Department of Economics
Faculty of Arts

Economics 395 (L01) (Use of Statistics in Economics)

Instructor:	Karl Pinno	Lecture Location:	MS 319
Phone:	403-220-5886	Lecture Days/Time:	MWF 10:00 – 10:50
Email:	kpinno@shaw.ca	Lab Location:	SS 020
		Lab Days/Time:	M 17:00 – 17:50, T 12:00 – 12:50
Office:	SS 405		
Office Hours:	By appointment	Winter 2015	

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: *Statistics for Management and Economics , 8th Edition, Keller*.
Principles of Econometrics, 3rd Edition, Hill, Griffith, Lim.
Using Stata for Principles of Econometrics, 3rd Edition, Adkins, Hill.

Desire2Learn: This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at http://d2l.ucalgary.ca using or through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. The default is your University of Calgary e-mail address.

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:

5 assignments (best 4 counted)	20%
2 Midterm Examinations, (Feb. 27th & March 27th)	35%
Final Exam (Scheduled by the Registrar)	45%

Tests and final exams are marked on a numerical (percentage) basis, 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 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.

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.

Non-programmable calculators WILL be allowed during the writing of tests or final examinations. Programmable calculators, cellphone, tablets and laptops are NOT allowed during the writing of tests or final examinations.

There will be a Registrar scheduled final examination, lasting 2 hours. The FULL COURSE will be covered.

Notes:
- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor *within fifteen days* of the work being returned to the class.

- 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.

- 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. Students should be aware that no "make-up" midterms will be given.

- All students must comply with the regulations published in the University Calendar concerning "Intellectual Honesty," "Examinations," etc.

- 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.

- 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.

Students' Union Vice-President Academic:
	Hana Kadri
	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 Arts Students' Centre 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, including program planning and advice.

- 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://www.ucalgary.ca/ssc/resources/writing-support*

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

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