

Statistics 101 – Sections E & F

Fall 2011

- Instructor:** Luke Fostvedt
Contact Info: 2418 Snedecor Hall, Phone: (515) 294-5009, email: Fostvedt@iastate.edu
 Course will use WebCT
Office Hours: Stat 101 help room schedule and office hours will be posted in WebCT
Lecture: MWF, 11:00-11:50, Lago E164
Laboratory: Section E: W, 12:10-2:00, Snedecor 3105
 Section F: W, 2:10-4:00, Snedecor 3105
Requirements: *Intro Stats*, 3rd Edition, Richard D. DeVeaux, Paul F. Velleman, & David E. Bock, Addison Wesley
Objectives: The objectives of the course are to help students develop an understanding of statistical thinking and to enable students to apply basic statistical techniques. By the end of the course students should be informed and critical consumers of quantitative arguments.

Important Dates:

- **Week of Aug. 22 – 26: NO LAB**
- **Monday, Sept. 5: Labor Day Holiday, NO CLASS**
- **Friday, Sep. 23: EXAM 1 (Chapters 1 – 6)**
- **Friday, Oct. 21: EXAM 2 (Chapters 7 – 9, 11 – 14)**
- **Friday, Nov. 18: EXAM 3 (Chapters 18I – 21)**
- **Friday, Dec. 9: Review for Final Exam**
- **Week of Dec. 12 – 16: FINAL EXAM (Cumulative with emphasis on Chapters 18II, 23-25)**

Reading Assignments:

Tentative Dates		Material	Text	
M	Aug 22	Stats Starts Here, Data	Chapters 1 & 2	
W	Aug 24 - F	Aug 26	Displaying and Describing Categorical Data	Chapter 3
M	Aug 29 - F	Sep 2	Displaying and Summarizing Quantitative Data	Chapter 4
W	Sep 7 - F	Sep 9	Understanding and Comparing Distributions	Chapter 5
M	Sep 12 - F	Sep 16	The Standard Deviation as a Ruler and The Normal Model	Chapter 6
M	Sep 19 - W	Sep 21	Scatterplots, Association, Correlation	Chapter 7
M	Sep 26 - F	Sep 30	Linear Regression, Regression Wisdom	Chapters 8 & 9
M	Oct 3		Understanding Randomness	Chapter 11
W	Oct 5 - F	Oct 7	Sample Surveys	Chapter 12
M	Oct 10 - W	Oct 12	Experiments	Chapter 13
F	Oct 14		From Randomness to Probability	Chapter 14
M	Oct 17 - M	Oct 24	Sampling Distribution Models	Chapter 18I
W	Oct 26 - M	Oct 31	Confidence Intervals for Proportions	Chapter 19
W	Nov 2 - W	Nov 9	Testing Hypotheses about Proportions, More About Tests	Chapters 20 & 21
F	Nov 11 - M	Nov 14	Sampling Distribution Models	Chapter 18II
W	Nov 16 - W	Nov 30	Inferences About Means	Chapter 23
F	Dec 2 - M	Dec 5	Comparing Means	Chapter 24
W	Dec 7		Paired Samples and Blocks	Chapter 25

Course Information and Policies

- **Disability:** Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact the course coordinator, Dr. Froelich at amyf@iastate.edu, to set up a meeting within the first two weeks of the semester. Before meeting with Dr. Froelich, you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-6624. **Retroactive requests for accommodations will not be honored.**

- **Academic Dishonesty:** This class will follow Iowa State University policy on academic dishonesty found in the Iowa State University Catalog. A score of zero will be given for the entire assignment in which the academic dishonesty occurred. If a pattern of academic dishonesty is found to have occurred, a grade of F for the entire course can be given.
- **Computing:** Some labs/assignments will incorporate work on the computer using the statistical analysis package JMP. Be sure to allow enough time to complete the JMP assignments. It is your responsibility to allow for computer failures and/or difficulty finding a computer with the JMP software. JMP software can be downloaded to your personal computer for free. Please see WebCT for more details about downloading and using JMP in Statistics 101.
- **Calculator:** A basic calculator is required for the class. A cellphone does not count as a calculator and calculators may not be shared during exams. The most complicated function the calculator must perform is the square root. It is recommended that you bring your calculator to class so that you can follow along with example calculations.

- **Assessments:**

- **Labs:** There is a mandatory weekly two-hour laboratory scheduled for each section. Labs provide the opportunity to actively experience statistical ideas discussed in lecture. Bring your book, class notes and a calculator to the lab. There is **no lab** the first week of the semester. **Make-up labs are not given.** A copy of each week's lab will be posted to WebCT on Thursday of that week at 6pm.
- **Online Homework:** Practicing what you have learned is an important part of the learning process. Online homework assignments will be given through WebCT for each chapter in the course syllabus. You will have two attempts at each online assignment. Each attempt contains the same questions, but certain aspects of the assignment may be different between attempts. After each attempt, you will see the number of points earned per question, some feedback for each question, and the total number of points earned for the assignment. You **will not** see the correct answer for each question between attempts. Assignments are due by 8am on the due date. **Due dates are given in the WebCT calendar and cannot be extended.**
- **Written Homework:** Not everything you learn in Stat 101 can be assessed with online questions, so a short written homework assignment will be assigned for almost every chapter in the course syllabus. These assignments will be posted in WebCT and must be printed out, completed, and handed in. The assignments will be due at the end of lecture on the due date given on the WebCT calendar. **No late homework will be accepted.** Solutions will be posted in WebCT at 5pm on the due date.
- **Lecture Quizzes:** Be prepared to take a short quiz at any time during lecture. Quizzes will not be announced, so you are encouraged to attend class on a regular basis. Make-up quizzes will not be given **under any circumstances.**
- **Project:** A project will be assigned during the semester. This project is intended to expose students to the collection and statistical analysis of data to solve real world problems. Students will work in groups. Specific details will be given later in the semester.
- **Exams:** The first three exams will be given during regular class time. Individual make-up exams are not given in Statistics 101. Students with a valid reason (i.e. illness, family emergency, etc.) for missing **one** hourly exam during the semester are eligible to complete a make-up exam on the same material as the missing exam during the last week of classes (December 5 – 9). The time and date of the make-up exam will be announced after the 3rd hourly exam. Students **cannot make-up more than one** of the three hourly exams. To obtain permission to take a make-up exam, students must provide documentation of the reason for the absence from the exam to the course coordinator, Dr. Froelich at amyf@iastate.edu, within one week of the missed exam.
- **Final Exam:** The final exam is **tentatively** scheduled for **Tuesday, December 13 from 9:45-11:45.** **Do not make plans for semester break before you know your final exam schedule.**

- **Grading:** Letter grades including plus/minus will be given based on performance on the assessment categories above. The percentage distribution is as follows:

Exam 1	14%	Labs*	5%
Exam 2	14%	Online Homework*	5%
Exam 3	14%	Written Homework*	5%
Final Exam	25%	Lecture Quizzes*	8%
Project	10%		

*Total points in each of these categories will be scaled at the end of the semester to allow you to miss up to 5% of the total points available in the category, without penalty, with a maximum score of 100%.