MATH 1210-016 Fall 2015 Applied Calculus I

Instructor: James Phillips Email: phillips @ virginia.edu

Office: Kerchof 401

Office Hours: Monday 3:30 - 4:30; Wednesday 12:30 - 1:30; by appointment

Class Meetings: MW 2:00 - 3:15 PM, Clark Hall 102

Textbook: Tan, Applied Calculus for the Managerial, Life, and Social Sciences, 9th ed. (Every student must purchase a webassign access code for the class, which comes with a digital version of the text. It is each student's choice whether or not to purchase a physical copy, which also comes with a code.)

General Policy: Students are expected to attend class and, in the event of an absence, are responsible for making up any missed material or work. Students are also encouraged to participate and to ask questions during class. Calculus can be difficult, but it is learned best through practice; I will be happy to work with students in class and in office hours to ensure the best understanding of the subject. Laptops and cell phones are not permitted during class, and calculators are permitted on neither quizzes nor tests.

Topics: We will cover a variety of topics in this class, including functions and their graphs; limits and continuity; derivatives of algebraic functions; the shape of curves; optimization; exponential and logarithmic functions and their limits and derivatives; integrals and area under curves; the Fundamental Theorem of Calculus. This list is by no means exhaustive, but does accurately describe the majority of the semester, and corresponds roughly to the first 6 chapters of the text.

Homework: Homework will be assigned weekly on Webassign. It will be assigned on Friday and due the following Friday. Since calculators are not permitted on quizzes and tests, I encourage you to use them sparingly on the homework, but computations will sometimes require them. Late homework will not be accepted. The lowest Webassign grade will, however, be dropped. We will also have various written homework assignments throughout the semester; these allow students to practice communicating mathematics and to receive more comprehensive feedback than would be possible on Webassign.

Diagnostic Quiz: At the end of the second week of class, we will take a short diagnostic quiz covering the material from sections 1.1 to 2.1 (which correspond to algebra and the basics of functions). For most students, this will be review material: the purpose of this quiz is for each student to determine whether or not he or she is prepared for the material we will cover in this class. For more information about calculus placement, visit here.

Chapter Quizzes: We will have a quiz following the completion of each chapter on the material from that chapter. These serve the dual purpose of both preparation for working in a test environment and practice in effectively writing and communicating your ideas in calculus. Quizzes will be announced at least one class period in advance. Like Webassign problems sets, these may not be made up, but rather, I will drop your lowest grade.

Exams: There will be two midterms and a final. As Math 1210 is a coordinated course, all tests are jointly written and all students take a common exam. The midterms will be held

on Wednesday, September 30, and Thursday, November 12; they will begin at 7:00 PM and will last 90 minutes. For students with midterm time conflicts, there will be a make-up exam given on the following morning at 7:20 AM, for which requests must be submitted at least a week before the test. Exams are closed-book, with no calculators permitted. In exceptional cases in which a student cannot sit either exam time, that student must notify me as soon as possible (and at least one week in advance of the test date), and we will find a more amenable time. The final will be held on Thursday, December 10, at 7:00 PM; this exam is comprehensive and will last three hours.

Grading:

Homework (Webassign and written): 15%

Chapter Quizzes: 15% Midterms (2): 20% each

Final: 30%

Attendance or participation do not go toward a specific grade, but can be an influence in cases of "borderline" grades. Final grades will be assigned according to the following standard:

Numerical Range	Letter Grade
$98 \le \text{grade} \le 100$	A+
$93 \le \text{grade} < 98$	A
$90 \le \text{grade} < 93$	A-
$87 \le \text{grade} < 90$	B+
$83 \le \text{grade} < 87$	В
$80 \le \text{grade} < 83$	B-
$77 \le \text{grade} < 80$	C+
$73 \le \text{grade} < 77$	С
$70 \le \text{grade} < 73$	C-
$67 \le \text{grade} < 70$	D+
$63 \le \text{grade} < 67$	D
$60 \le \text{grade} < 63$	D-
grade < 60	F

Special Accommodations: All students with special needs requiring accommodations should present the appropriate paperwork from the Student Disability Access Center (SDAC). It is the student's responsibility to present this paperwork in a timely fashion and follow up with me about the accommodations being offered. Accommodations for test-taking should be arranged at least 5 business days before an exam.

Resources: Requests for private tutors may be sent to math-help@virginia.edu. In addition to private tutors, the university provides free tutoring through the Math Tutoring Center on the second floor of Clemons Library.