

More On Groups Introductory Statistics—Fall 2018

Overview The group project is worth 100 points, which is approximately 25% of your grade in this class. Consequently, it should not be blown-off, as it is integral to the course. The idea behind it is for you to gain experience deciding what is an interesting question; gathering data; doing descriptive statistics with real data and doing inferential statistics with real data. You may well find that the two hardest tasks are coming up with interesting questions and then figuring out how to gather data to answer those questions. People have gathered data in a variety of ways: Some made observations, some went to businesses or government offices, others looked things up on the web or in the library. You may find your own source of data depending on what your project is. Warning: Your imagination is *not* a good source of data—in fact, it's a violation of the honor code.

Points assigned Points will be assigned based on four criteria:

1. A **proposal** of what your group intends to do for a project. The proposal must be typed and should be about one page in length and describe what you want to do, why you want to do it, and some possible sources of information. (What are your questions that you hope to answer? Why are they interesting? What ideas do you imagine you'll use?) How do you imagine you'll collect data? Write this up clearly: You will be evaluated on style, spelling, and clarity as well as content. 20 points.

The proposal is due at the start of class on Wednesday, November 14th.

2. An **oral report** to be presented to the class. The duration should be about 15 minutes—if you start to go over that, I will be forced to cut your group off. This is an opportunity for you to hone your oratorical and presentation skills. Charts, Minitab output, and related graphics are welcome aids to a good presentation. If you prefer to use Excel or another program, that's fine, too. Your group must concisely relate the essentials of your research. As we get closer to the presentations, we'll have two more parts of classes devoted to time to meet in groups and talk over issues that may have arisen. 40 points.

The oral reports will be given as described on the course schedule.

3. A **typed written report** of about 3-5 pages (double-spaced) on your group's findings. This is the summary of the results of your research. It should present something interesting. It should be as professional as if your team is handing it to a curmudgeonly manager who controls your salary and employment prospects. It should include your data. Include graphics as you see fit (these are in addition to the 3-5 pages). 40 points.

The written report is due by 2pm on the day your class presents.

4. A **typed confidential evaluation** of how the labor was divided in your group, and your best estimation of the percent of work done by each group member. The evaluation should be at most one page in length and should be very specific if you're criticizing a group member. Everyone must hand in an evaluation to receive a grade.

The confidential evaluation is due by 6pm on the day your class presents.

Everyone in the group will get the same grade, except in the instance that the confidential evaluations indicate an undeserving or especially stellar member. Grades may be changed accordingly.

Topics As inspiration to your imagination, here is a list of some of the projects which have been previously done by other groups. **You must, of course, develop your own interesting question.**

- Is chivalry dead at Wheaton? How many men hold doors open for women?
- Percentage of Wheaton students and faculty who *don't* lock their mailboxes
- Sleep habits of Wheaton students vs. class year
- How many Wheaton students park illegally on campus during the week?
- Percentage of cars not stopping for pedestrians in the crosswalk on Rte. 140
- **How long it took to answer whether or not person would take a sex survey**
- Weather vs. type of shoe worn by Wheaton students
- Success and failure of running a meal card through the machine at Emerson
- Percentage of students asleep in the Wallace Library
- Percentage of purchases made by Wheaton students at Norton Liquors
- Waiting time to be served at the Loft
- Comparing weather predictions for channels 10 and 12 in Providence
- Type of coin vs. how many Wheaton students stop to pick it up
- Prices at Walgreen's vs. prices at CVS
- Milk prices: Massachusetts vs. Maine; convenience store vs. supermarket
- Hand-washing habits vs. gender at Wheaton
- Percent of people ordering more than \$3 or less than \$3 worth of food at the Loft
- Percentage of Wheaton students who stop to pick up litter
- Attendance at Wheaton Baseball games, at the 3rd, 6th and 9th innings
- Percentage of Wheaton students who eat cereal for dinner at Chase
- Relationship between gender and duration of time to shower
- Height on store shelf vs. type of cereal
- Percentage of Wheaton population that will take a survey distributed by email
- What percentage of Wheaton students lock their doors at night?