Instructor: Misha Sweeney
E-Mail Address: sweeney@math.utah.edu
Instructor Office hours: T-Th 4:30-5:30
Office hours location: Online (Zoom)
Course type: IVC
Course meetings: T-Th 5:30-7:00PM
Course location: Online (Zoom)
Textbook: Introduction to Probability, by David F. Anderson, Benedek Valkó, Timo O. Seppäläinen
ISBN-10: 9781108415859

Prerequisite
Prerequisites: "C" or better in (MATH 2210 OR MATH 1260 OR MATH 1280 OR MATH 1321 OR MATH 3140).

Course Description
Combinatorial problems, random variables, distributions, independence and dependence, conditional probability, expected value and moments, law of large numbers, and central limit theorems.

Attendance
The course will be flipped classroom, where lectures are to be watched before class. Class time then will be a brief summary of the lecture, some additional problems, and time to answer questions or clarify content. Attendance is not mandatory but highly encouraged. For security reasons students must be logged into a Zoom account associated with their UID email. On days when there is a test or quiz it is expected that students are present and able to have their cameras on for the duration of the test or quiz. Breakout rooms will be used during the course for students to work on solving problems together. While students are encouraged to work together, student’s will be given the option to go to a “passive” breakout room where they may work by themselves.

Technological requirements:
These policies are in place to help the course run smoothly.

1. Students must have access to a scanner. Using a device to scan in images is fine. Blurry images and illegible work will not be accepted.

2. Students must have access to a webcam and microphone.

3. Students must have Zoom installed.

4. Students must have access to internet with adequate bandwidth to support video at a minimum for exams and quizzes.

5. Students will use Gradescope to turn in assignments. This will be a linked page in Canvas.

6. It is the student’s responsibility to keep track of due dates and turn in assignments on time. Technical troubles are not an acceptable excuse for turning in assignments late. If you expect to have troubles with this class due to technical issues, such as inconsistent internet access or needing to use a VPN due to living outside of the US, it is your responsibility to inform the instructor by the end of Tuesday, May 18th. If issues arise during the course of the semester, it is the student’s responsibility to inform the instructor as soon as feasible.

Late work
Quizzes cannot be taken late, although the 3 lowest quiz scores will be dropped. Late homework will not be accepted without extenuating circumstances.

Course communication
All course communication will take place via Canvas or Zoom. It is the student’s responsibility to regularly check the Canvas announcements for course updates. I encourage you to use Canvas discussions as a place to build classroom community, form study groups, and get assistance from others or myself.
Keep communications civil and make sure they comply with the student code of conduct. There will be zero tolerance for derogatory or offensive posts. **This includes private messages to other students and the instructional team.** Private chat will be enabled during the Zoom calls, **the instructor cannot view private messages between other users.** This feature will be left enabled to help better foster community but if there are reports of it being abused it will be turned off. If you are a victim of inappropriate zoom chats during this, or any other course, it is encouraged that you document this and report it to the Office of Inclusive Excellence (https://inclusive-excellence.utah.edu/secure/report-form.php).

**Course Outline**

**Flipped Classroom:** The course will be “flipped,” meaning that students are expected to watch pre-recorded lectures before the class period. During the class period then, the instructor will summarize the material, field HW / general questions, and give motivating problems to work on.

**Homework:** There is homework due every week on Friday from sections covered throughout the week (T-Th). Homework will be submitted via Canvas and is due by midnight on Friday the following week. Emailed homework will not be accepted and late homework will not be accepted without extenuating circumstances. Homework will be graded only for completion and is mainly for the student’s enrichment.

**Quizzes:** There will be a quiz after every class period covering content from the pre-recorded lecture for the class. The quiz will be open for 20 minutes and available to take up until the beginning of the following class period. The quiz will be very similar to the HW problems. There are no makeup quizzes, but the lowest three scores will be dropped at the end of the semester. Quizzes are to be taken and submitted through canvas.

**Exams:** There will be six exams throughout the course of the class, one every two weeks. They will cover the preceding 4 weeks of content, except for the first, which will only cover the first 2 weeks of content. The lowest exam score will be dropped.

**Grading weight and scale**

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<tr>
<th></th>
<th>Homework</th>
<th>Quizzes</th>
<th>Exams</th>
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<td>10%</td>
<td>30%</td>
<td>60%</td>
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<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
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<tbody>
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<td>A</td>
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<tr>
<td>A-</td>
<td>[93,90]</td>
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<tr>
<td>B+</td>
<td>[90,87]</td>
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<tr>
<td>B</td>
<td>[87,83]</td>
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<tr>
<td>B-</td>
<td>[83,80]</td>
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<td>C+</td>
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<td>C</td>
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<td>D+</td>
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*The instructor has the right to modify if necessary.

**Additional resources:** There is free tutoring through the T. Benny Rushing Mathematics Student Center which is offered online. For more information see http://www.math.utah.edu/undergrad/mathcenter.php

The math department has a full set of lecture videos which you are welcome to use to supplement our course material. These can be found at http://www.math.utah.edu/lectures/

**Covid-19**

Students must self-report if they test positive for COVID-19 via coronavirus.utah.edu. Please do not come to class if you are experiencing COVID-19 symptoms. Remember to maintain social distancing at all times. Face coverings are required for students and faculty. Based on CDC guidelines, the university requires everyone to wear face coverings in shared public spaces on campus, including our classroom. As a reminder, when I wear a face covering, I am protecting you. When you wear a face covering, you are protecting me and all of your classmates. If you forget your face covering, I will ask you to leave class to retrieve it. If you repeatedly fail to wear a face covering in class, I will refer you to the Dean of Students for a possible violation of the Student Code. Note that some students may qualify for accommodations through the Americans with Disabilities Act (ADA). If you think you meet these criteria and desire an exception to the face covering policy, contact the Center for Disability and Access (CDA). Accommodations should be obtained prior to the first day of class so that I am notified by CDA of any students who are not required to wear a face covering.

**Student Responsibilities:** All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft,
etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, and I will do so, beginning with verbal warnings and progressing to dismissal from and class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee. http://regulations.utah.edu/academics/6-400.php

**Students with disabilities** The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

**Safety:** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit https://safeu.utah.edu/.

**Addressing Sexual Misconduct:** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veterans status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety 801-585-2677(COPS).

**Student names and pronouns:** Class rosters are provided to the instructor with the students legal name as well as Preferred first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name on your U-ID card, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

**Student Wellness:** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student’s ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776.

**Veterans Center:** If you are a student veteran, the U of Utah has a Veterans Support Center located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: http://veteranscenter.utah.edu/. Please also let me know if you need any additional support in this class for any reason.

**University Counseling Center:** The University Counseling Center (UCC) provides developmental, preventive, and therapeutic services and programs that promote the intellectual, emotional, cultural, and social development of University of Utah students. They advocate a philosophy of acceptance, compassion, and support for those they serve, as well as for each other. They aspire to respect cultural, individual and role differences as they continually work toward creating a safe and affirming climate for individuals of all ages, cultures, ethnicities, genders, gender identities, languages, mental and physical abilities, national origins, races, religions, sexual orientations, sizes and socioeconomic statuses.
Office of the Dean of Students: The Office of the Dean of Students is dedicated to being a resource to students through support, advocacy, involvement, and accountability. It serves as a support for students facing challenges to their success as students, and assists with the interpretation of University policy and regulations. Please consider reaching out to the Office of Dean of Students for any questions, issues and concerns. 200 South Central Campus Dr., Suite 270. Monday-Friday 8 am-5 pm.