

**Math 105, Section 101**  
**Data, Functions and Graphs**  
**Course Information**  
**The University of Michigan**  
**Spring 2011**

**Instructor:** Jose Gonzalez  
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**Text:** *Functions Modeling Change* by Hughes-Hallet, Gleason, et al.  
Third Edition.  
**Calculator:** TI-84 graphing calculator or extremely close equivalent.  
**Websites:** <http://www.math.lsa.umich.edu/~jgonza/teaching.html>  
<http://www.math.lsa.umich.edu/courses/105/>

**Background and Goals:**

Math 105 serves both as a preparatory class to the calculus sequences and as a terminal course for students who need only this level of mathematics. Students who understand the material in 105 are fully prepared for Math 115. The contents of this spring term course are the same of its fall and winter versions. We will cover the same sections of the book, in approximately the same detail. Likewise, the level of the exams and the grading are similar to those for the fall and winter versions of this class.

**Content:**

This course presents the concepts of precalculus from four points of view: geometric (graphs), numeric (tables), symbolic (formulas), and written (verbal descriptions). The emphasis is on the mathematical modeling of real-life problems using linear, polynomial, exponential, logarithmic, and trigonometric functions. Students develop their reading, writing, and questioning skills in an interactive classroom setting.

**Websites:**

The course websites give information on important events in the course (such as exam days and times). The first website listed includes the information regarding the Spring 2011 course, including the course syllabus and homework assignments. The second website contains the general information for Math 105 classes, ranging from a description of the class and its goals, to a collection of past midterms and final exams with solutions.

**Grading:**

Your final grade for the course is based on your scores on **two exams** (a Midterm Exam and a Final Exam), your scores on **four quizzes** and your scores on the **web-based homework**. The corresponding percentages are as follows. The Midterm counts for 35%, the final exam counts for 40%, the four quizzes have equal weight and together count for 15% and the web homework counts for 10%.

- Midterm Exam:  
Covers sections 1.1-1.5; 2.1-2.6; 3.1-3.5; 4.1-4.3; 5.1-5.5. 35%
- Final Exam:  
**Cumulative**, covers sections 1.1-1.5; 2.1-2.6; 3.1-3.5; 4.1-4.3; 5.1-5.5;  
6.1-6.5, 6.6 (tangent only), 6.7; 8.1-8.3; 9.1-9.6. 40%
- Quizzes: 15%
- Web Homework: 10%

The **gateway test** (see below) can also influence your grade.

## Quizzes:

There will be **four quizzes** taken during class time. Make-up quizzes will only be offered under extraordinary and demonstrable circumstances.

## Gateway Test:

There will be one gateway test covering important algebra skills necessary to succeed in this class. The deadline for passing the gateway test is: **TUESDAY, MAY 17**. If you do not pass the gateway test by Tuesday, May 17, then **YOUR FINAL GRADE FOR MATH 105 WILL BE REDUCED BY ONE-THIRD OF A LETTER GRADE**. For example, if you earned a grade of "C" in Math 105 but did not pass the gateway by Tuesday, May 17, then your grade for Math 105 would be lowered to "C-."

There are practice versions of the gateway test. You can practice for the gateway from any computer (outside the gateway lab) at any time. Successful students begin practice gateways as soon as possible. The website for the Math 105 gateway test is:

<http://instruct.math.lsa.umich.edu/classes/105/gw/>

The proctored gateway opens on Tuesday, May 10. Proctored gateways are administered in the gateway lab (B069 East Hall). The schedule of the gateway lab will be announced in class.

## Calculator:

You will need a TI-84 calculator (or a very close equivalent) for this course. Please, bring your book and your calculator to class each day. You will be allowed to use your calculator on the midterm and on the final exam.

## Homework:

Daily homework will be assigned from each section that we cover. These assignments will be worked on the web. The **web homework** will count for 10% of your final grade. In order to do well in class, you must keep up with the daily assignments.

## Important Dates:

<b>Gateway Test Opens:</b>	Tuesday, May 10.
<b>Gateway Test Deadline:</b>	Tuesday, May 17.
<b>Midterm Exam:</b>	Friday, May 27. 4:00pm-6:00pm.
<b>Final Exam:</b>	Friday, June 24. 10:00am-12:00pm.

## Office Hours:

I will have two office hours per week. I will hold my office hours on:

<b>Office Hour 1:</b>	Tuesday, 1-2pm, East Hall 2852.
<b>Office Hour 2:</b>	Friday, 1-2pm, East Hall 2852.

If you are unable to attend these office hours, feel free to make an appointment with me outside of these scheduled hours. Any student with a documented disability should contact me as soon as possible so that we can discuss arrangements to fit your needs.