Statistics 104 – Section A
Fall 2009

Instructor: Dr. Bob Stephenson

Contact: Phone: (515) 294-7805 email: wrstephe@iastate.edu
section website: http://www.public.iastate.edu/~wrstephe/stat104.html

Office Hours: TTh 9:00 – 9:50 am, in 3111 Snedecor Hall
MWF 11:00 – 11:50 am, in 3111 Snedecor Hall
or by appointment

Lecture: TTh 8:00 – 8:50 am, 280 Town

Laboratory: F 8:00 – 9:50 am, 3105 Snedecor Hall

Required Text: *Statistics: The Art and Science of Learning from Data*, 2nd Edition, Alan Agresti and Christine Franklin, Pearson/Prentice Hall.

Objectives: The objective of the course is to have students develop an understanding of statistical thinking. By the end of the course students should be able to display and summarize data, evaluate probabilities, and use statistical methods to reach informed decisions about questions arising from real world problems especially those in the agricultural and biological sciences.

Syllabus:

Tentative Dates					Material	Text
T	Aug 25	–			What is Statistics?	Chapter 1
Th	Aug 27		Th	Sept 3	Exploring Data	Chapter 2
T	Sept 8	–	Th	Sept 17	Association	Chapter 3
T	Sept 22	–	T	Sept 29	Gathering Data	Chapter 4
					EXAM 1 – Friday, October 2	Chapters 1 – 4
T	Oct 6	–	Th	Oct 8	Probability	Chapter 5
T	Oct 13	–	Th	Oct 22	Probability Distributions	Chapter 6
T	Oct 27	–	T	Nov 3	Sampling distributions	Chapters 7
					EXAM 2 – Friday, November 6	Chapters 5 – 7
T	Nov 10	–	T	Nov 17	Estimation & Testing: Proportions	Sect. 8.1, 8.2, 8.4, 9.1, 9.2
Th	Nov 19	–	Th	Dec 3	Estimation & Testing: Means	Sect 8.3, 9.3, 9.4
M	Nov 24	–	F	Nov 28	**Thanksgiving Break**	
T	Dec 8	–	Th	Dec 10	Comparing Two Groups	Chapter 10

FINAL EXAM Tentatively scheduled for Monday, December 14 from 7:30 to 9:30 am

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 515-294-6624.

- 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.

- **Exams:** In class exams will be given during the lab period. You will be able to use a calculator during exams. Formulas and tables needed for the exams will be provided.

- **Final Exam:** The final exam is **tentatively** scheduled for Monday, December 14th from 7:30 to 9:30 am. **Do not make plans for semester break before you know the complete final exam schedule**.

- **Lab:** 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. In addition to doing the laboratory activities you can get help from the course instructor during lab. Bring your book, class notes and a calculator to the lab.

- **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 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 possible without penalty.

- **Quizzes:** Be prepared to take a short quiz at any time during class or lab. 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 15% of the quiz points possible without penalty.

- **Computing:** Some labs and homework assignments will incorporate work on the computer using the statistical analysis package JMP. Detailed instructions will be provided with all computer assignments. Help with JMP is available in 1207 Snedecor Hall 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. If you have questions about how to do this, go to the Solutions Center in Durham.

- **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 point distribution is as follows:

Exam 1	100
Exam 2	100
Final Exam	125
Homework	60
Laboratory	40
Quizzes	25
Project	50
Total	500