

ECON 3112: ECONOMETRICS

Syllabus for Fall 2022

8:00 a.m. – 8:50 a.m. MWF

Friday 155

Instructor

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Office Hours

9:00 a.m. – 10:00 a.m. WF
2:15 p.m. – 4:15 p.m. MW

If these hours are not convenient, feel free to make an appointment with me for another time or to stop by at another time when I am in the office.

Textbook

The textbook for this course is Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*, 7th edition (Cengage Learning, 2020). For our purposes in this course, earlier editions are also acceptable.

Catalog Course Description

ECON 3112: Econometrics – Econometric techniques, including simple and multiple regression with problems and analyses. Prerequisites: ECON 2101 and ECON 2102; MATH 1120 or MATH 1241; STAT 1220; and INFO 2130; all with grades of C or above.

Course Objectives

We will study basic data analysis techniques that are commonly used by economists. We will focus on understanding the strengths and limitations of the methods we cover, using econometric software to apply these methods, and interpreting the results we get.

Software

We will use STATA for the applications we do in this course. STATA is available on all Belk College computers. You can purchase STATA at a reduced rate through the STATA website (<http://www.stata.com/order/new/edu/gradplans/student-pricing/>). STATA is also available via Apporto. The website <https://spaces.uncc.edu/pages/viewpage.action?pageId=49033481> has instructions for accessing Apporto. The websites <https://dss.princeton.edu/training/>, <https://stats.idre.ucla.edu/stata/>, and <https://www.ssc.wisc.edu/sscc/pubs/sfr-intro.htm> provide a number of examples and other resources that you may find helpful as you work with STATA.

Means of Student Evaluation

Course grades will be determined by your performance on 4 problem sets (10% each), 3 tests (10% each), and a comprehensive final exam (30%). Letter grades for the course will be based on the following scale: A, 90%-100%; B, 80%-89.99%; C, 70%-79.99%; D, 60%-69.99%; F, below 60%. Your grade will be based only on your performance on the 4 problem sets, the 3 tests, and the final exam. Individual extra credit assignments will **NOT** be made.

Problem sets must be typed and must be submitted on the assigned due dates. A problem set may be submitted after the due date, but there will be a 10-point penalty for each day that the submission is late.

Once a problem set has been graded and returned to the class, no late submission will be accepted, and you will receive a grade of zero on that problem set. Problem set due dates will be September 16, October 14, November 11, and December 2. Test dates will be September 23, October 21, and November 18. The comprehensive final exam will be 8:00 a.m. – 10:30 a.m. on December 12 (the exam time slot assigned to this course).

Academic Integrity

All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code and on the [Student Conduct and Academic Integrity website](#). The Code is available from the Dean of Students Office or online at legal.uncc.edu/policies/up-407. Additional resources are available on the [Student Conduct and Academic Integrity website](#).

Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

Disability Accommodations

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations.

Revision of Syllabus during Semester

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and by email.

Attendance

Students are expected to attend every class and remain in class for the duration of the session. Failure to attend class or arriving late to class may affect your ability to achieve course objectives, and this can affect your course grade. An absence, excused or unexcused, does not relieve a student of any course requirement. Regular attendance is a student's obligation, as is a responsibility for all of the work of class meetings, including tests and written tasks.

The individual instructor has the authority to excuse a student's class absence(s) and to grant a student an academic accommodation (turn in a late assignment, provide extra time on an assignment, reschedule an exam, etc.). Under Academic Affairs [Policy on Course Attendance and Participation](#), however, University-sanctioned events or activities are considered excused absences. A University-sanctioned event or activity is one in which a student formally represents the University to external constituencies in athletic or academic activities. This policy does not supersede individual program attendance and/or participation requirements that are aligned with accreditation or licensure. For more information and student responsibilities to account for such an absence, see provost.charlotte.edu/policies-procedures/academic-policies-and-procedures/course-attendance-and-participation.

Students are encouraged to work directly with their instructors on class absences for medical appointments, military/court orders, and/or personal and family emergencies, such as a death in the immediate family, where a student is able to provide an instructor with appropriate supporting documentation of the absence. The final decision for approval of absences and missed work or make-up work is determined by the instructor.

The [Office of Student Assistance and Support Services \(SASS\)](#) can provide notification to faculty of emergency situations, when a student is unable to do so and when the office has been made aware of such emergencies. In such situations, the SASS office may also be able to assist with verification of such

emergencies, once a student is able to return to classes. The SASS office does not provide verification of absences for car trouble, weather issues, personal activities, work, weddings, vacations, or University-sponsored events. Absences related to such activities should be discussed directly with the faculty member.

Should a student need assistance from the SASS office in verifying an emergency situation, they can submit an [online request form](http://sass.charlotte.edu/services/absence-verification) (sass.charlotte.edu/services/absence-verification) and attach supporting documentation. Please be aware that students are not required to go through the SASS office at any time for absence verification and that the SASS office does not have the authority to excuse absences, allow for make-up work, or provide other academic accommodations.

In cases of absence due to pregnancy or parenting (pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery from any of these conditions), students should contact the Office of Civil Rights and Title IX to obtain absence verification by completing the online form at <http://bit.ly/332eaGd>.

Instructor Absence or Tardiness

If I am late in arriving to class, you must wait a full 20 minutes after the start of class before you may leave without being counted absent, or you must follow any written instructions that I give you about my expected tardiness.

Computer Use in the Classroom

Students are permitted to use computers during class only for taking notes and for doing other class-related work. Those using computers during class for work that is not related to this class must leave the classroom for the remainder of the class period.

Recording in the Classroom

Electronic video, image capture, and/or audio recording is not permitted during class, whether conducted in person or online, unless the student obtains permission from the instructor. If permission is granted, any distribution of the recording is prohibited. Students with specific electronic recording accommodations authorized by the Office of Disability Services do not require instructor permission; however, the instructor must be notified of any such accommodation prior to recording. Any distribution of such recordings is prohibited.

Course Withdrawals

The last day to withdraw from courses with grades of W is October 24. Students are expected to complete all courses for which they are registered at the close of the add/drop period. If you are worried about your ability to succeed in this course, then you should talk with me as soon as possible. University policy allows students only a limited number of opportunities available to withdraw from courses. It is important for you to understand the financial and academic consequences that may result from [course withdrawal](#).

Belk College of Business Diversity Statement

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

Outline of Topics and Reading Assignments

I assume that you have a basic knowledge of calculus and probability and statistics. The material that you need for this course is covered in Math Refreshers A, B, and C of Wooldridge (2020). You should review this material on your own just as soon as possible.

- I. Introduction to Econometrics
Wooldridge (2020), Chapter 1
- II. Simple Regression Analysis
Wooldridge (2020), Chapter 2, pp. 20-40 & pp. 50-53
- III. Multiple Regression Analysis: Estimation
Wooldridge (2020), Chapter 3, pp. 66-97
- IV. Multiple Regression Analysis: Inference
Wooldridge (2020), Chapter 4, pp. 117-136 & pp. 139-150
- V. Heteroskedasticity and Robust Standard Errors
Wooldridge (2020), Chapter 8, pp. 262-267
- VI. Regression Analysis with Qualitative Information
Wooldridge (2020), Chapter 7, pp. 221-228 & pp. 239-244
- VII. Regression Analysis with Time Series Data
Wooldridge (2020), Chapter 10, pp. 334-336 & pp. 339-345
Wooldridge (2020), Chapter 11
Wooldridge (2020), Chapter 12, pp. 395-401
Wooldridge (2020), Chapter 18, pp. 622-628