



WILLIAM & MARY

CHARTERED 1693

Math 351 Probability and Statistics for Scientists

Fall 2024

Instructor: Yuming Sun

Office: Jones Hall 111

E-mail: ysun30@wm.edu

Office Hours: MW 10:00 AM – 11:00 AM (starting from Sep 4)

Zoom Office: <https://cwm.zoom.us/j/7869287456> (by appointment)

Course Dates: Aug 28, 2024 – Dec 17, 2024

Course Times: MW 2:00 PM – 3:20 PM

Classroom: Jones Hall 302

Course Resources

- Course Website: <https://blackboard.wm.edu/>
- Textbook: *Probability & Statistics for Engineers & Scientists (9th Ed.)*, by Walpole, Myers, Myers and Ye.

Course Policies

- Regular attendance is critical for your success in this course. I expect your presence at every lecture.
- Grades and course materials will be posted regularly on Blackboard.
- Homework will be assigned and graded frequently. Homework should be turned in on 8.5 × 11 paper and stapled. The homework with the lowest grade will be dropped.
- Makeup exams will only be considered for **VERY VALID** reasons like a serious illness or a University excused absence. Official documentation **MUST** be provided in advance.

Grading Structure I

Homework	20%
Mid-term I (Sep 30)	25%
Mid-term II (Oct 30)	25%
Final Exam (Dec 11)	30%

Grading Structure II

Homework	20%
Mid-term I (<i>Sep 30</i>)	25%
Mid-term II (<i>Oct 30</i>)	
Final Exam (<i>Dec 11</i>)	55%

- For grading structure II, the higher midterm grade will contribute 25% to the final grade.
- The final grade will be calculated using both structures, and the higher score will be used.
- Final Grading Schema:

▪ 93 - 100	A	▪ 73 - 76	C
▪ 90 - 92	A-	▪ 70 - 72	C-
▪ 87 - 89	B+	▪ 67 - 69	D+
▪ 83 - 86	B	▪ 63 - 66	D
▪ 80 - 82	B-	▪ 60 - 62	D-
▪ 77 - 79	C+	▪ Under 60	F

Important Dates

- The add/drop deadline is **Sep 9**.
- The withdraw deadline is **Oct 28**.

Topics Covered (subject to change)

1. Introduction to statistics
2. Probability
3. Random Variables and Probability Distributions
4. Mathematical Expectation
5. Discrete Probability Distributions
6. Continuous Probability Distributions
8. Fundamental Sampling Distribution and Data Descriptions
9. One- and Two-Sample Estimation Problems
10. One- and Two-Sample Tests of Hypotheses

Syllabus Changes



This course syllabus is a general plan for the course, deviations may be necessary. If so, you will be notified of any changes to the syllabus.

Students Accessibility Services

William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels they may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see www.wm.edu/sas.

You should request accommodations at the beginning of the semester or as soon as a disability becomes known. Any student who needs accommodations should contact me as soon as possible so that I have sufficient time to make arrangements.

Honor Code

All students are expected to follow the W&M Honor Code. Any suspected violation of academic integrity will be taken very seriously and pursued to the furthest extent possible.

Artificial Intelligence

The use or incorporation of any AI-generated content (from ChatGPT, Dall-e, etc.) in assignments is not allowed.