

Math 331: The little Questions

First Lecture

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http://www.williams.edu/Mathematics/sjmiller/public_html/317

Bronfman B34
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Introduction and Objectives

Introduction / Objectives

Objectives

- Obviously learn problem solving.
- Emphasize techniques / asking the right questions.
- Learn to use computers to build intuition.
- Use these problems as a springboard to see good math.
- Uphold honor of Williams in competitions.

The Green Chicken



Course Mechanics

Grading / Administrative

- Homework: 42%, Midterm 30%, Final 5%, Class Presentation: 12%, Project Euler: 11%.
- Pre-reqs: linear algebra (analysis, programming a plus).

Office hours / feedback

- TBD and when I'm in my office (schedule online).
- Feedback ephsmath@gmail.com, password first 8 Fibonacci numbers (011235813).

Other

- Webpage: numerous handouts, additional comments each day (mix of review and optional advanced material).
- Opportunity to help write a book.
- Math riddles page:
<http://mathriddles.williams.edu/>.
- **PREPARE FOR CLASS!** Must do readings before each class.

Other: Advice from Jeff Miller

- Party less than the person next to you.

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Happy to do practice interviews, adjust deadlines....

Useful links

LaTeX and Mathematica Tutorials and Templates

http://web.williams.edu/Mathematics/sjmiller/public_html/math/handouts/latex.htm

Has templates for using LaTeX for papers, talks, posters, and a Mathematica tutorial.

Also videos on each.

Pascal's Triangle

Pascal's Triangle

Video on Pascal's Triangle

https://www.youtube.com/watch?v=tt4_4YajqRM