UNIVERSITY OF
MARYLAND

ECON 422
Econometrics I (Sec. 0301)
Spring 2016
Tydings Hall 2110
MW 2:00-3:15

Instructor: Hossein Abbasi **Office:** Tydings Hall 3127D **Tel**: 301-405-4784 **Email:** abbasi@econ.umd.edu. **Office Hours:** TTh 1:00-2:00; or by appointment	**Course Page:** The course webpage can be found at www.elms.umd.edu. You must use your directory ID and password to access this page

Course Description and Objectives:

Econometrics applies modern statistical methods to economic problems. It introduces techniques for estimating the effect of one or more explanatory variables on a variable of interest. It emphasizes on both the theoretical and practical aspects of estimating econometric models of various types and tests of hypotheses. The main goal of this course is to help you understand the theoretical aspects of estimating econometric models and provide you with tools to analyze empirical studies and carry out your studies.

Learning Outcomes:

➤ By the end of the semester, each student should be able to accurately do the following:
  o Formulate the economic issues and questions in a way appropriate for quantitative analysis.
  o Identify the data types and work with different types of data.
  o Choose the proper types of econometrics methods according to data and question.
  o Apply the method and analyze the results.
  o Understand the research in theoretical and empirical econometrics.

Prerequisites:

Restriction: Must be in a major within the BSOS-Economics department.

One course with a minimum grade of C- from ECON325/ECON326; and one course with a minimum grade of C- from STAT400/ECON321.

Students should be familiar with the following concepts: random variable, probability distribution, joint probability distribution, independence, expected value and its properties, variance, variance of sums of random variable, sampling distribution (of sample mean, sample variance), statistical inference (hypothesis testing, confidence intervals), and regression.

Textbooks and other required technology:

The required textbook for this course is *Introductory Econometrics, A Modern Approach* by: Jeffrey M. Wooldridge.
Both 5th and 6th editions are acceptable.
I may assign further reading materials during the semester.
Problem sets, announcements, and other course materials will be posted on the website. Please check it regularly.

Class Expectations:

➢ Students are expected to attend lectures, read the materials, participate in class activities, and complete assignments before they are due. If you miss any lecture, you are responsible for the material that was covered. If you find that you will be unable to participate in class activities for more than three sessions in a row because of any valid excuse, you must inform me via email. You will not be allowed postpone a "major scheduled grading event" because of absence earlier in the semester unless you have informed me in advance.

➢ Students are responsible for updating their current email address via http://www.testudo.umd.edu/apps/saddr/ AND for paying attention to messages I send to the class. Failure to check email, errors in forwarding email, and returned email due to "mailbox full" or "user unknown" problems will not excuse a student from missing announcements or deadlines.   In ELMS you must set your notification preferences so that you receive announcements ASAP; see ELMS quick guide for instructions.

➢ Please contribute to a positive learning environment. Students are expected to treat each other and the instructor with courtesy and respect. Please turn off all cell phones, Blackberries, Ipods and other PDAs and electronics before coming to class. Laptops in class should be used only for taking notes. Please do not disturb your fellow students by talking in class. If you happen to arrive late in class, please seat yourself quietly.

➢ I strongly recommend coming to my office hours if you are having trouble with some of the material or if you have any issue regarding your academic progress in this course. I prefer to be contacted via email for any academic issue (phone is not preferred; please use it only in emergency cases. Even in these cases, I may ask you to email me later.) I will do my best to respond in timely manner. You MUST sign your email with your full name, course, and section.

➢ I look forward to receiving your feedback on the course, both during and at the end of the semester. In particular, as a student member of the University of Maryland, **you are responsible to participate in the evaluation of the course** through CourseEvalUM (www.courseevalum.umd.edu will be available starting two weeks before the last day of classes). Your feedback is an essential part of the program at the University. It will remain confidential.

Policies:

➢ Exams are designated as "**major scheduled grading events**". Students are required to take exams. Make-up exams will be granted **only** to those students whose excuse complies with University policy. The four valid excuses according to University policy are: illness (of student or a student's dependent), religious observance, participation in University events at the request of University authorities, and compelling circumstances beyond your control. See http://www.testudo.umd.edu/soc/atedasse.html for more detail on the University's policy regarding attendance and assessments. If you miss an exam and cannot document a valid excuse, your grade will be recorded as a zero. If you can provide documents for a valid excuse, contact me to schedule make-ups as far in advance as possible by email and at a minimum the day of the exam. Do not send requests for make-up exams to TAs. Do not wait until afterwards to tell me you are sick.

University policy requires that you provide appropriate documentation before you can be considered eligible for a make-up exam. In the case of illness, ask your health care provider to verify dates of treatment and indicate the time frame that you are unable to meet academic responsibilities. No diagnostic information needs to be included.

