distribution, sports management, urban planning, voting prediction, race issues, environmental conservation, climate change, just to name a few.

COURSE OBJECTIVES

You will access Mindtap through our course website, Canvas. For options and support see: https://www.cengage.com/coursepages/UC_Mindtap

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.

Statistical package: 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/

This free e-book provides instruction on programming in R. But mainly we are going to implement the things we learn from the book in R. You are welcome to use other programming packages if you are proficient in them, but direct support will be provided only in R

## 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.

## COURSE PRESENTATION AND PROCEDURES

There will be 14 modules corresponding to the 14 weeks of the course (1 module per week). You should proceed through one module per week, which will be comprised of readings from the course texts, supplemental class notes, graded discussion questions, homeworks and quizzes, exams, and various outside sources of information such as additional readings and video content, among other content.

## COURSE OUTLINE

Review the separate weekly class schedule found on Canvas under “Syllabus” link.

## CLASS PARTICIPATION

This course is designed to engage you mostly through exercises, however, there will be 3 to 4 class discussions on the topics covered in the course materials. It is important that you participate in class discussions to facilitate learning by other students and gain exposure to different viewpoints of other students in the class.

## EVALUATION AND GRADING

Course grades will be determined by the completion of assignments, exams, and discussions, as shown below:

| | Points per assignment | Frequency | Grade Points | Grade Percentage |
|---|---|---|---|---|
| Exercises* | 20 | 13 | 260 | 26% |
| Discussion Postings | 25 | 4 | 100 | 10% |
| Homework* | 20 | 10 | 200 | 20% |
| Final Project | 150 | 1 | 150 | 15% |
| Proctored Midterm Exam | 140 | 1 | 140 | 14% |
| Proctored Cumulative Final Exam | 150 | 1 | 150 | 15% |
| TOTAL | | | 1000 | 100% |

Keep a copy of all work created for the course, including work submitted through Canvas.
*The lowest grade of these assignments will be dropped. See below.

COURSE GRADING CRITERIA

| | | | |
|---|---|---|---|
| | *93-100* | *930 – 1000* | *Excellent* |
| | *90-92.99* | *900 – 929* | |
| | *87-89.99* | *870 – 899* | |
| | *83-86.99* | *830 – 869* | *Above Average* |
| | *80-82.99* | *80* | |

ASSIGNMENTS

(260 POINTS) – There will be fourteen 20-point exercises. The first three exercises do not require the use of a statistical package. Exercises in Modules 4-13 will be Computer Exercises through Mindtap. They will be a combination of multiple choice, numeric, and short answer/fill in the blank. They can be done in R (although you can use any statistical package to complete them) and will be open book and open notes. Except for the first three modules, computer exercises will be completed in Mindtap. I will drop the lowest grade.

Homework assignments (200 Points) – There will be eleven 20-point Homework assignments. The format will be multiple choice and/or fill in the blank and will be open book, open notes. They may be quiz format (1 attempt and you're done) or you may have 3 attempts at each late-module question and your score is the average. Homework can be completed in Mindtap. I will drop the lowest grade.

(100 POINTS) – There will be four 25-point discussion postings. The discussion will occur asynchronously; I will post a discussion question and you will respond to the questions at your convenience prior to the due date. See the class schedule for due dates of posts and comments. Discussions are open book and open note. Discussions will be submitted through Canvas. The initial discussion post is due Thursdays and the discussion response is due Sundays.

(150 POINTS) – There will be one individual final project. This assignment will be 3 pages in length, single spaced, Times New Roman 12 point font, 1" margins. This writing assignment as well as a 5-minute video, will be submitted through Canvas. You will investigate your own hypothesis. This paper will encompass most of what we have learned in the class.

(290 POINTS) – There will be two (2) exams. The proctored Midterm Exam is worth 140 points and the proctored cumulative Final Exam is worth 150 points. The format of the exam will be multiple choice and calculations and will be closed book. The exams are completed on Canvas or Mindtap in a proctored setting.

