Math 1225: Calculus of a Single Variable
CRN: 19553
Spring 2015
Instructor: Maha Elouni
12:20-1:10pm, MWF in MCB 209
12:30-1:20pm, T in SEITZ 300

Office: McBryde 461A
Email: emaha@vt.edu
Office hours: MF: 9-10am, W:1:30-2:30pm & by appointment
Final Exam Time: Wednesday, May 13, 7:45 am - 9:45 am.
Course Website: http://www.math.vt.edu/courses/math1225/

Course Materials: We will be using Calculus: Early Transcendentals, 7th edition, by Stewart. The Mathematics Department has recently changed textbooks, so you cannot use a textbook from a previous calculus course at Tech. We will be using the online homework system WebAssign, so you will need to at least buy the digital version of the text for this course.

Course Content: Functions, limits, continuity, graphs, rates of change, derivatives, optimization, integration.

Prerequisites: To enroll in 1225 you must have one of the following
- A grade of B or better in Math 1014, 1015, 1016, 1025, or 1536
- Two units of high school algebra, one unit of geometry, ½ unit each of trigonometry and precalculus & placement by the Mathematics Department.
- A passing grade on Calculus Readiness Exam.

Educational Objectives: Differential Calculus is the study of rates of change. Integral Calculus is the study of accumulation of change. You will learn how to find the rate of change of one quantity as a second quantity varies. You will also learn to answer questions about changing quantities.

Math Emporium & Tutoring: The staff in the tutoring lab at the Math Emporium will be able to assist you with your questions. Since this course is not an Emporium course, it is not appropriate to approach the floor staff in the general area with your questions about Math 1225. The tutoring lab is open 4:30pm to 9:30pm Sunday through Thursday and from 10am to 1pm on Friday. Also, you may hire a private tutor by sending an email to MATH_TUTORS@listserv.vt.edu indicating your specific needs.

Disabilities: If you need adaptations or accommodations because of a documented disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible.

Attendance: Class attendance will be taken daily and kept for Mathematics Department records. Students are responsible for course materials and announcements covered in class.
Communication: Notices and updates about this class will be posted on the Scholar page. You are responsible for checking it regularly.

Exam Scheduling Note

There will be three common time exams and a common time final exam. The locations for the exams will be announced on the Math 1225 web page. Typically, they will not be the same as our lecture class.

You must take tests on the specified date. If you have a verified conflict with the time scheduled for an exam, an alternative starting time for the exam on the same evening will be provided. In general, makeup exams will not be given. If a student misses an exam for reasons that are serious, unavoidable, and beyond the student’s control, the situation will be handled on an individual basis. If it is to your benefit, your grade on the free response section of the final exam will replace your lowest test grade.

The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules, conflicts with classes and exams at other colleges, and travel plans.

Midterm exams are on Mondays February 23, March 30, and April 27, each from 7-8pm. The final exam is scheduled for Wednesday, May 13, 7:45 am - 9:45 am.

Graded Materials

Mid-Term Exams (48%): There will be three common-time exams and a common-time final exam. You must take tests on the specified date. If you have a verified conflict with the time scheduled for an exam, an alternative starting time for the exam on the same evening will be provided. No other alternate tests or makeup tests will be given. If it is to your benefit, your grade on the free response section of the final exam will replace your lowest test grade.

Final Exam (20%): There will be a final, two hour, cumulative exam. No calculators will be permitted on the final exam. The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules and with classes and exams at other colleges. The final exam is scheduled for Wednesday, May 13, 7:45 am - 9:45 am.

WebAssign Quizzes (12%): There will be twice a week online quizzes which will typically be due on Monday and Thursday of each week. You will have two attempts at each quiz, and the higher of your two grades will be used. I will drop your lowest four quiz grades.

Homework / In-Class Quizzes (20%): Homework will be announced in class and the assignment will be posted on scholar. The list of topics is available from the syllabus on the course website. I will only grade selected problems, and which problems I will grade will not be made available until the assignment is returned. Your understanding of the homework will be mainly tested in class through unannounced in class quizzes, which can be given in the beginning, the middle or the end of the class. You can get help from any appropriate source, but you must cite it. I encourage you to seek help from classmates. However, the final work must be your own.
You have to let me know prior to class if you have to miss a class for a serious reason. Only then, will a possibly missed in-class quiz be dropped. Everything else will result in a zero on that quiz. I will only accept homework that is stapled together, neatly written or typed, with your name on every page. I will accept one late assignment, and this must be turned in at the start of the following class. Please save this late option for an emergency. I will drop your lowest homework grade. While calculators may be used on homework, I discourage relying on them since they are not permitted on exams. Mathematics is about communication, not just numbers. Your homework and in-class quizzes will be graded for clarity, completeness, and correctness. No credit should be expected if no work is shown.

**Class Participation and Preparation (∞%):** Participation and preparation in Math 1225 is instrumental to success. I expect you to participate by reading the material before class, paying attention, asking and answering questions, as well as reviewing after class.

**Grading Scale**

Final course grades will be assigned as follows: 90% guarantees at least an A-, 80% guarantees at least a B-, 70% guarantees at least a C-, and 60% guarantees at least a D-.

**Grading Appeals**

If you believe that an error has been made in grading an assignment or test, please re-examine the problem as well as the solution and contact me the next day. Any concern should be brought to my attention within one week of the graded work being returned.

**Honor System**

All assignments, tests, and quizzes submitted will be considered graded works and must be completed on an individual basis. While discussing assignments and getting help from available resources is both authorized and encouraged for out of class work, copying solutions from any source will be considered a violation of the honor code. If you have any questions about how the honor code applies to a particular situation, it is your responsibility to ask.