MAT330/681 SPRING 2021

SYLLABUS

Welcome to MAT330/681!

To help get things started, I have assembled below some important information about this course, including details on Exams, Grades, Homework Assignments, etc. Please **READ CAREFULLY** and in its entirety. This and much more information can be found in the course webpage:

http://www.lehman.edu/faculty/rbettiol/lehman_teaching/2021mat330.html

1. About this course. As described in the official Lehman College course description, the contents of this course include: "Basic probability theory, combinatorial problems, distributions, expectation, law of large numbers and central limit theorem, Bernoulli processes, and Markov chains." This means we will learn the basic mathematical tools used to model and compute how likely a certain outcome is in an experiment where chance is involved. Probability is perhaps the most fundamental tool in modern decision-making, and has become an extremely desirable skill for all job applicants in quantitative and STEM fields. This course is also cross-listed as a basic graduate course (MAT681). Unfortunately, due to the ongoing COVID-19 pandemic, all activities of this course (lectures, assignments, and final exam) will be conducted remotely.

2. Classes. All lectures will be online, due to the ongoing COVID-19 pandemic. As detailed in the dayby-day schedule posted on the course website, lectures will be either **pre-recorded** or **live (via Zoom)**. Pre-recorded lectures are the majority of lectures, and consist of a sequence of short videos that will be posted on the course website, and are to be watched and worked through. You may complete these lectures at any time of the day that is most convenient for you; however, you will have to keep up with the weekly schedule in order to be able to complete homework assignments. Live lectures will be conducted via Zoom at scheduled class times according to the day-by-day schedule and recorded (you will receive an email to register and receive an individualized zoom link at the beginning of the semester). Your participation in the live lectures is strongly encouraged, but not mandatory, as you can watch the video recording afterwards.¹

3. Online. There are 2 important websites you will use for this course:

(A) Course website: http://www.lehman.edu/faculty/rbettiol/lehman_teaching/2021mat330.html

- (B) Blackboard: https://bbhosted.cuny.edu/webapps/login/noportal This is where you will access and submit your homework, and see your grades.
- 4. Textbook. The main textbook that will be used in this courses is:

A First Course in Probability, by Sheldon Ross, Pearson (10th edition)

Although the 10th edition is preferred, you may use previous editions (such as the 8th or 9th), also published by Pearson. You may be able to find electronic versions of this textbook or purchase inexpensive used copies. It is indifferent which format of the textbook you are using, as long as you have access to it (since some complementary reading will be assigned from it). Additional references and learning resources are listed on the course website, and this list might be expanded throughout the course.

¹Disclaimer concerning class recordings: Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

5. Homework. We will have weekly homework assignments due on Wednesdays, that will be posted and conducted entirely via Blackboard (under the "Assignments" tab), according to the tentative day-by-day schedule, but subject to changes. It is your responsibility to stay up-to-date with the assignments and allow yourself sufficient time to complete them prior to the deadline, taking into account any possible technical or internet connection issues. Blackboard is programmed to shut off each assignment at the specified deadline, and there will be no extensions or opportunities to re-take past homeworks.

6. Exam. There is only one (Final) Exam in this course, that will take place (remotely) on May 19, 2021. Please be sure to mark your calendars to have 2 hours of uninterrupted time to complete your exam that day. Detailed logistics on how the exam will be delivered will be announced later during the semester.

7. Grades. Course letter grades will be determined based on the homework (60%) and Final Exam (40%).

8. Students with disabilities. Lehman College is committed to providing access to all programs and curricula to all students. Students with disabilities who may need classroom accommodations must register with the Office of Student Disability Services. For more information, please contact the Office of Student Disability Services, Shuster Hall, Room 238, at 718-960-8441.

9. Academic integrity and class policies. The highest levels of academic integrity, as detailed in the

- (1) CUNY Academic Integrity Policy http://www2.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/academic-integrity-policy/
- (2) Lehman College Undergraduate Bulletin

https://lehman.smartcatalogiq.com/2019-2021/Undergraduate-Bulletin/Academic-Services-and-Policies/Academic-Integrity

must be upheld in all activities related to this course. Students are encouraged to discuss homework problems with each other, but are required to write their solutions independently. CUNY-wide and Lehman College policies and procedures that are in effect regarding academic integrity, attendance, student conduct, secular and religious holidays, reasonable accommodations and academic adjustments, etc will be followed strictly. Identical solutions or solutions copied from online forums and other websites will receive a zero grade and will be referred to the Office of Student Affairs for disciplinary sanctions. Absence from an exam will result in a zero grade for that exam, except in extraordinarily unusual circumstances, with both a valid written excuse and instructor approval. Any requests for grade revision must be submitted in writing (by email).