Department of Economics
Course Outline

UNIVERSITY OF CALGARY

		Term:	Fall 2012
Course:	Economics 395 [Use of Statistics in Economics]	**Section:**	01
Time:	MWF 10:00 - 10:50 *LAB 1 M 17:00 - 17:50 SS 018* *LAB 2 W 14:00 - 14:50 SS 018* *LAB 3 F 16:00 - 16:50 SS 018*	**Place:**	SA 124A
Instructor:	Karl Pinno		
Office:	SS 405	**Telephone:**	220-5866
Office Hours:	MWF 14:00 – 14:50	**E-mail:**	kpinno@shaw.ca

Textbook(s):
Hill, *Use of Statistics in Economics*, 2009 John Wiley & Sons [**Required Text**]
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.

PASS (Peer Assisted Study Sessions)
This course is supported by the PASS (Peer Assisted Study Sessions) program. PASS provides students with free, organized study groups which are facilitated by students who have been successful in the course before. Students who attend PASS can build their understanding of course content through discussion as well as learn valuable study skills which will help them to succeed in the course. You will meet your PASS leader and receive more information in the first weeks of classes.

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

Grade Determination and Final Examination Details:

Topic	Units	Grade
Midterm Examinations	2	30%
Assignments	6	30%
Final Examination	(2 Hours)	40%

The format and due dates of the assignments and midterm will be discussed during the first week of classes. 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 written portion of the assignment.

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:

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

A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

Part marks of 0.5 or above will be rounded up; those below 0.5 will be rounded down.

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

There will be a Registrar scheduled **final examination**, lasting 2 hours, and it may be held in a gym. The FULL COURSE will be covered.

Tests and exams will not involve multiple choice questions.

Students' Union Vice-President Academic:
        Kenya-Jade Pinto
        Phone: 220-3911
        E-mail suvpaca@ucalgary.ca

Students' Union Faculty Representative (Arts)
        Phone: 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. Join now by contacting sue@ucalgary.ca.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The new Faculty of Arts Program Information Centre (PIC) is your information resource for everything in Arts! Drop in at SS110, call us at 403-220-3580 or email us 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 in their new space 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 at the MacKimmie Library Block.

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

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 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: 220-5333
Emergency Assembly Point: Social Sciences Food Court

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2012-08-24