MATH 407: Probability Theory

Spring 2021 Syllabus

Type	Section	Time	Location	Instructor
Lecture	39981	MWF 1:00-1:50pm	Zoom	Haitian Yue
Discussion	39982	TuTh 12:00-12:50pm	Zoom	Oleksandra Lymar
Discussion	39983	TuTh 1:00-1:50pm	Zoom	Oleksandra Lymar

Disclaimer: This syllabus does not constitute a contract. The Instructor reserves the right to make changes at his discretion throughout the semester.

Contact Information:

• Instructor: Dr. Haitian Yue

Office: KAP 416F

Email: haitiany@usc.edu

Office hours: Thursday 2:00 - 4:00 pm (in the same Zoom link as lecturers) or by appointment

• TA: Ms. Oleksandra Lymar Email: lymar@usc.edu

Zoom: Our lectures, office hours, discussions and exams are all via Zoom. Please download the Zoom software in https://zoom.us/download for many different platform (e.g. PC, Mac, iOS and Android etc). You should have your **camera on** for all Zoom meetings. For audio, it helps to have your own microphone **muted** until you want to speak or ask a question.

I will record lectures live each Mon/Wed/Fri at 1:00-1:50pm for some students in different time zones.

For the lectures, my office hours and exams, we will use the following Zoom ID:

• Zoom Meeting ID: 985 7019 0997

• Passcode: Fn9v45ohFH

Also you could join Zoom Meeting via this link:

https://usc.zoom.us/j/98570190997?pwd=c3NId3ZGa3N3S11JeU9RYnBn0FdsUT09 and please download and import the following iCalendar (.ics) files to your calendar system in the link.

Course Description: Introduction to the theory of probability. Discrete and continuous random variables. Jointly distributed random variables, and properties of Expectation. Limit Theorems. Discussion of some of the probability problems encountered in scientific and business fields.

Course Textbook:

Sheldon Ross, A first course in probability 10th Edition.

Blackboard learning management system: Homework assignments as well as announcements concerning the course will be posted to Blackboard http://blackboard.usc.edu. It is your responsibility to check Blackboard frequently. Your scores will also be recorded on Blackboard. It is your responsibility to check that your scores are recorded correctly.

Important Dates:

Feb. 5, Friday March 5, Friday	Last day to add or drop classes. Last day to drop a course without a mark of "W" on the transcript.
, ,	Last day to drop a class with a mark of "W".
	Final exam; Time: 2:00-4:00pm; Room: Zoom

Grade weights:

 $^{^{1}\}mathrm{drop}$ without a mark "W" and receive a refund

Quizzes:	15%
HWs:	25%
Two Midterm Exams:	15% each
Final Exam:	30%

Homework & Quizzes:

- Homework: Homework will be assigned and posted in Blackboard on Fridays, and will be due at the 11:59 pm, Fridays. The homework should be submitted in the Blackboard system. An assortment of the problems from each homework will be graded. In your solutions, you should give at least a brief explanation where applicable (e.g. for problems whose answer is just "yes" or "no"). No homework will be due in the same week as an exam. In order to account for unexpected circumstances, your lowest two homework scores will be dropped.
- Quizzes: There will be quizzes at the end of Tuesday discussion sessions, which cover the material on the homework that is due Thursday in the same week. The quizzes are also required to be submitted in the Blackboard system. There will be no quiz the first week, and no quiz in the same week as an exam. No make-ups under no circumstances. In order to account for unexpected circumstances, your lowest two quiz scores will be dropped.

Exam Policy:

- An A4 cheatsheet and a basic calculator are allowed.
- No cell/smart phone or other electronic smart device will be allowed during an examination.
- If there is a scheduling conflict for an exam, you must let ME know at least 2 weeks before the examination. A scheduling conflict must involve an activity sponsored and approved by USC (marching band, athlete event, etc.). In particular, the university club or organization in question must send an official request, with the Dean's approval, to all faculty. Personal activities do not qualify. FAILURE TO ATTEND AN EXAMINATION WILL NOT BE EXCUSED UNDER NO CIRCUMSTANCES.

Academic Integrity: You must abide by the university policies on academic integrity. Please review them here. In essence, these policies require you to be honest. So, please: be honest.

Students with disabilities: Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be the letter is delivered to the instructor as early in the semester as possible. DSP is located in STU 301 and is open 8:30a.m.-5:00p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

¹We will have a take home midterm in the spring break.