Statistics 101 – Sections P & Q
Fall 2009

Instructor: Dr. Bob Stephenson
Office: 3111 Snedecor Phone: (515) 294-7805 email: wrstephe@iastate.edu
Course website: http://streaming.stat.iastate.edu/~stat101/homepage.html
Section website:http://www.public.iastate.edu/~wrstephe/stat101.html
Office Hours: TTh 9:00 – 9:50 am, MWF 11:00 – 11:50 pm, or by appointment
Lecture: MWF 10:00 – 10:50 pm, Physics 0003
Laboratory: Section P: W 12:10 – 2:00 pm, 3105 Snedecor
Section Q: W 2:10 – 4:00 pm, 3105 Snedecor
Required Text: *Intro Stats*, 3nd Edition, Richard D. DeVeaux & Paul F. Velleman, 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.

Syllabus:

Tentative Dates					Material	Text
M	Aug 24				Stats Starts Here	Chapter 1
W	Aug 26				Data	Chapter 2
F	Aug 28				Categorical Data	Chapter 3
M	Aug 31	-	F	Sep 4	Quantitative Data	Chapter 4
M	Sep 7				**NO CLASS –** Labor Day, Holiday	
W	Sep 9				Comparing Distributions	Chapter 5
F	Sep 11	-	W	Sep 16	The Standard Deviation as a Ruler and The Normal Model	Chapter 6
					EXAM 1 – Friday, September 18	Chapters 1 - 6
M	Sep 21	-	W	Sep 23	Scatterplots, Association, Correlation	Chapter 7
F	Sep 25		W	Sep 30	Linear Regression	Chapter 8
F	Oct 2				Regression Wisdom	Chapter 9
M	Oct 5				Understanding Randomness	Chapter 11
W	Oct 7				Sample Surveys	Chapter 12
F	Oct 9	-	M	Oct 12	Experiments	Chapter 13
W	Oct 14				From Randomness to Probability	Chapter 14
					EXAM 2 – Friday, October 16	Chapters 7 – 13
M	Oct 19	-	W	Oct 21	Sampling Distribution Models	Chapter 18I
F	Oct 23	-	W	Oct 28	Confidence Intervals for Proportions	Chapter 19
F	Oct 30	-	M	Nov 9	Testing Hypotheses about Proportions, More About Tests	Chapters 20 & 21
W	Nov 11				Sampling Distribution Models	Chapter 18II
					Exam 3 – Friday, November 13	Chapters 18I - 21
M	Nov 16	-	F	Nov 20	Inferences About Means	Chapter 23
M	Nov 23	-	F	Nov 27	**Thanksgiving Break**	
M	Nov 30	-	W	Dec 2	Comparing Means	Chapter 24
F	Dec 4				Paired Samples and Blocks	Chapter 25
M	Dec 7	-	F	Dec 11	Comparing Counts	Chapter 26
					FINAL EXAM – Week of Dec 11 – 15	

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. Bob Stephenson, 3111 Snedecor Hall, 294-7805, wrstephe@iastate.edu, within the first two weeks of the semester. Retroactive requests for accommodations will not be honored. Before meeting with Dr. Stephenson, 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 515-294-7220.

- **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 on which the academic dishonesty occurred.

- **Exams:** The first three exams will be given during regular class time. Individual make-up exams are not given in Statistics 101. A comprehensive make-up exam (covering all the material on Exams 1, 2 and 3) will be offered to any student missing one or more exams during the semester. This comprehensive make-up exam will be given during the last week of classes (December 7 – 11).

- **Final Exam:** The final exam is **tentatively** scheduled for Thursday, December 17th from 9:45 to 11:45 am. **Do not make plans for semester break that conflict with your final exam schedule**.

- **Lab:** 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.

- **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. At the end of the semester, the homework portion of the grade will be scaled to allow you to miss up to 10% of the total number of homework points without penalty. Solutions to the homework problems will be posted on the course website.

- **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**. The quiz portion of your grade will be scaled at the end of the semester to allow you to miss up to 15% of the quiz points without penalty.

- **Computing:** Some labs and homework assignments will require using the statistical analysis package JMP. Detailed instructions will be provided with all computer assignments. Help with JMP is available in 1207 Snedecor at the times posted. 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.

- **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	70 pts
Exam 2	70 pts
Exam 3	70 pts
Final Exam	120 pts
Homework	60 pts
Labs	30 pts
Quizzes	30 pts
Project	50 pts
Total	500 pts