

# Math 138: Statistics

## Fall 2008

### Course Procedures

**Professor:** Josh Laison

Collins 305, x6689, [jlaison@willamette.edu](mailto:jlaison@willamette.edu)

#### Office Hours:

Monday 10:30-11:30

Wednesday 10:30-11:30, at the Bistro

Thursday 2:30-3:30

Friday 1:30-2:30

or anytime by appointment or by catching me in my office. You can see my schedule and available times at <http://www.willamette.edu/~jlaison>

**Class Meetings:** Collins 204, 9:10-10:10 Monday, Wednesday, Friday

**Drop-In Math Lab Help:** The math hearth or Collins 306  
6:00-9:00 PM, Sunday through Thursday

**Text:** Stats: Data and Models, DeVeaux, Velleman, and Bock

**Course Web Page:** <http://www.willamette.edu/~jlaison/stats.html>

#### Grading:

Homework Assignments (approx. 32)	25%
Quizzes (3)	25%
Final Project (1)	20%
Final Exam (1)	20%
Class Attendance and Participation	10%
<b>Total</b>	<b>100%</b>

#### Course Goals:

By the end of the course, students should:

- Understand and be able to apply standard statistical techniques
- Be able to apply probability and statistics to make informed decisions about quantitative information presented to them in their everyday lives
- Be able to apply their knowledge of statistics to their various academic pursuits and careers

#### Ways to Get Unconfused:

- I encourage you to find classmates to work together with on homework problems and to study for exams, even if you're not confused!

- Find me in my office during my office hours or at other times, and I will be more than happy to answer questions. Feel free to hang out in the math lounge or in my office and work on homework there. These are great places to meet other statistics students and work together, and I will be easily available for questions.
- Come to the evening group study sessions held by the math department in the math lounge. Math majors are paid by the department to hang out and answer math questions 5 nights a week. These are also great places to form study groups. Since you need to do your homework sometime, why not do it during the group study sessions?

### **The Textbook:**

I have chosen a textbook that I believe is readable, and in fact interesting to read. I will ask you to read portions of the text for homework each night. I encourage you to do this. It will help your understanding of the material, and you might actually enjoy it! In addition, I will hold you accountable for material assigned as reading in the text, even if it is not discussed in class.

In addition, the textbook comes with a supplementary CD. This CD in fact contains a whole additional statistics textbook, called ActivStats. It contains audio and visual components which cover every topic that we will cover in class. If you are ever confused about a particular topic, I encourage you to try running the corresponding section on the CD. It can be a valuable study tool, and if you have purchased the book new, you have already paid for it.

### **Minitab:**

We will be learning how to use Minitab, a computer software package designed to make the computational aspects of statistics easier. I will assign a few homework problems specifically meant to help you learn to use it, and I suggest that you use it on whatever homework problems you like. Although Minitab may be a little foreign at first, the more you use it, the more helpful it will be, and it will continue to be helpful to your analysis of data in other courses after this one.

### **Homework Assignments:**

Homework will be due every Monday, Wednesday, and Friday by 4:30 PM, starting Friday, September 5, and should be turned in either to me in class, or to the folder outside my office, Collins 305. The homework will be returned to you in class. The underlined problems are the ones that will be graded. The others are meant for extra practice, as you feel they are needed, and are also useful to review for exams.

I encourage you to talk to me, to the evening mathematics tutors, and to each other about the homework problems. However, I ask that when it comes time to write down your solutions to the homework problems, you do so on your own.

### **Final Project:**

The final project will give you a chance to apply your newly acquired statistics skills to carry out and analyze your own experiment. You will be working with two partners. Your group will turn in a single project and each member of the group will receive the same grade.

There are three components to the final project. The first will be an oral proposal given by your group to me in my office. I will make a sign-up sheet available for each group to schedule a meeting.

The second component will be a poster session on Wednesday December 10. It will be your job to explain your experiment and accompanying analysis in a clear and convincing manner. **Your grade will be based on both presentation and mathematical correctness.** A well-designed but poorly explained experiment is just as bad as a poorly designed one. The group will be responsible for designing an attractive poster and explaining their results to their classmates and other poster session attendees.

The third component will be a paper that your group will submit on the day of the poster session. The goal of the paper is for your group to convey how much work you have put into the project. Your paper will be graded on this aspect only.

### **Late Assignments and Missed Classes:**

I expect everyone to attend all classes and turn in all homework assignments. Unfortunately, it is inevitable that some people will have crises during the semester that will prevent them from attending class or turning in homework on time.

If for some reason you are unable to attend class or turn in an assignment, please let me know as soon as possible, preferably *before* the missed class or assignment. The longer you wait to tell me, the less sympathetic I will become. The worst is to never tell me about it at all.

### **Disabilities:**

If you have a documented disability for which accommodations may be required in this class, please contact me to discuss your needs. Additionally, you will need to register with Disability and Learning Services in the Bishop Wellness Center within the first two weeks of class. All such discussions will be confidential.

### **Academic Honesty:**

Cheating and plagiarism are serious offenses and will be treated severely, in accordance with college policy. In addition, I am personally insulted by such behavior. So please don't do it. These are the practices I expect you to follow in each of the components of the course:

**on homework:** You may, and are encouraged to, discuss the homework with anyone, get help from Minitab, graphing calculators, your textbook, etc. However, your submitted written work should be your own.

**on the group project:** The members of the group should contribute equally to producing the final product. Do not put your name on a paper, poster, or presentation written by others.

**on quizzes and exams:** The resources that you may use on each quiz/exam will be different, and will be specified on the quiz/exam and earlier in class by me. You will never be allowed to receive aid from others.