

Math 4320 (Fall 2020): Course Syllabus

Professor William Ott

Office hour: Wednesday 11

Email: [wrott\[at\]central\[dot\]uh\[dot\]edu](mailto:wrott@central.uh.edu)

Office: Microsoft Teams

<https://www.math.uh.edu/~ott/>

Overview. Stochastic processes are mathematically beautiful. Stochastic models describe a broad array of phenomena, ranging from biocircuits to atmospheric dynamics. In this course, I will introduce you to stochastic processes. I will focus on theory, applications, computational proficiency, creative thinking, and clarity of communication.

Literature.

(1) Required textbook

(a) *An Introduction to Stochastic Modeling (Fourth Edition)* by Pinsky and Karlin

(2) Additional resources

(a) *Introduction to Probability Models (Twelfth Edition)* by Sheldon Ross. Note: Edition 11 would also work.

Assignments. You will be given two or three problem sets every 21 days. Several randomly selected problems from each set will be graded. Your lowest problem set score will be dropped when your course grade is computed.

Grading. Your course grade will be based on assignments and exams. The distribution is as follows.

| | |
|-------------|-----|
| Assignments | 34% |
| Exam 1 | 22% |
| Exam 2 | 22% |
| Final Exam | 22% |

Digital interfacing.

(1) Lectures and office hours will take place on Microsoft Teams. We will meet together for live lectures at our scheduled lecture times. I will record the lectures for those who need to watch them later.

(2) Course material such as assignments, reading information, exam material, solutions, and announcements will be available here:

<https://www.math.uh.edu/~ott/>

(3) Scores on assignments and exams will be accessible via the Blackboard system.

UH CAPS statement. 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 (<https://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. Also, there is no appointment necessary for the [Let's Talk Program](#), which is a drop-in consultation service at convenient locations and hours around campus.

Religious holy days. Students whose religious beliefs prohibit class attendance or the completion of specific assignments on designated dates may obtain an excused absence. To do so, please make a written request for an excused absence and submit it to your instructor as soon as possible, to allow the instructor to make arrangements. For more information, see the [Student Handbook](#).

Excused absence policy. Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston [Undergraduate Excused Absence Policy](#) and [Graduate Excused Absence Policy](#) for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Additional policies address absences related to [military service](#), [religious holy days](#), [pregnancy and related conditions](#), and [disability](#).

Interim undergraduate grading policy. Due to the unique and unprecedented challenges associated with the COVID-19 pandemic, the University of Houston has implemented an [Interim Undergraduate Grade Policy](#) for undergraduate grades which applies to all undergraduate students in courses offered in all sessions during fall 2020. Under this policy, students have the option of converting final assigned letter grades to S (Satisfactory, applicable to any letter grade from A to D-) or NCR (No Credit Reported COVID-19, applicable to grades of F) on their transcripts. Please visit [FAQs](#) for additional information.

Recording of class. Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the [Center for Students with DisABILITIES](#). If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and note-taking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus changes. Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible.