

ECN 102: Analysis of Econ Data  
Fall Quarter 2024

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**Instructor:** Remy Beauregard

**Lecture time:** MWF 11-11:50am

**Personal email:** [rebeauregard@ucdavis.edu](mailto:rebeauregard@ucdavis.edu)

**Lecture location:** Walker Hall 1310

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**Class support:**

Canvas link: <https://canvas.ucdavis.edu/courses/917632>

Class email: [beauregard.teaching@gmail.com](mailto:beauregard.teaching@gmail.com)

Office hours: MF 10-11am (walk with me to lecture around 10:45)

OH location: SSH 136

Section	A02	A03	A04	A05	A01	A06
Day & Time	Tues. 2:10-3pm	Tues. 3:10-4pm	Tues. 4:10-5pm	Thurs. 12:10-1pm	Tues. 1:10-2pm	Thurs. 1:10-2pm

Location	Hutchison Hall 93
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TA	Mitali Mathur	Gleb Kozliakov	Laurin Curschellas
OH time	Tues. 11am-1pm	Thurs. 10am-12pm	Wed. 8-10am
OH location	SSH 136	SSH 135	Voorhies 225

**Class description:** Analysis of economic data to investigate key relationships emphasized in introductory micro and macro economics. Obtaining, transforming, displaying data; statistical analysis of economic data; basic univariate and multivariate regression analysis.

**Course goals:** This class aims to provide both a theoretical and applied understanding of how variables and the relationships between variables are analyzed in Economics. We will use the standard statistical software *Stata* to read, clean, visualize, and analyze data. The class serves as a bridge between introductory statistics courses and more advanced courses in Econometrics (e.g. ECN 140, 141). Students should expect to participate in lectures through knowledge check exercises and attend sections to gain familiarity with Stata.

**Course materials:** I plan to use Colin Cameron's book [\*Analysis of Economics Data: An Introduction to Econometrics\*](#) (2022), available on Amazon as a physical copy or Kindle download. Chapters 1-4 are available free [here](#). Be aware that Equitable Access provides only a physical copy of the textbook. Please see the tentative class outline below for topics and associated chapters and plan to read these *before* each lecture. I also plan to post blank lecture slides ahead of each class; students can expect to download and annotate these slides to take notes. Completed lecture slides will then be posted following each class. However, **lectures will not be recorded**, so attendance is critical!

**Prerequisites:** ECN 1A-B, Statistics 13 or 32, Math 16A-B; or Consent of Instructor.

**Stata:** The main statistical software we will use for this class, Stata, is unfortunately locked behind a paywall. However, many campus resources exist to access Stata free of charge. Our sections will be held in Hutchison Hall 93, a basement lab with Stata-equipped computers. The availability of this lab outside of class can be checked [here](#). Stata is also now available weekdays and weekends in [Shields 91](#) (see link for hours). After hours, Stata can be accessed remotely using the IET virtual lab, available [here](#). Please contact me or your TA if you are having issues connecting to Stata. The final access option is purchasing a Stata license for your private machine, but you should not feel at all pressured to do this. If you do choose to purchase Stata (BE student 6-month ~\$48), you can get started [here](#).

**Assignments and grading:** The Reader for our class will be Siyu Liu. A breakdown of the assignments in this class and their associated weighting for your final class grade is below:

- Attendance and knowledge check exercises (10%): To ensure that you are regularly attending lecture and engaging with course material, each chapter slide deck will end with an interactive knowledge check exercise to complete and submit to Canvas after the class. These will be graded on effort not accuracy, but serve as good practice questions for exams. I will drop up to two missing knowledge checks for the quarter.
- Homework (10%): Seven homework assignments will offer you the chance to apply concepts from lecture to actual data and applied problems. Each assignment will include some questions that require Stata. Homework problems will be discussed in sections and then be due the following **Sunday at 11:59pm** on Canvas. Homework will be graded on completion, with full marks given for submissions that reasonably attempt at least 50% of questions. Late homework will not be accepted. No homework will be given on exams weeks or Thanksgiving break.
- Stata quiz (20%): As familiarity with Stata is a critical component of this class, we will have our Stata quiz week 8 during discussion section (11/19 or 11/21) that will test your knowledge of data processing, visualization, and analysis. This quiz will be closed-note, but you will have access to all posted homework solutions from submitted assignments.
- Midterm exam (25%) and final exam (35%): Our midterm will take place 11-11:50am 10/30 in class. Our final exam will take place 8-10am 12/12 during finals period. Both exams will be cumulative and closed-book. It is your responsibility to be aware of these dates and any potential conflicts and arrive on time. If you will need to miss the midterm exam, you must notify me *at least one week before the exam* and give a valid reason for your absence. If I accept your petition to miss the midterm, the weight of the midterm in your final grade will be added to your final exam (60% total). There are no makeup exams in this class. Missing the final exam for any reason will result in either failure of the class or an incomplete ("I") grade with valid justification.

