# ECON400H: Introduction to Statistics and Econometrics

# Online Syllabus 2020

Instructor: Dr. Kevin Allen

Email: kmal239@email.unc.edu

Office hours: Zoom Drop-Ins, Tue/Thur 9:30-10:30am EST, 1:00-2:00pm EST, and by appointment

Zoom ID: <https://unc.zoom.us/j/9979143342>

Lectures (400H-001): Posted Online

Materials: Diez, Rundel and Barr: Open Intro Statistics, 3rd ed. (<https://leanpub.com/openintro-statistics>)

You can access this from the “Download Extras” option, I prefer the 3rd edition to the 4th edition. Both are free.

We will be using STATA throughout the semester, which can either be purchased or accessed through the UNC Virtual Lab (see the following link: <https://virtuallab.unc.edu/vpn/index.html>)

Virtual Lab Getting Started: <https://uncch.service-now.com/sp?id=kb_article_view&sysparm_article=KB0010180&sys_kb_id=5344ec52dba7c81070551ffa6896192a>

Background: ECON 101, Calculus (STOR 113, MATH 152, MATH 231), Statistics (STOR 155)

**Course Description:**

The purpose of this course is to explore the foundations of Economic Statistics and Econometrics, focusing on statistical techniques, application of statistical and probabilistic methods to real-world situations, and data analysis.

The course covers five general topics:

1. Descriptive statistics
2. Random variables
3. Sampling distributions
4. Hypothesis testing
5. Regression analysis

The class format will be online and asynchronous (Except for testing, see below). Each week there will be a lesson that comprises 3 “lectures” that are comprised of a series of videos each covering a specific topic. These will be 5-10 minutes, most of which will have 1-2 questions that form an “engagement assignment” to make sure you are watching the videos. This will replicate in-class examples and questions that I would normally be asking. The videos will be hosted on Youtube and available in the Sakai lesson page. You will be able to view/review these videos whenever you want. I will give them titles describing what they are to make indexing/searching them easier.

**Exams:**

There will be three exams, two midterms during regular class time and a final exam.

Midterm exam: Thursday, September 25th

Midterm exam: Thursday, April 1st

Final exam: Tuesday, May 11th

Tests will be administered online through Sakai, similar to a long homework assignment. The test will be a combination of multiple choice and short answer questions. By necessity it will be open note/open book and so I will write questions with that taken into account. Prior to the test I will be posting a video tutorial to give more detailed instructions. There will be multiple time slots available to take the exam, and you may select which one is most appropriate for your time zone. Note that if you open two of the exams I will consider you to have cheated, so make sure the time slot you select is the one you want.

**ARS Accommodation Information:**

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities.

Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: https://ars.unc.edu or email ars@unc.edu.

If you require any ARS accommodations, please send me a reminder email with the subject: TEST ACCOMONDATIONS before the exam date. I will try to keep up with everyone but this is immensely helpful for me, particularly with our online format. I will do all that I can to meet those accommodations for extra time or whatever else is necessary.

**Homework:**

In addition to the engagement assignments associated with each video, there will be a weekly homework assignment that summarizes what I expect you to know after the week’s lectures. These questions will build off the engagement assignments and provide the inspiration for many exam questions later. There will also be regular STATA assignments to get you familiar with the program and its basic functions. As we progress in the course the STATA/Homework assignments may merge together, in particular when we are discussing Regression. All homework and assignments will be due the Monday after the lesson is given, allowing you the full week and weekend to look at it and ask any questions you might have.

**Grading weights:**

Each assignment and exam during the semester will comprise a certain percentage of your final grade, with the percentages given in the schedule below:

2 Midterm Examinations 40% (20% Each)

Final Exam 30%

Engagement Assignments 5%

Homework Assignments 15%

STATA Assignments 10%

I will choose the 10 highest Homework Assignment scores to calculate your final grade.

**Grading Scale:**

The final class grade will be assigned a letter grade based on the weighted earned scores during the semester according to the following grade schedule:

At least 93%: A

At least 90% but less than 93%: A-

At least 87% but less than 90%: B+

At least 83% but less than 87%: B

At least 80% but less than 83%: B-

At least 77% but less than 80%: C+

At least 73% but less than 77%: C

At least 70% but less than 73%: C-

At least 67% but less than 70%: D+

At least 60% but less than 67%: D

Less than 60%: F

**University Approved Absences:**

The link below is a list of university approved absences and a summary of the attendance policy. This primarily will affect tests, so if you expect there will be a conflict let me know as soon as possible. If you give me enough heads up I will (at my discretion) try to work with you as far as life events are concerned, even if they are not necessarily university approved absences (Weddings, work, etc). I do want to make clear that if you find yourself ill for a protracted time, due to the ongoing epidemic or any other illness or health problem let me know as soon as possible. I will work with you to figure out what will be your best course of action, and help you catch up if necessary.

<https://catalog.unc.edu/policies-procedures/attendance-grading-examination/#text>

**Make-Up Exams:**

If for any reason you miss an exam and need to make it up, I will schedule a time with that person. If there are multiple make-up exams required, then I will try to schedule them all together for my convenience.

**Counseling and Psychological Services:**

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

**Diversity Statement:**

I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve, I appreciate suggestions.

**Honor Code Policies:**

1. All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from “lying, cheating, or stealing” in the academic context. If you are unsure about which actions violate that honor code, please see me or consult [honor.unc.edu](https://studentconduct.unc.edu/).
2. Students are bound by the Honor Code in taking exams and in written work. The Honor Code of the University is in effect at all times, and the submission of work signifies understanding and acceptance of those requirements. Plagiarism will not be tolerated. Please consult with me if you have any questions about the Honor Code.
3. The University of North Carolina at Chapel Hill has had a student-administered honor system and judicial system for over 100 years. The system is the responsibility of students and is regulated and governed by them, but faculty share the responsibility. If you have questions about your responsibility under the honor code, please bring them to your instructor or consult with the office of the Dean of Students or the Instrument of Student Judicial Governance. This document, adopted by the Chancellor, the Faculty Council, and the Student Congress, contains all policies and procedures pertaining to the student honor system. Your full participation and observance of the honor code is expected ([honor.unc.edu](https://studentconduct.unc.edu/)).

**Title IX Resources:**

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison – Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

**Additional Student Resources:**

* **The Learning Center:** The UNC Learning Center is a great resource both for students who are struggling in their courses and for those who want to be proactive and develop sound study practices to prevent falling behind. They offer individual consultations, peer tutoring, academic coaching, test prep programming, study skills workshops, and peer study groups. If you think you might benefit from their services, please visit their website to set up an appointment: [http://learningcenter.unc.edu](http://learningcenter.unc.edu/).
* **The Writing Center:** The Writing Center is located in the Student and Academic Services Building and offers personalized writing consultations as well as a variety of other resources. This could be a wonderful resource to help with your writing assignments in this course (and any assignments in your other courses). You do not need a complete draft of your assignment to visit; they can help you at any stage! You can chat with someone in the writing center or set up as appointment on their website: [http://writingcenter.unc.edu](http://writingcenter.unc.edu/).

**Syllabus Changes:**

The professor reserves the right to make changes to the syllabus, including project due dates and test dates. These changes will be announced as early as possible.