AREC335/ECON335
Introduction to Econometrics
Section 4: Spring 2015

Class Meeting:
3:30-4:45 Tue, Thu (Clark C 363)

Pre-announced computer lab sessions in lieu of some lectures may be held in Shepardson 218.

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Email: marco.costanigro@colostate.edu
Office Hours: Wed 1:00-3:00 and by appointment

Teaching Assistant:
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Office Hours: Friday 11:30-1:00 pm

Course Description
The purpose of this course is to provide students with an introduction to econometrics and basic competence in applying statistical methods as a scientific tool in the analysis of practical economic problems. The course will begin with a brief preview of how econometrics can be used to answer applied, real-world question. A brief review of basic statistics and data analysis will follow, before moving into the core material, which is the linear regression model. Students will learn to specify and estimate econometric models, interpret results, and uncover and correct for common statistical problems. The lectures will balance theory and mathematical derivations on the one hand and applications to real-world and simulated data sets on the other. The training received in this course can shape attractive job candidates, and the computer work will provide skills that can be taken directly into the workplace.

Course Readings:
- Class note, posted on RamCT
  Book website: http://www.principlesofeconometrics.com
Course Prerequisites: ECON 204; MATH 141 or MATH 155 or MATH 160; STAT 201 or STAT 204 or STAT 301 or STAT 307

Computer Software: We will use Microsoft Excel for data analysis and econometric estimation. It is assumed that you either have working knowledge of Excel or that you are capable of learning it on your own or with basic guidance. There is a very useful tutorial available from the book website (Excel 2007), which I have uploaded in the class website. If you are already proficient using a specialized econometrics software, it is acceptable to use it for your homework. You will also be required to use word-processing software for one homework assignment, which is a report-writing exercise.

Warning for the Unwary: This is an upper-division course that assumes a mature understanding of basic mathematics and calculus, statistics, and economics, as well as good study habits. If you do not keep up with the material you will suffer and possibly fail the course. However, if you work diligently, you are very likely to do well, come away with highly useful skills and most importantly enjoy this course.

Course Evaluation
As a default, the grades are as assigned as follows: A = ≥ 90%; B = 80-89%; C = 70-79%; D = 60-69%; F = < 60%. No curving scheme will be used. Individual student course grade will be automatically determined by the highest score yielded by the following two weighting methods:

Method A:
- Group Homework Exercises 15%
- Group Project 10%
- Midterm Exam 1 20%
- Midterm Exam 2 20%
- Final Exam (comprehensive) 35%

Method B:
- Group Homework Exercises 15%
- Group Project 10%
- Final Exam (comprehensive) 75%
Important Notes:

1. The midterm exams and the final exam are in-class, closed-book. You may use a calculator and a back-to-back 8 ½ by 11-inch cheat-sheet. In each exam, there will be an extra credit question with variable score (based on the performance of the class). No other grade-curving scheme will be adopted.

2. Method A means that if you have done well along the way, you will not be unduly penalized for a sub-par performance on the final exam. Method B means that if you do well on the final, you will not be penalized for relatively poor performance on the midterm exams. Missed midterm exams are assigned a zero, implying that your course score will be determined by method B. No excuse is needed as to why a midterm exam is missed. Please contact the instructor for university-sanctioned events.

3. Homework exercises will be handed one week before the due date. You can expect 7-8 of them. When applying formulas, be always explicit (i.e. reproduce the formula and properly label your variables; when testing hypotheses, always clearly state your null and alternative hypothesis). Answers containing only numbers will not be graded (and receive a zero score).

   a. Group homework exercises are assigned throughout the semester, 1 week prior to the due date. The homework with the lowest score will be dropped from your final grade. You may work in groups of up to 3 people. If you choose to work in a group, which is highly encouraged, please submit only one copy of each assignment with the names of the participants on the front.

   b. There will be one group project. You may work in groups of up to 3 people. The project will be assigned after the core of the course material has been covered. This assignment will involve writing a formal, business style report from an econometric analysis. In addition to the econometric content, you will be graded for the style and presentation of your findings.

