

UNIVERSITY OF IOWA
Department of Statistics and Actuarial Science
Probability and Statistics
22S:120 Spring 2009

Course Information

Purpose We develop probability and statistical methods from first principles. Our development will be mathematically-precise to provide clarity, but we are motivated by statistical applications to real-world problems.

Prerequisites A second semester of calculus (22M:026 or 22M:032 or equivalent)

Time and Location Monday and Wednesday 3:30-5:20 p.m. in 71 SH

Instructor Blake Whitten Office: 261 Schaeffer Hall Phone: 335-0647
Email: blake-whitten@uiowa.edu

Office Hours

- Monday 1:45-3:00 in 261 SH
- Tuesday (Notice different location): 9:00-10:00 pm in C207 PBB (Business Building)
- Wednesday 1:45-3:00 in 261 SH

Course Website <http://www.stat.uiowa.edu/~blake/s120>

Required Materials

- **Textbook:** *A Brief Course in Mathematical Statistics*, 2007, by Tanis and Hogg
- **Calculator:** You need a calculator which calculates both *one-variable statistics* (standard deviation) and *two-variable statistics* (correlation and regression coefficients.)
 - * Please check your calculator's functionality using the Calculator Help link from the Stat 120 website.
 - * Recommended calculators if you need to purchase one: TI 83, 84, 85, 86, 89 graphing calculators or the cheaper TI 30XIIS, TI 36X, TI 36XII.
 - * The following calculators will not do the job (no two-variable statistics) and should not be purchased: TI 30STAT, TI 30X, TI 30Xa.

Independent Tutors For a list of graduate student tutors go to
<http://www.stat.uiowa.edu/courses/tutors.html>

Course Features

Study Groups

You are assigned to a team of five students to provide study support. The best way to succeed this course is to first do the homework on your own, and then meet with your study group to work through difficult or challenging problems.

Tentative Course Plan and Schedule

- **Mondays**

- * Students have completed the reading assignment before class.
- * Students download and bring to class new notes handouts from course website.
- * New homework is assigned **and due in Wednesday's class of the following week** (9 days later.)

- **Wednesdays**

- * Groups turn in HW assignment from previous week.
- * Class discussion of HW problems, including Group presentations of selected answers.
- * **Quiz** over recent HW and lectures
- * New reading assignment is made, to be completed by the following Monday.

Note: Students are responsible for class notes and announcements. If absent, it is the student's responsibility to obtain missed notes from other students. (Network with your study group.)

Homework

1. Each Study Group makes a single (common) homework submission for each assignment; homework scores apply to all members of the group.
2. Assignments are due at the beginning of class. (A grading penalty of 25% applies for late papers, and for each day thereafter.)
3. Important: Make a photocopy of the assignment before turning it in for class discussion. Groups may be asked to present selected HW answers to the class.
4. Homework Guidelines (please communicate with the grader clearly.)
 - Place a box around each final numerical answer.
 - Show all important steps in your reasoning. (Otherwise grading credit may not be awarded.)
 - Homework should be neat and stapled, with names of all Group members in the top right corner.

ICON

Students can access homework, quiz and exam scores on ICON. (See link from course website.)

Email

Professor Whitten occasionally sends emails to the class. Please keep your UI email account clear (under quota) so that you receive emails.

Course Grades

Grades are determined by a weighted average of Homework, Quizzes, Exams:

- Weights:

10%	Homework
30%	Quizzes
30%	Midterm Exam (near the middle of the semester)
30%	Final Exam (comprehensive)
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100%	

Extra Credit: up to 5% Attendance and Participation
(Prof. Whitten's subjective evaluation: 0%–5%)

- Weighted course percentage:

$$\text{Course \%} = (0.10)(\text{HW Percent}) + (0.30)(\text{Quiz Percent}) + (0.30)(\text{Midterm Exam}) \\ + (0.30)(\text{Final Exam}) + \text{Extra Credit (if any)}$$

- Course grades are earned by course percentage roughly as

“A” = 90%, “B” = 80%, “C” = 70%, “D” = 60%, “F” = below 60%

(Letter grades may possibly include +/–.)

- Quizzes are time-sensitive, and so makeup quizzes are not given. But instead, as an allowance for necessary absence (university-sanctioned events, illness, family emergency, etc.) the two lowest quiz scores are *dropped* from the calculation of the course grade.
- **Makeup exams may be requested only with written documentation of a university-approved absence.** (A letter from a professor or dean requesting absence for an academic-related field trip or activity will also usually suffice.) **Makeup exams are not available for personal (i.e., not university-approved) absence.**

Administrative Notes

Course Policies Course policies are governed by the College of Liberal Arts and Sciences.

Disabilities Please see Prof. Whitten as soon as possible if you have any disabilities which require alternative arrangements for lectures or exams.

Department Chair Luke Tierney, 241 Schaeffer Hall, 335-0712, luke-tierney@uiowa.edu

Academic Fraud Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is a serious matter and is reported to the departmental DEO and to the Associate Dean for Undergraduate Programs and Curriculum. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. See the CLAS Student Academic Handbook.

Making a Suggestion or a Complaint Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident. See the CLAS Student Academic Handbook.

Sexual Harassment Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment at www.uiowa.edu/eod/policies/sexual-harassment-guide/index.html for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over.