Math 030A-05, Mathematical Excursions: Fall 2014
A quick reference guide

Instructor: Johanna Franklin
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Office hours: Mondays, 11:00 a.m. to 1:00 p.m. and Wednesdays, 9:00 to 11:00 a.m.
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Semi-official course description: An exploration into several mathematical topics not covered in MATH 040, 045, 050, or 061, chosen by the instructor, to give an appreciation of what mathematics is about. Only a background in high school algebra is needed, yet the topics are covered in sufficient depth to show the power and beauty of mathematics. In this section, we'll talk about cryptology, both historically and mathematically.

Texts: *The Code Book* by Simon Singh and *Cryptological Mathematics* by Robert Lewand

Classroom and time: Gallon Wing 242, TR 2:20-3:45 p.m.

Grading scheme:

- In-class work: 30%

- Homework: 20%

- Midterm (October 14): 15%

- Final project: 15%

- Final exam: 20%

We will do in-class exercises almost daily. No makeups will be possible since most of these exercises will be done with your classmates, but the lowest two in-class exercise scores will be dropped.

Homework will be assigned sporadically and will be due at the beginning of class on its due date. Since I may discuss the assignment in class that day, no late assignments will be accepted except under the most extreme circumstances. If you have an emergency that you think may be an extreme circumstance, please let me know as soon as possible. The lowest homework score will be dropped regardless.

Your final project will be a group project to develop your own cryptosystem. More information will be provided later in the term.

There will be one midterm and a comprehensive final exam in this class.

Academic Honesty: You are expected to follow the Hofstra University Honor Code at all times. Plagiarism is a serious ethical and professional infraction. Hofstra's policy on academic honesty reads: "The academic community assumes that work of any kind [...] is done, entirely and without assistance, by and only for the individual(s) whose name(s) it bears." Please refer to the "Procedure for Handling Violations of Academic Honesty by Undergraduate Students at Hofstra University" at http://www.hofstra.edu/PDF/Senate_FPS_11.pdf for details about what constitutes plagiarism and Hofstra's procedures for handling violations. Violations of academic honesty will be reported.

You will be allowed to use nongraphing calculators, abaci, and slide rules on your midterm and final exam, but not graphing calculators, cell phones, computers, or other electronic or computational aids.

Accessibility Issues: If you believe you need accommodations for a disability, please contact Services for Students with Disabilities (SSD). In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, qualified individuals with disabilities will not be discriminated against in any programs or services available at Hofstra University. Individuals with disabilities are entitled to accommodations designed to facilitate full access to all programs and services. SSD is responsible for coordinating disability-related accommodations and will provide students with documented disabilities accommodation letters, as appropriate. Since accommodations may require early planning and are not retroactive, please contact SSD as soon as possible. All students are responsible for providing accommodation letters to each instructor and for discussing with him or her the specific accommodations needed and how they can be best implemented in each course.
For more information on services provided by the university and for submission of documentation, please contact Services for Students with Disabilities, 212 Memorial Hall, (516) 463-7075.

Religious observances: Some students may wish to take part in religious observances during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me before the end of the second week of the term to discuss appropriate accommodations.

Thoughts for success: Cryptology is not a spectator sport. If you don't practice on your own, it will be very hard to do well on the tests. If you need help, come see me, either in office hours or by appointment!