ILLINOIS STATE UNIVERSITY
DEPARTMENT OF ECONOMICS
ECO 238: Using Regression and Econometric Methods, Section 1
Spring Semester 2014

Classroom: Stevenson 440
Time: MW 9:35a.m. – 10:50a.m.

Instructor: Dr. Chen
E-mail: jchen4@ilstu.edu (Please include "ECO238" in the subject line)
Office: Stevenson 426E
Office Hours: Thursdays 10a.m. – 12 p.m. or by appointments
Course Website: via ReggieNet

Objective:
The primary objective of this course is to provide you with the necessary tools to use data to enhance and facilitate the decision-making process. This non-theoretical course focuses on basic concepts of regression analysis and other econometrics tools. Topics will include simple and multiple regression models, interval estimation and hypothesis testing, modeling issues, the use of dummy, interactive, and quadratic terms in regression analysis, and limited dependent variable models. Rather than on formal proofs, the course emphasizes on real-world applications, statistical computing, and learning-by-doing. After taking this course, you are expected to master the following objectives:

- Implement graphical and numerical techniques for summarizing qualitative and quantitative data.
- Becoming proficient at manually analyzing data and using statistical software such as Microsoft Excel and STATA to examine data.
- Perform simple and multiple linear regression analyses using sample data, and interpret and communicate the results of regression analysis.
- Explain and implement techniques to solve common statistical problems.

Required Material:

Principles of Econometrics (3rd Edition) by Hill, Griffiths, and Lim, published by Wiley.
For computer exercises, we will use STATA.

Prerequisites

ECO 101 and 102 or 105, and one of the following: ECO 138 or GEO 138 or POL 138 or PSY 138 or ECO 148 or MQM 100.

Student Responsibilities

While class instructions facilitate learning, the ultimate responsibility to learn the material taught rests upon you yourself. You should take due note of all assignments, meeting locations, and any changes to the syllabus

1

announced during class time and/or on ReggieNet.

Any behavior that interferes with the proceeding of each class and the learning of other students will not be tolerated. To that end, you are responsible for:

1. Being on time to classes,
2. Staying in class until dismissed,
3. Turning off and stowing any device (e.g. smartphones) irrelevant to the class,
4. Refraining from talking during class-time unless directed,
5. **Absolutely** no Internet surfing in class!

Evaluation

Class Participation	5%		Project	20%
Quizzes	15%		Midterm Exam	20%
Homework	15%		Final Exam	25%

Midterm Exam will be given in class on **Monday, March 3** (tentative). Please check iCampus for the Final Exam schedule. Rooms for the exams may differ from the regular classroom. Please pay attention to future announcements.

The following scale will be used to determine your final grade:

A	90 – 100 percent
B	80 – 89 percent
C	70 – 79 percent
D	60 – 69 percent
F	Below 60 percent

Class Participation
This is essentially a grade for good citizenship. Given the hands-on nature of this course, student conduct significantly impacts everyone's learning experience. Any violation of the terms listed under "Student Responsibilities" would jeopardize this grade. Missing class is strongly discouraged. Should you miss class, it is your responsibility to catch up on what you missed. You are expected to be actively involved in class discussions and other activities (in-class group work in particular) throughout the semester. **Completion of assigned readings before class is required.**

 Absences due to Student Bereavement. Students who experience the death of an immediate family member or relative as defined in the University Student Bereavement Policy will be excused from class for funeral leave, subsequent bereavement, and/or travel considerations. Students are responsible for providing appropriate documentation to the Dean of Students office and for contacting the instructor as soon as possible to make arrangements for completing missed work. More information is available in the Student Bereavement Policy at http://www.policy.illinoisstate.edu/2-1-27.shtml

Quizzes
There will be weekly quizzes throughout the semester. **NO make-up quiz will be given.** The exact timing of a quiz will be announced one lecture in advance. The lowest-scored quiz will be dropped while calculating your final grade.

Homework
There will be weekly homework assignments during the semester. They will be posted at ReggieNet on a regular basis. Each assignment (hard copy *only*) should be turned in at the **beginning** of the class on its due date. It is important to show steps in your assignment; otherwise, you would receive <u>NO</u> credit for relevant questions in the assignment. For computer exercises, you must submit a log file electronically (details will be explained later), without which you would receive <u>NO</u> credit for relevant questions in the assignment. **No late homework will be accepted**.

Project
This is a group assignment. The maximum group size is 3. The details will be given after the midterm. At the end of the semester, each group is required to submit a study report and give a 5-minute in-class presentation.

Exams
Both exams are closed-book, closed-notes tests. There are <u>NO</u> make-up exams. Working through the homework assignments and quizzes carefully will be the best way to prepare for the exams.

TOPICS

Part I: Introduction and Review
Appendix A: Math Essentials
Appendix B: Probability
Chapter 1: Introduction
Part II: Regression Analyses
Chapter 2: Simple Linear Regression Model
Chapter 3: Interval Estimation and Hypothesis Testing
Chapter 4: Modeling Issues
Chapter 17: Writing an Empirical Report and Data
Chapter 5-1: Multiple Regression Model
Chapter 5-2: Interval Estimation and Hypothesis Testing
Part III: Advanced Inference Issues
Chapter 6: Further Inference Issues
Chapter 7: Dummy Variables
Chapter 8: Heteroskedasticity
Chapter 17: Writing an Empirical Report and Data

<u>Note</u>: Academic integrity is a serious matter, and any deviations from appropriate behavior will be dealt with strongly. At my discretion, situations of concern may be dealt with as a scholastic matter or a disciplinary matter. As a scholastic matter, I have the discretion to determine appropriate penalties to the student's workload or grade, but the situation may be resolved without involving many individuals. An alternative is to treat the situation as a disciplinary matter, which can result in suspension from the University, or have lesser penalties. Be aware that I view this as a very serious matter, and will have little tolerance of or sympathy for questionable practices. A student who attempts to obtain credit for work that is not their own (whether that be on a paper, quiz, homework assignment, exam, etc.) will likely receive a failing grade for that item of work, and at my discretion, may also receive a failing grade in the course.