

PROBABILITY - MATH 316

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Office Hours: MWF 8.20am–9.10am and 10.20am–11.10am, 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 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 1–7 and 9, to varying extents.

Homework: Homework will be assigned and collected seven times throughout the semester. I will randomly choose 5 problems to grade. Each problem is worth 5 points. The assignments are on the back of this sheet so don't lose this sheet.

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

Midterm 1:	Tuesday, September 13	11.30am – 1.10pm	Lathrop 209
Midterm 2:	Wednesday & Friday, October 5 & 7	during class	McGregory 204
Midterm 3:	Tuesday, November 15	11.30am – 1.10pm	Lathrop 209
Midterm 4:	Wednesday & Friday, December 7 & 9	during class	McGregory 204

The final is Tuesday, December 13 from 9.00am to 11.00am.

Late work: Late homework **will not be accepted**. Period. Homework is late once I leave the classroom on the day homework is collected. 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: 10% Midterms: 17.5% each Final: 20%

I reserve the right to modify a grade by up to 1%. Furthermore, the grading scale is a straight scale: 90–100 are the As with 90–93.33 being an A– and 96.67–100 being an A+; 80–89 are the Bs, 70–79 are the Cs; 60–69 are the Ds; < 60 is an F.

Homework Problems

CHAPTER 1	p. 16	#1 – 22, 25, 27, 28. (Note: That says problems 1 through 22)
CHAPTER 2	p. 50	#1 – 10, 15, 16, 18, 23, 24, 26, 29 – 31, 38, 41.
CHAPTER 3	p. 102	#1 – 10, 20, 21, 23, 28 – 30, 45, 47, 48, 52, 53, 57, 64.
CHAPTER 4	p. 172	#1 – 10, 20, 21, 23, 28, 37, 38, 41, 51, 52, 54, 58, 61, 63, 71.
CHAPTER 5	p. 224	#1 – 8, 10, 13, 15, 17, 19 – 21, 23, 25 – 27, 32, 33, 38 – 40.
CHAPTER 6	p. 287	#1 – 10, 13, 17, 20 – 23, 27, 29, 30, 32, 33.
CHAPTER 7	p. 373	#1, 2, 5 – 11, 16, 17, 21, 22, 25, 30, 33, 36 – 38.
CHAPTER 9	p. 435	#4 – 11 (there is a crucial typo in #7: insert “if” before “such”)

Assignment and Class Schedule

September

9/5/11 (Monday): CHAPTER 1 Homework due

9/12/11 (Monday): CHAPTER 2 Homework due, Question/Answer session for review

9/13/11 (Tuesday): **Midterm 1** during free period (11.30am–1.10pm)

9/26/11 (Monday): CHAPTER 3 Homework due

October

10/3/11 (Monday): CHAPTER 4 Homework due, Question/Answer session for review

10/5/11 (Wednesday): **Midterm 2, Part 1** in class

10/7/11 (Friday): **Midterm 2, Part 2** in class

10/10/11 (Monday): No class (Fall break)

10/24/11 (Monday): CHAPTER 5 Homework due

10/28/11 (Friday): No class (speaking at a conference)

November

11/7/11 (Monday): CHAPTER 6 Homework due, Question/Answer session for review

11/8/11 (Tuesday): **Midterm 3** during free period (11.30am–1.10pm)

11/21/11 (Monday): CHAPTER 7 Homework due, start of Chapter 9 Lecture

11/23/11–11/25/11 (Wednesday-Friday): Thanksgiving break

December

12/5/11 (Monday): CHAPTER 9 Homework due, Question/Answer session for review

12/7/11 (Wednesday): **Midterm 4, Part 1** in class

12/9/11 (Friday): **Midterm 4, Part 2** in class