

Probability and Statistics I - Math 316
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Office Hours: MWF 8.20am–9.10am and by appointment.

In this course we will develop counting techniques and draw upon your calculus background to calculate probabilities of many different types of events. We will also investigate some standard probability distributions. For example, you've all heard of the bell curve, but do you know the formula for it? Hopefully, you will find this an interesting class in which you will develop a good idea of how probabilities work, and how your intuition can sometimes lead you astray.

The Book: We will be using the book A First Course in Probability, 8th ed., by Sheldon Ross. We will cover chapters 1–6 and 9, to varying extents.

The Website: I will post handouts and other information at
<http://math.colgate.edu/~aaron/classes.html>.

Homework: Homework will be assigned and collected seven times throughout the semester. I will randomly choose 10 problems to grade. Each problem is worth 2 points. The assignments are on the back of this sheet so don't lose this sheet.

Testing: There will be three midterms and a cumulative final. The midterms are scheduled as follows:

Midterm 1:	Tuesday, September 15	11.30am – 1.10pm	McGregory 209
Midterm 2:	Tuesday, October 13	11.30am – 1.10pm	McGregory 209
Midterm 3:	Tuesday, November 24	11.30am – 1.10pm	McGregory 209

Late work: Late homework **will not be accepted**. Period. Homework is late once I leave the classroom on the day homework is collected. Because of this policy, I will not count your lowest (percentage-wise) homework grade. Make-up midterms will not be given without a note from your doctor or dean. If you know you will miss a test, you must notify me *before* the test so that we can make arrangements for you to take the test *before* the scheduled date.

Grading: Homework: 15% Midterms: 20% each Final: 25%

I reserve the right to modify a grade by up to 5%. Furthermore, the grading scale is a straight scale: 90-100 are the A's with 90-92 being an A- and 98-100 being an A+; 80-89 are the B's, 70-79 are the C's; 60-69 are the D's; < 60 is an F. I will curve any midterm or final in which the average, *avg*, is less than 75 by adding $75 - avg$ points to everyone's score, so that the curved average is 75.

Homework Problems

CHAPTER 1	<i>p.16</i>	#1 – 22, 25, 27, 28.
CHAPTER 2	<i>p.50</i>	#1 – 10, 15, 16, 18, 23, 24, 26, 29 – 31, 38, 41.
CHAPTER 3	<i>p.102</i>	#1 – 10, 20, 21, 23, 28 – 30, 45, 47, 48, 52, 53, 57, 64.
CHAPTER 4	<i>p.172</i>	#1 – 10, 20, 21, 23, 28, 37, 38, 41, 51, 52, 54, 58, 61, 63, 71.
CHAPTER 5	<i>p.224</i>	#1 – 8, 10, 13, 15, 17, 19 – 21, 23, 25 – 27, 32, 33, 38 – 40.
CHAPTER 6	<i>p.287</i>	#1 – 10, 13, 17, 20 – 23, 27, 29, 30, 32, 33.
CHAPTER 9	<i>p.435</i>	#1 – 3, 6 – 11, 12, 13, 15.

Assignment and Class Schedule

September

- 9/7/09 (Monday): CHAPTER 1 Homework due
9/14/09 (Monday): CHAPTER 2 Homework due
9/15/09 (Tuesday): **Midterm 1** during free period (11.30am–1.10pm)
9/25/09 (Friday): CHAPTER 3 Homework due

October

- 10/12/09 (Monday): CHAPTER 4 Homework due
10/13/09 (Tuesday): **Midterm 2** during free period
10/14/09 (Wednesday): No class (conference)
10/16/09 (Friday): No class (conference)
10/19/09 (Monday): No class (Fall break)

November

- 11/9/09 (Monday): CHAPTER 5 Homework due
11/23/09 (Monday): CHAPTER 6 Homework due
11/24/09 (Tuesday): **Midterm 3** during free period
11/25-27/09 (Wednesday-Friday): Thanksgiving break

December

- 12/11/08 (Friday): CHAPTER 9 Homework due