Fall 2018 - MATH 181: A Mathematical World

- **Time and location:** MWF 2:00-2:50 pm, Altgeld Hall 343
- **Instructor:** Ruth Luo
- **Instructor email:** ruthluo2@illinois.edu
- **Instructor office:** Coble Hall B2
- **Course website:** [http://math.uiuc.edu/~ruthluo2/math181.html](http://math.uiuc.edu/~ruthluo2/math181.html)
- **Office hours:** Thursdays 2:00-4:00 pm or by appointment

### Course Description
This course is an introduction to a selection of topics in math (including graph theory, game theory, and voting theory) with an emphasis on applications in the modern world.

### Textbook
“For All Practical Purposes: Mathematical Literacy In Today’s World,” 10th ed., W.H. Freeman and Co. The textbook will be on reserve at the library if you choose not to purchase it. Additional reading suggestions will be posted on the course website.

### Exams
There will be three midterms and a final exam. The midterms will be held at the usual class time (2:00–2:50 pm) in the usual room (Altgeld 343). Midterms are closed book. Use of calculators or other electronic devices is prohibited. **The midterm dates will be September 28, October 26, and November 30.** There will also be a final exam at from 7:00-10:00 pm on **December 14** (location TBD).

### Final Project
Students will complete and present a final project on a mathematical topic of their choice. Project due: December 7.

### Quizzes and Homework
There will be short weekly quizzes. The lowest quiz score will be dropped. There will also be four graded homework assignments. Collaboration on homework is permitted, however each student must submit their own original writeup. Homework writeups showing clear signs of plagiarism will be discarded. Each student is permitted to turn in one late homework (up to 3 days late). Additional late homeworks will not be permitted.
Grade Distribution

- **Midterms**: 30% (10% each)
- **Final exam**: 25%
- **Final Project**: 20%
- **Homeworks**: 8%
- **Quizzes**: 15%
- **Attendance**: 2%

There is no curve or extra credit. The grade cutoffs are as follows:

- **A+**: 96.7
- **A**: 93.4
- **A-**: 90.0
- **B+**: 86.7
- **B**: 83.4
- **B-**: 80.0
- **C+**: 76.7
- **C**: 73.4
- **C-**: 70.0
- **D+**: 66.7
- **D**: 63.4
- **D-**: 60.0

Academic Integrity

All violations will be dealt with in accordance with the University policy. Infractions include, but are not limited to, submitting work that is not your own, using a calculator or any other electronic device during an exam, talking during a quiz or exam, or using any aids during a quiz or exam. For more information, see [http://admin.illinois.edu/policy/code/article1_part4_1-402.html](http://admin.illinois.edu/policy/code/article1_part4_1-402.html).

Other Policies

If you have an illness, accident, or family emergency that prohibits you from participating in any aspect of this course, you must contact the Student Assistance Center in the Office of the Dean of Students for documentation to excuse your absence. For more information, see [http://odos.illinois.edu/community-of-care/student-assistance-center/](http://odos.illinois.edu/community-of-care/student-assistance-center/).

Accommodation and Assistance

Please do not hesitate to contact me if you need special assistance or have questions or problems relating to this course. If you have a DRES accommodation letter please get it to me as soon as possible.