

**Calculus III**  
**MA 265 Winter 2016**  
**MWRF 9:00 – 9:50 AM WS 2901**

**Professor:** Dr. Linda Lawton  
**Office:** Jamrich 2206  
**Email:** llawton@nmu.edu  
**Office Hours:** 1:00 – 2:30 MRF or by appointment

**Text:** Calculus, Edition 7e, James Stewart, Thomson, Brooks/Cole, 2008.

**Course description:** We will cover chapters 12, 13, 14, 15, and 16 of the text. Students will become familiar with vectors, two-dimensional and three-dimensional geometry, vector-valued functions, functions of several variables, multiple integrals, and vector analysis.

**Prerequisite:** Satisfactory (C- or better) completion of Math 163 or equivalent.

**“Homework”:** Homework problems from the text will be assigned but not collected daily -instead we will have daily/weekly quizzes and in-class grades (group worksheets) worth a total of 1000 daily points. I will “forgive” 200 points—i.e. if at the end of the semester you have accumulated 800 points, you will receive 100% for your homework average. In light of this, there will not be “make-up” quizzes/worksheets—the “forgiven” 150 points accounts for necessary absences.

**Exams:** There will be five in-class exams spaced roughly 3 weeks apart. Exam dates and times can be rescheduled only with prior notice and approval except in the case of emergencies where I am notified by the university. Just a word of warning—make-up exams tend to be more difficult than the original. (Once a test has been given, its content tends to become widely known very rapidly—not to mention I may have already used my best (read nice) problems.)

**Breakdown:**

Homework:	8%	
Exam 1:	10%	
Exam 2:	10%	
Exam 3:	15%	
Exam 4:	15%	
Exam 4:	10%	
Final:	32%	(comprehensive)

**Grade scale:**

91 – 100%	= A
81 – 89%	= B
71 – 79%	= C
61 – 69%	= D
< 60%	= F

**Learning Outcomes** (primary focus of examinations) Students will . . .

- demonstrate the ability to analyze and visualize curves, surfaces, and regions in 2 and 3 dimensions, in Cartesian, polar, cylindrical, and spherical coordinate systems.
- perform calculus operations on vector-valued functions and functions of several variables, including limits, (partial) derivatives, and (multiple) integrals.
- find and classify extrema and tangent planes of functions of two variables.
- apply some of the theorems of vector calculus, such as the Fundamental Theorem of Line Integrals, Green’s Theorem, the Divergence Theorem, and Stokes’ Theorem, to simplify integration problems.

**About me:**

Normally I am a rather informal, laid back person—i.e. easy to deal with. (Even my husband agrees with this.) But there are a few things which tend to make me grumpy—i.e. difficult to deal with. Here's a short list (keep in mind this was developed while teaching "Math for People Who Hate Math But Have to Have One to Graduate"):

1. bad attitudes

(Please don't just sit in the back glaring at me—pretend you are enjoying yourself!!)

2. homework (or other) questions right before class starts

(I want to provide you with clear, understandable lectures, but I am easily distracted. I need that time to focus before I start class.)

3. repeatedly skipping class and expecting me to "lecture" during office hours

(I don't mind covering the material with you in my office, but there is only so much we can cover in one sitting.)

4. point grubbing

(When I grade quizzes and tests I go through all the papers twice to ensure that equivalent credit is given to equivalent work. If you feel I have made an error, please submit a written request for me to review the matter.)

5. cheating, etc.

Cheating will result in failure of not only the exam / assignment, but also the course.

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.

*This syllabus is subject to change with notice.*