MA 1170-01 – Fundamental Concepts of Calculus (3 credits)
MWF 10:30-11:20am, 110 Elliott
Howard Iseri

My wife Linda is also a member of the Math and CIS faculty, so there are two Drs. Iseri. Call me Howard.

Office: 213C Elliott Hall. Email: hiseri@mansfield.edu, Web page: http://faculty.mansfield.edu/hiseri. It will be most efficient to contact me by email, and you don’t need to notify me that you’ll be missing class.

Office Hours: MWF 9:30-10:20pm, TTh 9:00-9:50am

Attendance: You don’t have to notify me that you’ll be missing class. I’ll understand, if you miss a class occasionally. The lecture notes and homework will be posted on my web page, and if you turn in your quiz and homework for the missed class, your absence will not count against you.

Course Description: (3 credit hours) The fundamental concepts of calculus is for non-physical science majors utilizing the basic techniques of differential and integral calculus. Not available to students who have completed MA 2231. Prerequisites: MA 1128 or equivalent.

General Education: This course will satisfy Group III (Mathematics) General Education requirements and address the Problem Solving General Education Outcome. The final exam (and perhaps other assignments in the class) will be filed for assessment purposes (see me, if you wish your work to not be used as assessment artifacts).

Optional Text: There is no required text for this class. We will be working from my lecture notes. If you wish to have a text, Calculus and Its Applications, by Marvin L. Bittinger, (any edition) will match the course material pretty well. Most of you will be able to get along fine without a book.

Calculator: You will need a scientific calculator (a $10-$15 calculator with exponents, logs, and trig functions is sufficient).

Web Access: I will post lecture notes on my webpage in PDF format, so you will need something like Adobe Acrobat or Adobe Reader to read them. Click on Adobe Reader for information on free downloads. Campus policy requires that we use your Mansfield University email address for all course business.

Assignments: 10% total Homework, quizzes, and project.
22% each Three Tests (Wednesdays, February 9th, March 2nd, and April 6th).
24% Final Exam (Monday, May 2nd at 10:15am).

Letter Grades: I will assign letter grades based on the following percentages. An A is 93% or better, an A- is 90% or better, a B+ is 87% or better, a B is 83% or better, a B- is 80% or better, a C+ is 77% or better, a C is 73% or better, a C- is 70% or better, a D+ is 67% or better, a D is 63% or better, and a D- is 60% or better. Anything below 60% is an F.

Material to be covered: We will cover the basic properties and applications of functions, limits, differentiation, integration, and differential equations. See the course calendar for more details.

Objectives: (see objectives page for more details) Students will be able to:
1. Demonstrate knowledge of limit
2. Find derivatives using product rule, quotient rule, and chain rule.
3. Solve problems related to optimization.
4. Solve problems involving applications such as population growth and economics.
5. Take integrals using standard rules including substitution and integration by parts.
6. Compute areas using integration.
7. Solve differential equations for simple types (such as separable and linear DE’s).

MU Americans-with-Disabilities-Act Statement: Any students with documented psychological or learning disorders or other significant medical conditions that may affect their learning should work through Mr. William Chabala in our Counseling Center (South Hall 143, Phone: 662-4798; e-mail wchabala@mansfield.edu) to provide me with the appropriate letter so that I may serve their particular needs more effectively. If you have an exceptionality that requires classroom or testing accommodations, Mr. Chabala will work with us to identify and implement appropriate interventions.