

## MAT330/681 SPRING 2020

### 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/rbettio1/lehman\\_teaching/2020mat330.html](http://www.lehman.edu/faculty/rbettio1/lehman_teaching/2020mat330.html)

If you have any further questions, please come talk to me before/after class or send me an e-mail!

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).

2. **Classes.** Classes will take place Mondays and Wednesdays, 11.00am - 12.40pm, at GI 333, following the Registrar’s Academic Calendar available here: <http://www.lehman.edu/registrar/calendars.php>  
Attendance is mandatory.

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

(A) The course MAIN WEBSITE:

[http://www.lehman.edu/faculty/rbettio1/lehman\\_teaching/2020mat330.html](http://www.lehman.edu/faculty/rbettio1/lehman_teaching/2020mat330.html)

This is where the weekly homework (and solutions) will be posted, and also links to learning resources.

(B) Blackboard: <https://bbhosted.cuny.edu/webapps/login/noportal>

This is where you will see your grades for homework assignments and exams.

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 homework will be assigned from it, and reading will be indicated to complement in-class discussions). Additional references and learning resources are listed on the course website (and this list will be expanded throughout the course).

5. **Homework.** We will have weekly homework assignments, that will be posted on the website every Monday and are due the following Monday. Each homework assignment will have several exercises, some from the textbook, some that I write myself, and while you are strongly encouraged to solve all of them, there will be **1 or 2 exercises in each assignment** that will be labeled as “to be handed in”. Your solution to each of these exercises **must be entirely contained in 1 sheet of paper (one side for each exercise)**, that you will deliver weekly on Mondays at the beginning of class. Solutions in any other format or longer than 1 page (with one exercise on each side) will not be accepted. Please do not forget to write your Full Name and Student ID number on this sheet of paper, so that I can properly record your homework grades.

6. **Quizzes.** We will also have short in-class quizzes approximately every other week, during which you will be asked to solve 1 or 2 short exercises (in ca. 15 min) about the material we have covered in the last few classes. This is an incentive for you to keep up with the (fast) pace of this course, and also helps decentralize the weight of your grade from exams in a way that is more spread along the semester.

7. **Exams.** There will be 1 Midterm Exam and 1 Final Exam, scheduled as follows:

(i) Midterm Exam, March 16, 11.00am - 12.40pm (GI 333)

(ii) Final, Room and Time TBD

No calculators or any electronic devices will be allowed in the exams.

8. **Grades.** Course letter grades will be determined based on homework (20%), quizzes (20%), Midterm Exam (30%), and Final Exam (30%).

9. **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.

10. **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

<http://lehman.smartcatalogiq.com/2017-2019/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. **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.**