

Instructor: Bill Kinnersley

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Office Hours: Tuesday/Thursday 11-noon (or by appointment)

Course Website: <http://www.math.uiuc.edu/~wkinner2/math181/>

• **Text and Course Description:** “For All Practical Purposes: Mathematical Literacy In Today’s World”, 7th ed., W.H. Freeman and Co. Introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory, symmetry and tilings, geometric growth, comparison of algorithms, codes, and data management.

We won’t cover everything in the textbook. The tentative plan is to cover the material on Management Science (chapters 1-3), Voting and Social Choice (chapters 9-11), Fair Division (chapter 13), and Coding and Encryption (chapters 16-17). We might cover more or less than this, depending on time constraints. Some lectures will cover material not in the textbook; *you are still responsible for this material.*

• **Class Attendance:** Class meets Monday/Wednesday/Friday from 9:00-9:50 AM in 347 Altgeld. Attendance is expected. Class will start right when the bell rings, so please be on time.

• **Grading:**

Homework: 10%

Quizzes: 15%

Three midterm exams: 15% each

Final exam: 30%

• **Homework:** Homework will be assigned roughly every other week. It will usually be collected on Mondays at the beginning of class. I expect homework to be legible, detailed, and well-written; in particular, you should show your work and explain it to the best of your ability.

You may work on the homework in groups, but **each student must write up his or her own solutions in his or her own words.**

• **Quizzes:** There will be a short quiz every Friday (excluding exam days). At the end of the semester, each student’s lowest quiz score will be dropped.

• **Exams:** There will be three in-class midterm exams. They will be held on October 2nd, October 30th, and December 4th.

The final exam will be held from 8-11 AM on Thursday, December 17th. It will be cumulative.

Calculators may not be used on any quizzes or exams.