

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

**Instructor:** Mrs. Judy Newell  
**Office:** 208A Clements Hall  
**Hours:** 11:00-12:00 in office  
2:00-2:30 in classroom

**Phone:** 214/768-3243  
**Email:** [jnewell@smu.edu](mailto:jnewell@smu.edu)

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:** : *Applied Mathematics For the Managerial, Life, and Social Sciences*, 6<sup>th</sup> Edition, Tan: Brooks/Cole

**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](http://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 18**

**Test 2: May 20**

**Test 3: May 26**

**Test 4: May 28**

**Test 5: May 29**

**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

One-sided Limits and Continuity

The Derivative

Basic Differentiation Properties

Derivatives of Products and Quotients, Higher Order Derivatives

**Unit II:**

The Chain Rule

Derivatives of Exponential and Logarithmic

Functions Marginal Analysis in Business and Economics

Functions of Several Variables

Partial Derivatives

**Unit III:**

First Derivative and Graphs

Second Derivative and Graphs

Curve Sketching

Absolute Maxima and Minima

Optimization

**Unit IV:**

Antiderivatives and Indefinite Integrals

Integration by Substitution

The Definite Integral

The Fundamental Theorem of Calculus

Area between Curves

**Unit V:**

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

Introduction to Limits