## **MAT176 SPRING 2019**

## **SYLLABUS**

Welcome to MAT176!

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/2019mat176.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.

- (i) This is undoubtedly a VERY EXCITING course, where you will learn about one of the foundations of modern Mathematics and have a glimpse of its many applications. Besides its intrinsic interest, a good working knowledge of Differential and Integral Calculus is an essential tool to understand modern techniques and scientific advances in most natural sciences, including (but not limited to) Physics, Computer Science, Engineering, Economics, Statistics, Finance, and even Biology and Chemistry and beyond. As you can see from the Department Syllabus, the materials covered include a detailed study of integrals of single-variable functions, convergence of sequences and series, and some differential equations. There is also a co-requisite practical course (MAT156: Calculus II Lab) that you must take concurrently to MAT176, which will help solidify your understanding of these techniques and see how technology can be used to potentialize them.
- (ii) This is also a VERY DIFFICULT course, since in just over 3 months we will be learning details of methods that humanity took several centuries to develop! In order to succeed, it is imperative that you master all the Calculus I material equivalent to MAT175 at Lehman College, part of which will be quickly reviewed in our first lecture together. Please make sure that you communicate with me as early as possible if you notice any unfamiliarities with this material or any difficulties along the semester, so that we can develop together a strategy to maximize your learning outcome and protect you from undesirable grades. Rest assured you will have my full support throughout the semester to enable you to overcome any challenges this material may pose, but I need to be aware you need help early enough.
- 2. Classes. Classes will take place Mondays and Wednesdays, 1.00pm-2.40pm, at GI 311, 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/2019mat176.html

This is where the weekly homework (and solutions) will be posted, as well as Practice Problems for the Exams, links to extra material, and other learning resources.

- (B) Blackboard: https://bbhosted.cuny.edu/webapps/login/noportal
  This is where you will see your grades for homework assignments and exams, as well as announcements.
- 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 every other week, during which you will be asked to solve 1 or 2 short exercises (in 10 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 1, April 1, 1.00pm 2.40pm (GI 311)
  - (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%). It is a departmental policy that a minimum grade of 55/100 on the Final Exam is required to pass the course, regardless of your other grades.
- 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

 $\verb| http://lehman.smartcatalogiq.com/2017-2019/Undergraduate-Bulletin/Academic-Services-and-Policies/Academic-Integrity | Academic-Services-and-Policies/Academic-Integrity | Academic-Services-and-Policies/Academic-Services-and-Policies/Academic-Services-and-Policies/Academic-Services-and-Policies/Academic-Services-and-Policies/Academic-Services-and-Policies-Academic-Services-and-Policies-Academic-Services-and-Policies-Academic-Services-and-Policies-Academic-Services-and-Policies-Academic-Services-and-Policies-Academic-Services-and-Policies-Academic-Servic$ 

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.