MATH 180A - INTRODUCTION TO PROBABILITY

FALL 2018

Textbook: *Introduction to Probability* by Anderson, Seppäläinen, and Valkó

Course description: Time permitting, we will cover the material in the course catalogue description (see https://www.ucsd.edu/catalog/courses/MATH.html#math180a):

*Probability spaces, random variables, independence, conditional probability, distribution, expectation, variance, joint distributions, central limit theorem.* (Two units of credit offered for Math 180A if Econ 120A previously, no credit offered if Econ 120A concurrently. Two units of credit offered for Math 180A if Math 183 or 186 taken previously or concurrently.) Prior or concurrent enrollment in Math 109 is highly recommended. Prerequisites: Math 20C or Math 31BH, or consent of instructor.

Grading: Raw scores \((R)\) will initially be computed according to the formula

\[
R = 0.2H + 0.2M_1 + 0.2M_2 + 0.4F;
\]

however, your lowest scoring homework assignment will be omitted from the calculation. Furthermore, the final exam can take the place of your lowest scoring midterm exam. So, your final raw score will be computed as

\[
R = \max \left\{ 0.2H + 0.2M_1 + 0.2M_2 + 0.4F, 0.2H + 0.2 \max(M_1, M_2) + 0.6F \right\}.
\]

The class will then be curved with historical departmental practice in mind.

Final exam: The final exam will take place on December 14th, 2018 from 8:00 AM to 11:00 AM. If you cannot take the final exam at its scheduled time, then you should not enroll in the class.

Lectures: The lectures will take place in 214 Center Hall on Mondays, Wednesdays, and Fridays from 10:00 AM - 11:00 AM. Attendance is not mandatory; however, it is a fundamental part of the course. In particular, you are responsible for material presented in lecture whether or not it is discussed in the textbook. You should expect questions on the exams that will test your understanding of concepts discussed in lecture.

Reading: Reading the sections of the textbook corresponding to the assigned homework exercises is considered part of the homework assignment. In particular, you are responsible
for material in the assigned reading whether or not it is discussed in the lecture.

**Makeup policy:** Makeup exams are not offered. Similarly, late homework assignments are not accepted.

**Piazza:** We will use Piazza for the majority of communications about course material. You may sign up for the course Piazza page at https://piazza.com/ucsd/fall2018/math180a.

**Academic Integrity:** UC San Diego’s code of academic integrity outlines the expected academic honesty of all students and faculty and details the consequences for academic dishonesty (see https://students.ucsd.edu/academics/academic-integrity/index.html).

The main issues are cheating and plagiarism, for which we have a zero-tolerance policy. (Penalties for these offenses always include assignment of a failing grade in the course and usually involve an administrative penalty, such as suspension or expulsion, as well.) At the same time, academic integrity also includes things like giving credit where credit is due and treating your peers respectfully in class. In particular, here are a few of our expectations for etiquette in and out of class.

- **Entering/exiting class:** Please arrive on time and stay for the entire class/section period. If, despite your best efforts, you arrive late, please enter quietly through the rear door and take a seat near where you entered. Similarly, in the rare event that you must leave early (e.g., for a medical appointment), please sit close to the rear exit and leave as unobtrusively as possible.
- **Noise and common courtesy:** When class/section begins, please stop your conversations. Wait until class/section is over before putting your materials away in your backpack, standing up, or talking to friends. Do not disturb others by engaging in disruptive behavior. Disruption interferes with the learning environment and impairs the ability of others to focus, participate, and engage.
- **Electronic devices:** Please do not use devices (such as cell phones, laptops, tablets, iPods) for non-class-related matters while in class/section. No visual or audio recording is allowed in class/section without prior permission of the instructor (whether by camera, cell phone, or other means).
- **E-mail etiquette:** You are expected to write as you would in any professional correspondence. E-mail communication should be courteous and respectful in manner and tone. Please do not send e-mails that are curt or demanding.

**Accommodations:** Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD), which is located in University Center 202 behind Center Hall. Students are required to present their AFA letters to the instructor (please make arrangements to contact your instructor privately) and to the OSD Liaison in the department in advance (by the end of Week 2, if possible) so that accommodations may be arranged. For more information, see https://disabilities.ucsd.edu/.

**E-mail format:** Piazza is the recommended form of communication about course material. In the event that you need to contact either myself or a TA via e-mail, please make sure to include the course code and your student ID in the title. For example, “Math 180A (STUDENT ID HERE) - ISSUE HERE”.
Contact information

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Office hours: Wednesdays, 3-5 PM (subject to change)