

Statistics 101 – Sections C & D

Fall 2008

Instructor: Dr. Froelich
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 course website: <http://streaming.stat.iastate.edu/~stat101/homepage.html>
 section website: <http://www.public.iastate.edu/~amyf/stat101/homepage.html>
Office Hours: 11-12 MWF, 9-10 T (in Parks Library, outside of Bookends Café) or by appointment
Lecture: MWF 10:00 – 10:50am, Physics 0003
Laboratory: Section C: T 2:10 – 4:00pm, Town 270
 Section D: T 4:10 – 6:00pm, Town 270
Required Text: *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. 25 – 29: NO LAB**
- **Monday, Sept. 1: Labor Day Holiday, NO CLASS**
- **Friday, Oct. 3: EXAM 1 (Chapters 1 – 6)**
- **Friday, Oct. 31: EXAM 2 (Chapters 7 – 9, 11 – 14)**
- **Friday, Nov. 21: EXAM 3 (Chapters 18I – 21)**
- **Friday, Dec. 12: Review for Final Exam**
- **Week of Dec. 15 – 19: FINAL EXAM (Cumulative with emphasis on Chapters 18II, 23-25)**

Reading Assignments:

Tentative Dates		Material	Text	
M	Aug 25	Stats Starts Here, Data	Chapters 1 & 2	
W	Aug 27 - F	Aug 29	Displaying and Describing Categorical Data	Chapter 3
W	Sep 3 - M	Sep 8	Displaying and Summarizing Quantitative Data	Chapter 4
W	Sep 10 - F	Sep 12	Understanding and Comparing Distributions	Chapter 5
M	Sep 15 - F	Sep 19	The Standard Deviation as a Ruler and The Normal Model	Chapter 6
M	Sep 22 - W	Sep 24	Scatterplots, Association, Correlation	Chapter 7
F	Sep 26 - W	Oct 1	Linear Regression, Regression Wisdom	Chapters 8 & 9
M	Oct 6		Understanding Randomness	Chapter 11
W	Oct 8 - F	Oct 10	Sample Surveys	Chapter 12
M	Oct 13 - W	Oct 15	Experiments	Chapter 13
F	Oct 17		From Randomness to Probability	Chapter 14
M	Oct 20 - W	Oct 22	Sampling Distribution Models	Chapter 18I
F	Oct 24 - W	Oct 29	Confidence Intervals for Proportions	Chapter 19
M	Nov 3 - M	Nov 10	Testing Hypotheses about Proportions, More About Tests	Chapters 20 & 21
W	Nov 12 - F	Nov 14	Sampling Distribution Models	Chapter 18II
M	Nov 17 - M	Dec 1	Inferences About Means	Chapter 23
W	Dec 3 - F	Dec 5	Comparing Means	Chapter 24
M	Dec 8 - W	Dec 10	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 Dr. Froelich, Statistics 101 Course Coordinator, 294-5584, amyf@iastate.edu within the first two weeks of the semester. Retroactive requests for accommodations will not be honored. 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.
- **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.
- **Exams:** The first three exams will be given during regular class time. Individual make-up exams are not given in Statistics 101. Students missing **one** hourly exam during the semester are eligible to complete a make-up exam on the same material as the missing exam during regularly scheduled lab time the last week of classes (December 8 – 12). Students **cannot make-up more than one** of the three hourly exams.
- **Final Exam:** The final exam is **tentatively** scheduled for Tuesday, December 16 from 9:45-11:45 a.m. **Do not make plans for semester break before you know your final exam schedule.**
- **Homework and Labs:**
 - **Labs:** There is a weekly two-hour laboratory scheduled for each section. Labs provide the opportunity to actively experience statistical ideas discussed in lecture. Attendance at the lab is mandatory. Make-up labs will not be given. In addition to doing the laboratory activities you can get help from the lab instructor and/or course instructor. Bring your book, class notes and a calculator to the lab. There is **no lab** the first week of the semester.
 - **Homework:** Individual practice is an important part of learning. For this reason homework problems will be assigned throughout the semester. Homework assignments are due at the end of the lecture period on the due date. Late homework assignments will not be accepted. Solutions to the homework problems will be posted on the course website.

At the end of the semester, the homework and lab portion of the grade will be scaled to allow you to miss up to 5% of the total number of lab and homework points possible without penalty, with a maximum score of 100%.

- **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. Quizzes will be based on information presented in class, on labs and homework. Make-up quizzes will not be given **under any circumstances**. The quiz portion of your grade will be scaled at the end of the semester to allow you to miss up to two quizzes without penalty, with a maximum score of 100%.
- **Computing:** Some labs/homeworks 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 the course website for more details about downloading and using JMP in Statistics 101.
- **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.
- **Grading:** Letter grades including plus/minus will be given based on performance on exams, labs, homework and the project. The percentage distribution is as follows:

Exam 1	14%	Labs/Homework	15%
Exam 2	14%	Quizzes	8%
Exam 3	14%	Project	10%
Final Exam	25%		