Instructor Information

**Instructor:** Jim Swift  Adel Math Bldg. 110  523-6878  Jim.Swift@NAU.edu

**Office Hours:** MWF 10:30-11:30, Tu 2:00-4:00. If these times are inconvenient, you can make an appointment, or drop by my office any time. Don’t hesitate to send me e-mail.

**Websites:** www.nau.edu/Jim.Swift is my web site. Follow the “Teaching” link. On the instructor information page, there is a link to the web site for this class, as well as a link to official U.S. time, http://www.time.gov, that our class will observe.

Course Description

**Text:** *Calculus: Concepts and Contexts* third edition, by James Stewart.

**Prerequisite:** A grade of C or better in MAT 125, or an MAT placement code of 70. That placement code corresponds to 27 on the ACT, 620 on the SAT, or an Accuplacer score of 85.

**Content:** This is a four credit-hour class. It covers first semester calculus, including a review of precalculus, limits and derivatives, differentiation rules, applications of differentiation, and integrals. We will cover §1.1 through §5.5, skipping a few sections. The class website has a tentative schedule showing what sections we cover.

Student Learning Expectations This course addresses the essential skills of critical thinking, quantitative analysis, and the use of technology. By the end of the course, you should be able to express understanding of the limit, derivative and integral in four different ways: verbally, numerically, visually, and symbolically.

Basis of Evaluation

**Points:** There are approximately 1050 class points possible, plus extra credit. (Numbers in italics are estimates and subject to change.) Class points can always be converted to letter grades with the scale A (90%), B (80%), C (70%), and D (60%).

**Midterms:** (4 × 100 = 400 points) There will be 4 midterm exams. *All of the midterms count.* The schedule at my website gives tentative exam days.

**Homework:** (28 × 10 + 2 × 5 = 290 points). Regular homework assignments will be given in WeBWorK, a web-based homework system. Each assignment is worth 10 class points. There may occasionally be written homework assignments as well, worth 5 class points. You are *allowed and encouraged* to form study groups to work on homework and study for tests. WeBWorK gives random problems, so your problems will be slightly different from those of your classmates.
Technology Projects/Group Work: \((6 \times 10 = 60\) points) We will have approximately 6 projects. They are each worth 10 class points. These will usually involve technology, in the form of either graphing calculators or computers.

Final Exam: (300 points) The comprehensive Final Exam is scheduled for Wednesday, December 12 from 7:30 to 9:30. The final exam will be in our usual classroom. I reserve the right to raise your course grade from the 90/80/70 curve, based on an exceptional final exam.

Extra Credit: At each midterm exam I will give you 3 class points if you had no unexcused absences since the previous exam.

Points that you get for the “Problem of the Week” will be credited to this class, at a rate of one class point for every POTW point. These points will be added at the end of the semester.

At the end of each chapter there is a section called “Focus on Problem Solving.” You can get up to 2 class points for each even problem. These are due at the first class meeting after the last WebWorK assignment for that chapter is due.

Course Policies

Calculators: Graphing calculators will be allowed at most tests. The exceptions are Exam 3 and the first part of the Final Exam. These exceptions are due to the availability of TI-89 calculators which can do symbolic differentiation and integration. A TI-83 Plus or TI-84 Plus is sufficient for this course and beyond. The TI-89 is more powerful, but it is also slower and not as “user friendly.” The CAS (computer algebra system) power of a TI-89 is also available in computer packages such as Mathematica, Matlab and Maple. All CENS students can use Mathematica through the secure global desktop http://sgd.cens.nau.edu/.

Computer Lab: The departmental computer lab, in AMB 225, is available for your use starting the second week of classes. (The hours are to be announced.)

Excused Absences: If you have an institutional excuse, you will not lose the attendance extra credit. If you have feel you deserve an excused absence for some other reason contact me by e-mail, phone, or in person. Do so before the absence, if possible.

Help: If you need help the first person to contact is me. I am your personal tutor at no charge. You can come to my office hours or contact me via e-mail. There is a button in WebWorK for sending me e-mail. The math department also has a list of tutors for hire, available from the department office. The Learning Assistance Center (www4.nau.edu/lac) has an array of services.

University Policies: Our web site has a link to the university’s safe working and learning environment, students with disabilities, institutional review board, and academic integrity policies. jan.ucc.nau.edu/academicadmin/plcystmt.html

Amendments: Any changes to this syllabus will be announced in class, and an updated version will be posted on my website.