

Statistics 101 – Sections C & D

Fall 2018

Instructor: Guoliang Ma
Contact Info: 3207 Snedecor Hall, Phone: (515) 708-4796, email: glma@iastate.edu
Course Info: Canvas
Office Hours: 3205 Snedecor Hall, MW 4:00-5:00, also see canvas
Lecture: MWF, 10:00-10:50, Horticulture Hall 0118
Laboratory: Section C: T 2:10-4:00, time, 3105 Snedecor Hall
 Section D: T 4:10-6:00, time, 3105 Snedecor Hall
Optional Text: *Intro Stats*, 4rd 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:

- **NO LABS**
 - Week of August 20 – 24
 - Week of November 12 – 16
- **NO CLASS**
 - LABOR DAY, Monday, September 3
 - THANKSGIVING BREAK, November 19 through November 23
- **EXAMS**
 - Exam 1 – Monday, October 1 (In-Class Exam: Covers Unit 1)
 - Exam 2 – Take Home: October 15 - 19 (Covers Unit 2)
 - Exam 3 – Monday, November 12 (In-Class Exam: Covers Unit 3)
 - FINAL – Wednesday, December 12, 9:45-10:45 am (Location TBD: Covers Unit 4)

Reading Assignments:

	Tentative Dates				Material	Text
Unit 1	M	Aug 20			Stats Starts Here	Chapter 1
	W	Aug 22	-	F Aug 24	Displaying and Describing Categorical Data	Chapter 2
	M	Aug 27	-	F Aug 31	Displaying and Summarizing Quantitative Data	Chapter 3
	W	Sep 5	-	F Sep 7	Understanding and Comparing Distributions	Chapter 4
	M	Sep 10	-	W Sep 12	Scatterplots, Association, Correlation	Chapter 6
	F	Sep 14	-	F Sep 21	Linear Regression, Regression Wisdom	Chapter 7&8
Unit 2	M	Sep 24	-		Understanding Randomness	Chapter 9
	W	Sep 26	-	F Sep 28	Sample Surveys	Chapter 10
	W	Oct 3	-	F Oct 5	Experiments	Chapter 11
	M	Oct 8			From Randomness to Probability	Chapter 12
Unit 3	W	Oct 10	-	M Oct 15	The Normal Model	Chapter 5
	W	Oct 17	-	M Oct 22	Sampling Distribution Models	Chapter 15I
	W	Oct 24	-	M Oct 29	Confidence Intervals for Proportions	Chapter 16
	W	Oct 31	-	M Nov 5	Testing Hypotheses about Proportions	Chapter 17
Unit 4	W	Nov 7	-	F Nov 9	Sampling Distribution Models	Chapter 15II
	W	Nov 14	-	M Nov 26	Inferences About Means	Chapter 18
	M	Nov 26			More About Tests and Intervals	Chapter 19
	W	Nov 28	-	M Dec 3	Comparing Groups	Chapter 20
	W	Dec 5	-	F Dec 7	Paired Samples and Blocks	Chapter 21

Homework and Vocab Due Dates:

Below are the due dates for homework and vocabulary quizzes this semester. These due dates are also listed in Canvas. All chapters have online vocabulary and homework assignments, but several chapters do not have written homework assignments. These are denoted in the table below by NONE.

Chapter	Online Vocab & Homework (by 8am)	Written Homework (at the beginning of lecture)
1	Wednesday, August 29	NONE
2	Friday, August 31	Friday, August 31
3	Friday, September 7	Friday, September 7
4	Friday, September 14	Friday, September 14
6	Friday, September 21	Friday, September 21
7&8	Friday, September 28	Friday, September 28
9	Part of Chapter 12: due Friday, October 12	NONE
10	Friday, October 5	NONE
11	Friday, October 12	NONE
12	Friday, October 12	NONE
5	Friday, October 19	Friday, October 19
15I	Friday, October 26	Friday, October 26
16	Friday, November 2	Friday, November 2
17	Friday, November 9	Friday, November 9
15II	Friday, November 16	NONE
18	Friday, November 30	Friday, November 30
19	Friday, November 30	NONE
20	Friday, December 7	Friday, December 7
21	Friday, December 7 (Extra Credit)	NONE

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 the course coordinator, Kevin Kasper, by email at kmkasper@iastate.edu, to set up a meeting within the first two weeks of the semester. **Accommodations must be requested within one week of an assessment.** Before meeting with Kevin, you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 Student Services Building. Their telephone number is 515-294-7220. **Retroactive requests for accommodations will not be honored.**
- **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.
- **Harassment and Discrimination:** Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, [Student Assistance](#) at 515-294-1020 or email dsosas@iastate.edu, or the [Office of Equal Opportunity and Compliance](#) at 515-294-7612.
- **Religious Accommodation:** If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the [Dean of Students Office](#) or the [Office of Equal Opportunity and Compliance](#).
- **Contact Information:** If you are experiencing, or have experienced, a problem with any of the above issues, email academicissues@iastate.edu.

