

**Statistics 221H: Principles of Statistics Honors**  
**TTh 9:30-10:50 am, 299 TMCB**  
**Winter 2005**

## Course Objectives:

1. Help students understand the value of Statistics in acquiring knowledge and making decisions in today's society.
2. Help students become critical and thoughtful consumers of information. Understanding the following ideas is critical:
  - Variation exists in every measurable process.
  - Inferences to populations are made based on sample characteristics.
  - Valid inferences require randomization.
  - Experiments are conducted to gain knowledge and determine causal processes.
  - Valid conclusions require that experiments and surveys be carefully designed and carried out.
  - Because variation exists, all inferences and conclusions drawn from statistical analyses have associated probabilities that measure their uncertainty.

**Prerequisite:** Mathematics 110 or equivalent

**Instructor:** C. Shane Reese, Ph.D., 208 TMCB  
422-9250, [reese@stat.byu.edu](mailto:reese@stat.byu.edu)  
Office Hours: MWF 11-12:00 am (or by appointment)

**TA:** John (Jay) Hathaway, [jhathaway@byu.edu](mailto:jhathaway@byu.edu)

**Required Materials:**

- The Basic Practice of Statistics, 3rd Ed. by David Moore, 2003, Freeman and Company.
- E-STATPACK, 2004, Freeman and Company (Purchase at the BYU Bookstore.)
- Scientific calculator

(Note: CD-ROM, tables, and E-STATPACK must be in your book for buyback at the BYU Bookstore.)

**Optional Materials:** The Lecture Notes and the Review Packets can be purchased at the BYU Bookstore. The Review Packet contains practice exams and study guides and is available on Blackboard.

**Blackboard:** Check Blackboard daily for announcements, exam summaries, links to the Review Packets and access to the Flash lessons under Course Documents.

## Policies:

Students are expected to:

- follow University policies (including dress and grooming and the Honor Code) when attending class and lab, and taking exams and quizzes.
- coordinate scheduling conflicts with the instructor *in advance*.
- be *on time* to class!

## Grades:

Homework: 15%   Exams: 45%   Final Exam: 20%   Project: 20%

A = 94-100	A- = 90-93.9	B+ = 87-89.9	B = 83-86.9
B- = 80-82.9	C+ = 77-79.9	C = 73-76.9	C- = 70-72.9
D+ = 67-69.9	D = 63-66.9	D- = 60-62.9	E = 0-59.9

Grades may be lowered by the instructor if you fail to meet University standards.

## Exams:

All exams are to be taken at the scheduled time in the Testing Center. Tables, formulas, and calculators are provided at the Testing Center. Exam coverage is on the next page. The final is comprehensive. Exams assess understanding of concepts, interpretation of results, definitions, and computations. The final examination will be given in the Testing Center on December 13-17, 2004. In case of an emergency that will impact on meeting deadlines for homework or tests, students must contact the instructor as soon as possible. Tests will not be given past the published test deadlines except when the conditions of either of the two preceding sentences are met and agreed upon by the student and the Course Coordinator. Exams are not returned to the students.

## Class Preparation:

You need to read the material in the text prior to the lecture in which it is covered. If a lecture is missed, you can review the Flash lessons on Blackboard.

## Labs:

Labs begin on Tuesday, September 7. In lab, questions on homework and lecture will be answered; CRUNCH-it!, a statistical software package, will be taught; practice exercises will be discussed; and exams will be reviewed after they have been taken. There will also be help for your course projects presented there. Homework and quizzes will **ONLY** be returned in the labs. Open labs will be held in rooms 203, 205, 244, 250 and 275 TMCB. Hours for the open labs will be posted on Blackboard and in the glass case opposite 297 TMCB.

## Homework:

Your name, section, assignment number and the word HONORS must be written on top of the first page of each homework set to receive credit. Homework must be turned in to 201 TMCB no later than 10 pm on the due date listed on the schedule page but may be turned in to 201 TMCB or in lecture anytime during the week it is due. Late homework will NOT be accepted. To receive full credit, answer all HW questions completely, accurately and in context of the problem.

## Quizzes:

A three-point quiz will be given at the end of each class. The quiz points will count up to 2% extra credit on the final grade. Quizzes will cover the material presented in the current day's reading and/or lecture. Quizzes are open book and you may discuss them with your neighbor. You cannot make up quizzes. Credit will not be given if: 1) your name, section number, and quiz number are not included, and; 2) the quiz is not taken in the section for which you are registered. Turning in a quiz for a person not in attendance is a violation of the Honor Code.

## Projects:

You'll notice 20% of your grade is determined by a course project. More details on this later, but you should start thinking of some aspect of your field of study that interests you.

## Course Surveys:

You are required to complete two surveys during the first two weeks of class and a follow up survey on the last week of class in order to pass. The surveys can be accessed through Blackboard or at this web address <http://statistics.byu.edu/classes/221/>. The first two surveys count as the first two quizzes and the last survey counts as 20 points on your final exam score.

## Preventing Sexual Harassment

BYU's policy against sexual harassment extends not only to employees of the university but to students as well. If you encounter sexual harassment or gender based discrimination, please talk to your professor, contact the campus Equal Employment Office at 422-5895, or contact the Honor Code Office at 422-2847.

## Students With Disabilities

BYU is committed to providing reasonable accommodation to qualified persons with disabilities. If you have any disability that may adversely affect your success in this course, please contact the Services for Students with Disabilities Office at 422-2767. Services deemed appropriate will be coordinated with the student and instructor by that office.