

MATH 108-004 – INTRO CALCULUS WITH BUSINESS APPLICATIONS

Spring 2015

<http://math.gmu.edu/~robeirne/math108>

- PREREQUISITE:** Specified score on the Mathematics Placement Test or successful completion of the self-paced Basic Mathematics Program offered by the Mathematics Literacy Center
- INSTRUCTOR:** Richard O'Beirne, Department of Mathematical Sciences
Telephone: 703-993-1467
Email: ROBEIRNE@GMU.EDU
Office: Exploratory Hall 4452
- MEETINGS:** Tuesdays and Thursdays from 4:30 p.m. to 5:45 p.m. from January 20, 2015 through April 30, 2015 in Exploratory Hall L004 (except March 10 and 12 – Spring Break)
- OFFICE HOURS:** 6:00 p.m. –7:00 p.m. on Tuesdays and Thursdays, and by appointment as necessary.
- TEXTBOOK:** Applied Calculus for Business, Life, and Social Sciences by Burzynski, (Published by XYZ Textbooks)
- MATERIAL:** The course will cover most of the material contained in the following five chapters:
Chapter 1 – Functions, Limits, and Rates of Change
Chapter 2 – Differentiation: The Language of Change
Chapter 3 – Applying the Derivative
Chapter 4 – The Natural Exponential and Logarithmic Functions
Chapter 5 – Integration: The Language of Accumulation

GRADING: There will be 3 tests, ungraded homework, and a final exam. The lowest score of the three tests will be dropped, and the remaining two tests will determine 60% of the grade. The final exam (on Tuesday, May 12 at 4:30 p.m.) will determine the final 40%. In addition there will be occasional quizzes in class. The quizzes will not count toward the grade. The test dates will be announced two weeks in advance of each test. Grades will be calculated as A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: below 60. +/- may be used at the edges of each bracket.

In this course I put a HEAVY emphasis on the application to calculus to business and economic concepts. The key to success in any mathematics course is in understanding the examples in the book and working the exercises at the end of every chapter. I will identify specific exercises from the book for ungraded homework. You should consolidate all of the worked exercises in a notebook to be used to study for tests and the final examination. The Honor Code is taken very seriously and will be enforced if necessary. You may not give or receive help during tests. You may study in groups, but you should understand the work, and work you submit must be your own. I will discuss test procedures in class.