

## Department of Economics Course Outline

**Instructor:** Eugene Choo **Term:** Fall 2007

Course: Economics 395 Section: L03

[Use of Statistics in Economics]

**Time:** TR 12.30 – 13:45 **Place:** SS 113

**Office:** SS 447 **Telephone:** 210-9490

Office Hours: TBA E-Mail: echoo@ucalgary.ca

**Textbook(s):** Doane D.P. and Seward L.E., Applied Statistics in Business and Economics,

McGraw-Hill. [Required Text]

Lyryx Online. [Required]

Book(s) on Reserve: none

**Blackboard:** This course will make use of blackboard – students who are registered in the course can log on at <a href="http://blackboard.ucalgary.ca/webapps/login">http://blackboard.ucalgary.ca/webapps/login</a>

## **Course Outline:**

Prerequisites; Econ 201, 203 and Stats 211 or 213.

This course focuses on understanding how statistical tools are used in modeling random phenomena in economics. It builds on the statistics and probability theory presented in Stats 211 or 213. Besides extending the theoretical foundation of statistics, Econ 395 also familiarizes students with the practical application of the statistical principles to problem in economics. The course focuses on the intuition and use of statistical reasoning to answer questions of interest to an economist, the gathering and manipulation of economic data, and the practical use of standard econometric software.

The course is divided into 4 broad segments.

- 1. **Probability Theory** –Rules of Probability and Expectation, Conditional and Marginal concepts, the concept of Independence, Random Variables and transformations, special distributions
- 2. **Estimation, Sampling Theory and Inference** Sampling Distributions of means and variances, Hypothesis Testing
- 3. **More About Inference**-Normal Distribution, Goodness of Fit tests, Chi-Square Distribution
- 4. **Regression Theory** -Simple Regression, Analysis of Variance

The practical aspect of Econ 395 instructs students on how to find and download economic variables from the main economic data sources; transform and modify data to be read into an econometric software package. Students will also learn how to use a standard econometric software packages like Excel and STATA to analyze the downloaded data.

Students MUST attend lab presentations (Starts Sept.17 offered in the Tri-Faculty Lab SS Rm. 018). Each week the three lab presentations will be identical and you do not need to attend on the same day from week to week.

The labs are on

Mondays, 16:00 to 16:50 Tuesdays, 9:00 to 9:50 Fridays, 15:00 to 15:50

## **Grade Determination and Final Examination Details:**

Assignments and Labs	10	35%	
Midterms	2	30%	Dates to be announced in the first week of classes.
Final Examination (2 Hours)	1	35%	As scheduled by the Registrar.

There will be a Registrar scheduled **final examination**, lasting 2 hours and held in a gym. The FULL COURSE will be covered. **A student must pass the final exam to pass the course as a whole.** 

Programmable calculators are NOT allowed during the writing of tests or final examinations. Non-programmable calculators WILL be allowed during the writing of tests or final examinations, but cell-phones are strictly forbidden during the writing of examinations.

No deferred midterm will be given. In case of documented illness or family emergency, the extra weight will be shifted to the final examination. The Instructor should be *notified in advance* if a student will be unable to write a midterm. In any case, documentation must be provided as soon as possible (within a day or so of the missed midterm).

The format and dates of these tests and assignments will be discussed during the first week of classes. Each assignment is due on the date and time stated on the assignment. **Late assignments** will not be accepted. The assignments in Lyryx will be individual assignments done online. You are welcome to work with a small group (2 or 3 students) on the paper portion of any assignment, and a group assignment is to be handed in. All students in the group will receive the same mark for that assignment. The last two paper assignments will be larger group assignments, with no less than 4 students, and no more than 6 students, in each group.

Tests and final exams are marked on a numerical (percentage) basis, and then converted to letter grades. The course grade is then calculated using the weights indicated above. As a guide to determining standing, these letter grade equivalences will generally apply: .../3

If, for some reason, the distribution of grades determined using the aforementioned conversion chart appears to be abnormal the instructor reserves the right to change the grade conversion chart if the instructor, *at the instructor's discretion*, feels it is necessary to more fairly represent student achievement.

Students' Union Vice President Academic:

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Society of Undergraduates in Economics (S.U.E.)

www.fp.ucalgary.ca/econ/~sue

## **Notes:**

- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor *within* seven days of the work being returned to the class.
- Make-up midterm tests/assignments and deferred midterm tests/assignments will not be given. In cases of documented illness, documented family emergency, or documented religious observance, extra weight will be given to the final examination.
- Midterm tests and the final examination will only be given on the indicated dates, not before.
- It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

Safewalk / Campus Security