

Math 1210 – Calculus I - Sections 1 & 2 Spring 2007

Information contained in this syllabus, other than the grading, late assignments, makeup work, and attendance policies, may be subject to change with advance notice, as deemed appropriate by the instructor. Changes will be announced in class.

Instructor: Sarah Brown
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Website: http://www.suu.edu/faculty/brown_s/
Prerequisites: A grade of C or better in Trigonometry and College Algebra. This should include [Math 1050](#) and [Math 1060](#) or a pre-college background of at least two and one-half years of algebra, one year of geometry and one-half year of trigonometry.
Text: *Calculus, Early Transcendentals, 8th ed.* by Anton, Bivens, and Davis (Chapters 1-6)
Other Materials: Graphing Calculator
Fees: \$10.00
Class Meetings: **Section 1:** 9-9:50am Monday through Friday SC129. Wednesdays are usually optional.
Section 2: 1-1:50am Monday through Friday SC129. Wednesdays are usually optional.
Office Hours: Monday through Friday, 11-12 in SC 120

Course Description:

Functions, limits and continuity; the derivative, differentiation techniques, and applications; graphing applications including extrema and concavity; elementary antiderivative/integration skills; the definite integral and its applications. Coverage includes applying the ideas and techniques of calculus to algebraic, trigonometric, exponential, and logarithmic functions. A graphing calculator is required.

Objectives:

Calculate limits
Determine whether a function is continuous
Find derivatives using the definition, basic differentiation techniques, the product and quotient rules, the chain rule, implicit differentiation, and L'Hopital's rule
Apply the derivative to topics such as function analysis, curve sketching, maximum and minimum problems, function approximation, and rectilinear motion
Master basic integration techniques
Apply the integral to topics such as finding area and rectilinear motion
Have exposure to the rigorous definitions of limit, continuous function, derivative, and integral
Have exposure to basic calculus theorems such as the Intermediate Value Theorem, Rolle's Theorem, Mean-Value Theorem, and the Fundamental Theorem of Calculus
Use a graphing calculator as a tool to gain intuition, suggest direction in a problem, and to confirm theoretically obtained results

Grading:

Homework (40+ assignments)	400 points (10 pts each, several of the lowest assignments will be dropped, depending on how many assignments there are, as only 40 will count)
Chapter Tests (4 tests)	300 points (75 pts each)
Final Exam	300 points (cumulative excluding Chapter 1, although about a third of the exam will focus on Chapter 6)
Extra Credit	½ point for each day you attend class (except exam days, reviews, and help sessions), provided you're on time and stay the whole class period. There are also extra credit test review assignments.

Grading Scale:

A	930-1000 (93%-100%)	B-	800-829 (80%-82%)	D+	670-699 (67%-69%)
A-	900-929 (90%-92%)	C+	770-799 (77%-79%)	D	630-669 (63%-66%)
B+	870-899 (87%-89%)	C	730-769 (73%-76%)	D-	550-629 (55%-62%)
B	830-869 (83%-86%)	C-	700-729 (70%-72%)	F	0-549 (0%-54%)

Homework:

The class is 4 credits. Expect to spend at least 8 hrs on homework each week (2 hours for every hour of class). Homework is graded by selecting a few of the assigned problems. Work must be shown to get credit. You are encouraged to work in groups but may not copy each other's homework. Copying solutions from others or the back of the book or solutions manual will result in 0 credit. Homework is collected at the end of class but may also be turned in at my office (SC 120) by 5pm the day it is due. Late homework is not accepted and missed exams cannot be made up unless there are extenuating circumstances as approved by the instructor. Grades will be posted periodically on WebCT, which can be accessed from <http://www.suu.edu/curstu/>.

Calculators:

No notes or calculators are allowed during the exams. The calculator is a very valuable tool and is required on many homework problems. However, its use can also inhibit understanding if it is figuring things out for you that you should be doing on your own. This is why calculators will not be allowed on exams. I encourage you to only use your graphing calculator on the homework problems that have the graphing calculator icon next to them.

University Policies:

Scholastic dishonesty will not be tolerated and will be prosecuted to the fullest extent. You are expected to have read and understood the current issue of the student handbook (published by Student Services) regarding student responsibilities and rights, and the intellectual property policy, for information about procedures and about what constitutes acceptable on-campus behavior.

Having an instructors manual is not allowed.

Students with medical, psychological, learning, or other disabilities desiring academic adjustments, accommodations or auxiliary aids will need to contact the *Disability Support Center*, Room 205D, Sharwan Smith Center, phone (435) 865-8022. The Disability Support Center determines eligibility for and authorizes the provision of these services and aids.

Resources for Help:

- The Student Success Center <http://www.suu.edu/ss/success/> in the Sharwan Smith Center has free tutoring <http://www.suu.edu/ss/success/tutoring.html>.
- My office hours are Monday through Friday 11-12 in SC 120.
- I encourage you to form study groups with your classmates. However, the problems must be written up in your own words. Duplicate homeworks are not acceptable and will result in 0 credit for all parties.
- Wednesday help sessions with the TA are primarily question/answer sessions.
- A supplemental instructor will offer help sessions. See <http://www.suu.edu/ss/success/msi.html>.
- The textbook explanations can be helpful.