

STAT 201: GENERAL STATISTICS

Spring 2019

Instructor:	Aaron Nielsen	Email:	aaron.nielsen@colostate.edu
Time:	TR 9:00 – 9:50am	Section:	002
Location:	Clark A102	Webpage:	http://canvas.colostate.edu/

Course coordinator: Dr. Aaron Nielsen (aaron.nielsen@colostate.edu)

Course credits: 3

Recommended Textbook: *OpenIntro Statistics*, 3rd edition by David M. Diez, Christopher D Barr, and Mine Çetinkaya-Rundel (<https://www.openintro.org/stat/textbook.php>)

Required Software: **JMP** – you should have received an email to download and install this program. If not, contact RamTech on campus for a download link.

Office hours and location: Tues 10:00am – 12:00pm, Weds 1:00pm – 4:00pm (or by appointment). There are also teaching assistants available MTWR 9:00am – 8:00pm and F 9:00am – 5:00pm in the Statistics Success Center (Weber 223A).

Prerequisite: At least one credit from Math 100 to 200.

Catalog Description: Graphs, descriptive statistics, confidence intervals, hypothesis tests, correlation and simple regression, tests of association.

iClicker Participation: iClicker questions will be given randomly in lecture throughout the semester. You will receive participation credit for each lecture you use your clicker. Four clicker scores will be dropped from your total in case you forget your clicker or need to miss class. If you don't have an iClicker, they are available for purchase in the campus bookstore. Make sure to register your iClicker on Canvas before Tuesday, January 29. Clicker points cannot be made up at a later date.

Recitation Labs: Recitation labs will be distributed in recitation on Friday and are either due at the end of recitation or by 5:00pm on the following Monday in the homework cart located in the SSC. Students that have an unexcused absence from recitation are not eligible to turn in labs on Monday. You must attend the recitation section for which you registered!

Online Homework: Online homework will be due each Thursday at 11:59pm and will be assigned through the online homework portal, WebAssign (www.webassign.net). You may collaborate with other students on WA homework, but be aware that data presented in your assignment will likely be different than those of your classmates due to WA randomization. You can request an extension for WA homework for up to 14 days after the original due date. Using an extension incurs a 50% credit penalty, and you will not be given an extension if you've viewed the answer key. I will not grant WA extensions, except for excused absences.

Exams: There will be two 110-minute evening exams and a 120-minute final exam. The locations of these exams will be announced in class and on Canvas. You are allowed to use one double-sided note card (3.5"x5") and a calculator for the exams. No make-up exams are offered.

Basis for Final Grade: Your final grade will be based on your exam scores, online homework sets, recitation labs, and iClicker participation. The weightings will be as follows:

- Online Homework Assignments: 30%
- Recitation Labs: 20%
- iClicker participation: 5%
- Midterm Exam #1 (Feb 21): 15%
- Midterm Exam #2 (April 4): 15%
- Final Exam (**May 14**): 15%

Grading Scale: Your course grade will be determined from the following grading scale:

A	92% – 100%	C+	78% – 80%
A-	90% – 92%	C	70% – 78%
B+	88% – 90%	D	60% – 70%
B	82% – 88%	F	0% – 60%
B-	80% – 82%		

Course Policies:

- **Attendance:** While I do not take attendance in lecture, you do receive points for iClicker participation in class. Additionally, there is a weekly lab in recitations. It is highly recommended that you don't make a habit of missing lecture and/or recitation.
- **Late Work Policy:** Online homework can be submitted up to two weeks late for 50% credit. Recitation labs are not accepted after the due date. Makeup exams are not given without prior approval for excused absences.
- **Students with Disabilities:** The university is committed to providing support for students with disabilities. If you have an accommodation plan, please see me so we can make any arrangements necessary to facilitate your learning.
- **Grades of “Incompletes”:** I will follow university procedures on “incompletes”, i.e., they are only given in situations where unexpected emergencies prevent students from completing the course and the remaining work can be easily finished the following semester. Incomplete work must be finished the next semester or the grade automatically turns into an F.
- **Group Work Policy:** Students are encouraged to collaborate on homework sets, as long as they acknowledge their collaborators. There is no penalty for working together. Of course, no collaboration is allowed on exams, as that is considered cheating.
- **Cheating:** Students are expected to understand intuitively what proper ethical conduct means in the context of a college mathematics course. If you are caught cheating, you could fail the class or (at least) have your grade lowered, so don't even try it.

Course schedule: The following schedule of course materials covered is tentative, but the dates of the exams will not change.

<u>Week</u>	<u>Date</u>	<u>Topics</u>	<u>Module</u>	<u>Important Dates</u>
1	Jan 21 – 25	Syllabus / Math review		
2	Jan 28 – Feb 1	Using Data	1	HW #0 due
3	Feb 4 – 8	Descriptive Statistics	2	HW #1 due
4	Feb 11 – 15	Probability	3	HW #2 due
5	Feb 18 – 22	Probability (cont.)	3	Exam #1

EXAM #1: THURSDAY, FEBRUARY 21 (5:00 – 6:50pm)

6	Feb 25 – March 1	Sampling Distributions	4	HW #3 due
7	March 4 – 8	Sampling Distributions	4	
8	March 11 – 15	Confidence Intervals	5	HW #4 due

SPRING BREAK (MARCH 18 – 22)

9	March 25 – 29	Confidence Intervals (cont.)	5	HW #5 due
10	April 1 – 5	Review and catch-up		Exam #2

EXAM #2: THURSDAY, APRIL 4 (5:00 – 6:50pm)

11	April 8 – April 12	Hypothesis Testing (cont.)	6	
12	April 15 – 19	Hypothesis Testing (cont.)	6	HW #6 due
13	April 22 – 26	Simple Linear Regression	7	
14	April 29 – May 3	Simple Linear Regression (cont.)	7	HW #7 due
15	May 6 – 10	Review and catch-up		

FINAL EXAM: TUESDAY, MAY 14 (2:00 – 4:00pm)

Advice for succeeding in Stat 201:

- If you feel confused in Stat 201, you will not be alone. Understanding statistics is challenging. If you hear something that you don't understand in class, it is a safe bet that a large number of your classmates also didn't understand. Please ask questions when you have them. It doesn't matter if you think the question is too simple, or if you feel like everyone else understands it but you. They don't. And they'll be happy you asked it.
- There are lots of ways to get help other than asking questions in class. The Statistics Success Center is open from morning until evening, and will always be staffed with teachers and tutors and fellow STAT 201 students who work with you or answer your questions.
- All of the course material was developed with the goal of helping you understand statistics. The course notes, homework assignments, videos, worked examples, iClicker questions, and exam practice problems were all created to complement one another. If you have trouble seeing the purpose of what's in the notes, check to see what kinds of questions are being asked in the homework, especially the wordy ones. If you read a homework question that confuses you, see if there's a worked example or video on the same topic, or scan the notes for examples and definitions.
- It is not likely that you will fully absorb the course materials by listening to lecture alone. A good practice is to read through the course notes after attending lecture. A better practice is to read them before lecture, too.
- Each new course module will build upon topics from previous course modules. Reviewing previous modules will help you understand new ones. If you miss a homework assignment, go back and do it anyway (you can still get 50% credit). Future homework problems will assume you understand how to solve past homework problems.

Required Materials:

- **Calculator** (TI-83/84 are preferred but not required) – bring to lecture and recitation
- **iClicker** – bring to lecture
- **Class notes on Canvas** – print and bring to lecture
- **JMP** – software to be installed on your computer to complete homework assignments
- **Textbook** – *not required* but it's cheap and recommended as a reference