

University of Colorado Boulder  
INTRODUCTION TO STATISTICS WITH

- x Office Hours: Tuesdays and Thursdays 9 am -11:30 pm using 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:**September 3, 2024.

**Term End:**December 12, 2024.

The Final Exam ends December 15, 2024.

### COURSE WEBSITE

Canvas is our class website:

- x Login using your University of Colorado Boulder identity key and password  
<https://canvas.colorado.edu/>
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- x Note: all email correspondence will be through your CU Boulder email address.
  - o Do not use the Canvas email or messages, it is not checked.

### COURSE DESCRIPTION

This course

This foundational course is essential to your success in the study of economics. CU economics 4000-level courses require knowledge of basic statistical reasoning and understanding. Further, our econometric courses build directly off this course.

### COURSE OBJECTIVES

By the end of the course, you should be able to:

1. Describe data with graphs and with statistical tools.
2. Identify probability distributions.
3. Conduct hypothesis testing.
4. Conduct statistical inference.
5. Identify which test to use in which case.
6. Run and interpret a simple lineal regression.

### COURSE PREREQUISITES

Requires prerequisite courses of ECON 2010 (Principles of Microeconomics) (minimum grade C-) AND either ECON 1088 or MATH 1081 or MATH 1300, MATH 1310, or APPM 1350 (minimum grade C-). Restricted to students with 22-180 units completed.

### REQUIRED COURSE MATERIALS

**Textbook (required)** Moore, D., Motz, W. and Fligner, M., The Basic Practice of Statistics, 9<sup>th</sup> edition. With Achieve. Macmillan. ISBN: 9781319344634.

You need the version with Achieve since Achieve will be used for homework and quizzes.

You may also buy a hard copy of the book (ISBN:9781319408541), but this is not required.

**Day 1 Digital Access** To keep the cost of your course materials as low as possible and access to those materials as convenient as possible, we have collaborated with the CU Book Store and the publisher to deliver those materials to you through the course Canvas page. This is a guaranteed lowest price, discounted by the publisher, and not available outside this course. You can opt out by: using a link in a reminder email you will receive with the course materials. You must opt out no later than September 12, 2024, otherwise you will be charged for the materials. If you do not opt out, you will have no way to complete assignments.

1. You will receive access to all your course materials, digitally, on the first day of classes, through the course Canvas page.
2. This is a guaranteed lowest price, discounted by the publisher, and not available outside this course. approximately **\$91.45**
3. You can opt out by: using a link in a reminder email you will receive with the course materials. You must opt out no later than September 12, 2024, otherwise you will be charged for the materials.
4. If you do not opt out, you will have no way to complete assignments.

**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 CU 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 from the MacMillan Learning catalog.

#### COURSE PRESENTATION AND PROCEDURES

There will be 14 modules, in 14 weeks (1 module per week). You should proceed through one module every week, which will be comprised of readings from the course texts, supplemental class notes, graded discussion questions, exercises, and quizzes, examusf readingtes,





2. With **Proctorio or a comparable online proctoring service as determined by your instructor**. Online proctoring is a service that uses a webcam and microphone to ensure academic integrity. To use this service, you must have access to a computer with a webcam and a microphone. There will be a cost for using the online proctoring services.
- x Note that you are required to have a computer with a functioning webcam and microphone or have access to a computer with a functioning webcam microphone to complete your exams.
  - x See Canvas for detailed information about proctoring. If you are in a rural area or on a military base, you may need approval process.

#### EXTRA CREDIT

There **MAY** be 30 points of extra credit available (= 3% of the course grade).

- x Extra credit may be available during the semester for completing certain activities, such as listening and commenting on a podcast or solving practice exams. These extra credit opportunities will be determined by the instructor and announced on Canvas.

#### COMMUNICATION

I am nice and I want you to succeed. Do not hesitate to contact me about anything.

