

MATH 108: Functions and Derivatives with Applications
Fall 2014

Professor: Dr. John A. Chiaramonte

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Phone:

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Office Hours: MWF 12:30 - 1, 4-4:30 PM and by appointment

Required text: Calculus: For Business, Economics, Life Sciences and

Social Sciences, by Ziegler and Byleen, 13th ed.

COURSE GOALS:

This course is designed to develop the calculus concepts that will benefit those students interested in the business and social sciences. The approach used will be especially useful for students who need to study calculus but would benefit by a review of necessary precalculus topics. Upon completing the course, successful students will be able to work with functions algebraically, graphically, and numerically, and use them to model problems, understand the derivative conceptually as well as knowing how to calculate derivatives using the various techniques studied in class, improve their communication and technical writing skills by discussing mathematical problems and presenting solutions in written and oral form.

COURSE DESCRIPTION:

Homework assignments will be given at each class meeting. Students are expected to complete these assignments by the next class meeting, where they will be discussed. No one can learn mathematics without doing it themselves and so, to the student, homework is the most important part of the course. Since class participation is important, students are expected to attend every class.

GRADING:

Your final grade will be based on

Homework assignments, attendance and class participation 10%

3 class exams 20 % each

Comprehensive final exam 30%

MAKE-UP TESTS ARE GIVEN ONLY IN EXTREME CASES. IF A STUDENT HAS TO MISS A TEST IT IS THE STUDENT'S RESPONSIBILITY TO CONTACT THE PROFESSOR AS EARLY AS POSSIBLE.

The following grading scale is used when assigning your final grade,

93-100 A 83-86 B 73-76 C 63-66 D

90-92 A- 80-82 B- 70-72 C- 60-62 D-

87-89 B+ 77-79 C+ 67-69 D+ 0-59 F

LEARNING DISABILITY ACCOMMODATIONS:

Students who wish to request accommodations in this class for a disability should contact Elaine Mara, Assistant Director of Academic & Disability Support located on the first floor of Monocacy Hall or by calling 610 861-1401. Accommodations cannot be provided until authorization is received from the Academic Support Center.

ACADEMIC HONESTY POLICY GUIDELINES FOR MATHEMATICSCOURSES:

The Mathematics and Computer Science Department supports and is governed by the Academic Honesty Policy of Moravian College as stated In the Moravian College Student Handbook. The following statements will help clarify the policies of members of the Mathematics faculty. In all homework assignments which are to be graded, you may use your class notes and any books or library sources. When you use the ideas or thoughts of others, however, you must acknowledge the source. For graded homework assignments, you may not use a solution manual or the help, orally or in written form, of an individual other than your instructor. If you receive help from anyone other than your instructor or if you fail to reference your sources, you will be violating the Academic Honesty Policy of Moravian College. For homework which is not to be graded, if you choose, you may work with your fellow students. You are responsible for understanding and being able to explain the solution of all assigned problems, both graded and not graded.

NOTE: This syllabus is a guideline for the course. It may be necessary to make changes during the semester. Any deviations will be announced in class.

Math 108B TENTATIVE ASSIGNED PROBLEMS FALL SEMESTER, 2014

Week 1 1.1 P14 3-19Eoo, 39-49odd, 61-65odd

1.2 P263-17odd, 33,41,47,71

Week 2 1.3 P443-15Eoo,23, 29, 43-47odd, 69

1.4 P595, 7, 23, 25, 33-45odd, 57

Week 3 1.5 P703-15Eoo, 25-41Eoo, 47-51odd

1.6 P821-33Eoo, 43-49odd, 57-63odd, 81, 83

Week 4 2.1 P1057-23odd, 35-59Eoo

2.2 P11711-43Eoo, 51, 53

Week 5 Review, exam 1

2.3 P12827, 29-53Eoo, 69-75odd

Week 6 2.4 P14311, 21, 23, 25, 45-57odd

2.5 P1539-25odd, 33-53odd, 57, 59, 61, 81

Week 7 2.6 P17011-43Eoo

3.1 P1859-15odd, 21, 25-29odd, 33, 35, 41

Week 8 3.2 P1949-33odd, 39-53odd

3.3 P2019-33odd, 47-53odd, 71, 93

Week 9 Review, exam 2

3.4 P21119-51odd, 57, 63, 67

Week 10 3.5 P2181-29Eoo, 37

3.6 P23115-63Eoo

Week 11 4.1 P2499-16, 19-43Eoo, 58, 95
4.2 P2669-19odd, 25-37Eoo, 49-69Eoo

Week 12 4.3 P2791-53Eoo
Review, exam 3

Week 13 4.4 P28913, 19, 27, 35, 51, 55, 57, 85b
4.5 P29915, 17, 26, 29-53Eoo

Week 14 4.6 P31011-19odd, 25-33odd, 37
Review

Week 15 Review