

Syllabus

Statistics 201

Block 6, Spring 2019

Instructor: Ann Cannon

Office: Law 206B

Office Hours: MWF 11-12, TTh 3-4. Others by appointment

Office Phone: 4461

Home Phone: 455-2373

Prerequisite: Two years of high school *algebra* and a writing course. If you are unsure that you have satisfied the algebra prerequisite, talk to me as soon as possible.

How to be successful: The material we will cover in this class is interesting, important, and useful not only for many different careers, but also for living life as an informed citizen. That said, it takes some effort to learn to apply the ideas that will be presented. The typical student should expect to spend an average of about 4 hours a day, 7 days a week, on this course this term. Some students may be able to spend a bit less and still be successful; others will find that they need to spend more to be successful.

Learning Objectives: This course supports the Educational Priorities and Outcomes of Cornell College with emphases on knowledge, inquiry, communication, reasoning, and ethical behavior. Specifically, the learning objectives of this course are:

- Ability to communicate statistical ideas clearly and accurately (communication).
- Understand the importance of and techniques for collecting data (knowledge, reasoning, ethical behavior)
- Ability to display and interpret data (knowledge, reasoning).
- Understand simple linear models (knowledge, reasoning).
- Ability to apply inference to means and proportions using one and two sample techniques (knowledge, reasoning).
- Use of bootstrapping and randomization distributions (knowledge, reasoning).
- Use of the normal and t-distributions (knowledge, reasoning)
- Ability to ascertain which type of analysis is appropriate for a particular data set and question (inquiry, reasoning, ethical behavior).
- Begin to see the big picture of following the statistical process of starting with a question, collecting the requisite data, analyzing the data, and reporting on the results (inquiry, reasoning, communication).

Meeting Times: Class will generally meet 9 – 11 in Law 211 and 1:15 – 2:45 in Law 203. Class times and locations may change occasionally, but I will announce any changes.

Text: Statistic: Unlocking the Power of Data, second edition by Lock, Lock, Lock, Lock, and Lock. We will cover most of chapters 1-6 completely. With any remaining time, we will cover part of chapters 9 and 7 (in that order).

Exams and Quizzes: There will be three exams in this class. There will be two 100-point exams and a 150-point final on the last day of the term. All three exams will have at least a portion of them done on the computer. The first exam will be given in two parts. The first part will be the second Tuesday morning and the second part will be the second Tuesday afternoon. You may start the afternoon portion of the first exam any time between 12:30 and 1:15. The second exam will be during the afternoon of the third Wednesday. Again, you may start this exam anytime between 12:30 and 1:15. There will also be 4 short quizzes, each of which will be worth 25 points. The final will be the last Wednesday morning from 8-12. You must be here by 8, you must be done by 12!

Papers: There will be two graded papers for this class. The first one will be worth 40 points and will be due on the second Friday. The second one will be worth 60 points and will be due the fourth Monday. **Note:** Communication is important! I will be grading how you express yourself as well as what you say. Feel free to use the Writing Studio if you need help. And make sure that you proofread your paper carefully!

Drop Policy: I follow the official college drop policy; i.e. in order to be eligible for a third Friday drop, all absences must be excused by me and you must complete all course work, including in-class activities.

Learning Disabilities: The official Cornell College policy is as follows. Cornell College makes reasonable accommodations for persons with disabilities. Students should notify the Coordinator of Academic Support and Advising and their course instructor of any disability related accommodations within the first three days of the term for which the accommodations are required, due to the fast pace of the block format. For more information on the documentation required to establish the need for accommodations and the process of requesting the accommodations, see [Cornell College website on accommodations for learning disabilities](#).

Academic Honesty: The official Cornell College statement is as follows. Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgement of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in The Catalogue, under the heading "Academic Honesty." I will follow the college policy. Note that this means I will **charge you formally** with the registrar's office if I find you have violated this policy.

Grading: Grades will be based primarily on your performance on assignments, quizzes and exams according to the following schedule:

Assessment item	Points
Quizzes (4)	100
Paper 1	40
Paper 2	60
Exam 1	100
Exam 2	100
Final Exam	150
Total	550

I do not collect regular book homework problems. This does not mean that you should spend less time on the regular homework problems. These are just as important to learning the material. STUDENTS WHO DO NOT DO THE HOMEWORK OFTEN FIND IT DIFFICULT TO PASS THE CLASS!