**Math 163 :: Calculus II :: Winter 2014**

This is the syllabus for Math 163-01. See the links to the right for updated information. Here you'll find information on prerequisites, grading policy, homework, study resources and a tentative course calendar.

**Textbook**

The (required) textbook we will use for this course *Calculus - Early Transcendentals* by James Stewart. I will use the Sixth Edition, which is available at the University Bookstore. It is pictured below.

Other editions will be very similar, but the exercises will occasionally differ. If you have a different edition, find a friend with the sixth edition to make sure the exercises you work match your friend's. This is an incredibly popular text, it is carefully written with clear explanations, it motivate the subject and has lots of examples.

**Class**

Class will be held in West Science 2911, unless otherwise noted on the following days & times.
- Math 163-02: 10:00-10:50 a.m., Mon-Wed-Thur-Fri

**Office Hours**

I am often in my office NSF 1115, you are free to stop by and see if I am available. My official office hours are
- Monday: 1pm - 3pm
- Wednesday: 1pm - 3pm
- Thursday: 1pm - 2pm
- Friday: 1pm - 2pm

**Attendance**

Regular attendance is expected. Important dates can be found [here](#).

**Grading**

- Homework 25%
- Quizzes 10%
Exams 40% (4 @ 10% each)  
Final 25%

**WeBWork**

Homework problems from the text will be completed online via WeBWork, and is due each Friday at 8am. Any additional written homework will turned in on Friday. Help can be found here.

**Quizzes**

Quizzes will be given roughly every two weeks. Some quizzes will be group/team quizzes.

**Exams**

- Exam 1 - February 5  
- Exam 2 - February 28  
- Exam 3 - April 2  
- Exam 4 - April 25  
- Final - Thursday, May 1 :: 10 am - 11:50 am  
*Make sure that you will be able to attend the exams at the given dates and times. Exceptions can only be accepted in case of time conflicts with other courses, or serious illness with a physician's certification.*  
[Final Exam Schedule]

You need a C or better in MA 161 or satisfactory score on the Math Placement Exam. You **should be familiar** with the ideas on page one of this sheet.

**Calculators & Graphing Software**

Calculators and graphing software will often be used in class and will be allowed on Some exams and quizzes. Unless otherwise notified, you are **not allowed to have any information saved** in your calculators during quizzes and exams. You are not required to have a calculator, since there are many free online graphing calculators available.  
[FooPlot.com, DesMos.com]

**Laptops**

In order to promote a focused learning environment, **Do not use your laptop in class unless instructed to do so.**

**Other Resources**

Both free and paid [tutoring](#) is available, in the tutoring lab in NSF 3810.

**Outcomes & Assessment**

Upon successful completion of this course students will be able to:

- Select and correctly apply specialized integration techniques.  
- Select and apply appropriate tests to determine convergence or divergence of sequences and series.  
- Use integration techniques, differential equations and power series to model and solve common problems in applied mathematics.  
*Evaluation of these learning outcomes will be done through a mix of assignments, class exercises, projects, research papers, group work, written & oral quizzes and tests.*
Course Description

This course will cover chapters 7, 8, 9, 10 and 11 of the text. We will learn various techniques that allow us to integrate many different types of functions. Then, we will apply these techniques to answer questions inside and outside of mathematics. We will then study differential and parametric equations and use polar coordinates to represent functions. We will next learn to represent elementary functions as an infinite sum of simple terms. Finally, we will use this series representation to approximate functions.

- Integration Techniques - 3 weeks
- Further Applications of Integration - 1 week
- Differential Equations - 2 weeks
- Parametric Equations & Polor Coordinates - 2 weeks
- Infinite Sequences and Series - 4 weeks

University Policies

Academic Honesty: Cheating is not only unethical and pathetic, but is a violation of the Northern Michigan University Student Code and University Policy and grounds for your dismissal from the University.

Discrimination & Harassment: Northern Michigan University does not unlawfully discriminate on the basis of race, color, religion, national origin, gender, age, height, weight, marital status, handicap/disability, sexual orientation or veteran status. If you have a civil rights inquiry, contact the Affirmative Action Office at 906-227-2420.

Americans with Disabilities Act Statement: The University seeks to provide equal access to its programs, services and activities for people with disabilities. 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). at 906-227-1700 as soon as possible. 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.

The Registrar: Withdrawing from any course or any matters relating to registration are the responsibility of the student. For more information regarding this topic, check out the Registrars Website.