M1201-TYEA

Fall 2020 Time: Tu 11:00 - 12:15 Th 11:00-13:05 **Room:** Online

Instructor:Arkady EtkinE-mail:arkadyetkin@yahoo.comWebsite:www.aetkin.comOffice Hours:Tu 12:20-13:20

Textbook

Single Variable Calculus Early Transcendentals, 8th Edition by James Stewart.

Expected Learning Outcomes

The student will learn about functions of one variable, including the concepts of limit, continuity and the derivative. The student will be able to compute derivatives of various functions using the definition of the derivative, the power rule, the product and quotient rules, the chain rule, and implicit differentiation. The student will learn the Mean Value Theorem and the Intermediate Value Theorem. These concepts will be applied by the student to various problems involving related rates, curve sketching and optimization, and linear approximation. The student will learn about antidifferentiation and the Riemann integral, and will be able to compute Riemann integrals of some simple functions using the Fundamental Theorem of Calculus. Finally, the student will apply these techniques to computing areas and volumes.

Syllabus

Ch. 2-5

Grading Policy:

| Total | | 100% |
|-----------------|------------------|------|
| Final Exam: | Cumulative (2-5) | 40% |
| Exam 2: | Ch. 3-4 | 30% |
| Exam 1: | Ch. 2-3 | 30% |

Uniform Final Exam

The date of the final exam will be announced later in the semester.

Tutoring

Learning Center is located on Boylan Hall in room 1300 and offers free tutoring (actually you have already paid for it, so use it!) Information can be found on their website: http://www.cuny.edu/academics/testing/cuny-assessment-test/resources.html

Calculators

Calculators will not be permitted on exams.

"The faculty and administration of Brooklyn College support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The complete text of the CUNY Academic Integrity Policy and the Brooklyn College procedure for implementing this policy can be found at this site: http://www.brooklyn.cuny.edu/bc/policies If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member MUST report the violation."

"In order to receive disability-related academic accommodations students must first be registered with the Center for Student Disability Services. Students who have a documented disability or suspect they may have a disability are invited to set up an appointment with the director of the Center for Student Disability Services at 718-951-5538. If you have already registered with the Center for Student Disability Services please provide me with the course accommodation form and discuss your specific accommodation with me."

Overview of Class Policy for Math 1201

Attendance and Class Participation

In the course of the semester, the student is expected to achieve the learning outcomes outlined at the beginning of the syllabus. It is at the discretion of the student whether to utilize the lecture as a vehicle for reaching this goal. Aside from absences during exam periods, **no direct penalty or grade reduction will be based on the student's attendance record**. However, in making the decision whether to attend regular lecture hours or not, be sure to consider the following:

- Whereas not attending lectures works well for a handful of students, the overwhelming majority of students do very poorly when they are regularly missing the class.
- The student that regularly attends and participates in class discussions is more familiar to the instructor. Participation can be a means to demonstrate your learning aptitude, motivation, and creative thinking.

Homework and Other Assignments

Weekly optional assignments will be posted on the website at http://www.aetkin.com. These assignments will not be collected and will not have direct bearing on your grade. The assignments will be theoretical or conceptual in nature and their purpose is to identify the best students. Questions from these assignments may also be used as extra-credit problems appearing on the body of the midterm exams.

Expected Work Outside of Class

Mathematics requires many hours of practice. A good student is expected to **spend a minimum of 6 hours a week in addition to the 4 hours of lecture** grappling with the concepts. Spoon-feeding is not an effective technique for learning mathematics and the student should have the maturity to know how to read the textbook and ask for clarifications on things he or she doesn't understand. Just like with weight training, you cannot anticipate a growth in your muscle mass if the trainer is lifting the weights for you. You must struggle!

Office Hours and Other Sources for Help

The student is strongly encouraged to attend office hours at the slightest sign of falling behind or not understanding the lecture. The office hours give the instructor additional opportunity to learn about the academic strengths of his students. This familiarity is vital when it comes to writing a good evaluation letter. Learning Center is located on Boylan Hall in room 1300 and offers free tutoring. Information can be found on their website: http://www.cuny.edu/academics/testing/cuny-assessment-test/resources.html

Academic Honesty and Conduct

Identical or very similar solutions on the exam are consistent with cheating. The most severe form of cheating is copying the solutions from a fellow student's exam. Another form of cheating is memorizing mathematical facts without due understanding. It occurs most frequently in advanced undergraduate classes, when the student is asked for the recital of some problem or the justification of a theorem that was presented in class. Broadly speaking, the instructor defines cheating as the attempt to pass the subject without learning the contents of the course.

The instructor expects his students to understand the material conceptually. **Students suspected of copying another person's exam will be summoned to a surprise test, where they would have to prove their knowledge.** This test will involve randomly a randomly selected problem, which the student will have to solve in front of the camera. Failure to take this test or failure in passing the test will result in the grade 0 for the exam in which the student was suspect.

The following are suggested ways to avoid suspicion:

- Demonstrate understanding through class participation and office hour discussions.
- Demonstrate consistent work on the online homework assignments.
- Submit optional work and show resolve to understand the more rigorous aspects of the course.

Staying or Withdrawing from the Course

With all the best intentions, failing rate in calculus are 25 to 30 percent. This means that, in a class of 35 students, approximately 10 students will receive a failing grade if they do not withdraw from the course in time. You must withdraw before **Thursday**, **November 5** in order to avoid the grade W in the transcript. Students that decide to stay in the class beyond this date without doing passing work should not expect leniency. Each semester, a number of students approach the instructor with outlandish and uncomfortable requests. Last semester, for instance, a student doing failing work announced that he is on a work-study visa and insinuated that he will be deported if he fails the class. There are many more stories of similar nature and the instructor wishes to be spared their sequels.

Recommendation Letters

If you ask for a recommendation letter, be prepared to solve a problem through ZOOM. The harder the problem, the better the recommendation. You can also participate in a higher level class, demonstrate that you are a thoughtful, intelligent individual etc. ect. If you just pass calculus with an A+, as much as I wish to help you, my honest thoughts are "This person passed it, because my course was as challenging as a sidewalk curb for a young lad."