This course requires proctored examinations. Exams are proctored which will require planning on your part. Proctors are individuals who administer the exam process following the guidelines provided by University of Colorado Boulder to ensure academic integrity.

Who can be my proctor?

If you are in Boulder or nearby, you can take your exam:

1. At the Department of Economics. There is no cost for using this proctor. This option is only on selected days during the exam period.
2. At the University Testing Center on-campus in Boulder, CO. There may be a cost for using the testing center. This option is only available M-F during regular business hours.
3. With Proctorio. 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. Please review Proctorio Minimum System Requirements to ensure you have the correct hardware and software to use this tool.

## 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

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. Make sure that you are using appropriate grammar and structure. In other words, do not use "R U" instead of "are you". There are people in the class that may not 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 (or kinder). It might be 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.

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

Compiled by Melissa Landin, Instructor, Dept. of Communication, Inver Hills Community College, mlandin@inverhills.edu

CLASSROOM BEHE6(ur)10(n.)]TJETv7(et)-7(ur6y@)-5(e )-2(bef)10(o)4(r)8(e )-2(you)5( hi)4S92 reW.00000912 0 6

As a matter of public health and safety, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. CU Boulder currently requires COVID-19 vaccination and boosters for all faculty, staff and students. Students, faculty and staff must upload proof of vaccination and boosters or file for an exemption based on medical, ethical or moral grounds through the MyCUHealth portal.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the f

| | | | *11:59pm MST/MDT* |
|---|---|---|---|
| 1<br>(8/28) | Appendix A: Mathematical Tools | Discussion post<br>Assignment Module 1<br>Discussion comment<br>Homework Module 1 | Thursday 9/1<br>Thursday 9/1<br>Sunday 9/4<br>Sunday 9/4 |
| 2<br>(9/5) | Appendix B: Fundamentals of Probability | Exercise Module 2<br>Homework Module 2 | Thursday 9/8<br>Sunday 9/11 |
| 3<br>(9/12) | Appendix C: Fundamentals of Mathematical Statistics | Exercise Module 3<br>Homework Module 3 | Thursday 9/15<br>Sunday 9/18 |
| 4<br>(9/19) | 1 What is Econometrics | Computer Exercise Module 4<br>Homework Module 4 | Thursday 9/22<br>Sunday 9/25 |
| 5<br>(9/26) | 2 The Simple Regression Model | Computer Exercise Module 5<br>Discussion post<br>Homework Module 5<br>Discussion comment | Thursday 9/29<br>Thursday 9/29<br>Sunday 10/2<br>Sunday 10/2 |
| 6<br>(10/3) | 3 Multiple Regression Estimation | Computer Exercise Module 6<br>Homework Module 6 | Thursday 10/6<br>Sunday 10/9 |
| 7<br>(10/10) | | | |
| 8<br>(10/17) | 4 Multiple Regression Analysis | Computer Exercise 1 Module 8<br>Computer Exercise 2 Module 8<br>Homework Module 8 | Thursday 10/20<br>Thursday 10/20<br>Sunday 10/23 |
| 9<br>(10/24) | 5 Multiple Regression Analysis: Asymptotics | Computer Exercise Module 9<br>Discussion post<br>Homework Module 9<br>Discussion comment | Thursday 10/27<br>Thursday 10/27<br>Sunday 10/30<br>Sunday 10/30 |
| 10<br>(10/31) | 6 Multiple Regression Analysis: Further Issues | Computer Exercise 1 Module 10<br>Computer Exercise 2 Module 10<br>Homework Module 10 | Thursday 11/3<br>Thursday 11/3<br>Sunday 11/6 |
| 11<br>(11/7) | 7 Multiple Regression Analysis: Analysis with Qualitative Variables | Computer Exercise 1 Module 11<br>Computer Exercise 2 Module 11<br>Homework Module 11 | Thursday 11/10<br>Thursday 11/10<br>Sunday 11/13 |