Topics in Contemporary Mathematics - Spring 2013
MATH 030

Instructor: Joshua Lesperance
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Office	M W F	11:00 - 1:30
Hours:	W	2:30 - 4:00
	or by appointment	

Textbook: *The Heart of Mathematics*, 3rd Edition, by Burger and Starbird

Learning Objectives: In this course we will cover a wide variety of topics, including number systems, infinity, geometry, chaos, fractals, and probability. One of the main goals of this course is to help you understand that mathematics is much more than a list of formulas used to work on exercises from some textbook. Rather, mathematics is a web of compelling ideas and strategies that have proven to be powerful tools in our quest to seek pattern, order, and understanding of the world we live in. In the limited time we have this semester we will not be able to explore any given topic in great depth, but by the end you should be prepared to use the training you receive to solve problems, analyze situations, and think about the world with a sharpened focus.

Class Expectations: These are simple: you should attend every class, you should be alert and pay attention during class, you should ask questions when you are confused or curious, and you should try your best to answer the questions that are presented to you. Officially speaking, the only classes that you are required to attend are on those days that there is an exam scheduled. However, it should go without saying that the best chance you have for success in this class is to follow the guidelines I have suggested above. Class is most enjoyable, and most productive, when all of you are in class and we are all participating in the learning process.

Homework: You will be assigned homework problems approximately once every week or two. These will be collected and (partially) graded. These problems are essential for mastering the material that we will discuss this semester. Homework should be submitted by 4:00 pm on the designated day (usually Wednesday). Late homework will be accepted at my discretion, with a possible penalty for being late. That being said, it is better to get some credit for a late homework than to get no credit for a homework not submitted.

Collaboration: You may work with your classmates on the homework. In fact, I encourage you to do so. Discussing these problems/ideas with others will be an excellent way to understand them better. However, it is neither permitted nor beneficial to simply copy someone elses work.

Calculators: Feel free to use a calculator to help with homework problems or the exams.

Help Outside of Class: I am here to help you in any way that I can. Interaction with students outside of class is an essential, and enjoyable, part of my job. Please, please take advantage of the office hours I have provided, or set up appointments with me. If my door is open, feel free to drop in.

Exams: There shall be three in-class exams given during the semester. The dates for these are tentatively scheduled as **March 1, April 5, and May 3.**

Final Exam/Project: There will either be a final exam given at the end of the semester, or a final project due by the end of the semester. (I haven't decide which yet.) If we have a final exam, it is scheduled for **Wednesday, May 15, 9 - 11 am.**

Missing an Exam: On occasion it may be necessary to miss class on a day when we have an exam scheduled. I am quite flexible when it comes to rescheduling exams, when there is a legitimate reason for missing class. All I ask is that you notify me as far in advance as possible. (Among other things, I do not consider travel plans to be a legitimate reason for missing an exam.)

Honor Code: Students are expected to write and sign the Honor Pledge on all academic exercises. The pledge reads: "I have adhered to the Honor code in this assignment."

Students With Disabilities: Reasonable accommodations will be made for persons with documented disabilities. Students should notify the Office of Disability Services and come see me as soon as possible to discuss any disability related needs.

Grading: To compute your final grade, your in-class exams shall be ranked from highest to lowest (1 to 3). Your final grade for the semester will be determined as follows:

Homework	20%
Exam 1	25%
Exam 2	20%
Exam 3	15%
Final	20%