

MATH 214A - PROBABILITY
FALL 2014

Instructor: Peter Wong

Class Meeting: TTh ¹: 8:00 - 9:20 a.m. (Hathorn 104)

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Textbook: *John E. Freund's Mathematical Statistics with Applications* (8th ed.) by I. Miller and M. Miller, Pearson Prentice hall, New Jersey, 2014.

Office hours: T: 11:00 am - 12:00 pm, or by appointment

Grading: Attendance/Class Participation - 5%; homework - 20%; quizzes - 10%; 2 mid-terms @20% each; Final Exam - 25%

Prerequisites: Math 206 (multi-variable calculus)

This is a calculus-based introduction to Probability. We develop necessary mathematical tools for the theory of probability as well as for certain applications to Statistics. We plan to cover most of the first seven chapters of the text.

Note on homework, quizzes, exams and class attendance:

While group work is encouraged in general, the writing up of your homework assignment must be done on your own. *In the event that you discuss certain homework problems with other classmates, make sure you (and the person(s) with whom you discussed the assignment) write the names of your collaborators in your assignment before you hand it in.* Although your homework need not be typeset, only neat and legible work are acceptable for the grader to read/correct. Be sure to include all your work; merely giving an answer without explanation will receive no credits.

Homework problems from the text will be assigned frequently and collected (on specific dates listed below) BEFORE class; reading assignment will be given at the end of every lecture. Be sure to read ahead of time before coming to the next class. **Late homework may NOT receive any credit.** I will post the HW problems on Lyceum and you can find a copy of this information sheet on my page:

<http://www.bates.edu/~pwong/teaching/Fall2014/Math214A/Math214A.html>

¹first week Th only

Approximately every other week, short (about 15 minute long) quizzes will be given on material covered during the previous week. The quiz problems are routine and you should be able to answer them if you have been keeping up with your homework and reading.

The dates for the exams are (1) Exam I - October 7; (2) Exam II - November 11; and (3) Final Exam - Friday 1:15 - 3:15 pm December 12.

The 5% for class attendance is an incentive for you not to miss (eight o'clock) classes. If you miss a total of 3 or more classes, you will receive 0 of the 5% class attendance grade. Exceptions are only those absences with Dean's excuses.

Academic Integrity: Regarding plagerism, cheating or other forms of academic dishonesty, please refer to the Academic Integrity Policy of the College below:

<http://www.bates.edu/entering/policy/judicial-affairs/code-of-student-conduct/academic-misconduct/>

Miscellanea: Since this is a 3 hour 200-level math elective, we do not have enough time to go over homework problems in class. I do expect to have a teaching assistant who will help with this class by running weekly problem sessions as well as review sessions before the exams. In addition, Math/Stats Workshop usually have tutors who can help with the material covered in this class.

Tentative Syllabus:-

week 9/1: §§1.1 - 1.3; (Th. only)

week 9/8: §§2.1 - 2.5; **HW#1** - due on September 11

week 9/15: §§2.6 - 2.8, 3.1 - 3.2; **quiz #1** - September 16; **HW#2** - due on September 18

week 9/22: §§3.3 - 3.5; **HW#2** - due on September 25; **HW#3** - due on September 25

week 9/29: §§3.6 - 3.7, 4.1 - 4.2; **quiz #2** - September 30; **HW#4** - due on October 2

week 10/6: **Exam I** - October 7, §4.3;

week 10/13: §§4.4 - 4.5, **Fall Recess** October 15 - 19; **HW#5** - due on October 14

week 10/20: §§4.6 - 4.8; **quiz #3** - October 23; **HW#6** - due on October 23

week 10/27: §§5.1 - 5.4, 5.7; **HW#7** - due on October 30

week 11/3: §§6.1 - 6.4, **quiz #4** - November 6; **HW#8** - due on November 6

week 11/10: review, **Exam II** - November 11, §6.5;

week 11/17: §§6.6, 7.1 - 7.2; **HW#9** - due on November 18

Thanksgiving Recess - November 24 - 29

week 12/1: §§7.5, 7.5; **quiz #5** - December 4; **HW#10** - due on December 4