Statistics 134, Spring 2005

Instructor: Professor Bin Yu
Office Hours: W: 11-12 am; Th: 1:30-2:30 pm in 429 Evans Hall.
Phone: 642-2021 (Office), 642-2781 (dept, messages), email: binyu@stat
Comments, Suggestions, Gripes: in person, email, anonymous notes in my box or under the door. All feedback is welcome.

TA and office hours: M: 1-3, Th: 8:30-9:30, 3:30-4:30, 307 Evans Hall The TA will post homework solutions inside the glass windows located along the middle aisle on the third floor in Evans Hall.
Phone: 642-2781 (Stat. Dept. main no.)
Lectures: MWF 10-11 AM, 60 Evans Hall.
Discussion groups: T/Th: 2:30-3:30, Cesar Chavez (student learning center), 113.
Grading:

\[
\text{max}\{20\%\text{homework} + 35\%\text{midterm} + 45\%\text{final}, 20\%\text{homework} + 25\%\text{midterm} + 55\%\text{final}\}
\]

Homework: is assigned in class on Friday and usually due on the following Friday (unless announced otherwise). No late homework will be accepted, for any reason.
Doing the problems will help you on exams even though they are counted only 20% towards the final grade, and is the only way for you to know whether or not you’ve mastered the material.

For your information and well-being:

- Read the textbook before lectures. You will get more from both the text and the lectures. Try skimming the chapter before lecture, then re-reading it before doing the homework. You need to do more problems than the HW assignments to get enough practice. Please try as many other problems as you can from the book.

- Show all your work on homework and exams for maximum credit, and for partial credit.

- Always state any additional assumptions you must make to solve a problem, both on homework and exams.

- I am not interested in your ability to memorize formulae. I am interested in your ability to think and to reason things out. You may bring one page of notes (front and back) to the midterm and final.

Material Covered: The non-optional sections of the textbook.
Tentative schedule:

Week 1. 8/30, 9/1, 3
Discrete probability – concepts and rules. (Ch. 1)

Week 2. 9/6, 8, 10
Binomial distribution and its normal approximation. (2.1-2.2)

Week 3. 9/13, 15, 17
Poisson approximation and random sampling; (2.4-2.5)

Week 4. 9/20, 22, 24
Monday and Wed. Introduction to Random Variables
3.1. friday: Expectation (3.2).

Week 5. 9/26, 28, 10/1
Monday Expectation 3.2 (method of indicators) wed:
prediction (3.2) friday: Standard deviation and normal
approximation (3.3)

Week 6. 10/4, 6, 8
Monday: normal approximation (3.3) add office hour
on tuesday. sample exam and review sheet to them
ready for wed to give them. wed: Discrete distributions
(3.4) friday: Poisson distribution (3.5) (peng
teaches)

Week 7. 10/11, 13, 15
Poisson dist (3.5) on Monday; Review on Wed; more
office hours on thursday!!! Midterm in Class Friday
(Oct 15) covers Chapters 1-3. One-page of double-
sided notes allowed.

Week 8. 10/18, 20, 22
Probability densities (4.1)

Week 9. 10/25, 27, 29
Exponential and Gamma distributions (4.2).

Week 10. 11/1, 3, 5
Change of variable and cumulative distribution func-
tions (4.4, 4.5)

Week 11. 11/8, 10, 12
Uniform distributions and densities (5.1-5.2, 5.3)

Week 12. 11/15, 17, 19
Normal random variables (5.3, 5.4, 6.1)

Week 13. 11/22, 24, (26)
Conditioning (6.2-6.3)

Week 14. 11/29, 12/1, 3
Covariance, correlation, and bivariate normal (6.4,6.5)

Week 15. 12/6, 8, 10
Monday: 6.5. Wed and Friday: Reviews for the final
exam.

Week 17. 12/14 (Tuesday) Final Exam: 8-11 am
   It covers all the material taught during the semester.
   Two pages of double-sided notes are allowed.