➢ Cell phones and other electronic devices are not permitted in exam rooms. If I see your cellphone or any other electronic devices, except calculator, you will be considered to be cheating. You are not allowed to talk to each other during the exam time. You are not allowed to have anything (including, but not limited to books, notes, and loose papers) but the exam materials (provided by me) and writing instruments on your desk or on the floor near your chair. Otherwise, it will be considered as cheating.

- For a description of the university's Medically Necessitated Absences Policy, please visit: http://www.umd.edu/catalog/index.cfm/show/content.section/c/27/ss/1584/s/1540
- For questions about the university's religious holidays policy, please visit: http://www.umd.edu/teach/attend_student.html#religious

Emergency Protocol:

If the university is closed, I will contact you via email with instruction.

Academic Integrity:

The University of Maryland has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards applicable to all undergraduate students, and you are responsible for upholding these standards as you complete assignments and take exams in this course. Please make yourself aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information see www.studenthonorcouncil.umd.edu. If any student is believed to be in violation of the Code of Academic Integrity, they will be referred to the Student Honor Council.

Students with Disabilities:

UMD guarantees appropriate accommodations for students with disabilities. Any student with a disability needing accommodation must obtain documentation from the Disabilities Support Service in 0106 Shoemaker Building, 301 314 7682. She/he is required to inform the instructor of her/his needs at the beginning of the semester. If you need further clarification, the link to DSS is: http://faculty.umd.edu/teach/specialneeds.html

Grading of Assignments:

➢ **In-class quizzes:** 10% (Not graded. You will receive full credit for this part if you hand in 90% of quizzes.)

➢ **Homework assignments:** 20%
  o You may submit assignments in groups of 2 or 3 students. If you miss an assignment, your assignment grade will be knocked down to a maximum of 50% credit for 48 hours after the due date and 20% after that. The homework assignment with the lowest score will be dropped.

➢ **Exams:** (midterm: 30%, final exam: 40%)
  o Exams are mandatory.
  o Final exam will be comprehensive.

Grade Breakdown:

I use the following cutoff points:

Letter Grade	A-, A	B-, B, B+	C-, C, C+	D, D+	F
Percentage	90%+	80%-89.99%	70%-79.99%	60%-69.99%	59.99%-

The cutoff points for + and – will be determined at the end of the semester.
No extra credit will be granted.

Tentative Course Outline:

Dates	Topic
1/25	Introduction to Econometrics, Wooldridge Chapter 1
1/27	Introduction and Simple Regression Model, Wooldridge Chapters 1 and 2
2/1	Simple Regression Model, Wooldridge Chapter 2
2/3	Simple Regression Model, Wooldridge Chapter 2
2/8	Simple Regression Model, Wooldridge Chapter 2
2/10	Simple Regression Model, Wooldridge Chapter 2
2/15	STATA Lab 1
2/17	Multiple Regression Analysis: Estimation, Wooldridge Chapter 3
2/22	Multiple Regression Analysis: Estimation, Wooldridge Chapter 3
2/24	Multiple Regression Analysis: Estimation, Wooldridge Chapter 3
2/29	Multiple Regression Analysis: Inference, Wooldridge Chapter 4
3/2	Multiple Regression Analysis: Inference, Wooldridge Chapter 4
3/7	Multiple Regression Analysis: Inference, Wooldridge Chapter 4
3/9	Midterm Exam
3/14 & 3/16	Spring Break
3/21	STATA Lab 2
3/23	Multiple Regression Analysis: Further Issues, Wooldridge Chapter 6
3/28	Multiple Regression Analysis: Further Issues, Wooldridge Chapter 6
3/30	Multiple Regression Analysis with Binary Variables, Wooldridge Chapter 7 and 17.1
4/4	Multiple Regression Analysis with Binary Variables, Wooldridge Chapter 7 and 17.1
4/6	Multiple Regression Analysis with Binary Variables, Wooldridge Chapter 7 and 17.1
4/11	Heteroskedasticity, Wooldridge Chapter 8
4/13	Heteroskedasticity, Wooldridge Chapter 8
4/18	Heteroskedasticity, Wooldridge Chapter 8
4/20	Basic Regression Analysis with Time Series Data, Wooldridge Chapter 10
4/25	STAT Lab 3
4/27	Basic Regression Analysis with Time Series Data, Wooldridge Chapter 10
5/2	Simple Panel Data Methods, Wooldridge Chapter 13
5/4	Simple Panel Data Methods, Wooldridge Chapter 13
5/9	TBA
Monday, May 16. 1:30-3:30	Final Exam