- **Absences Due to School Activities:** If you are involved in athletics or a school sponsored activity and anticipate any absences from class during the semester, please inform me as soon as possible. You will need to obtain a letter from the athletic department or the faculty sponsor of your activity with a list of absences with dates and times. All absences must be arranged in advance in order to receive excused grades or to be able to make-up assignments.
- **Computing:** Some labs/assignments 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. While not a requirement for the course, JMP software can be downloaded to your personal computer for free if you desire. Please see Canvas for more details about downloading and using JMP in Statistics 101.
- **Calculator:** A basic calculator is required for the class. Any device with an internet connection (cellphone, smartphone, iPod touch, etc.) does not count as a calculator. Calculators may not be shared during exams. The most complicated function the calculator must perform is the square root. It is recommended that you bring your calculator to class so that you can follow along with example calculations.

Assessments:

- **Course Learning Outcomes:** Student learning outcomes for each chapter covered in the textbook are posted in Canvas. These outcomes form the structure of all course assessments.
- **Lecture 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. If you miss class, you miss the points. Students whose absences are due to school activities will receive excused grades for the missing quizzes at the end of the semester.** At the end of the semester, the total number of points will be scaled to allow you to miss up to two quizzes/attendance checks without affecting your grade.
- **Labs:** 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 class notes and a calculator to the lab. **Make-up labs are not given under any circumstances. If you miss the lab, you miss the points. Students whose absences are due to school activities will receive excused grades for the missing labs at the end of the semester.** At the end of the semester, one lab score will be dropped from the lab portion of the course grade. A copy of each week's lab will be posted to Canvas.
- **Vocabulary Quizzes:** To assist you in learning the language of statistics, vocabulary words for each chapter are listed in Canvas. Short vocabulary quizzes on these words will be given through Canvas for each chapter in the course syllabus. These quizzes work in a similar way to the online homework assessments (see information below). At the end of the semester, the total number of points will be scaled to allow you to miss up to 5% of the possible vocabulary quiz points without affecting your grade.
- **Online Homework:** Practicing what you have learned is an important part of the learning process. Online homework assessments will be given through Canvas for each chapter in the course syllabus. You will have one attempt at each online assessment. The assessments are not timed, and you can save your assessment and return to it at any time before submission. Assessments must be submitted by 8am on the due date. **Due dates are given in Canvas and the course syllabus and will not be extended for any reason.** After the due date, correct answers with feedback will be available for the assessment through Canvas. At the end of the semester, the total number of points will be scaled to allow you to miss up to 5% of the possible online homework points without affecting your grade. For more information, see the **Online Homework Guidelines** in Canvas.
- **Written Homework:** Not everything you learn in Stat 101 can be assessed with online questions, so a short written homework assignment will be assigned for most chapters in the course syllabus. These assignments will be posted in Canvas and must be printed out, completed, and handed in. The assignments will be due at the beginning of lecture on the due date given on the Canvas calendar. **No late homework will be accepted.** Solutions will be posted in Canvas at 5pm on the due date. Written homework assignments are graded and returned to you in lecture within one week of the due date. At the end of the semester, the total number of points will be scaled to allow you to miss up to 5% of the possible written homework points without affecting your grade. For more information, see the **Written Homework Guidelines** in Canvas.

- **Exams:** There are three exams this semester: two in-class and a take home. The in-class exams will be given during your normal lecture time. Individual make-up exams are not given in Statistics 101. Students with a valid reason (i.e. illness, family emergency, etc.) for missing **one** in-class exam during the semester are eligible to complete a make-up exam on the same material as the missing exam during the last week of classes (December 3 – 7). **The time and date of the make-up exam will be announced after the 3rd in class exam.** Students **cannot make-up more than one** of the two in class exams. To obtain permission to take a make-up exam, students must provide documentation of the reason for the absence from the exam to your instructor **within one week of the missed exam.**
- **Dead Week:** The last week of classes each semester is denoted as Dead Week. This semester, Dead Week is from Monday, December 3 through Friday, December 7. As part of the policy on Dead Week, the course syllabus must list all graded assignments due during Dead Week. These assignments are:
 - **Lab Assignment** – there will be a lab assignment during your regularly scheduled lab.
 - **Ch 20 Vocabulary, Online and Written HW** – Due Friday, December 7
 - **Ch 21 Vocabulary and Online HW** – Due Friday, December 7 (**counts as extra credit**)
- **Final Exam:** The final exam is **tentatively** scheduled for XXXX. The final exam is **one hour and covers Unit 4 material.** Only students who have three exams in one calendar day where Stat 101 is the smallest of the three classes are eligible for a make-up final exam. All other students must take the final exam at the regularly scheduled day and time. All requests for make-up final exams must be submitted to me by the end of the day on Friday, November 30. **Do not make plans to leave campus for break before you know your final exam schedule.** For more information, see the **Final Exam Guidelines** in Canvas.
- **Grading:** Letter grades including plus/minus will be given based on performance on the assessment categories above. **The exact scale will not be determined until the end of the semester.** The percentage distribution is as follows:

Exam 1 (in-class)	18%	Labs*	6%
Exam 2 (take home)	9%	Online Homework**	10%
Exam 3 (in-class)	18%	Written Homework**	10%
Final Exam	18%	Lecture Quizzes/Attendance***	5%
		Vocab Quizzes**	6%

* Total points in this category are scaled at the end of the semester to allow you to miss up to one lab, without penalty, with a maximum score of 100%.

** Total points in each of these categories will be scaled at the end of the semester to allow you to miss up to 5% of the total points available in the category, without penalty, with a maximum score of 100%.

*** Total points in this category are scaled at the end of the semester to allow you to miss two quizzes/attendance checks without penalty, with a maximum score of 100%.