**Email: [sara.avila@colorado.edu](mailto:sara.avila@colorado.edu)**

- x **Please always remind me of what course you are taking.** Since I teach several courses, I forget what course you are taking, especially at the beginning of the semester.
- x I will respond to email within 12-18 hours, but usually within 2-4 hours. I always respond to emails. If you have not had a response within 18 hours, I did not receive the email. Be sure to use your CU email address because sometimes Gmail and yahoo email accounts are filtered into my spam folder.

Additional ways to contact Dr. Avila:

- x Online Office Hours: Wednesdays and Thursdays 10 am -12:15 pm using Zoom (<https://cuboulder.zoom.us/my/saraavila>)

## 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: [Supported Browsers Page](#)

### Technical Support

- x Canvas technical support. If you are experiencing issues with Canvas please contact:
  - o CU Boulder's Help desk at 303-735-4357 (5-HELP) or [help@colorado.edu](mailto:help@colorado.edu). 5-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 Within the Canvas App, you can search the Canvas support guides, Report a Problem or chat with Canvas Support 24 hours a day, 7 days a week.
- x Connect tech support:
  - o <http://mpss.mhhe.com/> or <http://bit.ly/StudentRegistration>

## COURSE POLICIES

### NETIQUETTE

All students should be aware that their behavior impacts other people, even online. I hope that we will all strive to develop a positive and supportive environment and will be courteous to fellow students and your instructor. Due to the nature of the online environment, there are some things to remember.

1. Always think before you write. In other words, without the use of nonverbals with your message, your message can be misinterpreted. So please think twice before you hit submit.
2. Keep it relevant. There are places to chat and post for fun everyday stuff. Do not stray from the discussion in the assigned questions.
3. Never use all caps. This is the equivalent of yelling in the online world. It is not fun to read. Only use capital letters when appropriate.
4. understand this type of abbreviation, not to mention it does nothing to help expand your writing and vocabulary skills. Emoticons are fine as long as they are appropriate. A smile 😊 is welcome, anything offensive is not.

5. Treat people the same as you would face-to-face. In other words, it is easy to hide behind the computer. In some cases, it empowers people to treat others in ways they would not in person. Remember there is a person behind the name on your screen. Treat all with dignity and respect and you can expect that in return.
6. Respect the time of others. This class is going to require you to work in groups. Learn to respect the time of others in your group and your experience will be much better. Always remember that you are not the only person with a busy schedule, be flexible. Do not procrastinate! You may be one that works best with the pressures of the deadline looming on you, but others may not be that way. The same is true for the reverse. The key to a successful group is organization, communication and a willingness to do what it takes to get it done.

Website: <http://www.albion.com/netiquette/corerules.html>

Compiled by Melissa Landin, Instructor, Dept. of Communication, Inver Hills Community College,  
[milandin@inverhills.edu](mailto:milandin@inverhills.edu)

## TECHNOLOGY REQUIREMENTS AND SUPPORT

What are the basic computer specifications for Canvas?

- x Visit the official [Canvas Computer Specifications Page](#) for the latest list of recommended system requirements.

Which browsers does Canvas support?

- x Visit the [Supported Browsers Page](#) for the detailed list of internet browsers in Windows, MacOS, iOS and Android.

Skill Requirements

- x Students also need to possess basic computer skills, such as:
  - o How to use a web browser and word processor
  - o How to send and receive email
  - o How to locate a file and attach it to an email or upload a file into a course
  - o How to copy and paste
  - o Must know basic typing skills and keyboard commands
  - o Must know basic computer terminology

## TECHNICAL SUPPORT

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  - o CU Boulder's Help desk at 303-735-4357 (5-HELP) or [help@colorado.edu](mailto:help@colorado.edu). 5-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](#)

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## ACCOMODATION 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 303-492-8671 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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misconduct (harassment, exploitation, and assault), intimate partner abuse (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who have been subjected to misconduct can contact OIEC at 303-492-2127 or email [cureport@colorado.edu](mailto:cureport@colorado.edu). Information about university policies, [reporting options](#), and [support resources](#) including confidential services can be found on the [OIEC website](#).

Please know that faculty and graduate instructors must inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to 1omoTQ72.025 595L161(a)-





Introduction to Statistics, ECON 3818 Fall 2024, Avila, University of Colorado Boulder