MATH 4070/5090, Probability and Mathematical Statistics I
Spring 2024

Instructor:
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Class Web Page:

- https://faculty.uml.edu/jongsoo_lee/4070S24.html

Be sure to check often for announcements, homework assignments and other course material.

Class Time and Location:
Th 6:30-9:20 PM
Olsen 348

Office hours:
TuTh 8:00-9:30 AM
Or by appointment

Text:
Required:

- Wackerly, Mendenhall, Scheaffer. *Mathematical Statistics with Applications*, 7th Ed., Duxbury. Will cover chapters 2 to 7.

There may be other resources, such as notes and articles, to be determined. This will be especially relevant for 5090 (graduate) students. I will provide them as needed.

Prerequisites:
Calculus III and Discrete Structures I

Overview:
This course provides a rigorous introduction to probability for students with background in calculus. From the official course description: "Addresses the topics of probability, random variables, discrete and continuous densities, expectation and variance, special distributions (binomial, Poisson, normal, etc.), moment generating functions, joint and conditional distributions, transformations of variables, sampling, and the central limit theorem."
The course serves as a preparation for the subsequent course in mathematical statistics (MATH 4860/5880) and also prepares students for taking Exam P of the Actuarial Exam.

Homework:
Homework will be assigned weekly (unless otherwise announced) and must be turned in at or before the beginning of class on the due date. You may work with fellow students on the homework problems, but please write up the homework solutions on your own and show all your work. Late homework will be subject to penalty unless the student has obtained a prior approval from the instructor (not accepted at all if more than a few days late or unexcused). *The homework grade will be made available to student only by visiting the instructor and discussing the homework solutions.*

Exams:
There will be a quiz, two exams and a final exam (all in-class).

Quiz:	Thursday, February 15
Exam 1:	Thursday, February 29
Exam 2:	Thursday, April 11
Final Exam:	TBD

All exams are closed-book, but you may bring a limited amount of notes.

Attendance Policy:
Attending every class is required. You may be called upon to participate in class activities and are responsible for everything said in class. Excused absences require valid justification, and make-up works are at the discretion of the instructor.

Academic Integrity:
Academic dishonesty is prohibited in all programs of the University and sanctions may be imposed on any student who commits an act of academic dishonesty. Details on UML policy can be found at

- `www.uml.edu/catalog/undergraduate/policies/academic-policies/academic-integrity.aspx` (Undergraduate)
- `www.uml.edu/Catalog/Graduate/Policies/Academic-Integrity.aspx` (Graduate)

Course Grade (approximate):

- 40% Homework and class participation
- 5% Quiz
- 15% Exam 1
- 15% Exam 2
- 25% Final exam