

Math 113 – Statistical Methods for the Social and Behavioral Sciences (Fall 2006)

As announced over email on 9/29, I will drop your lowest team homework grade, your lowest homework grade, and your lowest lab grade.

Instructor: Kevin Woods, King 220B, Kevin.Woods@oberlin.edu

Lectures: MWF 10-10:50am, Science Center A162.

Laboratory: Tuesday 10-10:50am, King 137.

Office Hours:

Monday 2:30-3:30pm, Wednesday 9-10am, Friday 11am-12pm, and by appointment. Also, feel free to stop by any time my door is open (but be understanding if I say I am too busy).

Required Textbook:

Moore & McCabe, *Introduction to the Practice of Statistics*, 5th Edition. We will cover most of Chapters 1-12.

Computer Software:

We will use Data Desk, a statistical program often. You will use it in the labs each week, and may also want to use it on homework. It can be accessed (I hope!) from any computer on the university network by opening the network drive “Dosserv” (under “My Computer,” with luck, in Windows) and following the path \WIN32\Data Desk 6.1\Data Desk 6.1.exe. If you would like to use King 137 after hours (e.g., as a convenient meeting place), each of you must see Cathy Murillo (the Math AA) in King 205 to get the punch code and fill out a security sheet. Note that most graphing calculators can do some statistical work, as can Excel and other spreadsheet programs, and you are free to use these on homework.

Blackboard:

<http://bb.oberlin.edu>. I will post homework, reading, and other announcements on Blackboard. There is also a discussion board that I encourage you to use to ask questions, make comments, etc. I will read it and post comments, but I also want you to try to answer each other’s questions. If this course doesn’t appear when you log on to Blackboard, let me know so I can enroll you.

Grading:

Individual Homework (10%).
Team Homework (15%).
Computer Labs (10%),
Project (15%),
2 Hour-long Exams (15% each),
Final Exam (20%).

Individual Homework (10%).

These will be assigned each day. Each Monday at the beginning of class (no late homework accepted!), you will turn in all of the problems that have accumulated since the last time I collected. Part of your grade for this portion will be that you have reasonably attempted each problem. In addition, a few randomly selected problems will be checked for correctness. You may (should!) work together on these problems, but your written solutions must be your own. Use full sentences to explain what you are doing. Note most of the odd problems have answers in the back of the book, but often not complete solutions.

Team homework assignments (15%).

You will be divided into groups of 3 or 4 to work together. Problems will be collected each Monday at the beginning of class (no late homework accepted!). Ideally you will meet twice a week (once to talk about the problems and divvy up the write-ups and once to read through what has been written; maybe you can even talk about the individual homework!). You may organize who writes up what among your team, but you MUST make sure that, in the long run, everyone does an (approximately) equal amount of work. These problems will be graded very strictly for how coherently written they are. Explain things carefully and in

complete sentences. Imagine that another student in the class who hasn't done this problem yet will read your solution: they should be able to understand it without having to ask you questions.

Computer Labs (10%).

Each Tuesday, I will give you a sheet to work on. You may work singly or in pairs (I encourage you to work in pairs) at a computer and discuss your answers, but you must complete your own sheet and write down your answers in your own words. The labs will be due at the beginning of class each Wednesday (no late work accepted!).

Project (15%).

During the second half of the semester, you will conduct a small-scale research study or experiment. It will involve planning, data collection, and data analysis. The written report will be due at the beginning of class on Monday, December 11.

2 Hour-long Exams (15% each).

Wednesday, October 11, and Monday, November 20, in class. These will concentrate on topics covered in that segment of the course, but the course material is very cumulative, so you will have to know everything from the course so far. You may bring and use notes on one side of one 8.5 x 11 sheet of paper (with reasonably sized handwriting). You may use a scientific calculator for addition, exponentiation, etc., but you may not use statistical functions.

Final Exam (20%).

Wednesday, December 20, 2-4pm. The final exam will cover the entire course. You may bring and use notes on one side of one 8.5 x 11 sheet of paper (with reasonably sized handwriting). You may use a scientific calculator for addition, exponentiation, etc., but you may not use statistical functions.

Honor Code:

Individual homework and labs may be discussed in groups, but your answers must be your own (in particular, you may not look at someone else's written solutions). For team homework, you must make sure that, in the long run, everyone contributes equally. You may use statistical calculators and software. You may use other Statistics texts in addition to ours. On the exams, you may use only a scientific calculator (you may not use statistical functions), notes on one side of one 8.5 x 11 sheet of paper (with reasonably sized handwriting), and your own wits.