MATH 407: Probability Theory  
Spring 2021 Syllabus

<table>
<thead>
<tr>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>39981</td>
<td>MWF 1:00-1:50pm</td>
<td>Zoom</td>
<td>Haitian Yue</td>
</tr>
<tr>
<td>Discussion</td>
<td>39982</td>
<td>TuTh 12:00-12:50pm</td>
<td>Zoom</td>
<td>Oleksandra Lymar</td>
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<tr>
<td>Discussion</td>
<td>39983</td>
<td>TuTh 1:00-1:50pm</td>
<td>Zoom</td>
<td>Oleksandra Lymar</td>
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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 at https://zoom.us/download for many different platforms (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:** Fm9v45ohFH

Also, you could join Zoom Meeting via this link: https://usc.zoom.us/j/98570190997?pwd=c3NId3ZGa3N3S11JeU9RYnBnQFdsUT09 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.


Blackboard learning management system: Homework assignments as well as announcements concerning the course will be posted to Blackboard at 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:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>Feb. 5, Friday</td>
<td>Last day to add or drop classes.</td>
</tr>
<tr>
<td>March 5, Friday</td>
<td>Last day to drop a course without a mark of “W” on the transcript.</td>
</tr>
<tr>
<td>April 10, Friday</td>
<td>Last day to drop a class with a mark of “W”.</td>
</tr>
<tr>
<td>May 5, Wednesday</td>
<td>Final exam; Time: 2:00-4:00pm; Room: Zoom</td>
</tr>
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</table>

Grade weights:

1. drop without a mark "W" and receive a refund
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.

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