MATH 1551G: Differential Calculus
17 August - 7 December 2015
MWF 1:05 - 1:55 at Van Leer C341
Course Webpage
http://people.math.gatech.edu/ sscott42/teach/math1551.html

Instructor	Shane Scott
Email	scottsha@gatech.edu
Office	Skiles 252
Hours	on course site
	or by appointment

Welcome to Differential Calculus! Attend all lectures. Relevant text sections will be posted to the course webpage. Read the text sections and work through text examples to prepare for lecture. Come prepared with your e-clicker and questions. Participate. If you haven't interupted me with a question, you're doing it wrong.

Course Objectives: This course will introduce students to the ideas of continuous functions, the uncountably infinite continuum, derivatives and rates of change, and some basic applications. Students will: master basic concepts of differentiation, build algebraic and graphical intuition for derivatives, and solve geometry, physics, and optimization problems.

Resources:

- The Course Webpage will update to keep abreast with our progress and carry course materials.
- T-square will host grades.
- MyMathLab will host online assignments (see final page).
- Piazza will host online class Q&A and announcements.
- Mathlab in Culc 280 offers free tutoring from recitation instructors. Check the link for summer hours.

Textbook and eHomework access: Thomas. Calculus: Early Trancendentals, 13th ed. An electronic version of the text is included with a MyMathLab code. Purchase MyMathLab access through Pearson. (Details follow on the final page.) Register with your GTID as your student ID. The course ID is **scott05943**

Grade Policy: Semi-weekly online homework will be assigned and posted to the course website and MyMathLab. Complete the homework through MyMathLab. No late submissions will be considered. The lowest two homeworks will be

dropped. Recitation group work and quizzes will be held on recitation days. Participation grades will be computed from clicker responses. You may use a turning point clicker or the ResponseWare app on a mobile device or laptop. There will be 4 midterm exams and a cumulative final. Only paper and pencil are allowed in any exam. Grades will be computed with the following weights

(a) Homework 10%

(b) Quizzes and Participation 6%

(c) Four Midterms 14% each

(d) Final Exam 28%

Cutoff grades will be F=[0,60), D=[60,70), C=[70,80), B=[80,90), A=[90,100]. Make-up examinations will be given only in the event of a valid, documented excuse. Exam regrade requests may be made in writing within one week of return.

Honor Code: All students are expected to comply with the Georgia Tech Honor Code. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Office of Student Integrity. The institute honor code is available at http://www.honor.gatech.edu.

Course Outline:

§1.1-1.8: Functions ..... 4 lectures
§2.1-2.6: Continuity ..... 6 lectures
Exam 1 – Chapters 1-2 ..... 18 September
§3.1-3.11: Differentiation ..... 9 lectures
Exam 2 – Chapters 3.1-3.6 ..... 9 October
Exam 3 – Chapters 3.7-3.11 ..... 30 October
§4.1-4.4,6,7: Mean Value Theorem and Optimization ..... 8 lectures
Exam 4 – Chapters 4.1-4.4 ..... 20 November
§4.8: Antiderivatives ..... 2 lectures
§5.4: Fundamental Theorem of calculus ..... 1 lecture
Final Exam–Comprehensive ..... Monday 7 December 2:50 - 5:40

Important Dates:

First Class ..... 17 August
Add/Drop Deadline ..... 21 August
Labor Day (No Class) ..... 7 September
Exam 1 ..... 18 September

Exam 2	9 October
Withdraw Deadline	25 October
Exam 3	30 October
Exam 4	20 November
Thanksgiving Break (No Class)	25-27 November
Course Final	Monday 7 December 2:50 - 5:40