Instructor:  
Office: MB 2.404  
Classroom:  
Phone:  
E-mail:  

Office Hours  
MW  
TR  

Course Outline:  
See attached.  

Prerequisite:  
MAT 1093 (Pre-calculus) with a grade of “C” or better.  

Text Book:  
Thomas’ Calculus Early Transcendentals Media Upgrade 11th ed., by Maurice Weir and Joel Hass  

Goals and Objectives:  
This course provides students with the opportunity to master basic topics of Calculus in one variable, which are of fundamental importance to the foundation of advanced mathematics and many applications.  

Attendance:  
Regular attendance is encouraged and expected.  

Test Policies:  
Students are responsible for taking the assigned tests at the assigned time. There will be no make-up tests given. However, your final exam grade replaces your lowest test grade, if higher. This indicates that only test can be missed or replaced.  

Homework and Online Quizzes:  
Homework will be assigned for each section covered in the textbook. Some homework assignments may be collected for completion purposes only. However, the completion of this homework is vital to your success in this course since problems and questions for your online quizzes are extracted 100% from your homework.  

Grade Evaluation and Tentative Examination Schedule:  

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<th>Homework/Online Quizzes</th>
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<th>Tests</th>
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<td>Test #1 (Chapter 2) –</td>
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<td>Test #2 (Chapter 3) –</td>
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<td>Test #3 (Chapter 4) –</td>
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<td>Test #4 (Chapter 5) –</td>
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<th>Final Exam</th>
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<td>Comprehensive (Chapters 2-5)</td>
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Other Important Dates to Remember:  

- Last day to drop or withdraw without a grade.  
- Last date that a student is permitted to drop an individual course.  
- Student Study Days. Classes do not meet.  

Note: All electronic devices (e.g. pagers, cellular phones, etc.) must be turned off or placed in silent mode while in classrooms.
Text:  *Thomas' Calculus Early Transcendentals Media Upgrade 11th ed.*, by Maurice Weir and Joel Hass

Course Description:
An introduction to the concepts of limit, continuity and derivative, mean value theorem, and applications of derivatives such as velocity, acceleration, maximization, and curve sketching; introduction to the Riemann integral and the fundamental theorem of calculus.

CHAPTER 2 Limits and Continuity

2.1 Rates of Change and Limits
2.2 Calculating Limits Using the Limit Laws
2.3 The Precise Definition of a Limit
2.4 One-Sided Limits and Limits at Infinity
2.5 Infinite Limits and Vertical Asymptotes
2.6 Continuity
2.7 Tangents and Derivatives

CHAPTER 3 Differentiation

3.1 The Derivative as a Function
3.2 Differentiation Rules for Polynomials, Exponentials, Products, and Quotients
3.3 The Derivative as a Rate of Change
3.4 Derivatives of Trigonometric Functions
3.5 The Chain Rule and Parametric Equations
3.6 Implicit Differentiation
3.7 Derivatives of Inverse Functions and Logarithms
3.8 Inverse Trigonometric Functions
3.9 Related Rates
3.10 Linearization and Differentials

CHAPTER 4 Applications of Derivatives

4.1 Extreme Values of Functions
4.2 The Mean Value Theorem
4.3 Monotonic Functions and the First Derivative Test
4.4 Concavity and Curve Sketching
4.5 Applied Optimization Problems
4.6 Indeterminate Forms and L'Hôpital's Rule
4.8 Antiderivatives

CHAPTER 5 Integration

5.1 Estimating with Finite Sums
5.2 Sigma Notation and Limits of Finite Sums
5.3 The Definite Integral
5.4 The Fundamental Theorem of Calculus
5.5 Indefinite Integrals and the Substitution Rule
Instructions to Access MyMathLab

Your package included a student access kit to the publisher’s site. To register, follow the instructions in your kit and go to the student registration and login site at:

http://www.coursecompass.com

When asked for the course ID, use:

Once you are registered, click on the MAT 1214 Calculus I Spring 2010 link.

After using your student access kit to register in CourseCompass, I would like for you to familiarize yourself with the following four links: Installation Wizard, Multimedia Library, Chapter Contents, and MyMathLab.

INSTALLATION WIZARD

You must use the installation wizard to install plug-ins and players such as Quicktime Player, Macromedia Flash Player, and Adobe Acrobat Reader.

MULTIMEDIA LIBRARY

In this link you will find the textbook sections online, powerpoint presentations for each section, and video lectures for each section. You need all the above plug-ins and players to gain access to this multimedia information.

CHAPTER CONTENTS

In the chapter contents, you will find a link labeled Math Tutor Center. Once you enter this link, you will find a phone number to register for free online tutoring. There will also be a Tutor Center's website link that will give you more information. Please have your CourseID or student access code ready when calling.

Note: Quizzes, NOT TESTS, will be taken at this site. In addition, video presentations, the student solution manual, and more are available here.