



University of Colorado Boulder  
**INTRODUCTION TO STATISTICS WITH COMPUTER APPLICATIONS**  
**ECON3818 SYLLABUS FALL 2022**

Instructor: Dr. Sara Avila

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x Office Hours: Tuesdays and Thursdays 9am-12:15pm using Canvas Chat or Zoom

**INSTRUCTOR BIO**

I am an economics instructor with more than two decades of experience. My research interests are in the fields of environmental economics and more recently, in how to teach economics. I have worked on topics related to air quality, climate change, urban transportation, and biodiversity conservation. I am passionate about building understanding in a diverse environment. I am also an avid (but aging) runner, so when I am not injured, I run every day.

Term Start: Aug 29 2022

Term End: Dec 8 2022

**COURSE WEBSITE**

Canvas is our class website:

- x Login using your University of Colorado Boulder identity card and password  
<https://canvas.colorado.edu/>
- x [ECON3818 Introduction to Statistics](#)
- x Note: all email correspondence will be through your CU Boulder email address.
  - o Do not use the Canvas email messages; it is not checked.

**COURSE DESCRIPTION**

This course introduces you to the principles of statistical reasoning and inference. To this end, ultimate goals of the course are for you to thoroughly understand the following concepts: sampling distributions, hypothesis testing, and confidence intervals across multiple settings.

Organized into fourteen modules, the course is divided into four parts. The first part of the course provides an overview of how data is properly collected and how to explore data using visual and numerical methods. The second part is an introduction to probability theory, discrete and continuous probability distributions and mathematical expectation. The third part introduces sampling distributions, confidence intervals and hypothesis testing. Finally, the last section applies statistical inference to population means, to proportions and to simple regressions.



Course Website <https://canvas.colorado.edu/> (Canvas) Grades and any further additional readings will be posted on Canvas. Please check Canvas frequently for any relevant notifications/changes that may occur throughout the course.

### SUPPLEMENTAL MATERIAL

You will use R, a free statistical package to conduct statistical analysis.

### INSTRUCTIONAL METHODOLOGY AND DELIVERY

This course is delivered via distance education format using the Canvas system. This format will use a combination of readings, online discussion, and other web-based resources. You will interact with the instructor and other students using the communication functions provided by Canvas. You will submit assignments in accordance with the course outline using Canvas. You will also have access to Achieve

## EVALUATION AND GRADING

Course grades will be determined by the completion of assignments, exams, and

## ASSIGNMENTS

(200 POINTS) There will be a 20 point exercise associated with most modules.

- x Problem Sets consist of quantitative questions where you will complete questions while showing your work. Problem sets will be Achieve
- x Your lowest one (1) Problem Set will be dropped from your final grade calats



## TUTORING

The Economics Department provides a free drop-in tutorial office which offers assistance on all core courses in the major, and occasionally on other undergraduate courses in the Department. Its website is <https://www.colorado.edu/economics/node/513/attachment>

The Economics Department maintains a list of tutors who are available for private hire. Its website is <https://www.colorado.edu/economics/node/515/attachment>

## TECHNOLOGY SUPPORT

CU Boulder uses Canvas.

Here is the list of recommended system requirements [Canvas Computer Specifications Page](#)

Here is the detailed list of internet browsers in Windows, MacOS, iOS and Android [Approved Browsers Page](#)

### Technical Support

- x Canvas technical support. If you are experiencing issues with Canvas please contact:
  - o CU Boulder's Help desk at 303-543-5757 (5HELP) or [help@colorado.edu](mailto:help@colorado.edu) Help will answer your call: Monday through Friday from 7:30 a.m. to 7:00 p.m., Saturday and Sunday from noon to 6:00 p.m., Closed during [University Holidays](#)
  - o On your computer





ECON3818: Introduction to Statistics

ACCOMODATION FOR DISABILITIES

misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-2127 or [cureport@colorado.edu](mailto:cureport@colorado.edu). Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on [the OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

## RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal

you should stay home and follow the further guidance of the Public Health Office ([contacttracing@colorado.edu](mailto:contacttracing@colorado.edu)). If you are fully vaccinated and have been in close contact with someone who has COVID-19, you do not need to stay home; rather, you should self-monitor for symptoms and follow the further guidance of the Public Health Office ([contacttracing@colorado.edu](mailto:contacttracing@colorado.edu)).

## COURSE WITHDRAWAL POLICY

Any student who wishes to withdraw from the course must do so by September 7. For complete information, please visit <https://ce.colorado.edu/resources/topics/dates-and-deadlines/general-info/>

## ADDITIONAL SUPPORT SERVICES

A variety of instructional support services, such as writing center, guidance on personal or educational issues, tutoring questions and library resources are available to the students. For more information about their services, visit their websites linked under modules on Canvas.

## ACCOMMODATION FOR DISABILITIES

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on [the Disability Services website](#). Contact Disability Services at 303-867-1 or [dsinfo@colorado.edu](mailto:dsinfo@colorado.edu) for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.

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