Syllabus (Fall 2011)
MA 2233-01 – Calculus III
11:30 MWF – 116 Elliott
Lab: 5:30 TTh – 207 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: 213B Elliott Hall. Email: hiseri@mansfield.edu. Web page: http://faculty.mansfield.edu/hiseri. Phone: 662-4701 (I like email messages a lot more than phone messages).

Office Hours: 10:30 MWF and 12:00 TTh.

Text: (Optional): Calculus, Larson and Edwards (any edition). You probably already have this or another calculus text, and that’s fine. If you don’t, it’s very likely that you won’t really need one.

Catalog Description: This is a continuation of MA 2232. The purpose of this course is to investigate functions of two or more variables. Topics include graphing functions of two or more variables, partial derivatives, vectors, optimization, double and triple integrals, line and surface integrals, and calculating volumes. (Addresses NCTM Standards 1.5.3, and 1.5.10 for Mathematics Education majors.) Prerequisite: MA 2232 or equivalent.

NCTM evidence for Mathematics Education Majors: Mathematics Education majors are required to compile an electronic portfolio including evidence that supports NCTM accreditation of this program. The mathematics faculty have designated a number of specific items to be included in your portfolio addressing NCTM standards 1.5.3, and 1.5.10. These will be identified to you during the semester. Please include such items in your electronic portfolios.

Calculator: You may want to use a calculator for this class, and you will be allowed to use it on tests. A $10-$15 scientific calculator or statistical calculator should be sufficient.

Assignments: 10% total Homework, quizzes, and labs.
22% each Three Tests (Wednesdays, Sept 21st, Oct 12th, and Nov 9th).
24% Final Exam (Wednesday, December 14th at 10:15).

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: See Course Calendar (http://faculty.mansfield.edu/hiseri/MA2233/MA2233.htm)

Course Objectives: Goals for the course are that students will be able to:
1. Perform multivariate computations, as extensions of single variable concepts, including vector arithmetic, multivariate derivatives and integrals, multivariate extrema.
2. Appropriately apply Green’s Theorem, Divergence Theorem, and Stokes’ Theorem, and demonstrate a knowledge that these are extensions of the Fundamental Theorem of Calculus.
3. Use technology to explore and deepen understanding of the above concepts.

Objectives 1 and 2 address the Content Knowledge program objective, Objectives 1, 2 and 3 address the Proof and Objective and the Problem Solving program objectives, and Objective 3 addresses the Technology program objective.

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 216, 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.