**Regrading policy:** Scores for each exam will be available on Canvas within one week of the exam date. In addition, your exam pdf and the grading rubric for each question will be available on Gradescope with points earned/lost. If you feel you were graded incorrectly, you have *one week from when exam scores are released* to contact your TA with a regrade request. It is up to the discretion of the TA whether or not these points will be awarded following a regrade request. If necessary, I reserve the right to make the final decision over the allocation of make-up points. No regrade requests can be accommodated after the one-week window elapses.

**Final grades:** Any curving or rescaling of the grade distribution for this class will not be done until all assignments are submitted and evaluated. There is no hard limit on the distribution of grades in this class, but I expect the class average to fall between 80-85%. Prior to all assignments being graded, however, I cannot provide intuition as to the letter grade associated with any percentage grade. Instead, I encourage all students to compute their z-score following the midterm exam as a signal of their performance in the class: a positive z-score would indicate you are outperforming the average, while a negative z-score would suggest you may be falling behind.

**Special accommodations:** If you have any form of disability, difficulty understanding English, or other extenuating circumstance you feel will prevent you from doing your best in this class, please meet with me during the first week of class to discuss appropriate arrangements. Any student registered to take their exams through SDC should expect to do so. Students taking the midterm and/or final exam through SDC will be provided a non-scientific calculator by default. *Students taking the Stata quiz through SDC should expect to purchase a copy of Stata (BE) software for their personal computer.*

**Cheating:** I have a zero tolerance policy for work submitted that is not your own. This includes but is not limited to: submitting work from another student as your own, submitting work from an external source without proper citation, and submitting work produced by generative AI (e.g. ChatGPT). If I find you have engaged in any form of academic misconduct on any assignment or exam, you will receive a **zero** for that assignment or exam. This includes use of personal electronic devices or talking between students during exams. I also fully reserve the right to submit instances of cheating to student judicial affairs for review and discipline. Please see the full UC Davis Code of Academic Conduct [here](#).

**Diversity and inclusion:** My class is built on a foundation of mutual respect and professional courtesy. All individuals should feel welcome, regardless of their age, sex, gender identity, race, ethnicity, national origin, immigration status, sexual orientation, religious beliefs, socioeconomic status, or disability status. Economics and academia more broadly are enriched through their embrace of diverse perspectives, ideas, and backgrounds. Additional resources for issues of equity and inclusion can be found [here](#). A link to student health and counseling services can be found [here](#). If you feel you have experienced any form of discrimination in my class, please report the matter to me or use the link above.

**Course schedule:** Broadly, this class is broken down into four main components:

- (a) Introduction: what we can do with data
- (b) Univariate analysis: analysis of a single variable (ch. 1-4)
- (c) Bivariate analysis: the relationship between two variables (ch. 5-9)
- (d) Multivariate analysis: the relationship(s) between several variables (ch. 10-15)

A tentative schedule of topics and associated textbook chapters for each week are below. [Brackets] indicate campus holidays when class will not be held.

Week 0: 9/25, 9/27

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class introduction; descriptive statistics: *chapter 1*  
no hw due

Week 1: 9/30, 10/2, 10/4

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data visualization; the sample mean: *chapters 2+3*  
hw 1 due 10/6 at 11:59pm

Week 2: 10/7, 10/9, 10/11

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the sample mean; univariate inference: *chapters 3+4*  
hw 2 due 10/13 at 11:59pm

Week 3: [10/14], 10/16, 10/18

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bivariate data: *chapter 5*  
**no class 10/14** (Indigenous Peoples' Day)  
hw 3 due 10/20 at 11:59pm

Week 4: 10/21, 10/23, 10/25

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the least squares estimator; bivariate inference: *chapters 6+7*  
hw 4 due 10/27 at 11:59pm

Week 5: 10/28, 10/30, 11/1

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bivariate inference: *chapter 7*  
optional practice: *chapter 8*  
**midterm exam 10/30**  
midterm review 11/1  
no hw due

Week 6: 11/4, 11/6, 11/8

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bivariate transformations; multiple regression: *chapters 9+10*  
hw 5 due 11/10 at 11:59pm

Week 7: [11/11], 11/13, 11/15

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multiple regression; multivariate inference: *chapters 10+11*

**no class 11/11** (Veterans Day)

hw 6 due 11/17 at 11:59pm

Week 8: 11/18, 11/20, 11/22

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multivariate inference: *chapters 11+12*

**stata quiz in section 11/19 or 11/21**

no hw due

Week 9: 11/25, 11/27, [11/29]

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indicator variables: *chapter 14*

**no class 11/29** (Thanksgiving break)

no hw due

Week 10: 12/2, 12/4, 12/6

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multivariate transformations: *chapter 15*

optional practice: *chapter 13*

hw 7 (practice final exam) due 12/6 at 11:59pm

knowledge checks due 12/6 at 11:59pm

Final exam: 12/12

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cumulative exam: *chapters 1-15*

8-10am in Walker 1310