

**Colorado State University
Department of Economics
ECON/EA 335 Spring 2009
Introduction to Econometrics**

1 COURSE INSTRUCTOR

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Class Meeting: MWF 9:00- 9:50 AM - Section 2 PLSCI W9
Class Meeting : MWF 12:00-12:50 PM - Section 3 PLSCI W9
Office hours Call: MWF 10:10am-11:10 am and by an appointment

2 COURSE OBJECTIVES

ECON 335 give an opportunity for students in Economics, Agriculture Economics, Business different branches in social science and natural science as well to implement OLS, GLS in their work and research as well. It give a chance for enrolled students to learn whenever they have time and whatever their major, this class has a wide application.

The objective of this course is to provide students with an understanding of the basic principles regarding Econometrics, with an emphasis on the applications. within this respect we will concentrate on the following points

- To Learn how to estimate the OLS equation and the Interpretation of the coefficients.
- To test hypothesis regarding the estimated OLS coefficients.
- To identify and correct (when possible) violation of the OLS assumptions including serial correlation and heteroscedasticity(GLS)
- learning techniques for estimating OLS models with Qualitative independent variables.

I believe that the there are three complementary components in the educational process (The Student, The Instructor and the facilities in the educational institution), the student should be prepared in the following classes Stcc 204 or ST 301 or ST 304, Knowledge about Excel, Doing the assignments and exams, Ask if she/he has a trouble in understanding something by E-mail, and during the office hours. The second component is the Instructor, My job

is making ECON 335 easily understandable, applicable in economics and Social Science. Since in general, through providing simple materials, useful applications and weekly session lab, on How can we use EViews software, The facilities of CSU representing in RAMCT that give the student the access for the whole material of EC335.

3 Course Structure and Policies

3.1 RESOURCES

- Required Text: Damodar N. Gujarati. Basic Econometrics Fifth edition . McGraw- Hill/Irwin. 2009.
- Class Material on RAMCT: <http://ramct.colostate.edu>.

3.2 RAMCT

Certain materials for this course will be available via the University's RAMCT site, including:

- This course syllabus, text slides, applications, WSJ articles which also is being supplied in class will be submitted on your RAMCT.
- Homeworks (HW will be a combinations of topics covered in class and the data will be from the textbook)
- Grades.

To access the course's RAMCT, go to <http://ramct.colostate.edu>. Choose "Log onto RAMCT", and enter your university eID and password. If you are validly registered in this course, you should be able to choose ECON315 under "Courses" that you can access. For more information on how to use RAMCT, choose "Student Resources" from the menu on the RAMCT homepage.

3.3 ADA Policy Statement:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Support Services for Students with Disabilities at CSU.

3.4 ACADEMIC INTEGRITY:

Students have an obligation to integrity in all academic work. In this course, submission of test answers to be counted toward your course grade automatically implies a personal pledge that you have neither given nor received unapproved information about the test, whether by copying answers, exchanging unauthorized prior information, etc. Violation of this pledge in even the slightest degree will be subject to academic penalty and/or University disciplinary action., and more severe measures according to University procedure, For More Information please visit the website: <http://www.catalog.colostate.edu/front/policies.aspx>. Other instances of course-related theft or dishonesty will be treated similarly.

3.5 RESPECT:

Class will be conducted in an atmosphere of mutual respect among students, and between students and the instructor . Specifically: The instructor of the course pledge to respect students' right to learn, right to express themselves reasonably, and right to be treated fairly. They commit themselves offering clear and useful course content and leadership, and to constructing fair and relevant examinations.

Students in the course pledge to protect each other's right to learn, and to put forth their share of the effort required for the teaching-learning enterprise. Students commit themselves to informing themselves of course policies and schedule; doing their best to master the material presented; attending class; avoiding late arrivals, early departures, and irrelevant, discourteous or disruptive behavior in class. Also reading newspapers, stories or irrelevant materials in the class room is prohibited, and if students repeated the same behavior in the class, the instructor has the right to take an action consistent with the university rules.

3.6 Problem Sets:

There will be 8 problem sets, 20 points each, posted on RAMCT. They will be graded, and the Assignments will be solved in the class only after receiving your Assignments.

3.7 Exams

- **Midterm Exams:**

There will be Two midterm exams each with 100 points (open book) according to the class schedule

Midterm I March 6th 2009
Midterm II April 17th 2009

- **Final Exam**

The final exam will be given in the final week (**Tuesday May 12 11:20-1:20p**), 140 points, and it will be cumulative. You are expected to take the final exam at the time scheduled. However you must be able to provide written evidence of any medical or family emergency which causes you to unexpectedly miss the final exam as scheduled .

3.8 GRADING:

your course grade will be determined by adding together the points earned on the assignments, the midterms and the final as follows;

Title	Total	%
Exam I	100	20
Exam II	100	20
Final Exam	140	28
HW	8 Assignments (20 points each)	32
Total	500	100

Within this classification you can find your letter as follows;

90 <100 A	80 < 90 B	70 < 80 C	60 < 70 D	< 60 F
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3.9 Topic Schedule

For the most part, we will be following the text. The title of the lectures give a theme or focus and are not meant to describe everything which may be covered on any given day. I've added roughly corresponding section number from the text. Since I've undoubtedly misestimated how long it will take to cover certain topics, this schedule is subject to change and your time schedule.

W*	Topic	Sec.
1	What is Econometrics Single-Equation Regression Model Single-Equation Regression Mode	1.1&1.3 1.2&1.3 1.4&1.5
2	Single-Equation Regression Models Single-Equation Regression Models An Application:Lab Session (EViews)	1.6&1.7 Example
3	Two-Variable Regression: Basic Ideas The Concept of Population Regression Function The Sample Regression Function An Application:Lab (C141)	2:1:2-3 2.6&2-7
4	Two-Variable Regression: Continued The Method of Ordinary Least Square (OLS) Standard errors of LS estimation The Gauss-Markov Theorem An Application:Lab (C141)	3.1&3.2 3.3 3.4
5	Two-Variable Regression: Continued The Coefficient of Determination R^2 Classical Normal Linear Regression Model An Application:Lab (C141)	3.5:3.7 4.1&4.2
6	Two Variable Regression: Interval Estimation and Hypothesis Testing Confidence Intervals for Regression Coefficients β_1, β_2 Hypothesis Testing An Application:Lab (C141)	5.2 5.3 5.5
7	Hypothesis Testing Analysis of Variance Midterm I March 6th 2009	5.6:5.8 5.9&5.10
8	Application of Regression Analysis: The problem of Prediction Reporting the result of Regression Analysis Evaluating the results of Regression Analysis An Application:Lab (C141)	5.10 5.11 5.12
9	Spring recess No Classes	
10	Extension of Two-Variable Regression Through the Origin... How to measure Elasticity (Log-Linear Model).. An Application:Lab (C141)	6.1:6.4 6.5:6.6
11	Multiple Regression Analysis:Estimation The Multiple coefficient of Determination R^2 .. The Problem of Inference	7.1:7.4 7.5:7.8 8.1:8.7
12	Dummy Variable Regression Models Multicollinearity Midterm II Friday April 17th	9.1:9.5 10.1&10.2

13	Heteroscedasticity	11.1:11.7
14	Autocorrelation	12.5:12.6
15	Review Session	1-12
Final Exam	ECON 335 Section 02 on Tuesday, May 12th from 11:20-1:20 PM	
	ECON 335 Section 03 on Monday, May 11th from 7:00-9:00 AM	

W: Week