



MA 120-04

Calculus and Its Applications

Semester: Spring 2003

Instructor: Richard Hitt, Ph.D., Professor of Mathematics

Office Hours: MWF 8:15 AM - 9:05 AM, and by appointment in ILB 306 (accessible through ILB 325).

Phone: (251) 460-6755 is a direct line into my office. If I am not in, you can leave a message on my voice mail. If you need to speak to a secretary, you should dial 460-6264 and press 0 (zero) at the voice prompt.

E-mail: My electronic mail address is hitt@jaguar1.usouthal.edu. This is a good way to get in touch with me.

Web page: I will maintain a course web page that will contain information on class meetings and homework assignments. You can access it by starting at my web page <http://math.usouthal.edu/hitt> and clicking on the course number in my schedule.

Class Meeting: MWF 10:10 AM - 11:00 AM in ILB 370.

Text: *Applied Calculus*, Second Edition, by Hughes-Hallett, et al, (ISBN 0-471-20792-6). It is important that you have the correct edition of the text.

Coverage: We will cover selected material from Chapters 1 – 7 and 9 as time allows. See the course home page for the details.

Prerequisite: MA 112 (Precalculus I) or equivalent.

Tutoring: The Department of Mathematics and Statistics provides free tutoring in ILB 456 beginning the second week of classes. A schedule of hours for the tutoring lab will be posted on the bulletin board outside ILB 325.

Calculator: A graphing calculator is required for this course. I will be using a TI-89 in class since this is the required calculator in MA 112 (the course prerequisite).

Description: [Taken from the *2001-2002 Undergraduate/Graduate Bulletin*] Introduction to calculus with an emphasis on problem solving and applications. Key concepts are presented graphically, numerically and algebraically, although the stress is on a clear understanding of graphs and tabular data. The course covers: algebraic, exponential and logarithmic functions, their properties and their use in modeling; the concepts of derivative and definite integral and their applications to marginal analysis, optimization and probability; examples of multivariable functions, partial derivatives and applications to optimization problems.

Objectives: The goal of this course is to provide a conceptual understanding of the main ideas of calculus and their application to problem solving.

Grading: There will be two in-class tests, each counting as 25% of the course grade. The final exam (Monday, May 5, 10:30 AM – 12:30 PM) will be cumulative, and will count as 35% of the course grade. The remaining 15% of the grade will be derived from short quizzes. The lowest quiz grade will be dropped. There are no make-up tests or quizzes. If you miss a test, a grade for that test will be extrapolated from the part of the final exam which covers the missed test. (Note: You cannot choose to miss a test after you have received the test in class.) Unless otherwise announced, the cut-off points for the letter grades A, B, C and D are 90%, 80%, 70% and 60%, respectively.

Notes: If you have a specific disability that qualifies you for academic accommodations, please notify me and provide appropriate certification from the Office of Special Student Services (Student Center, Room 270, Phone 460-7212).

Any unforeseen changes required in the above policies and procedures will be disseminated to the class in a timely fashion.