BROCK SCHOOL OF BUSINESS
SAMFORD UNIVERSITY

BUSA 130-01
MW(F) 2:15-3:20PM
DBH 213

Course:	Quantitative Methods I
Instructor:	Caleb Moxley
Email:	cmoxley1@samford.edu
Website:	people.cas.uab.edu/∼ccmoxley
Office Hours:	By appointment or Mondays 3:20-4:30PM
Cell:	205.482.6515 - You may text me.

This syllabus is subject to change. Any changes will be posted on the course website, and students will be informed of changes via email.

Course Description (from the College Catalogue):

Quantitative Methods I is designed to develop an intuitive understanding of calculus as well as an appreciation of the usefulness of calculus to solve managerial, business, economic and social science problems. The course is aimed at the uses of calculus, not its development as a mathematical discipline; as such, it provides an introduction to differential and integral calculus with emphasis on managerial and business applications.
Prerequisite(s): C- or better in MATH 150, or equivalent.
Course Topic Coverage: 85% Quantitative Methods, 15% Business Functional Area Applications.
Credit Hours: 3

Required Text Tan, S.T. (2012). *Applied Calculus for the Managerial, Life, and Social Sciences: A Brief Approach, 9th Edition* (ISBN-13: 9780538498906) and *Student Solutions Manual* (ISBN-10: 0840068476).

Course Objectives:

This course is intended to improve students' quantitative competencies, foster intellectual curiosity, and enhance mental dexterity. In particular, students will learn to

1. evaluate functions and their graphs
2. define and conceptualize the derivative
3. use differentiation to solve business problems (e.g. optimization problems)
4. define and conceptualize the integral
5. use integration to solve business problems (e.g. marginal analysis)

Computer Skills:

You must be able to communicate via email and gain access to the course website. You are welcome to use computing software or devices (such as Mathematica, MATLAB, WolframAlpha, graphing calculators, or Maple) to check your work but not as a substitute for your own work.

Evaluation:

Tests	45%	Three tests, 15% each
Midterm Exam	25%	Comprehensive, 11 March
Final Exam	30%	Comprehensice, 13 May, 1:00PM

Tests and the midterm exam are 65 minutes. The final exam is 120 minutes.

The make-up policy for exams is strenuous. If a student misses an exam, she or he must provide a ***serious and verifiable*** reason for the absence. For instance, a flat tire is serious but (unless accompanied with a towing/service receipt) is not verifiable, and no make-up would be granted for such an excuse. Please ensure that, if you miss an exam, you collect accompanying documentation to verify your circumstances. The instructor has the discretion to either omit the exam, schedule a make-up exam, or substitute the score on the final exam for the missed exam when an acceptable excuse has been provided. **If you have a scheduled, unavoidable conflict (e.g. an athletic event, conference, or major surgery), it is your responsibility to notify the instructor at least a week before the missed exam to schedule an alternative time to take the exam. You will be required to take the exam early under these circumstances.**

Letter Grade (x) Scale:

$93 \leq x$	A	$73 \leq x < 77$	C
$90 \leq x < 93$	A-	$70 \leq x < 73$	C-
$87 \leq x < 90$	B+	$67 \leq x < 70$	D+
$83 \leq x < 87$	B	$63 \leq x < 67$	D
$80 \leq x < 83$	B-	$60 \leq x < 63$	D-
$77 \leq x < 80$	C+	$x < 60$	F

Attendance Policy:
I will keep attendance for my own records. You will not be penalized for poor attendance.

Homework and Presentations:
Homework assignments will be given regularly. It is in your best interest to complete all homework assignments. I will occasionally ask students to work problems from the assignments on the board in exchange for points on the coming test.

Class Decorum:

- Arriving to class on time is expected.
- Please keep all electronic devices silenced and put away.
- You may take notes by hand only. Electronic copies of my notes will be available on the course website, so you will not need to take notes electronically.

Students with Special Needs:
Samford University complies with Section 504 of the Rehabilitation Act and with the Americans with Disabilities Act. Students with disabilities who seek accommodations must make their requests by contacting Disability Support Services located in Counseling Services on the lower level of Pittman Hall, or call 205.726.4078/2105. I will grant reasonable accommodations only upon written notification from Disability Support Services. It is the student's responsibility to seek accommodations.

Academic Integrity:
You are expected to work independently on all exams. You are welcome to work with other students freely on all homework problems.

The university policy on academic integrity will be enforced in this class. As stated in the Student Handbook, "[A] student…found guilty of dishonesty in academic work, for a first offense,…will be placed on probation, and the professor will receive a recommendation that [s]he receive an F in the course." The Handbook describes academic dishonesty as "dependence upon aid from others beyond that expressly approved by the instructor," "plagiarism" or "dishonesty on quizzes, tests, and examinations." Please refer to your copy of the Student Handbook for a more complete discussion of the importance of academic integrity.

Expected Time Dedication:
You will be held to a professional standard in this course. Your work should be carefully and thoughtfully completed. You should come well-prepared to the exams. This level of performance cannot be achieved unless you dedicate significant time outside of class to work in this course. You should, at the minimum, expect to spend 6 hours per week outside of class on work for this course.

Data for Research Disclosure:
Any and all results of in-class and out-of-class assignments and examinations are data sources for research and may be used anonymously in published research.

Tentative Course Outline:
Weekly coverage might change as it depends on the progress of the class.

Week	Material
Weeks 1-3	Chapters 1 & 2, Test 1
Weeks 4-6	Chapter 3, Test 2
Weeks 7-9	Chapter 4, Midterm, Spring Break
Weeks 10-13	Chapters 5-6, Test 3
Weeks 14-15	Topics in Chapters 7-8

Extra Credit: On occasion, extra credit may be assigned for the entire class. Extra credit will not be assigned to an individual student.

> "If people do not believe that mathematics is simple, it is only because they do not realize how complicated life is."
>
> **John Louis von Neumann**