ECO 382 Econometrics
Department of Economics, Queens College
City University of New York

Spring 2002
Instructor: Kazuhisa Matsuda
Office: Temp. II Room 105
Office Hour: Tuesdays & Fridays 1:00 – 2:00 pm (No appointment needed)
Email: maxmatsuda@hotmail.com
Class Schedule: Tuesdays & Fridays 11:00 – 12:50 pm at KG202

Course Objectives and Outline:

This course is designed as an advanced level one-semester econometrics course which deals with regression analysis for economics, business, and accounting majors. Prior understanding of basic algebra and statistics are very helpful and the course starts from reviewing fundamental concepts covered in a statistics course.

The goal of this course is to present the regression concepts and techniques as practical as possible. The eventual goal of studying econometrics after acquiring the fundamental concepts is obviously to develop the ability to apply it to the business settings. In this course, students are required to solve numerous application problems using mostly Excel following the three important steps:

Step 1: Identify the correct method to use.
Step 2: Compute the numbers (statistics).
Step 3: Interpret the statistics correctly.

During the lab hour, I will provide step-by-step instructions of how to use Excel for some specific purposes. My goal is to make students experience the fun of econometrics which is much more than some complicated mathematics course. The course is outlined as follows:

1) **Review of Basic Statistical Concepts**
   Descriptive statistics, Discrete random variables and probability distributions, Normal distribution, Populations, samples, and sampling distributions, Estimating the population mean, Hypothesis tests about a population mean
2) **Simple Regression Analysis**
   Use of simple regression to describe a linear relationship, Examples of simple regression as a descriptive technique, Inferences from a simple regression, Assessing the fit of the regression, Prediction and forecasting with a simple regression, Fitting a linear trend to a time-series data, Cautions in interpreting a simple regression

3) **Multiple Regression Analysis**
   Use of multiple regression to describe a linear relationship, Examples of multiple regression as a descriptive technique, Inferences from a multiple regression, Assessing the fit of the regression, Prediction and forecasting with a multiple regression, Fitting a linear trend to a time-series data, Cautions in interpreting a multiple regression, Comparing two regression models
4) **Curve Fitting**
5) **Evaluating the Assumptions of the Linear Regression Model**
   Regression residuals, Evaluating the imposition of a linear relationship, Constant variance around the regression line, Normally distributed disturbances, Independent disturbances, Multicollinearity
6) **Use of Dummy (Indicator) Variables**
7) **Linear Probability Models (Qualitative Dependent Variables)**

*These are just plans. These plans may change.

Required Text:

Title: Applied Regression Analysis for Business and Economics, Third Edition
Author: Terry Dielman
Publisher: Duxbury, Thomson Learning
ISBN: 0-534-37955-9

Course Grades:

You will have one mid-term exam and one final exam. You will also have a series of assignments throughout the semester.

Grade Component

	Date	Marks	Weight	Length	Cumulative
Midterm Exam	TBA	100	30%	110 minutes	
Assignments	Random		30%		
Final Exam	TBA	100	40%	120 minutes	No

Grading system is based on the relative scale, not on the absolute scale. You will be compared to the class mean.
   I expect regular class attendance and participation throughout the semester.
   These are just plans. These plans may change.
   The date of final exam is to be announced by the economics department later.

Course Web Site:

http://www.maxmatsuda.com   You can get everything you need (handouts and this syllabus) and much more at my website.

Computer Lab:

Computer class room is located in Keiley Hall Room 236. Time is from 11:00-12:50 pm on Fridays.

Make-up Exam Policy:

Make-up exams will be allowed only in extenuating circumstances. Every effort should be made to take the test as scheduled. All make-ups must have the instructor's approval.

Prereq:

ECON 249 Statistics as Applied to Economics.

Course Policy:

1. Study hard.
2. Have lots of fun.
3. Play honest.