

STAT 6301 Probability for Statistical Inference

Autumn Semester 2026

Lecture

MWF 11:30AM-12:25PM in Cockins Hall 312, first instructional day is Aug 26

Instructor

Paul Wiemann

Office: Cockins Hall 219

Office Hours: M 12:30PM -- 1:30PM or by appointment

Email: wiemann.3 at osu.edu

Qualification: Doctorate from University of Göttingen, Germany

Office Hours

Please arrive within the first 10 minutes of scheduled office hours or let me know by email if you plan to arrive later. For some weeks, I will need to hold office hours at a different time. Those will be announced in Carmen.

Grader

Chenze Li

Email: li.13074 at osu.edu

Prerequisites

Math 4547 or Math 548 or permission of instructor.

Short description

Introduction to probability, random variables, and distribution theory; intended primarily for students in MAS degree program.

Textbook

Mathematical Statistics and Data Analysis (Third Edition) by John Rice (ISBN 978-0-534-39942-9).

Note: The international edition has different exercise problems and is therefore not recommended. To verify that you have the correct edition, check the ISBN.

Website

The course has a web page on CarmenCanvas. You will find the class schedule, homework assignments, and other course announcements on the web page. Please check it on a regular basis.

Course delivery

The class is scheduled to be delivered in person.

Classroom engagement

To make our time together more focused and productive, this will be a “dumb” classroom, which simply means that smart devices (e.g., phones, tablets, laptops) should stay closed unless you’re using them for class purposes. You’re welcome to use your device if it helps you, for example,

- to take notes in a way that works best for you,
- to answer polls or in-class questions, or
- view class materiel.

If you’re using your device for anything outside of these purposes (like texting, browsing, or checking social media), it can be distracting for both you and others. In those cases, I may ask you to close it or step out for the rest of class.

Use of recording devices in class

In accordance with Ohio Administrative Code Rule 3357-15-13-37, electronic recording (for example, photo, audio, or video) of class lectures or class activities is prohibited. Exceptions may only be granted when a student has obtained prior written permission from the instructor or has a documented accommodation approved by Student Life Disability Services and has informed the instructor of the accommodation.

Homework & Quiz

Homework

There will be approximately one assignment every week. Homework problems and will be posted on Carmen. They are to be submitted online through Carmen by 10:30am on the due dates. No late assignments will be accepted. See Carmen for a tentative homework assignment schedule.

Quiz

There will be three to five in-class quizzes. See Carmen for a tentative quizz schedule. Quiz dates will be fixed no less than seven days prior to the quiz. Students are expected to participate in all quizzes; not attendance will be marked with 0 points. Answers without work may not receive credit.

Grading-related Questions

The grader is the primary point of contact for grading-related inquiries. Should additional clarification be needed after consulting with the grader, or if the issue remains unresolved, you are welcome to bring the matter to the instructor.

Exams

No make-up exams will be given. The final exam will be cumulative but will emphasize the more recent material. Exam rules will be announced in class.

Attendance

Students are expected to attend as the class is delivered in person.

Grading

Your course grade will be based on in-class quizzes, homework assignments, two midterms, and a comprehensive final exam.

Homework	10%	Effort only, two lowest grades dropped
Quizzes	20%	In-class, lowest grade dropped
Midterm I	20%	tentatively on October 9 (Friday) in-class
Midterm II	20%	tentatively on November 9 (Monday) in-class
Final	30%	December 17 (Thursday) 10:00AM-11:45AM

Grading Scale

Letter Grade	Percentage Range
A	100% to 93%
A-	< 93% to 90%
B+	< 90% to 87%
B	< 87% to 83%
B-	< 83% to 80%
C+	< 80% to 77%
C	< 77% to 73%
C-	< 73% to 70%
D+	< 70% to 67%
D	< 67% to 60%
E	< 60% to 0%

Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call 614-688-HELP at any time if you have a technical problem.)

Grading and feedback

For assignments, you can generally expect feedback within 7-14 days.

Email

I aim to reply to emails within 2 school days.

Tentative Course Schedule

Week	Chapters	Topic
1	1	Sample space and probability
2	1	Sample space and probability
3	1, 2	Sample space and probability, Univariate random variables
4	2	Univariate random variables
5	2	Univariate random variables
6	2, 3	Univariate random variables, Joint distributions
7	3	Joint distributions
8	3	Joint distributions
9	3	Joint distributions
10	3, 4	Joint distributions, Expectations and variances
11	4	Expectations and variances
12	4	Expectations and variances
13	4	Expectations and variances
14	5	Law of large numbers and CLT
15	5	Law of large numbers and CLT
16	6	Normal-derived distributions

University Policies

Standard Syllabus Statements

- [Academic Misconduct](#)
- [Religious Accommodations](#)
- [Accommodations for Disability and Illness](#)
- [Intellectual Diversity](#)
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- [Mental Health Support](#)
- [Resources for Military-Connected Students](#)
- [Campus-wide Class Cancellations](#)