

**ECONOMICS 423
PRE-ECONOMETRICS
OREGON STATE UNIVERSITY
CREDITS: 4
FALL 2019**

Instructor: Michael Jerman

Contact Information:

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Office Hours:

Tu: 12:00PM–2:00PM

Or by appointment

Course Description: Introduction to probability and statistics with an emphasis on estimation and hypothesis testing. Applications to economic models.

Learning Outcomes: By the end of the course, students should be able to:

- Explain the relationship between dependence and conditioning
- Compute conditional moments given joint density functions
- Conduct hypothesis tests

Prerequisites: The prerequisites for this course are Math 241 or 251.

Textbook: The recommended textbook for this course is:

- Neil A. Weiss (2015). *Introductory Statistics*, 10th Edition. Pearson Education.

Previous editions are good substitutes and can be found online at very low cost.

Canvas: All announcements, assignments, and grades will be will be posted on Canvas (canvas.oregonstate.edu). This is the official website for the course, and you will be responsible for any and all information that is posted there. If you experience any errors or problems, contact 24-7 Canvas Support through the Help link within Canvas. If you experience computer difficulties, need help downloading a browser or plug-in, or need assistance logging into a course, contact the IS Service Desk for assistance. You can call (541) 737-8787 or visit the IS Service Desk online.

Attendance: Your grade will not formally depend on your attendance during the lectures, but you will be responsible for everything that is discussed in class. As a general rule you should NOT expect, slides, notes, or other materials to be made available outside of class.

Homework: There will be weekly homework assignments throughout the term. No late assignments will be accepted. You are encouraged to work together in groups, but each person must submit their own assignment. Homework is graded primarily on effort and completion. Many of the exam questions will be *very* similar to homework questions.

Exams: There will be one midterm examination and one comprehensive final examination. The midterm will be held in class on Monday, October 28 (week 5). The final exam is **tentatively** scheduled for Thursday, December 12 at 6:00PM (*note that this date and time may be subject to change*). A non-graphing calculator is permitted for each exam.

No makeup exams will be given. If a midterm is missed due to a *documented* emergency, the weight of that exam will be placed on final. An documented emergency that causes you to miss the final will result in an incomplete for the course. Missing any exam for a reason other than a documented emergency will result in a score of zero.

Grades: Your grade will be calculated based on the following weights:

Homework: 30%

Midterm: 30%

Final: 40%

The *minimum* letter grade that you will receive based on your weighted total of points earned is given below:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-
93	90	87	83	80	77	73	70	67	63	60

Statement Regarding Students with Disabilities: Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval, please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Expectations for Student Conduct: Student conduct is governed by the universitys policies, as explained in the Student Conduct Code. Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

Academic Integrity: Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit Student Conduct and Community Standards, or contact the office of Student Conduct and Mediation at 541-737-3656.

Reach Out for Success: University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about resources that assist with wellness and academic success at oregonstate.edu/ReachOut. If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)

Tentative Schedule

All chapters and sections refer to the 10 edition text

	Monday	Wednesday
Week 0		Data and Statistics 1.1, 1.2, 2.1, 2.2
Week 1	Univariate descriptive stats 2.3, 3.1, 3.2, 3.5	Bivariate descriptive stats Chpt 14
Week 2	Basic probability 4.1, 4.2, 4.3, 4.4	Conditional probability 4.5, 4.6
Week 3	Random variables 5.1, 5.2	Discrete distributions 4.8, 5.3
Week 4	Discrete distributions	Review
Week 5	Midterm Exam	Bivariate Distributions 4.4, 4.6
Week 6	Continuous bivariate 4.4, 4.6	Continuous random variables 6.1, 6.2, 6.3
Week 7	Veterans Day No class	Sampling distributions Chpt 7
Week 8	Estimation and inference Chpt 7	Hypothesis testing 9.1, 9.2, 9.3, 9.4
Week 9	Confidence intervals 8.1, 8.2, 9.5, 9.7, 10.1	Confidence intervals
Week 10	Catch-up and Review	Catch-up and Review