

## COURSE CREDIT BY EXAMINATION

**MATH 1350—Survey of Calculus**  
**Four Semester Hours**

MT  
08/12

### PREREQUISITES:

University Requisite: MATH 1321 or (C or better in 1200), or math placement level 2 or higher and WARNING: not MATH 2301

### COURSE DESCRIPTION:

Presents a survey of basic concepts of calculus. For students who want an introduction to calculus, but do not need the depth of 2301 and 2302. Note: Students cannot earn credit for both 1350 and 2301.

### TEXTBOOK AND SUPPLIES:

Barnett, Raymond, Michael Ziegler, and Karl Byleen. *Calculus for Business, Economics, Life Sciences, and Social Sciences*. 13<sup>th</sup> ed. Pearson, 2014. [ISBN: 9780321869838]

You may use a **calculator** for your study and on the examination, although it may not be of great help. The calculator must have only basic functions (a TI-30 or similar); you may not use a TI-82, TI-85, TI-92, or similar models from Hewlett-Packard or other manufacturers.

In addition to the textbook mentioned above, there are several texts that cover the material of this course syllabus. The following are other options. (If you already have one of these texts, you may use it in place of the required text, although you will have to determine from the index where to find the topics covered on the examination.)

Lial, Greenwell, and Ritchey. *Calculus with Applications*. 9<sup>th</sup> ed. Addison Wesley, 2007.

Ramaley. *Applied Calculus*. Wm. C. Brown Company, 1996.

### READING ASSIGNMENTS:

The examination will cover the following topics:

- Chapter 2—Functions, Limits, and the Derivative  
Study Sections 2.1 to 2.6
- Chapter 3—Limits and the Derivative  
Study Sections 3.1 through 3.5; this is the core chapter of the course.
- Chapter 4—Additional Derivative Topics  
Study all sections thoroughly; pay special attention to 4.1, 4.2, 4.3, and 4.4.

- Chapter 5—Graphing and Optimization  
Study all sections from 5.1 to 5.6.
- Chapter 6—Integration;  
Study 6.1, 6.2, 6.4, and 6.5.
- Chapter 7—Additional Integration Topics  
Study 7.1 and 7.2.

You may omit the study of “Alternative Sections” from all assigned chapters. Be sure that you learn the techniques of solving problems as illustrated by “Examples” in the chapters, and review the key ideas presented in the “Chapter Review” for each assigned chapter. It will be to your benefit to work the “Review Exercises” and “Chapter Tests” for practice. I may select problems for the examination from these sources.

### **NATURE OF THE EXAMINATION:**

The examination has a total of 115 possible points, divided as follows:

1. A true/false problem and a fill-in-the-blanks section based on overall factual knowledge of the course. (Total credit: 15 points)
2. Five problems based on rules of differentiation, curve sketching, and solving optimization problems using concepts of calculus. (Total credit: 50 points)
3. Five additional problems drawn from all assigned sections of the chapters, plus an additional bonus problem for extra credit. (Total credit: 50 points, 10 points for bonus)

You will be allowed three hours to complete the examination. All materials will be provided; you are not permitted to use books, notes, or supplementary aids, except your calculator. Remember, your calculator must conform to the requirements listed under “Textbook and Calculator” of this section.

### **Grading Criteria**

Assigned point credits for each problem will be indicated. You will earn some “goodwill points” for neat and organized answers written legibly and fully. Your final grade will be based on the percentage of total credit points earned.