

**Course:** Math 2200, TR 2:00-3:15

**Instructor:** Jim Blair

**Office:** Boyd 427G

**Office Hours:** T 12:00 - 1:00, R 11:00 - 12:00, and by appointment

**E-mail:** dblair@math.uga.edu

**Goals:** The primary goal of this course is to develop and understand the derivative. You should know how to take the derivative of polynomials, trig functions, exponential and logarithmic functions, and combinations of these. You should be able to use the derivative to solve optimization problems, related rate problems, and to sketch graphs of functions. The course will wrap up with a brief look at anti-derivatives.

**Book:** *Calculus: Early Transcendentals Version*, Edwards & Penney

**Grading:** There will be three tests worth 20% each, ten quizzes worth a total of 10%, and a final worth 30%. Final grades will be assigned on a ten point scale: 90-100 = A, 80 - 89 = B, etc. Some extra credit will be available on tests and in-class review sessions. Homework will be assigned each Thursday but not collected.

**Quizzes:** There will be a quiz during the last 15 minutes of each Thursday class, except on these weeks when there is a test. One question will come straight from the homework assigned the prior week; the other question will be *similar* to one of those homework problems. Each quiz will be worth 5 points.

**Tests:** Tests will be mostly computational in nature, however there will be some questions asking for brief explanations of concepts covered in the course. Each test will take the entire class period and be worth 100 points. The final will be worth 150 points and will be comprehensive.

**Attendance:** No formal attendance will be taken. However, you may be withdrawn from the course if you fail to take two or more quizzes or tests without having made prior arrangements.

**Make-up work:** Under no circumstances may a quiz be made up. Tests may only be made up if a valid excuse has been granted by the Office of the Vice President for Student Affairs.

**Course Schedule:** This schedule is tentative. Any significant modifications will be announced in class at least a week in advance.

<u>Week of</u>	<u>Sections</u>	<u>Topics</u>	<u>Special</u>
Aug 19	2.1 - 2.2	Tangent Lines, Limits	
Aug 26	2.3 - 2.4	Limits, Continuity	Quiz 1
Sept 2	3.1	Intro to Derivative	Quiz 2
Sept 9	3.2 - 3.3	Differentiation Rules	Quiz 3
Sept 16	3.3 - 3.4	Chain Rule, Review 1	Quiz 4
Sept 23	<b>T1</b> , 3.5	Max/Min	<b>Tues: Test 1 (2.1-4, 3.1-4)</b>
Sept 30	3.6	Applied Optimization	Quiz 5
Oct 7	3.7 - 3.8	Derivatives of Trig/Exp Fns	Quiz 6, Midpoint
Oct 14	3.9	Implicit Diff, Review 2	Quiz 7
Oct 21	<b>T2</b> , 4.2	Linear Approximation	<b>Tues: Test 2 (3.5-9)</b>
Oct 28	4.3	Mean Value Theorem	Fall Break(no class Thurs)
Nov 4	4.3 - 4.4	MVT, First Derivative Test	Quiz 8
Nov 11	4.4 - 4.5	FDT, Curve Sketching	Quiz 9
Nov 18	4.6	Higher Derivatives, Review 3	Quiz 10
Nov 25	<b>T3</b>	<b>Tues: Test 3 (4.2-6)</b>	Thanksgiving(no class Thurs)
Dec 2	5.2, 8.3	Antiderivatives, Separable Eqns	

**Final:** Thurs, Dec 11, 3:30 - 6:30