

The University of Iowa
College of Liberal Arts and Sciences
Department of Statistics and Actuarial Science
22S:002 Statistics and Society (STAT:1010)
Fall, 2013

Instructor:

Amy M. Johnson
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Office Hours (or by appointment): Tuesday 7:30-9:00am
 Thursday 2:00-3:30pm
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Teaching Assistant:

Name
Office: Schaeffer Hall Office Phone: (319) 384-1600
Office Hours:
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DEO: Dr. Luke Tierney, 241 Schaeffer Hall, 319-335-0712

Lecture Time and Location:

MWF 12:30 – 1:20pm in Shambaugh Auditorium (SHAM); Main Library (LIB)

Textbook (Required):

Bennett, Briggs, & Triola (2013). Statistical Reasoning for Everyday Life (4th Ed).
ISBN: 978-0-321-81762-4

Course Goals and Objectives:

This course is intended to help you develop important analytical skills through the practice of quantitative reasoning. We shall focus on the evaluation of evidence and argument, the understanding of the use and misuse of data, and the organization of information in quantitative or other formal symbolic systems. Specifically, you will be introduced to the fundamental concepts of statistics and develop reasoning skills that can be applied to statistical information encountered on a daily basis. Students should learn to draw conclusions from analyses and how to communicate analysis results.

Hand computations will be stressed. However, should time allow some analyses may be described using statistical software packages such as Minitab or Excel. Any software utilized will be available in the campus computer labs or at <http://virtualdesktop.uiowa.edu>

Approved GE: Quantitative or Formal Reasoning

Course Web Site:

Course notes, homework assignments, solution sets, and other relevant materials will be available on the ICON (Iowa Courses On-Line) course website: <https://icon.uiowa.edu>

Lecture Notes:

Notes will be available on ICON prior to the lecture in which they are covered. In the case of an absence, the student is responsible for material covered in class and must get any additional notes from fellow students.

Course Readings:

We will not cover all sections of each chapter of the textbook. Students should read the relevant sections prior to lecture, and focus on material covered in class.

Weekly Discussion Sessions:

Attendance at discussion is important. Generally problems similar to homework or activities to clarify a particular topic will be covered. Unscheduled quizzes may be given during this time. Quiz make-ups will not be given.

Tentative Course Topics (in roughly this order):

<u>Topic</u>	<u>Chapter</u>
Sampling Techniques & Study Types	1
Measurement, Data Types, & Dealing with Errors	2
Visual Displays of Data, Statistical Graphics	3
Summary Statistics & Distribution Shapes	4
Probability	6
Normal Distribution	5
Sampling Distributions	8
Inference for Population Mean(s)	8, 9, 10
Inference for Population Proportion(s)	8, 9
Inference for Two-way Contingency Tables	10
Correlation & Regression (as time allows)	7
Other topics (as time allows)	

Evaluation:

Appropriate work **must** be shown on homework **and** exams. Simply providing a final numerical answer is not sufficient and will be counted as wrong (even if correct).

❖ **Homework (20%)**

Assigned on Friday, and due the following Friday at the beginning of class. Due to time constraints, the grader may grade only some of the assigned questions, but you are responsible for understanding all questions. Late homework will not be accepted. The lowest homework score will be dropped from the calculation of your final grade.

The grader and I reserve the right to **deduct points** if homework does not appear professional, neat, and easily handled (e.g. stapled, problems done in order, etc.)

Collaboration is allowed. However each student must write and turn in their own homework assignment. Additionally on the first page, state the name of anyone you collaborated with.

Although you can work together in the completion of homework, it is important to remember that you will take exams based on your own knowledge. It is therefore imperative that you understand course topics.

❖ **Midterm Exams* (20% each)**

Two midterm exams will be given. One cheat sheet (8.5"x11") – both sides – is allowed. Any needed tables will be provided by the instructor.

❖ **Final* (25%)**

The final will be **comprehensive** in nature. Two cheat sheets (8.5"x11") – both sides – are allowed. Any needed tables will be provided by the instructor.

❖ **Discussion (5%)**

The course TA will evaluate you via attendance, unannounced discussion quizzes, preparedness, and participation in your discussion section. *Make sure you are clear about your TA's policies and expectations regarding this portion of your grade.*

❖ **Lecture Quizzes* (10%)**

Short, scheduled quizzes will be given in lecture. There are no make-up quizzes. However your lowest quiz score will be dropped in the calculation of your final grade.

❖ **Attendance / Effort**

You are expected to attend all lectures in their entirety. Your attendance, participation, work ethic, etc. may affect your grade.

**Note: No make-up quizzes or exams will be given unless absence is due to unavoidable circumstances as stated by University policy (documentation will be required in such cases.) Missed exams and quizzes will receive a score of 0.*

Grades:

If everyone in the class earns an A, then everyone will get an A.
As an approximate guide, grades will be given as:

90-100	A
80-90	B
70-80	C
60-70	D
Below 60	F

Plus and minus grades will be assigned near the borders of the letter grade intervals.

Resources for Additional Help:

1. Statistics Tutorial Lab: There is a free statistics tutorial lab in room 202 Communications Center. During available times, a knowledgeable person will be present to assist students. For more information, visit: <http://www.stat.uiowa.edu/resources/tutoring>

2. Private For-Pay Tutors: The Department of Statistics and Actuarial Science maintains a list of private tutors at: <http://www.stat.uiowa.edu/private-tutors>

Administrative Home:

The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Academic Policies Handbook at <http://clas.uiowa.edu/students/handbook>.

Electronic Communication

University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences ([Operations Manual, III.15.2](#), k.11).

Accommodations for Disabilities:

A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See www.uiowa.edu/~sds/ for more information.

Academic Honesty

All CLAS students or students taking classes offered by CLAS have, in essence, agreed to the College's [Code of Academic Honesty](#): "I pledge to do my own academic work and to excel to the best of my abilities, upholding the [IOWA Challenge](#). I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled ([CLAS Academic Policies Handbook](#)).

CLAS Final Examination Policies

The final examination schedule for each class is announced by the Registrar generally by the tenth day of classes. Final exams are offered only during the official final examination period. **No exams of any kind are allowed during the last week of classes.** All students should plan on being at the UI through the final examination period. Once the Registrar has announced the date, time, and location of each final exam, the complete schedule will be published on the Registrar's web site and will be shared with instructors and students. It is the student's responsibility to know the date, time, and place of a final exam.

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident ([CLAS Academic Policies Handbook](#)).

Understanding Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI [Comprehensive Guide on Sexual Harassment](#) for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the [Department of Public Safety website](#).