Introduction to Statistics - Math 105 Aaron Robertson 219 McGregory, arobertson@colgate.edu

In this course we will analyze and summarize data to help you understand statistical statements that are made in the news, by your friends, etc. The course will require calculation and hence a scientific – but not graphing – calculator is required (if you have a graphing calculator, you can use it). I will expect that you have a calculator to use in class as well as during exams. You may **not** use the one on your phone.

Resources: Here is the URL to use to get to the material: https://tinyurl.com/Math105Colgate

In this Google drive, you will find guided lecture notes, Google Sheets pages that I use in class, and additional practice problems (with solutions).

WebAssign: We will be using the online homework tool WebAssign (www.webassign.net).

To Login to WebAssign:

- 1. Connect to http://www.webassign.net and click I have a class key.
- 2. Enter colgate 3963 0851
- 3. Verify that the course is Introduction to Statistics with Aaron Robertson
- 4. Create a WebAssign account if necessary and login to your WebAssign account
- 5. Pay for WebAssign. The cost is around \$23.

Office Hours: These will be Tuesdays and Thursdays, 9:30am to 10:30am. To request office hours:

- 1. Go to my appointments page https://tinyurl.com/Math1050H (those are letters at the end)
- 2. Select an available 15-minute slot (grey blocks labeled 105OH)
- 3. In the WHAT field (first field) put your first **and** last names (delete the pre-filled message)
- 4. Press Save.

Your appointment will appear on your Google calendar and/or you will get a calendar invite in your email. If you find that you cannot make a scheduled appointment, go to your Google calendar and change Yes to No or delete the event from your calendar (and The Google will find me and notify me).

If your schedule does not allow you to make any of the scheduled office hour times, please email me to set up an appointment.

Computer: We will be using Google's spreadsheet program Sheets so that your computer's operating system is irrelevant. You will also need a computer to do the homework.

Assignments: The assignments are on the WebAssign webpage. The WebAssign system grades (and records) your homework, as well as lets you know whether you got a specific question correct or not. You have **3** chances for all **fill-in the blank** problems (but only 1 or 2 chances for multiple-choice/true-false questions) to submit each question so that you can correct any error (and learn the material).

Homework assignments are due the same day as the exam (before the exam starts) over which they cover. Hence, there is plenty of time to complete them. For that reason, late work is not accepted (except for a long absence as documented by your administrative dean).

Below are suggested due dates for the homework so that you stay on top of the material. You **should not wait until right before the exam** to do the homework; the official due dates are as they are to allow you flexibility (not to procrastinate). The homework will also prepare you for any pop quiz.

Date	Homework/Exam
AUG. 31 (Wed)	HW 1.1
SEPT. 2 (Fri)	HW 1.2
SEPT. 7 (Wed)	HW 2.1
SEPT. 12 (Mon)	HW 2.2
SEPT. 14 (Wed)	Spreadsheet 1
SEPT. 19 (Mon)	EXAM 1 (Units 1 and 2)
SEPT. 28 (Wed)	HW 3.1
OCT. 3 (Mon)	HW 3.2
OCT. 5 (Wed)	Spreadsheet 2
OCT. 10 (Mon)	No class (Fall Break)
OCT. 14 (Fri)	HW 4.1
OCT. 17 (Mon)	HW 4.2
OCT. 19 (Wed)	EXAM 2 (Units 3 and 4)
NOV. 4 (Fri)	HW 5.1
NOV. 7 (Mon)	HW 5.2
NOV. 9 (Wed)	Spreadsheet 3
NOV. 11 (Fri)	HW 6.1
NOV. 16 (Wed)	HW 6.2
NOV. 18 (Fri)	EXAM 3 (Units 5 and 6)
NOV. 30 (Wed)	HW 7.1
DEC. 5 (Mon)	HW 7.2
DEC. 7 (Wed)	EXAM 4 (Unit 7)
DEC. 12 (Mon)	FINAL EXAM (9:00am to $11:00am$)

Pop Quizzes: To help you stay on top of the material, there will be 7 pop quizzes (assuming Covid doesn't rear its head and make this infeasible) throughout the semester, one for each unit. Each quiz consists of a basic question over the material covered in the unit to that point. The quizzes are short (about 5-10 minutes) and consist of the main types of questions recently covered. I will set aside class time after a lecture to do the quiz. There are absolutely no make-up quizzes.

The grading on the quizzes is a bit different: If you achieve a 4/5 or 5/5 on at least five quizzes, your quiz grade will be 100%; otherwise, your quiz grade will be a straight average of your quiz scores.

Testing: There will be four exams and a cumulative final. The exams will be held during our regularly scheduled class time. The dates are included in the table above for suggested homework due dates. The final exam date is Monday, December 12, 2022, 9:00am - 11:00am. The final exam is cumulative.

The exams consist of computational and theoretical questions related to the material covered (including Google Sheets). The exams are strictly timed (50 minutes during regularly scheduled class time) Time will be a factor used to gauge the degree of mastery of material.

You may create and use a one page "cheat" sheet $(8\frac{1}{2}" \times 11")$ in size, one side only) to use during each exam. You will be provided with formulas so these need not be on your sheet. The sheet must be turned in with your exam.

If you are allowed extra time for test-taking, email me in the first few weeks to get things set up.

Course Grading: The grading scale is a straight scale (i.e., 90-100 are As, 80-89 are Bs, etc) broken down as follows: Assignments (20%), quizzes (5%), Midterms (15% each), and Final Exam (15%). The average GPA in my sections of statistics in recent years has been about 3.2. There **are** +'s and -'s for grades, e.g., 80.0-83.3 is a B-, 83.3-86.6 is a B, and 86.6 – 89.9 is a B+. The one exception is that there is no A+ grade in this class.