AED Econ 4002.01 Syllabus

Econometric Applications in Agribusiness and Applied Economics
Autumn 2012

Course Description and Objectives

The primary objective of the course is to help you understand and apply quantitative methods to decision making in agribusiness. The focus of the course will be on using econometrics, arguably the most commonly used tool of data analysis in the social sciences. You will learn how to formulate, estimate and diagnose statistical models to aid in the understanding, prediction and forecasting of economic data.

Instructor

Dr. S.R. Thompson
Agricultural Administration 335
Office Hours: By appointment
E-mail: thompson.51@osu.edu

Teaching Assistant

Ms. Betsy Truex
Agricultural Administration Room 342
Office Hours: TBA and by appointment
Phone: 292-9516
E-mail: truex.68@buckeyemail.osu.edu

Organization

Lectures
Tuesday, Wednesday & Thursday 11:30-12:25pm
Agric. Admin. Bldg. 251

Computer Lab
Section 1: Friday 11:30-12:25pm
Section 2: Friday 12:40-1:35pm
Agricultural Administration 005

Prerequisites

Prereq: 2002 (205) or AEE 387 or AnimSci. 2260 (260) or ComLdr 3537 or HCS 2260 (260) or Stat1430 (133) or 1145 (145). Prereq or concur: 4001 (500) or Econ 4001.02 (501.02). Not open to students with credit for 502.
Texts/Software and other Materials


Software: We will be using “small stata 12” in the lab sessions. If you wish to purchase this for personal use, go to: http://www.stata.com. If you are planning to purchase a new text, you have the option of purchasing small stata.

Carmen will serve as the official repository for all course-related materials, including the course syllabus, overheads, lecture notes, handouts, and homework assignments.

Communication

Electronic mail (OSU email address) will be used for course related notices, including unanticipated class and lab schedule changes. For lab and homework related questions, students are expected to first see the teaching assistant. All other matters should be discussed with the instructor.

Coursework

Lectures
The lectures are designed to emphasize key concepts and to synthesize course subject matter. Students are expected to master the material presented on lecture notes handout and assigned chapters of the text. All lecture notes, homework assignments and other important material will be posted on Carmen. Although attendance in lectures will not be recorded, attendance and class participation are expected.

Laboratories
A weekly laboratory session provides an opportunity for students to acquire practical experience. Attendance will be recorded at laboratory sessions. Students must attend the laboratory session for which they are registered, unless given explicit prior approval by the teaching assistant. Students will be excused from a lab session only with a documented university accepted absence.

Homework Assignments
Students will be expected to complete approximately 4-5 homework assignments, most of which will be coordinated with the work performed in the labs. Note, open hours for the Agricultural Administration computer lab (AA 05) and other computer labs throughout campus are scheduled throughout the week.

Homework assignments are due by no later than 5pm of the due date. Completed homework may be submitted in class at the end of lecture, or placed in the teaching assistant's mailbox in Ag Admin 243. A penalty of 20% will be assessed per day for late homework (the weekend counts as one day). Problem sets overdue more than three days will receive a grade of zero and not be accepted. Students may be awarded a deadline extension on an assignment only with a documented university-approved absence.
Examinations

The mid-term exam will be administered in class on Thursday September 13 and the final exam is Thursday, October 11, 11:30am to 12:25pm. Exams will typically consist of multiple-choice, true-false, and/or short answer questions.

Make-up exams will be administered only with a documented university-approved absence. Foreseeable absences will be excused only if they are communicated to the instructor with at least 24 hours notice.

If you plan to graduate this semester, please alert the instructor of your intentions.

Grading and Course Evaluation

Final course grade will be based on performance according to the following weights:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-term (September 13)</td>
<td>40 %</td>
</tr>
<tr>
<td>Homework/lab attendance</td>
<td>20%</td>
</tr>
<tr>
<td>Final exam (October 11)</td>
<td>40%</td>
</tr>
</tbody>
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The first lab will be the second week of class (August 31)

Final Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93.0 – 100</td>
</tr>
<tr>
<td>A-</td>
<td>90.0 – 92.9</td>
</tr>
<tr>
<td>B+</td>
<td>86.7 – 89.9</td>
</tr>
<tr>
<td>B</td>
<td>83.3 – 86.6</td>
</tr>
<tr>
<td>B-</td>
<td>80.0 – 83.2</td>
</tr>
<tr>
<td>C+</td>
<td>76.7 – 79.9</td>
</tr>
<tr>
<td>C</td>
<td>73.3 – 76.6</td>
</tr>
<tr>
<td>C-</td>
<td>70.0 – 73.2</td>
</tr>
<tr>
<td>D+</td>
<td>66.7 – 69.9</td>
</tr>
<tr>
<td>D</td>
<td>60.0 – 66.6</td>
</tr>
</tbody>
</table>

Individual exams and homework will not receive letter grades. However, there may be a curve to the course grade depending on overall class performance.

Academic Misconduct

Copying any part of someone else's work (on homework, quizzes, tests, or exams, etc.) and handing it in as your own work is academic misconduct and has serious consequences at this university. Collaboration (getting together with other students to discuss HOW to solve problems) is encouraged. But you must do the work on your own.

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed;
illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see Code of Student Conduct.

Disability

Any student who feels s/he may need an accommodation based on a disability should contact the instructor during the first week of class to discuss specific needs.

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office of Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/.

Topic Course Outline (Chapter assignments are from Student 6th edition)

Part I. The Basic Regression Model

A. Overview of Regression Analysis
B. Ordinary Least Squares (OLS)
C. The Classical Regression Model
D. Hypothesis Testing

Chapter 1
Chapter 2
Chapter 4
Chapter 5

Part II. Violations of the Classical Assumptions

A. Model Specification:
   1. Omitting Relevant Variables
   2. Including Irrelevant Variables
   3. Choosing Correct Functional Form
   4. Dummy Variables
B. Multicollinearity
C. Serial Correlation
D. Heteroscedasticity

Chapter 6 and 7
Chapter 8
Chapter 9
Chapter 10

Part III. Extensions of the Basic Model

A. Simultaneous Equations
B. Forecasting from Econometric Models

Chapter 14
Chapter 15

Final Exam October 11, 11:30am to 12:30pm.