Department of Economics
Course Outline

		Term:	Fall 2013
Course:	Economics 395 [Use of Statistics in Economics]	**Section:**	02
Time:	TR 09:30 – 10:45 LAB: M 17:00 – 17:50 W 14:00 – 14:50	**Place:**	Lecture SA 247 LAB SS 020
Instructor:	Karl Pinno		
Office:	SS 405	**Tel. no.:**	220-5886
Office hours:	TR 3:45-4:45 or by appointment	**E-mail:**	kpinno@shaw.ca

Textbook(s):
Lee C. Adkins, R. Carter Hill, *Using Stata For Principles of Econometrics*, 3rd Edition, 2008 John Wiley & Sons [**Required Text**]

Book(s) on Reserve:
R. Carter Hill, William E. Griffiths, and Guay C. Lim, *Principles of Econometrics* , 2008 John Wiley & Sons

Course Outline:

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

Building on the fundamental mechanics of statistics and probability as presented in Stats 211 or 213, Econ 395 familiarizes students with the empirical application of statistical principles to problems of measurement in economics. The course focuses on the intuition and application of statistical reasoning, the gathering and manipulation of economic data, and the use of standard econometric software. The core of this course comprises Random Variables, Expectation Theory, Probability Distributions, Hypothesis Testing and the Two-Variable and Multi-Variable Linear Regression Model.

Topics Covered

Random Variables: The role of random variables as the fundamental building block of econometric models; the use of expectation theory including the conditional expectation operator as the main tool for investigating the characteristics of econometric relationships; the role of probability theory in expectations; sampling and sampling distributions; probability density and cumulative distribution functions.

Data Gathering and Manipulation: Instruction on searching for and downloading economic variables from the main economic data sources in Canada; transforming and modifying data to be read into an econometric software package.

Single and Multi-Variate Probability Distributions: Instruction on using and interpreting the Uni-variate and Multi-variate Normal distribution; extensions to the Student -t, Chi-squared and F distributions with empirical applications.

Hypothesis Testing and Inference: Single and joint hypothesis tests, Type I and Type II errors and p-values; choosing the correct test statistic for the measurement problem.

The Least Square Regression Estimator: The two-variable regression model; interpreting the variables, the coefficients and the error term; confidence intervals, goodness-of-fit, hypothesis testing and introduction to multi-variable linear regression models.

Applications of Econometric Software: Instruction on using a standard econometric software package; reading data, descriptive statistics, applying the least squares estimator, interpreting econometric results, carrying through with and the empirical interpretation of hypothesis testing and other standard econometric tests; graphical methods.

Students MUST attend lab presentations. The course will use software Excel and STATA.

Grade Determination and Final Examination Details:

Midterm Examinations	2	**35%**
Assignments	6	**20%**
Final Examination	1	**45%**

The format and due dates of the assignments and midterms will be discussed during the first week of lectures. Late assignments will not be accepted. Students may work in small groups of 2 students on assignments, and a group file is to be handed in. Students in the group will receive the same mark for the assignment.

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

A+	95 – 100	B	73 - 76	C-	60 - 62
A	85 - 94	B-	70 - 72	D+	56 - 59
A-	80 - 84	C+	67 - 69	D	50 - 55
B+	77 - 79	C	63 - 66	F	0 - 49

Non-programmable calculators WILL be allowed during the writing of tests or final examinations. Programmable calculators are NOT allowed during the writing of tests or final examinations.

Students who are unable to write the midterm because of an illness, family emergency or religious observance will have the midterm weight shifted to the final examination.

Documentation MUST be provided as soon as possible (within a day or so of the missed midterm). Students should be aware that no "make-up" midterms will be given.

There will be a Registrar scheduled final examination, lasting 2 hours.

Students should be aware of the academic regulations outlined in The University of Calgary Calendar. All students must comply with the regulations published in the University Calendar concerning "Intellectual Honesty," "Examinations," etc.

Notes:

- 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 403-220-8237. 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.

- Students seeking reappraisal of a piece of graded term work should discuss their work with the instructor *within 15 days* of work being returned to class.

- The use of cell phones for any purpose in class is prohibited. The classroom is a no cell phone zone. Laptops and tablets may only be used for note-taking purposes.

- Please note that the following types of emails will receive **no response**: emails not addressed to anyone in particular; emails where the recipient's name is not spelled correctly; anonymous emails; emails in which the sender has not identified which course and section he/she is taking; and, emails involving questions that are specifically addressed on the course outline.

- Students will be responsible for all material listed on the course outline, regardless of whether or not the material has been covered in class, unless the instructor notifies the class that the material will not be covered.

Students' Union Vice-President Academic:
Emily Macphail
Phone: 403-220-3911
E-mail suvpaca@ucalgary.ca

Students' Union Faculty Representative (Arts)
Phone: 403-220-3913 Office: MSC 251
E-mail arts1@su.ucalgary.ca arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca

Society of Undergraduates in Economics (S.U.E.):
www.ucalgary.ca/sue

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students succeed both academically and socially at the

University of Calgary. Services include access to the exam bank, career partnerships with the Career Centre through hosting industry nights and information sessions, recognizing achievements in teaching, and organizing social events for members. They invite you to join by contacting sue@ucalgary.ca.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The Faculty of Arts Program Information Centre (PIC) is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580 or email them at artsads@ucalgary.ca. You can also visit the Faculty of Arts website at http://arts.ucalgary.ca/undergraduate which has detailed information on common academic concerns.

- For program planning and advice, contact the Student Success Centre (formerly the Undergraduate programs Office) at 403-220-5881 or visit them on the 3rd Floor of the Taylor Family Digital Library.

- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.

- Online writing resources are available at *http://ucalgary.ca/ssc/writing-support/online-writing-resources*

Safewalk / Campus Security: 403-220-5333
Emergency Assembly Point: Social Science Food Court
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