MAT226 SPRING 2020

SYLLABUS

Welcome to MAT226!

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/2020mat226.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: "Vectors in two and three dimensions, equations of lines and planes, functions of several variables, partial differentiation, directional derivatives, gradients, optimization with Lagrange multipliers, multiple integration, line integrals, and vector fields." In short, what this means is that we will learn how the concepts of calculus that you learned in Calculus I and II extend to higher dimensions, especially dimensions 2 and 3. Needless to say, this is of substantial importance given that most real-life problems are modeled in these dimensions. We will learn how coordinates are used to denote location in these dimensions; analyze functions and their derivatives, extremal points, and integrals; and glance at some of the associated geometric concepts. This course is best taken after or simultaneously with Linear Algebra (MAT 313), which is also essential for more advanced courses in Mathematics, Computer Science, Engineering, Chemistry, and beyond.

2. Classes. Classes will take place Mondays and Wednesdays, 1.00pm - 2.40pm, 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/rbettiol/lehman_teaching/2020mat226.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 textbook used in all of Lehman College Calculus courses is:

Calculus: Early Transcendental Functions, by Larson and Edwards, Cengage (5th edition)

Although the 5th edition is preferred, you may use the 4th edition (by Larson, Hostetler, and Edwards), also published by Cengage. 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 homework will be assigned from it, and reading will be indicated to complement in-class discussions).

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 23, 1.00pm 2.40pm (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.