Course Policies and Exceptions

1. Homework exercises are due on the stated due date. Beyond that, no assignments will be accepted.

2. Attendance is not required, but highly encouraged. If you arrive late or expect to leave early, please sit near the exit to avoid disrupting the lecture. Attendance will not be considered to determine the final grade.

3. The general rule is that make-up exams will NOT be administered. At the instructor’s discretion, however, exceptions can be made for specific CSU-sponsored activities or DIRE circumstances, provided appropriate documentation is presented.
4. You have one week after receiving a graded homework assignment or exam to provide the instructor with a written grade appeal. The appeal should identify which question is believed to be incorrectly scored. Note that the instructor/teaching assistant reserves the right to re-grade the entire work, potentially resulting in a lower overall grade.

5. If you have a documented disability that requires special arrangements, please let the instructor know immediately at the beginning of the course.

6. Academic integrity is expected. No cheating will be accepted, period. This course will adhere to the CSU Academic Integrity Policy as found in the General Catalog - 1.6, pages 7-9 and the Student Conduct Code. At a minimum, violations will result in a grading penalty in this course and a report to the Office of Conflict Resolution and Student Conduct Services.

7. Always show appropriate respect for your instructor and fellow students. This means, among other things, that cell phones should be turned off or on mute prior to class.

8. If you are finding that you have difficulties in this course, ask for help as soon as possible. The instructor and teaching assistant want you to do well and meet your academic goals. The sooner you ask for help, the sooner we can get you back on track. Your learning and well-being is of highest priority.

Tentative Course Outline (Modifications are likely and at the instructor’s discretion)

<table>
<thead>
<tr>
<th>Date</th>
<th>WEEK ID</th>
<th>TOPIC AREA</th>
<th>Important Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-Jan-15</td>
<td>W1</td>
<td>Introduction</td>
<td></td>
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<tr>
<td>26-Jan-15</td>
<td>W2</td>
<td>Simple Linear Regression</td>
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<tr>
<td>2-Feb-15</td>
<td>W3</td>
<td>Stats Review</td>
<td>Feb 4: Registration (add/drop) closes</td>
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<tr>
<td>9-Feb-15</td>
<td>W4</td>
<td>Stats Review</td>
<td></td>
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<tr>
<td>16-Feb-15</td>
<td>W5</td>
<td>Stats Review</td>
<td></td>
</tr>
<tr>
<td>23-Feb-15</td>
<td>W6</td>
<td>Simple Linear Regression</td>
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<tr>
<td>2-Mar-15</td>
<td>W7</td>
<td>Interval Estimation</td>
<td>Midterm 1</td>
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<tr>
<td>9-Mar-15</td>
<td>W8</td>
<td>Interval Estimation</td>
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<tr>
<td>16-Mar-15</td>
<td>W9</td>
<td>Spring Recess</td>
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<td>23-Mar-15</td>
<td>W10</td>
<td>Hypothesis testing</td>
<td>March 23: Course Withdrawal Ends</td>
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<td>30-Mar-15</td>
<td>W11</td>
<td>Hypothesis testing</td>
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<td>6-Apr-15</td>
<td>W12</td>
<td>Multivariate model</td>
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<td>13-Apr-15</td>
<td>W13</td>
<td>Interactions, dummies</td>
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<td>20-Apr-15</td>
<td>W14</td>
<td>Interactions, dummies</td>
<td>Midterm 2</td>
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<td>27-Apr-15</td>
<td>W15</td>
<td>Misspecification</td>
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<td>4-May-15</td>
<td>W16</td>
<td>Multicollinearity, Perfect coll</td>
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<td>11-May-15</td>
<td>W17</td>
<td>Finals Week</td>
<td>Final: May 11, 6:20-8:20</td>
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