

MAT3338: Probability

Spring 2019

Course Logistics

Instructor: Dr. Anna Vershynina

Lecture time: Tuesday, Thursday 10:00am-11:20pm in SEC 202

Contact: anna@math.uh.edu

Please include “MATH 3338” in a subject so that your letter won’t be regarded as spam

Office hours: preliminary office hours are Tuesday 11:30am-12:30pm or by appointment, in my office 634 PGH.

Course website: <https://www.math.uh.edu/~anna/2019-3338/2019-3338.html>

Textbook

We will be using the book “Introduction to Probability, Statistics, and Random Processes” by Hossein Pishro-Nik. You are not required to purchase the book, as it is openly available online at <https://www.probabilitycourse.com/>.

Prerequisites

MATH 1432

Course Overview

During the course we aim to cover the following topics:

Basic Concepts (Set theory, probability)	2 weeks
Combinatorics	1 week
Discrete random variables	1 week
Continuous and mixed random variables	2 weeks
Joint distributions	1 week
Multiple random variables, Probability bounds	2 weeks
Limit theorems and convergence: Law of large numbers, Central limit theorem	2 weeks

The list is subject to change.

Grading Policy

Your final grade will break down as follows:

- Homework: 7% (one lowest grade will be dropped)
- Quizzes: 15% (one lowest grade will be dropped)
- Midterm 1: 20%
- Midterm 2: 20%
- Final: 38%

Attendance

Attendance for the class is not mandatory, but strongly advised. If you miss class, for whatever reason, you are responsible for all material covered, any assignments missed, and any announcements made in class. If you have to miss classes for a prolonged period due to a serious illness, you should contact me as soon as possible.

The class will start on time every time. Tardiness is disrespectful and disruptive to the instructor and to your fellow students, who arrived on time. Do not be late for classes, as you will lose the opportunity to turn in your homework or take a quiz. If you come in late, you are not allowed to distract any students. Coming to class on time is entirely your responsibility. If you have any concerns or you are expecting to be late often for a valid reason, please talk to me about it at the start of the semester, or as soon as the matter preventing you from being tardy arises. But note, that homework or quiz, that has already been missed, will not be excused for any reason, as one lowest grade for each will be dropped. I strongly discourage you to miss any classes.

Academic Honesty Policy

You are expected to adhere to the Academic UH Honesty Policy on all assignments at all times. Violation of the Policy in any form may result in disciplinary actions in this course, at the department and college levels.

Homework

A list of homework problems can be found on the class website. Homework will be checked for completeness only, not correctness. But a solution MUST be relevant to the problem and should not be a copy of another student's work. Homework is due at the beginning of the class on days indicated in the calendar on the class website. Once I begin the instruction, homework may no longer be turned in. No late homework will be accepted for any reason, because one lowest grade will be dropped.

Quizzes

About once a week there will be a short 10-15-min quiz at the beginning of the class. The quiz will consist of one/two homework problems that are due on or before the day of the quiz. The day of the quiz is indicated in the class calendar on the class website. Once the quiz is started, I will not distribute any more problem sheets, including to any late arrivals. If you arrive late, you will miss the quiz. There will be no exceptions or makeup quizzes, if you miss it for any reason, because one lowest grade will be dropped.

No books, notes, calculators, cell phones, any electronic devices, or any other help is permitted on the test.

Midterms

There will be two midterm exams held during the class. The dates of midterms will be communicated later. Each exam will start at the beginning of the class and will last for 80 min. Do not be late for the class, or you will lose exam time.

Each midterm will mostly cover material not covered by a previous one. A more detailed list will appear here later and will be communicated in class.

No books, notes, calculators, cell phones, any electronic devices, or any other help is permitted on the test. Bring your student ID cards to midterms.

There will be no make up midterms. If you miss a midterm for any reason, the weight of that exam will be added to the weight of the final. You may miss only one midterm exam per this policy. The second missed midterm will result in a zero grade, if you miss it for any reason. If you miss both exams for reasons described in the section Extraordinary circumstances below, and you are able to provide satisfactory documentations in a timely manner (in particular, before the last day of class), the weight of the first midterm will go to final, and the weight of the second one will be spread out between homework and quizzes. I strongly discourage you to miss any midterms for any reason.

Final

Final will be held on May 9. It will start at 11:00am in our classroom SEC 202. The final will cover ALL material from the beginning of the semester.

No books, notes, calculators, cell phones, any electronic devices, or any other help is permitted on the test. Bring your student ID cards to the final. There will be no make up final.

IMPORTANT

Retain ALL class material until you see your final grade in the system. Do NOT throw away any of your graded homework, exams, problems sets,... until the final grade is posted.

Extraordinary circumstances

An excuse from a midterm or quiz will be granted only for the following reasons:

- Serious illness, with a doctor's note
- Major religious observation, with a note from a religious leader
- Family emergency, with appropriate documentation
- Active military service, with appropriate approvals

If you happen to find yourself in any of the above circumstances, contact me as soon as possible, and bring the appropriate documentation in a timely manner (in particular, before the last day of classes). If the absence is foreseen, you must contact me before the exam takes place. Each individual circumstance will be reviewed, and I will decide whether documentation presented is sufficient to demonstrate an excused absence.

UH CAPS

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

Learning accommodations

Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please visit The Center for Students with DisABILITIES (CSD) website at <http://www.uh.edu/csd/> for more information. Do not hesitate to contact me to discuss such concerns/needs.