Introduction to Econometrics
Fall 2013

Instructor: Billy Mertens
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Office Hours: M 1:00 – 5:00; W 11:15 – 11:45; and Friday afternoons by appointment.

Course Description:
This course provides an introduction to the theory and applications of modern econometrics. This course begins by reviewing and extending the statistical material covered in Econ 3818. Following this, students are guided through the principals of regression analysis starting with the simple regression model. Issues in relation to estimation, inference and specification will be explored.

Text:
Introductory Econometrics: A Modern Approach, (4th edition) by Jeffery M. Wooldridge. The text in the 4th edition is identical to the 5th edition, but some practice problems are missing in the old editions. The text is important, as I will follow it closely. Keep up with the readings. It is essential for success in this class.

Prerequisites:
Economics 3818, Introduction to Statistics with Computer Applications, or its equivalent.

In-class Group Problems:
We will work some practice problems in groups, which can help your understanding of the material whether you already understand it fairly, or are struggling a bit. I will announce the days for these problems at least a week in advance. Unexcused absences from in-class problems will significantly lower your grade!

Software:
We will utilize Microsoft Excel for the data analysis in this course. Excel is available in all campus computer labs, including the lab in the basement of the Economics building.

Stats Review Quiz:
You must prove a certain amount of proficiency in basic statistical methods to move forward in the course. We will take the first couple of weeks to review and then you must score 80% or better on the stats quiz to move on. If you fail to achieve 80%, you will need to retake the quiz sometime out of regular class hours.
**Exams and Grading**

Stats quiz (Friday 9/13) 4%
In-class group problems 6%
Exam I (Friday 10/4) 22%
Exam II (Friday 11/1) 22%
Exam III (Friday 12/6) 22%
Final Exam – Monday 12/16 at 4:30pm. 24%

There will be three exams and a cumulative final. No exams will be dropped. Exams are not cumulative (except the final), but the material does build on itself so it is important to understand all of the concepts as we go. No makeup exams will be given. If you miss an exam, you will receive a zero. Exceptions to this rule are specified in University policies (e.g. you are ill and can provide proof - a letter from the student health center). You may also prearrange an excused absence from me. In either case the cumulative final will be weighted more heavily to replace the missed exam.

**Final Exam Conflicts:**
If you have three or more final exams scheduled on the same day, you are entitled to arrange an alternative exam time for the last exam or exams scheduled on that day. To qualify for rescheduling final exam times, you must provide evidence that you have three or more exams on the same day, and arrangements must be made with your instructor no later than the end of the sixth week of the semester (Friday, October 4th, 2013).

**Tentative Course Outline (Text chapters are in parentheses):**

1. Review of Mathematics and Statistics (Appendices A, B and C)

**Stats Quiz**

2. The Simple Regression Model (Ch. 2)
3. Multiple Regression Analysis: Estimation (Ch. 3)

**Exam 1**

4. Multiple Regression Analysis: Estimation (Ch. 3)
5. Multiple Regression Analysis: Inference (Ch. 4)
6. Multiple Regression Analysis: OLS Asymptotics (Ch. 5)
7. Multiple Regression Analysis: Further Issues (Ch. 6)

**Exam 2**

8. Multiple Regression Analysis: Further Issues (Ch. 6)
9. Multiple Regression Analysis with Qualitative Information: Binary Variables (Ch. 7)
10. Heteroskedasticity (Ch. 8)
11. Multiple Regression Analysis: Specification Issues (Ch. 9)

**Exam 3**

**Policy on Cheating:**
If you are found to have violated the honor code (see below), by both myself and the honor code council, you will automatically fail the course!
Additional University Policies:
University policies regarding classroom behavior are available at
http://www.colorado.edu/policies/classbehavior.html and at
http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Information regarding the University Honor Code is available at
http://www.colorado.edu/policies/honor.html and at
http://www.colorado.edu/academics/honorcode. The Honor Code Council can be
contacted by email at honor@colorado.edu or by telephone at 303-725-2273.

University policies regarding disabilities are available at
http://www.colorado.edu/disabilityservices. Disability Services can be contacted by
telephone at 303-492-8671, or in person at Willard 322.

University polices regarding religious practice are available at
http://www.colorado.edu/policies/fac_relig.html.

University policies regarding Sexual Harassment and Amorous Relationships are
available at http://www.colorado.edu/odh/. The Office of Discrimination and
Harassment can be reached by telephone at 303-492-2127. The Office of Judicial
Affairs can be reached at 303-492-5550.