Math 1309
9:00-11:00, 12:00-2:00 MTWTHF
TBD

Instructor: Mrs. Judy Newell   **Phone:** 214/768-3243
Office: 208A Clements Hall   **Email:** jnewell@smu.edu
Hours: 11:00-12:00 in office
        2:00-2:30 in classroom

Math 1309 is a prerequisite to Business Statistics and Accounting I. If students do not complete this course before the next fall, they are not able to enroll in statistics or accounting and cannot enter the Business school in the spring of the next year as expected. Taking the class in May term instead of summer school allows them to pursue other opportunities in the summer such as a summer job, internship or study abroad.

I will hold class for 2 hours and then take a one hour break and hold class for another 2 hour session. This will allow the students to have lunch and look over what was covered in the morning before moving on. A typical class would include a 1.5 hour lecture followed by a group quiz in which I would circulate around the room answering questions. I followed this schedule in the past and it was very successful. The students all did very well in the class, far exceeding my expectations.

Book: *College Mathematics for Business, Economics, Life Sciences and Social Sciences*: Edition 12, Barnett, Ziegler and Byleen: Pearson

Grading: Quizzes 10%
           Tests 90%

Class Policies:
1. You are expected to be in class each day (and on time). Absences and tardies are unacceptable. Please remain in class until you are dismissed.
2. Please stay focused on this course—do not read other material, sleep, or talk while class is in session.
3. The academic work in this course will be subject to the guidelines of the SMU Honor Code.
4. There will be **no make up** of quizzes or tests. All work must be turned in on time -- no late work! Final Exams must be taken at the scheduled time.

Disability Accommodations: Students needing academic accommodations for a disability must first contact Disability Accommodations & Success Strategies (DASS) at 214-768-1470 or www.smu.edu/alec/dass.asp to verify the disability and to establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements.

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence.

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity will be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements for make- up work with the instructor prior to any missed class.

Test Dates: **Test 1: May 19**
Test 2: May 22
Test 3: May 27
Test 4: May 29
Test 5: May 30

Goals: This course satisfies the Quantified Formations Requirement

1. Students will be able to solve problems using algebraic, geometric, calculus, statistical and/or computational methods.

2. Students will be able to interpret and/or draw inferences from mathematical models, data, graphs, or formulas.

Unit I: Limits and The Derivative
Introduction to Limits
Continuity
Infinite Limits and Limits at Infinity
The Derivative
Basic Differentiation Properties
Marginal Analysis in Business and Economics

Unit II: Additional Derivative Topics
Derivatives of Exponential and Logarithmic Functions
Derivatives of Products and Quotients
The Chain Rule
Functions of Several Variables
Partial Derivatives

Unit III: Graphing and Optimization
First Derivative and Graphs
Second Derivative and Graphs
L'Hopital's Rule
Absolute Maxima and Minima
Optimization

Unit IV: Integration
Antiderivatives and Indefinite Integrals
Integration by Substitution
The Definite Integral
The Fundamental Theorem of Calculus
Area between Curves

Unit V: Mathematics of Finance and Integration Applications in Business and Economics
Simple Interest
Compound and Continuous Compound Interest
Future Value of an Annuity; Sinking Funds
Present Value of Annuity; Amortization
Integration Applications in Business and Economics

May Term 2014 - Math 1309

Class #	Date	Section/Topic	Assignment
01	Thurs. May 15 9-11	First Day of Class Policies/Procedures 10.1 Intro to Limits	Page 486 #5,13,17,21,27,43,47,51,67
02	Thurs. May 15 9-11	10.2 Infinite Limits/ Limits at Infinity 10.3 Continuity	Page 498 #1,5,9,13,17,21,27,31,33,35,41,47 Page 509 #11,13,19,25,29,37,41,57 **Quiz #1 Today!**
03	Fri. May 16 9-11	10.4 The Derivative 10.5 Differentiation Properties	Page 523 #7,11,21,63ab,65 **Quiz #2 Today!**
04	Fri. May 16 12-2	10.5 Differentiation Properties 10.7 Marginal Analysis	Page 532 #1,5,9,13,17,27,29,33,37,39,43,47,49,51,69,71,73 Page 548 #25,27,29,33 **Quiz #3 Today!**
05	Mon. May 19 9-11	Review for Test #1	Worksheet
06	Mon. May 19 12-2	Test #1	
07	Tues. May 20 9-11	11.2 Derivatives of Exponential and Logarithmic Function 11.3 Derivatives of Products	Page 572 #1,3,5,7,9,11,13,15,17,19,21,27,29,31,33,35, 37,39,41 Page 579 # 3,9,11,19,39,47,49,55,63,67 **Quiz #4 Today!**
08	Tues. May 20 12-2	11.3 Derivatives of Quotients 11.4 The Chain Rule	Page579 #7,21,23,25,43,51,57,69,83 Page 588 #19,25,31,33,35,39,41,47,53,55,57,59,63,69,79,81 **Quiz #5 Today!**
09	Wed. May 21 9-11	15.1 Functions of Several Variables 15.2 Partial Derivatives	Page 804 #1,5,9,49,51,53 Page 812 #3,7,9,11,83,85,87 **Quiz #6 Today!**
10	Wed. May 21 12-2	Review for Test #2	Worksheet on Webpage
11	Thurs. May 22 9-11	Test #2	
12	Thurs. May 22 12-2	12.1 1st Derivatives and Graphs 12.2 2nd Derivatives and Graphs 12.3 L'Hopital's Rule 12.4 Curve Sketching	Page 626 #29,33,37,51,53,55,57,59,79,83 Page 644 #7,11,15,17,25,29,31,33,35,37,89,91 Page 657 #3,5,7,9,11,13 Page 667 #3,5 **Quiz #7 Today!**
13	Fri. May 23 9-11	12.5 Absolute Extrema 12.6 Optimization	Page 678 #17,19,23,33,39,41,47,57,61 Page 688 #11,17,25,27 **Quiz #8 Today!**
14	Fri. May 23 12-2	Review for Test #3	Worksheet on Webpage
15	Tues. May 27 9-11	Test #3	

16	Tues. May 27 12-2	13.1 Antiderivatives and Indefinite Integrals 13.2 Integration by Substitution	Page 706 #1,7,13,15,19,23,41,47,51,55,65,83 Page 718 #1,5,9,15,19,25,27,31,35 **Quiz # 9 Today!**
17	Wed. May 28 9-11	13.5 The Fundamental Theorem of Calculus 14.1 Area Between Curves	Page 749 #5,11,13,25,29,33,49,51,61,69 Page 765 #7,13,19,37,41,49,63,65 **Quiz #10 Today!**
18	Wed. May 28 12-2	Review for Test #4	Worksheet
19	Thurs. May 29 9-11	Test #4	
20	Thurs. May 29 12-2	3.1 Simple Interest 3.2 Compound and Continuous Compound Interest 3.3 Future Value of an Annuity, Sinking Funds 3.4 Present Value of an Annuity, Amortization	Page 131 #41,43,45,47,55,57,61 Page 142 #27,29,35,37,45,53,55,57,67 Page 151 #21,23,25,27,33 Page 161 #21,23,25,31,37,39 **Quiz #11 Today!**
21	Fri. May 30 9-11	14.2 Applications in Business and Economics Review for Test #5	Page 778 #21,25,29,31,43,47 Worksheet **Quiz #12 Today!**
22	Fri. May 30 12-2	Test #5	