# Syllabus for ECON 4818 Introduction to Econometrics

ECON 4818-004 MWF 11:00-11:50 GUGG 205

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Office: ECON 6A

**Office Hours:** MW 9:45 - 10:45 PM

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## **Course Description:**

This course will introduce you to the theory and applications of econometric analysis.

The course has a strong applied emphasis. We will use Excel for data analysis. The course will provide you with the opportunity to improve your competence and acquire new skills in Excel.

This is a rigorous course and my expectations are high. I expect that you will attend lectures, participate in class discussions, read the relevant textbook chapters, work through the end-of-chapter problems, and complete the assigned homework.

Reading the textbook is essential for success in this class. After each class you should review your lecture notes and read the relevant sections in the textbook. This will prepare you for the next class, so that you can participate in class discussions and follow the presentation of the new material, which builds upon concepts from the previous class.

## **Prerequisites:**

ECON 3818 Introduction to Statistics with Computer Applications, or its equivalent. These prerequisites will be strictly enforced. If you are enrolled in this course without the required prerequisites, you will be administratively dropped, which can occur at any point during the semester.

## **Required Text:**

Introductory Econometrics : A Modern Approach, 5th edition, by Jeffrey Wooldridge. You can also use the older edition.

Again, reading the textbook is essential for success in this class.

#### **Software:**

The data analysis in this class will require the use of Excel. We will also use the DataAnalysis Toolpak in Excel, an Excel Add-in.

<u>Disclaimer for Mac users:</u> The DataAnalysis Toolpak does not work with Excel for Macs. If you have a Mac, you are encouraged to use the PCs in the computer labs on campus to complete your Excel homework assignments. Alternatively, Mac users can purchase MegaStat for Mac. The cost is low – around \$15. 1 To24 245.m /TT Tf [(i) 0.2 (n.)] TJ ET Q 9 50 0 0b44 50b6 78.239se the Da2

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mates evaluate your contribution with 100%, 100% and 80%. Then your overall homework score is 50%(90) + 50%(90)(100% + 100% + 100% + 80%)/4=87.75 out of 100.

# **End-of-Chapter Practice Problems:**

I will post answers to the odd-number end-of-chapter problems in the textbook. You are expected to work through these problems to ensure mastery of the material. Try to do the problems without looking at the answers right away. <u>I will not collect</u> your work on these problems. These are good practice problems for the exams so you are advised to work on those problems.

# Attendance and in-class participation:

I will take attendance. I will take attendance either at the beginning or at the end of class. It is your responsibility to be in class on time and to sign the attendance sheet. If you are late to class and attendance has already been taken, you can't sign the attendance sheet for that day. You are allowed to miss two classes. Each additional recorded absence will reduce your attendance score. If you miss more than 20% of classes (3 weeks or 9 classes) you will receive an F grade for this course. These absences include both valid (sickness, weather, emergencies) and invalid reasons for not being in class.

Your participation in class discussions is essential for enhancing your and your classmates' learning experience in this class. Your participation will not be graded as right or wrong, but rather I will evaluate the quality of your critical thinking, your willingness and ability to apply learned concepts and your use of learned terminology. Making mistakes is part of learning. So, don't be shy, speak out and get more out of this class! On random dates I will record your participation.

## **Preparing for class:**

The material in this class builds upon material from previous lectures. Before you come to class I expect you to review and master the material from the previous class. This includes studying the lecture notes and the textbook. This is critical for your ability to engage in class discussions and to understand the new material that is presented in class. You learn best if you don't simply take notes in class but also understand the statistical analyses that I will present in class and why they are needed.

If you struggle with the material or even if you have minor questions about it, see me in office hours ASAP. Do not wait until the day befTJ ET Q q 05 0.8d6lasady bes(a) 0.2 M 58 225.6 2(a8cm BT 50 0 0



### **Classroom Behavior:**

<u>Please turn off your laptop and your phone before the beginning of class.</u> Please do not engage in any non course-related activities during class. This is distracting to me and your classmates.

### **Tentative Course Outline**

- 1. The Simple Regression Model (Chapter 2)
- 2. Multiple Regression Analysis: Estimation (Chapter 3)
- 3. Multiple Regression Analysis: Inference (Chapter 4)
- 4. Multiple Regression Analysis: Further Issues (Chapter 6)
- 5. Heteroskedasticity (Chapter 8)
- 6. More on Specification and Data Problems (Chapter 9)
- 7. Multiple Regression Analysis with Qualitative Information: Binary Variables (Chapter 7)
- 8. Additional Multiple Regression Analysis Issues.

#### **Disabilities**

Students with disabilities who qualify for academic accommodations must provide a letter from Disability Services (DS) and discuss specific needs with the professor (in person or by e-mail), preferably during the first two weeks of class. For exam accommodations, provide your letter at least one week prior to the exam.