of the class and may cover either more or less than what is listed below.

Approximate Week	Text book Chapters	Topic
1	1	What is Statistics
2	2,3	Graphical Statistical Techniques
3 (Tuesday)	4	Numerical Descriptive Techniques
3 (Thursday)	5	Data Collection and Surveys
4	6	Probability
5	7	Random Variables and Discrete Probability Distributions
6	8	Continuous Probability Distributions
7	9	Sampling Distributions
8	10	Estimation
9	11	Hypothesis Testing
10	12	Inference About a Population
11	13	Inference About Comparing Two Populations
12	16	Simple Linear Regression
13	17	Multiple Regression

Note that you are not responsible for chapters 14 and 15, as they will not be covered.

Labs

Lab participation is required and will count towards your final mark, as detailed below. Labs will normally be used to go over problem set assignments, summarize material from lectures, and/or address questions that you may have.

Software

You will need the use of a spread sheet software, such as Excel or OpenOffice (a zero-cost option), in order to perform the data analysis required for this course.

Assignments, Exams, and Marks

Your mark will be assigned according to the following weights:

Component	Completion Date	Notes	Total Weight (%)
Data Analysis Assignments	5-10 Assignments in total. Each due 1-2 weeks after they are handed out.	All students will benefit from a 24 hour grace period after the original due date. In fairness to the vast majority of students who are responsible in handing in their work on time, a mark of zero will be given, without exception, to any assignment handed in after the grace period. Students are required to forms teams to complete <u>all</u> homework assignments together. You are free to form your own homework teams, but should do so within the first two weeks of class. If you cannot find a teammate please let me know within the first two weeks of class and I will assign you a teammate if possible. Only in exceptional cases will groups of one or three be permitted. Each group will work on their own data set, which they will be asked to collect as part of the first assignment. It is important to select a data set on a topic that genuinely interests both teammates.	20.00%
Midterm Exam	Tuesday, Oct 16th (in class)	The midterm exam covers all expects of the course, including the lectures, sections, assignments, and reading. However, some sections of the textbook will be emphasized more heavily than others. The best way to gage which topics are emphasized is through regular attendance in lecture. Practicing questions from past exams is also highly recommended.	25.00%
Final Exam	Dec. 12th – 2:30-4:30 pm	The same notes apply as for the midterm. Please also note that the final exam is a cumulative exam. It covers the entire semester.	55.00%

Missed Exams

Students who miss the midterm exam due to well-documented compassionate or medical reasons

may be permitted to have their marks re-weighted in such a way that the mark on their final exam substitutes for the missed term test. Please refer to

http://www.uoguelph.ca/baco/pdf/FS_Defer.pdf

for the university's policy on deferred final exams. Students should notify the instructor in writing of any religious or other conflicts with exam dates by September 21.

Office Hours and Email Communication

You are encouraged to see me after class or stop by my regular office hours. This is usually the best way to address your questions. In addition, a special e-mail has been set up to answer your questions for this course at eco2740@gmail.com. If you do not receive a reply within four days please send an e-mail to me personally using the e-mail address found on my web page. Also, if you have specific suggestions, complaints, or concerns regarding the course itself then please e-mail me directly. Please use your official University of Guelph student e-mail account for e-mail communication. The TAs and I are sorry not to be able to reply to e-mail queries sent from accounts outside the University of Guelph.

Your Feedback

Your feedback and suggestions on the course would be most greatly appreciated. Please feel encouraged to give me your feedback in person, by e-mail or by sending me an anonymous email using the feedback box at http://www.amaynard.org/teaching/anonymous_reply.html.

Course Evaluations

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.uoguelph.ca/economics/academics/courses/course-evaluation