University of Oregon 23750/23758 Winter 2020

MATH 4/562: Intro Methods Stats II

Instructor: Matthew Petersen **Phone:** 541-346-8403
Class Time: MWF 12:00–12:50 pm **Email:** mpeters2@uoregon.edu
Classroom: ESL 116
Office Hours: M,W,F 1–2 or by appointment
Office:333D Tykeson

Prerequisites: Math 461

Text and Required Materials:

(1) *An Introduction to Mathematical Statistics and Its Applications*, Larsen & Marx.

Course Description: The course cover chapters 5–9 (perhaps 10) of Larsen and Marx, as an introduction to mathematical statistics. We will learn methods for estimating parameters, confidence intervals, and characteristics of good statistics, and briefly learn about Bayesian statistics. Then we will learn the theory of hypothesis testing, in general, and in one and two-sample situations.

Learning Objective: A successful student should understand the mathematical theory behind statistics.

Classroom Policy, Procedure, and Expectations: Students are expected to take responsibility for their own learning and progress. In general, this includes being aware of university policies and deadlines as well as specific policies, due dates, and exam dates.

Attendance: Attendance is integral to succeeding in this class.
Participation: Students are expected to participate fully in the learning process. This includes completing any reading or other work required for each class before coming to class. During class, students are expected to participate in given activities, as well as to foster a positive and safe atmosphere for experimentation and learning.

Workload: In total, students will spend an average of 6 hours per week on assignments and study outside of class, in addition to the 3 weekly class meeting hours.

Written Homework: There will be homework due each Friday at midnight. Though the homework is due at midnight, we will set aside some class time on Friday to go over questions from the homework.

Quizzes: There will be a quiz each week, generally on Monday. Quizzes will cover the topics covered the week prior, both conceptual and procedural.

Exam: There will be one midtern exam, during week six.

Final: The final will be Wednesday March 18 at 10:15.

Assessment and Grades:

Participation	5%
Homework	12.5%
Quizzes	12.5%
Midterm	30%
Final	40%

Grades are assigned according to the scale

A	90–100%
B	80–89%
C	70–79%
D	60–69%
F	$< 60\%$

Plus and minus grades are awarded to the top and bottom 2 percentage points in each grade bracket (so 98–100 is A+ and 90–92 is A-).

Learning Environment: The University of Oregon strives for inclusive learning environments. Please notify me if the instruction or design of this course results in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 164 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

Academic Conduct: The code of student conduct and community standards is at dos.uoregon.edu/conduct. In this course, it is appropriate to help each other on homework as long as the work you are submitting is your own and you understand it. It is not appropriate to help each other on exams, to look at other students exams, or to bring unauthorized material to exams. All violations will be reported to the Office of Student Conduct.

For the project, copying work from the internet or from other students for the project is a serious violation, and will be reported to the Office of Student Conduct.