**INTRODUCTION TO STATISTICS FOR ECONOMICS (ECON 218-01)[[1]](#footnote-1)**

**Trinity College - Hartford**

Spring 2022

**TTH –** 6.30pm to 7.45pm

**MC 311**

**Instructor:** ***Jun He***

**Email:** jun.he@trincoll.edu

**Office Hours:** Monday 1.30-2.30 pm, Friday 1.30-3 pm (you need to book via [calendly](https://calendly.com/junhe_trin/office-hours) in advance)

**Office Location:** Virtual meeting on [Zoom](https://trincoll.zoom.us/j/4325198931) (meeting ID: 432 519 8931)

**Contact:** All communications will be through WebAssign, Moodle, Zoom, and email.

**Course Description and Objectives:** As data and computing resources have become increasingly accessible, economics has become more concerned with the measurement and estimation of economic phenomena. This course is designed to familiarize students with common statistical methods used in economics. Topics will include the presentation of data, descriptive statistics, probability theory, discrete and continuous distributions, sampling distributions, estimation, and hypothesis testing.

**Course prerequisites:** C+ or better in Economics 101.

**Requirements for the Economics Major**: Students must earn a grade of C+ or better in this course to count it towards the Economics Major. (Please refer to the College Bulletin for the requirements of the Economics major.)

**Textbook: *“****Statistics: The Exploration & Analysis of Data****”*** 7th Edition, by Roxy Peck and Jay L. Devore, Cengage Publishers, ISBN-13: 9780840058010.[[2]](#footnote-2)

**Grading:** The final grade for this course will be calculated as follows:

Quizzes 10%

Assignments 20%

Module exams 1-4 20% \*3+10% (10% for the lowest one)

**Midterms and Final Exam**

* All the exams are in-class. I will announce their details 1 week ahead of the examination date. The final exam date and time are set by the College and cannot be changed.
* Texas Instruments TI-30 or Casio fx-260 may be used in class and on exams. You may not share them with each other during **any** of the in-class exams. **NO** phones or any other electronic devices that send/receive data are allowed to be used as calculators (even if airplane mode is on).

**Quizzes:** I will give a quiz regularly on Tuesday at the beginning of the class (unless an exam is scheduled). Quizzes will be 5-10 min long and you will be expected to solve an exercise that will be similar to the ones we will have solved in class in the previous two lectures. If you miss a quiz because you came late to class or were absent, you will be given a **zero** unless presenting proper justification on or before the same day.

**Assignments:** There is a homework assignment for each chapter of the text. The homework will be submitted online via WebAssign. You shall follow the directions on the top of the Moodle page to register for the course WebAssign. You only need to complete this registration process once. After creating your account, you will be able to be directly routed to WebAssign through the Moodle link.

**Late Submission Policy:** I will allow only one deadline extension during the entire course, in which case a penalty by 15 points per day will be applied for a late submission. The extension request has to be placed within a week post the deadline.

**Office hours and TA sessions:** Please note that I will be available on Zoom during my office hours. The link for the Zoom meeting is at the top of the syllabus. You are supposed to book an opening through [Calendly](https://calendly.com/junhe_trin/office-hours). Notifying me with emails on the meeting content in advance will be appreciated.

Your TA (to be reached at equinn@trincoll.edu) for this class will be holding a TA session every week, 3:00-4:00 for both Tuesday and Thursday at Peter B’s. During these sessions, your TA will be answering any questions you might have regarding class material and providing hints to help you solve exercises from assignments whose due dates are after the sessions. Additional exercises are available from the end of each chapter from the textbook, and you can benefit from extra practice, with the TA.

HM questions and practice questions should go primarily to the TA.

Q-Center: The Q-Center will open for tutoring on Monday, September 20th and provide in-person tutoring services on a walk-in basis. Please refer to their website <https://www.trincoll.edu/quantitative-center/tutoring-support/> for detailed information.

For this course, you should expect to spend an average of ***9-12 hours per week*** studying and completing assignments.

