ECON 3112: ECONOMETRICS
Syllabus for Fall 2021
4:00 p.m. – 5:15 p.m. MW
Friday 155

Instructor
Rob Roy McGregor
227C Friday Building
Phone 704-687-7639
Email rrmcgreg@uncc.edu

Office Hours
2:15 p.m. – 3:45 p.m. MW
4:00 p.m. – 5:30 p.m. R
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.

Textbooks
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 15, October 13, November 10, and December 1. Test dates will be September 22, October 20, and November 17. The comprehensive final exam will be 5:00 p.m.–7:30 p.m. on December 15 (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](https://legal.uncc.edu/policies/up-407). The Code is available from the Dean of Students Office or online at [legal.uncc.edu/policies/up-407](https://legal.uncc.edu/policies/up-407). Additional resources are available on the [Student Conduct and Academic Integrity website](https://legal.uncc.edu/policies/up-407).

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.

**Face Coverings**

It is the current policy of UNC Charlotte that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the 49er community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings **in all indoor spaces on campus**, including classrooms and labs, **regardless of vaccination status**. Failure to comply with this policy in the classroom or lab may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Office of Student Conduct and Academic Integrity for charges under the [Code of Student Responsibility](https://legal.uncc.edu/policies/up-407).

**Attendance**

Students are expected to attend every class and remain in class for the duration of the session when it is safe to do so in accordance with University guidance about COVID-19. Failure to attend class or arriving late may affect your ability to achieve course objectives, which could affect your course grade. An absence, excused or unexcused, does not relieve a student of any course requirement. Regular class attendance is a student’s obligation, as is a responsibility for all the work of class meetings, including tests and written tasks.

Students are encouraged to work directly with their instructors regarding their absence(s). For absences related to COVID-19, please adhere to the following:

- **Complete your Niner Health Check** each morning.
- **Do not come to class if you are sick.** Please protect your health and the health of others by staying home. Contact your healthcare provider if you believe you are ill.
• **If you are sick:** If you test positive or are evaluated by a healthcare provider for symptoms of COVID-19, indicate so on your Niner Health Check to alert the University. Submit a copy of your Niner Health Check notification email to your instructors. Upon learning that you have tested positive or have been diagnosed for symptoms of COVID-19, either from your reporting or from Student Health Center testing or diagnosis, representatives from Emergency Management and/or the Student Health Center will follow up with you, and your instructors will be notified of the need for accommodations, as necessary.

• **If you have been exposed** to COVID-19 positive individuals and/or have been notified to self-quarantine due to exposure, indicate so on your Niner Health Check to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary. Submit a copy of your Niner Health Check notification email to your instructors. If you need any additional support verifying your absence after you have communicated with your professors, contact Student Assistance and Support Services.

To return to class after being absent due to a period of self-quarantine, students should submit a copy of their Niner Health Check clearance email to their instructor(s). To return to class after being absent due to a COVID-19 diagnosis, students should submit an online request form to Student Assistance and Support Services (SASS). Supporting documentation can be attached directly to the request form and should be from a student's health care provider or the Student Health Center, clearly indicating the dates of absences and the date the student is able to return to class. Instructors will be notified of such absences.

If you are absent from class as a result of a COVID-19 diagnosis or quarantine, as instructor I will help you continue to make progress in the course by providing remote learning options and assignments on a case-by-case basis. The final decision for approval of all absences and missed work is determined by the instructor.

**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 22. 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

III. Multiple Regression Analysis: Estimation
     Wooldridge (2020), Chapter 3

IV. Multiple Regression Analysis: Inference
    Wooldridge (2020), Chapter 4, pp. 117-136

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 11
     Wooldridge (2020), Chapter 12, pp. 395-415