

Course Syllabus
University of Colorado Boulder
Introduction to Statistics with Computer Application
Economics 3818-020
Fall 2024

Professor: Nicholas E. Flores
Office: Econ 107
Email: Nicholas.Flores@Colorado.edu

Lecture Classroom: ECON 117
Class Meeting Time: MWF 1:25 p.m. – 2:15 p.m.

Office Hours: Econ 107, MW 2:30 p.m. – 4:00 p.m. and by appointment
Zoom ID on Course Canvas Site

Teaching Assistant: Warren Hendricks
Office: Econ 14
Office Hours: T 3:30 p.m. – 5:30 p.m.

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knowledge of basic statistical reasoning and understanding. Further our required econometrics courses build directly off of this course. Finally, this course helps you build a skill that has enormous potential financial return in the marketplace.

The course consists of five closely related parts. The first part of the course introduces ways to explore data using visual and numerical measures. You will learn about summary measures for single variables and we will consider relationships between variables. The second part of the course introduces you to basic probability theory, popular probability distributions, and mathematical expectation. The third part of the course introduces you to sampling distributions and their properties, properties of estimators, confidence intervals, and hypothesis testing. The fourth part of the course is all applied statistical inference including inference about the mean of a probability distribution, inference about differences in two population means, inference about a single proportion from a population, and inference about differences in two proportions. The fifth and final part of the course further explores correlation and simple regression analysis and then adds inference about simple regression.

Course Modality

This is an in-person course. You will be required to come to class and recitation. No part of this course is remote with the exception of some Zoom office hours. We are hoping the in-person experience will make for a richer learning experience for you.

Textbook

The Basic Practice of Statistics, 9th Edition

R Computer Applications – R is a free programming language that is available for Mac, Windows, and Unix operating systems. It is pre-installed on computers in most University computer labs and can be downloaded from the Internet. You will use the R Studio Interface to do R exercises. We will spend some of our class/recitation time working on these. R has good self-contained documentation in the basic R installation. On your first R exercise, you will get some basic training on how to install and do some basic operations in R. I will help you through the semester. An additional free resource is the book Modern R with the tidyverse by Bruno Rodrigues:

https://b-rodrigues.github.io/modern_R/

September 2 – Labor Day No Class
October 4 – Exam 1
November 1 – Exam 2
November 25 – 29 – Fall and Thanksgiving Break

your accommodation letter from Disability Services to your faculty member in a timely manner so your needs can be addressed. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance.

If you have a temporary medical condition or

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to ensure that individuals impacted receive an outreach from OIEC about their options for addressing a concern and the support resources available. To learn more about reporting and support resources for a variety of issues, visit [Don't Ignore It](#).

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, you should contact your professor to make arrangements to ensure you keep up with the class. See the [campus policy regarding religious observances](#) for full details.

MENTAL HEALTH AND WELLNESS

The University of Colorado Boulder is committed to the well-being of all students. If you are struggling with personal stressors, mental health or substance use concerns that are impacting academic or daily life, please contact [Counseling and Psychiatric Services \(CAPS\)](#) located in C4C or call (303) 492-2277, 24/7.

Free and unlimited telehealth is also available through [Academic Live Care](#). The Academic Live Care site also provides information about additional wellness services on campus that are available to students.