

Course objectives. Econometrics is the primary tool of empirical analysis in economics. The field of econometrics combines principles of probability and statistics, economic theory, and data to test theoretical propositions and estimate relations among economic variables.

The first goal of this course is to enable you to understand and critically evaluate empirical studies in economics. Although we will not have time to get into advanced econometric procedures that you might encounter in economics journals, you should still be able to interpret the estimation and test results that are common across most applied econometric analysis. You

Meeting this goal will require mastery of some fundamentals of probability and statistics and the application of these principles in regression analysis.

Second, you will learn how to perform a valid empirical analysis that is supported by principles of econometric theory. I do not believe that one can learn econometric methods (theory) without practice with applications. Econometric theory establishes when estimators are flawed, but only with empirical examples can we see the types of false conclusions that might be drawn without proper attention to the assumptions of the regression model. Similarly good empirical work requires an understanding of the econometric theory. For example, econometric theory establishes the conditions for unbiased estimation or for valid tests of hypotheses.

understand the logical reason
explain to your roommate, with
this course. This is the true test
exam questions will require you to
understand it well enough." -

You will encounter many formulas
you should not try to memorize
formulas when you need them
basis, and that's what you need

Homework: Problem Sets and Computer Exercises

Like any mathematically based course, you need to practice working problems to master the material. Almost every week you will have homework in the form of either problem sets or computer applications. These assignments will be posted on D2L. All homework exercises must be submitted at the end of class on the due date and will be graded. **No late submissions** can be accepted, but you will be permitted to drop one assignment without penalty. In other words, when computing your final homework score, I will drop your lowest scores, which could be zero if you fail to submit one assignment.

The computer assignments will consist of a data set, instructions for implementing the exercise, and some questions that call for an explanation or interpretation of your estimation and test results. These exercises are designed for the EViews econometric software program, which is available in the Economics computer lab. You may purchase your own copy of the student version of EViews for \$39.95 (go to www.eviews.com for more information). EViews is widely used in government agencies and research departments of major corporations. It is easy to learn and to use, but also offers powerful programming capabilities and advanced estimation procedures.

Textbook: Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*. Fifth edition (2013) Southwestern Publishing. This is an excellent text that could serve as a valuable reference for you in the future. I realize that textbooks are outrageously expensive, and there are options for you to keep the cost down. The fourth edition of this text will not handicap you in any way. There is also the possibility of renting the text – go to the publisher's website (<http://www.cengagebrain.com>) for more information.

Grading. Your grade will be based on four equally weighted parts: homework, two midterms, and a mandatory final exam. No make-up exams will be given for any reason. However, an optional portion of the final exam will be offered for anyone wishing to make up for a missed exam or for an unsatisfactory performance on a midterm exam. The optional and mandatory finals will both be given during the 2½ hour regularly scheduled final exam period. The mandatory part will be similar in length to the midterms. It will emphasize the material from the last third of the course, but certainly these topics will build upon earlier material. The optional final will be designed to require 1½ hours to complete, and it will cover material from the two midterm exams. If your score on the optional portion of the final is higher than your lowest midterm score, then this higher score will replace the lower one.

Prerequisites, Classroom Rules, and Other Administrative Matters. The prerequisite for this course is Econ 3818 (Economic Statistics) or a course in mathematical statistics. Introductory

statistics courses from departments other than Mathematics or Economics are not acceptable. For more information, contact the instructor at wooldrid@missouri.edu.

similar classes, please discuss this with me before deciding whether to stay in or to drop the class.

You are **not permitted to use cellphones, computers, tablets**, or similar electronic devices during class. There is nothing on your phone or computer, or on the internet, that you will need to access during class, and I am sure that note-taking on an electronic device is not feasible for this class. Please help me avoid embarrassing you in class by following this rule

According to College rules **incomplete grades (I)** can be given only under the following three conditions: (i) the student must initiate the request for an I; (ii) an I can be given only if the student cannot complete the course for reasons beyond his or her control (such as a medical emergency); and (iii) the student and the instructor must complete and sign an agreement stipulating the reasons for the incomplete and the conditions for completing the course. Additional administrative issues governing disability needs, religious observances, honor code, etc. can be found in the final section of this syllabus covering students' rights and responsibilities in CU courses.

| Schedule, readings and assignments. (Chapters refer to our text by Woodridge.) | | | |
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| Dates | Topic | Readings | assignments |

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3/23 – 3/27 Spring Break

Week 11 Second exam
(3/30 – 4/3)

(4) Policies towards Discrimination and Harassment:

The University of Colorado Boulder (CU-