Math 019 Fundamentals of Calculus I  
Section J (95363)  
Room: TBD  
Time: MWF 01:10 – 02:00  
Instructor: Douglas Dickey  
Office: 109 Votey  
E-mail: dgdickey@uvm.edu

Book: *Calculus with Applications 11th Edition* by Lial, Greenwell and Ritchey. (Please note that you will want the MyMathLab Supplement that comes packaged with the textbook. You may wish to only purchase the MyMathLab Supplement which includes an e-book or electronic version of the textbook. The UVM Bookstore offers both options!)

Course Description: *Fundamentals of Calculus I* is the first course in a two course sequence. The underlying applications of differential calculus will be investigated (chapters 1 – 6 and 13 of the Lial textbook). This will include an understanding of *functions, limits, continuity, rates of change, derivatives* (including implicit), and *derivative applications*. The material will be discovered and shown via mathematical modeling of real world situations. An emphasis will be made to understand these new concepts graphically, numerically, verbally, and algebraically. The course work will involve some fairly intense computations and mathematical modeling, and it is required that students purchase or obtain an appropriate calculator. A TI-83/84 Graphing calculator is highly recommended, but a basic scientific calculator capable of performing exponential, logarithmic and trigonometric operations is adequate. Any calculators capable of performing symbolic algebra or calculus computations are prohibited.

Course Goal: Upon the successful completion of the course, a student will be able to adapt his or her knowledge of functions, limits, and rate of change in order to analyze and make conclusions about real world situations. Note: A common follow-up course would be Math 020.

Grading: The grading system is as follows:

- **MyMathLab Assignments (15%)**—Following each section covered, each student must log on to the MyMathLab system and complete a companion homework assignment that follows the material covered in class. You will be given several attempts to answer each question, and you can utilize the book and all of the aids offered within the MyMathLab system to help solve the problems. Each assignment should take roughly 45 minutes to complete, and you will have several days to complete the assignments. At the end of the semester, I will drop the lowest 4 MyMathLab Assignments and average the remaining assignment grades. The COURSE ID for the section is TBD


- **Class Quizzes (15%)**—Each week, usually on Thursday, we will have a short 10 – 15 minute quiz at the end of class. The quiz will cover materials from previous lectures and will be your chance to show me that you are keeping active in the course.

- **Tests (45%)**—There will be three midterm tests worth 15% apiece.

- **Final Exam (25%)**—There will be a cumulative final exam given at the end of the semester. The final exam will count towards 25% of your final grade.

Expectations: Students are expected to act in accordance to the rules outlined in the school's *Classroom Code of Conduct*. A copy can be found online. In addition to these rules, students shall respect the thoughts and ideas of both the instructor and the other students present in the class. The instructor shall also adhere to these same rules.

Late Work/Absences: If you miss a quiz for a non-sanctioned UVM activity, you will receive a 0% on this quiz. Remember that I will drop your two lowest grades for this very reason. MyMathLab assignments submitted late will incur a penalty. The penalty for late MyMathLab assignments is stated on the specific assignment.

Office Hours/Help Sessions: Mondays 5 - 6 and Tuesdays 3 – 4.

Academic Assistance: Students with documented learning disabilities are entitled by law to certain “reasonable accommodations.” If you have a documented reason for special accommodations, you must provide written evidence of this as soon as possible from the appropriate office. Further info can be found at the Academic Support Program Offices.