Calculus I
(MATH 1525)
Fall 2008

Professor: Dr. Paul Bailey

Office: WIL 228

Office Hours: MWF 1:00 PM to 2:00 PM; TTh 12 noon; by appointment

Web Site: `http://www.saumag.edu/pbailey`

Email: `plbailey@saumag.edu`

Book: *Thomas' Calculus*, Weir, Hass, Giordano, 11th edition

Grade Components

Problems:	10%
Quizzes:	30%
Midterms:	30%
Final:	30%

Homework exercises from the textbook will be assigned daily to be completed before the next class. These will not be collected, but they need to be done in a timely fashion to keep up with the course. Questions regarding the homework will be addressed at the beginning of the next lecture.

Occasional challenge problems will be handed out, to be thought about and completed outside of class. Mathematics should be written neatly, and *in complete sentences*.

There will be a quiz almost every Friday. No makeup quizzes will be given *unless arrangements are made before the day of the quiz*.

There will be two midterm examinations and one final examination. The final examination is scheduled for Wednesday, December 17, 2008, at 11:00 AM.

Calculators can be detrimental to the study of mathematics. The use of calculators, cell phones, laptop computers, and all electronic devices is strictly prohibited during quizzes and examinations. You may use an abacus.

Course Outline

Week	Beginning	Topic	Sections
Week 1	Sep 1	Sets and Functions	Notes
Week 2	Sep 8	Real Line and Cartesian Plane	1.1, 1.2, 1.3
Week 3	Sep 15	Real Valued Functions	1.4, 1.5, 1.6
Week 4	Sep 22	Limits	2.1, 2.2, 2.3
Week 5	Sep 29	Continuity	2.4, 2.5, 2.6
Week 6	Oct 6	Differentiation	3.1, 3.2, 3.4
Week 7	Oct 13	Differentiation	3.5, 3.6, 3.7
Week 8	Oct 20	Extrema	4.1, 4.2, 4.3
Week 9	Oct 27	Inflection	4.4, 4.5, 4.6
Week 10	Nov 3	Antiderivatives	4.8, 5.1, 5.2
Week 11	Nov 10	Integration	5.3, 5.4, 5.5
Week 12	Nov 17	Substitution	5.6
Week 13	Nov 24	Logarithmic Functions	7.1, 7.2
Week 14	Dec 1	Exponential Functions	7.3, 7.4
Week 15	Dec 8	Hyperbolic Functions	7.7, 7.8

Grade Interpretation

A: Indicates nearly complete mastery of the conceptual and computational aspects of the course.

1. know all definitions;
2. understand all major theorems;
3. perform all related calculations with only minor and infrequent errors;
4. combine ideas from differing sections in new ways to solve problems.

B: Indicates good understanding of conceptual material and excellence at computation.

1. know most definitions;
2. know most major theorems;
3. perform all related calculations without signficant errors;
4. combine ideas within sections in new ways to solve problems.

C: Indicates adequate knowledge of conceptual material and adequate computational skills.

1. know most of definitions;
2. know some major theorems;
3. perform a majority of the computational techniques correctly.

D: Indicates some knowledge of the theory and techniques resulting from adequate effort to learn.

1. complete a majority of assignments;
2. perform some computational techniques correctly.

F: Indicates inability to demonstrate knowledge of course material, and/or inadequate effort.

Assignment Assessment

Each quiz will be graded on a scale of 0 to 10. Quizzes normally contain two problems.
Each exam will be graded on a scale of 0 to 100.

Academic Integrity

The University's policy on academic integrity, as stated in the Course Catalog (pages 34 and 35) will be strictly enforced in this course. Any evidence of academic dishonesty will not be tolerated.

You are welcome to work with each other on homework assignments if you follow these rules: 1) anyone you discuss a problem with should be mentioned in your solution, and the originator of any idea should be so credited; 2) you must understand your solution, and write it in your *own words* (NO COPYING). Any violation of rules 1) and 2) is plagiarism, a form of academic dishonesty.

Observing and/or copying from another student's paper during quizzes and examinations is cheating, a form of academic dishonesty.

All answers on quizzes, worksheets, examinations, et cetera, must be justified in words and/or computations. Answers with insufficient or incorrect justification may result in zero credit, or in question marks surrounding the assignment's grade. Assignments with question marks receive zero credit until the student visits the professor to demonstrate the ability to reproduce the result in question.