

Statistics 221- Principles of Statistics
Sections 31-62, 70-71

Winter 2009 Syllabus
TTh Lecture

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 statistical information.
3. Help students understand that:
 - 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

Instructors: Dennis Tolley, 206 TMCB, 422-6668, tolley@byu.edu , Office Hrs. 12-2 W 10-11 Th
Kim Davison, davison.kk@gmail.com , Office Hrs. Available after class or by appointment.

Course TTh Manager: P. Lynne Nielsen, 223B TMCB, 422-9202, lynne.nielsen@byu.edu, Office Hrs. 10-11 MWF 3-4

Manager: Contact the Course Manager regarding TAs and course concerns.

Exam Coordinator: For exam issues, contact Kathi Carter, 223D TMCB, 422-4506, kathi_carter@byu.edu,
Office Hrs. 2-4 WThF 9-10 MT. See "Policies" and "Exams" next page.

Homework Coordinator: For homework issues email 221coordinator@statmail.byu.edu . See "Online Homework" next page.

Required Materials: 1) Access code to *StatsPortal*, to view StatTutor lessons, use the *ebook* and *CrunchIt*, and submit homework. Go to <http://www.whfreeman.com/portals/bps4e>. (*StatsPortal* is a web site containing a complete eBook that supports highlighting and note taking, study resources, and your homework assignments.) Since all assignments are submitted on *StatsPortal*, you must purchase access to it. Either purchase a package containing both the printed text and an access code from the bookstore, or purchase access to *StatsPortal* directly from the publisher at www.portals.bfwpub.com.
2) Access to a scientific calculator.

Optional Materials: 1) *The Basic Practice of Statistics*, 4th Ed. by David Moore, 2007, Freeman and Company. (Bookstore buyback requires CD in the back.)
2) *Statistics 221 Lecture Notes*, Fifth Edition 2008-2009.
3) *Statistics 221 Review Packet* (Purchase at the BYU Bookstore or find on Blackboard.) The Review Packet contains practice exams and study guides.
4) *iClicker* for lecture quizzes.

Blackboard: Go to www.byu.edu and log-in to Route Y. Click on "Blackboard" and open "Stat 221 Winter 2009 Lecture" to access our Blackboard course. Check it **daily** for announcements, *CrunchIt!* instructions, links to the Review Packet, details of extra credit writing assignments, and additional information on some of the homework problems.

Click on the "Getting Started" button of our Blackboard course for instructions on *StatsPortal* and *iClicker* registration. For problems, go to room 258 TMCB.

Policies: Students must adhere to the Honor Code (including dress and grooming) while attending class and lab, and taking exams and quizzes. We, the faculty in the Department of Statistics, have zero tolerance for students accessing pornographic sites using computers in our labs; these students will be identified and reported to the Honor Code office.

Grades:	Homework: 15%	Midterms: 55%	Final Exam: 30%	Quizzes: 2% Extra Credit
	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

Your instructor has the right to lower your grade if you fail to meet University standards.

Student Learning: You are ultimately responsible for your own learning. You can take charge of your learning process by staying current with reading and homework assignments, attending class daily and taking notes, attending labs, and asking questions about any material you do not understand. **Please be considerate of other student's learning experience - turn off cell phones and avoid coming in late and leaving early.**

Exams: All exams are to be taken during the scheduled time in the Testing Center. Except for the final, you must begin your exam **before 5 p.m. on the last fee day**. Tables, formulas, and calculators are provided by the Testing Center. Exam coverage is given on the next page. All exams are comprehensive and assess understanding of concepts, interpretation of results, definitions, and have only a few computations. The final examination will be given in the Testing Center during finals week, April 17-22. An exam will not be given after a published test deadline **unless all of the following conditions are met: (1)** An emergency has occurred and **(2)** You have contacted the Exam Coordinator as soon as possible and **(3)** the exception has been agreed upon by the student and the Exam Coordinator. **No late exams will be given more than a week after the deadline and penalty points will be applied to all late exams.** Plan on at least 2 hours for exams. Exams are not returned to the students but are discussed in labs.

Class You need to read the material in the text or *eBook* prior to the lecture in which it is covered.

Preparation: If you miss a lecture, you can view the corresponding *StatTutor* lessons on *StatsPortal* under Student Resources or at the end of each section on *eBook*.

Labs: Regular labs begin on Monday, January 12. In lab, questions regarding *StatsPortal*, online homework and *StatTutor* lessons will be answered; homework feedback and instructions for using *CrunchIt!*, a web-based statistical software package, will be given; and exams will be reviewed. Open or homework labs will start on Tuesday, January 20. The open lab schedule will be posted on Blackboard and outside room 258 TMCB.

Online Homework: Log on to *StatsPortal*, click on "Assignments" and open an assignment. As you work on the homework, click the "Save answers" button at the bottom of the page before quitting. After you have completed the assigned exercises, click "Submit". **Once the "Submit" button has been clicked, you cannot return and work on that assignment.** Homework "Saved" but not "Submitted" before the 11 pm Friday deadline will be considered late and will not be accepted. You will not be able to access the assigned exercises after the deadline. Contact the Homework Coordinator 221coordinator@statmail.byu.edu if you missed the deadline due to illness, a university-excused absence or technical difficulties. **Problems with submitting homework must be reported within 2 days following the deadline.** To receive full credit, answer all essay homework questions completely, accurately and in the context of the problem. Check Blackboard regularly for updated information on some of the homework problems. For extra credit homework points, do the writing assignments posted on *StatsPortal*. The first one is due Thursday, January 29 and the second one is due Thursday, March 12.

Deadline for *StatsPortal* registration in the correct section is Tuesday, January 20 for homework credit. Verify that you are in the correct section with your TA.

Quizzes: At least one three-point quiz will be given sometime during each lesson starting with lesson 3. 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 need to have an *iClicker* to take the quizzes. You cannot make up quizzes even if you forgot your *iClicker* and you cannot bring other *iClickers* to class – it is a violation of the Honor Code. See Blackboard for instructions on how to register your *iClicker*. Deadline for *iClicker* registration is Wednesday, January 21 for quiz credit. If you cannot see your registration number, go to room 258 TMCB.

Surveys: By Tuesday, January 20, you are required to take two surveys called Questionnaire Survey and Learning Styles Survey, respectively at <http://statistics.byu.edu/classes/221/>. The first two surveys (Questionnaire Survey and Learning Styles Survey) count as the first two lesson quizzes. You need to take the Follow Up survey between April 6 and 13 on the same site. It will count as the last lesson quiz.