**Grading Scale:** You can refer to the student handbook for a more detailed explanation of the grading policies. Below I am providing the numerical values for the main ones:

|  |  |  |
| --- | --- | --- |
| A+ | A | A- |
| 97-100 | 93-96.99 | 90-92.99 |
| B+ | B | B- |
| 87-89.99 | 83-86.99 | 80-82.99 |
| C+ | C | C- |
| 77-79.99 | 73-76.99 | 70-72.99 |
| D+ | D | D- |
| 67-69.99 | 63-66.99 | 60-62.99 |

**F if below 60 points.**

**Make-up** **Examinations:** Absence from class **does not** excuse the student from any assigned work designated by the instructor as part of this course. In the event of an absence, you alone are responsible for promptly discovering what was covered or announced in class and catch up with class assignments as soon as possible. Therefore, please check Moodle announcement at least once per week. **No make-up** **will be given**. If you have a ***documented excuse*** for missing a quiz/midterm, the points will be reallocated to the upcoming quiz/midterm. Only the final can have a make-up when *official* proof justifying the absence is presented.

**Extra Credit:** It is not offered in this class, so please do not ask for such an opportunity after exams or at the end of the semester. Instead of trying to boost your grade with extra course work, FOCUS on studying and performing well on the mandatory class material. Also, incomplete requests are not accepted.

**Other Class Policies:**

* Computers are only allowed for taking notes, although I highly suggest taking notes with pen and paper. Please do not use your computer for personal reasons (online shopping, checking email, watching YouTube, etc.) during class.
* Please **restrict yourselves** from leaving and re-entering the classroom. You might hurt your grade by missing important information, and you might also create a negative externality for your classmates by distracting them from the lecture.
* **Recording the lectures is not allowed**, unless you have my permission to do so in advance.
* Please try not to bring food/drinks to class, after all, it is a classroom and not a cafeteria.
* Please **keep your mask on** (covering both mouth and nose) for the entire class session. The use of beverages and drinks is not permitted inside the classroom during class sessions.

**Academic Integrity:** The faculty and administration support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The complete text of the Academic Integrity Policy and the Trinity College procedure for implementing that policy may be found at <http://internet2.trincoll.edu/facman/doc0009.html>.

**Students with Academic Accommodations**: Trinity College is committed to creating an inclusive and accessible learning environment consistent with the Americans with Disabilities Act. If you have approval for academic accommodations, please share your accommodation letter during the first two weeks of the semester or a minimum of 10 days prior to needing your accommodations. You shall choose to email me a PDF copy of your letter.  If you do so, please copy [SARC@trincoll.edu](mailto:SARC@trincoll.edu) on the email and be sure to meet with me privately to discuss the implementation of your accommodations in at least a week’s advance to the exam. If you do not have a letter but have a disability requiring academic accommodations, or have questions about applying for accommodations, please contact Lori Clapis, Coordinator of Accessibility Resources at 860-297-4025 or [Lori.Clapis@trincoll.edu](mailto:Lori.Clapis@trincoll.edu).

**Course Outline (Tentative):**

**Module 1. Fundamentals for Econ 218**

Chapter 1. Role of Statistics and the data analysis process

WebAssign Assignment #1

Chapter 4. Numerical methods for describing data

WebAssign Assignment #2

Chapter 6. Probability

WebAssign Assignment #3

**Midterm 1 (Chp 1, 4, 6)**

**Module 2. Normal Distribution**

Chapter 7. Normal Distributions (7.1-7.3)

WebAssign Assignment #4

Chapter 8. Sampling Variability

WebAssign Assignment #5

**Midterm 2 (Chp 7 & 8)**

**Module 3. Application of Normal Distribution**

Chapter 9. Estimation using a single sample (9.1-9.3)

WebAssign Assignment #6

Chapter 10. Hypotheses & Test Procedures (10.1-10.4)

WebAssign Assignment #7

**Midterm 3 (Chp 9 & 10)**

**Module 4. Introduction to OLS**

Chapter 5. Bivariate Data (5.1-5.3)

WebAssign Assignment #8

Chapter 13. Simple linear regression and correlation

WebAssign Assignment #9

Chapter 14. Multiple Regression Analysis (if time permits)

WebAssign Assignment #10

**Midterm 4 (Chp 5, 13, 14)**

**Commitment to the Course:** By signing up for this course, you are expected to get all the materials recommended for this course (textbook & WebAssign), attend all the lectures, and follow the syllabus.

1. This syllabus is tentative and subject to revisions. The latest version will be updated on Moodle. You alone are responsible to learn about these changes if you miss any class time. [↑](#footnote-ref-1)
2. You will also find the Wooldridge textbook, especially its appendices, super helpful. Jeffrey Wooldridge, *Introductory Econometrics: A Modern Approach*, 7th edition, ISBN 978-1-337-55886-0. [↑](#footnote-ref-2)