Moravian College
MATH170 Calculus I
M, W, F: 2:35 – 3:45 p.m.
PPHAC 112

Course Description: Review of real numbers, analytic geometry and algebraic and transcendental functions. Topics include: limits and continuity, definition, interpretations, and applications of the derivative, definite and indefinite integrals, including the fundamental theorem of calculus.

Course Objectives
In working toward internalizing these main ideas for the course, we will work to meet the following objectives:
- Master differentiation and integration methods and the concepts behind them,
- Demonstrate facility with functions graphically, algebraically, numerically, and verbally,
- Apply the methods of calculus to solving real world problems, and
- Discuss and present solutions to mathematical problems in written and oral form.

Main ideas for the course
- Continuous changes can be approximated by discrete processes.
- Linearization is the key to understanding many functions.
- Solving problems requires finding the right model.
- Calculus is about the concept of the infinite.

Department Outcomes
- Read and demonstrate comprehension of new mathematical material
- Write mathematics with awareness of audience, mathematical context, and proper notation and terminology
- Model a significant real world problem and solve it using mathematical techniques.
- Demonstrate awareness of the role specific mathematical concepts play in several areas of mathematics.

Text: Rogawski, J. (2012). *Calculus: Single variable (early transcendentals),* (2nd ed.).New York, NY: W. H. Freeman and Co.

Technology: Graphing Calculator TI-83/84 recommended

Instructor: Prof. A. Rolón
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Office Hours: PPHAC 223
Monday, Wednesday: 2:00 – 2:30 p.m.

Method of Assessment:

Exam #1……………………………………………………..	20%
Exam #2……………………………………………………..	20%
Limit Proficiency Test…………………………………	5%
Derivative Proficiency Test……………………………	10%
Quizzes……………………………………………………	20%
Final Exam…………………………………………………..	25%

Final Grade: The final grade will be given as follows:

A = 93 – 100	**B+ = 88 – 89**	**C+ = 78 – 79**	**D+ = 68 – 67**
	B = 83 – 87	**C = 73 – 77**	**D = 60 – 67**
A– =90-92	**B– = 80 – 82**	**C- = 70 – 72**	**F = 0 – 59**

Homework problems will be assigned for each section discussed in class. It is expected that the student complete the homework problems prior to class. If you have any questions regarding any homework problem feel free to ask in class or see me during office hour.

Quizzes will reflect the problems in the homework and will be administered weekly on-campus or take-home. You must complete the quizzes on time or your score will be a zero for that quiz. No make-up quizzes will be given. In case when you have to turn in a quiz, you MUST be present to do so or have arranged to turn it in at an earlier time. Late quizzes will not be accepted.

Tests are more challenging. You need to apply the concepts learned to more difficult problems. You have the entire class period to complete each test. No class will be held after tests.

Cell-phones/Smart phones/iPads/i_____ etc., etc., etc., MUST be turned off or in silent mode during class. In case you have an e-book, please make sure that the book reader is only displaying the textbook and nothing else. If you are expecting a call, let the instructor know before class begins. Cell phones CANNOT be used as calculators at all. I don't want to see them; I don't want to hear them. You will be asked to pack your "stuff" and leave if caught using any of these devices during class. Courtesy is appreciated.

Sleeping WILL NOT be tolerated. You will be asked to leave class if caught sleeping. If you are tired, please stay home and get the necessary rest in order to be an active learner/participant in class.

Communication: The best way to communicate with me is via email. Please note that I will **NOT** check emails at nights (after 4:00 p.m.) or on weekends. So if you send me an email after 3:00 p.m. Friday, I will not respond to it until Monday.

Student Accommodation
Students who wish to request accommodations in this class for a disability should contact Elaine Mara, assistant director of learning services for academic and disability support at 1307 Main Street, or by calling 610-861-1510. Accommodations cannot be provided until authorization is received from the Academic Support Center.

What can *you* do to help your final grade? READ! READ! READ! I hope that you will find the lectures and activities brilliant and stimulating, but I simply will not go over every detail of the book in class. You will be tested over many of those details. It is my strongest advice that you read each section at least twice. However, reading it twice in a row will do you little, if any, good. You should plan to read each section once before you do the assignment and once after you do the assignment.

Limit and Derivative Proficiency Tests
In addition to the regular exams, there will be two proficiency exams: a *Limit Proficiency* and a *Derivative Proficiency*. If you score less than 80% on either of these, your score will be entered as a 0% in the grade book. However, you may retake the exam as often as you want within 4 weeks of the original exam — the grade book will reflect the highest score you achieved on the exam (assuming it is 80% or better).
The first Limit Proficiency exam will be on February 11, 2013 and retakes may be done through March 18, 2013.
The first Derivative Proficiency exam will be on March 1, 2013 and retakes may be done through April 5, 2013.
Retakes for both proficiency exams are to be done outside of the regular class meeting times. You will need to set up an appointment to retake the exam. Poor planning on your part does not constitute an emergency on mine. Let's make sure we both agree to a time where we are both available.

Academic Honesty
Students will be expected to adhere to the standard of the Academic Honesty policy as described in the Student Handbook (*http://www.moravian.edu/studentlife/handbook/academic/academic2.html*). Any violations of this will result in severe penalties on the assignment, a report to the Dean, and the very real possibility of failing the course.

Please note that a syllabus is a tentative schedule for the course and is subject to change at any time during the semester. Any changes made to the syllabus will be announced in class.