

MATH 230-02 – Statistics I
Spring 2009
MWF 9:30–10:50am, Towers 122

Lecturer: Mr. Matthew McMullen

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The prerequisite for this class is a passing grade in MATH 115 or MATH 120 or qualification through the department's placement exam.

Office hours: TR 9–10am, MWF 2–3pm, and by appointment. Please do not hesitate to visit me during my office hours, or anytime I am in my office, if you need extra help. In addition to this, I will be tutoring in the Math Lab on the second floor of the library MTWRF 1–2pm. You can also email me or call me with whatever problems you may have.

Course: The title of this course is “Statistics I.” Loosely speaking, this course has three parts: descriptive statistics (the presentation of data), probability, and inferential statistics (the interpretation of data). Along the way, we will also study statistical distributions, sampling, the Central Limit Theorem, hypothesis testing, correlation, and regression analysis.

Materials: The textbook we will be using is *Introduction to Probability and Statistics*, 12th edition, by Mendenhall, Beaver, and Beaver. You will also need a calculator with statistical capabilities – preferably Texas Instruments TI-83 or TI-84. We will be using a statistical calculator and the statistical software Minitab (which is already on the campus computers) frequently throughout the quarter.

Attendance: You are expected to be present at all classes and tests. Whenever you miss a class you are strongly encouraged to let me know about the reason of your absence. If you have a conflict with any test, you must see me **in advance**. No make-ups will be given for unexcused absences.

Grades: Homework will be collected every Monday and will make up 10% of your final grade. The weekly assignments will be posted on my website. We will have quizzes every Friday on the weeks in which we don't have a midterm. Your five best quiz scores will make up 10% of your final grade. We will have two midterms throughout the quarter, one every fourth Friday. Collectively, these exams make up 50% of your final grade. **The final for your section is on Tuesday, June 9 from 8–10am.** The final is worth 25% of your final grade. All of this leaves 5% for your attendance and participation grade; this includes, but is not limited to, the many small group projects we will have throughout the quarter.

It is anticipated (but in no means set in stone) that the letter grade assignments will be made on the following scale: A 93%, A- 90%, B+ 87%, B 83%, B- 80%, C+ 77%, C 73%, C- 70%, D+ 67%, D 60%, F below 60%.

Academic integrity: It goes without saying that cheating and plagiarism is not tolerated in this course, or any other. If you are guilty of such an act, you will receive a zero for the assignment and I will report the offense to Academic Affairs. More information about this policy can be found in the student handbook.

Common courtesy: It should go without saying that cell phones should be packed away and turned off or set on silent during class. Using cell phones during class for any reason, **including texting**, is distracting to everyone (especially to me).

Advice: In order to succeed in a math course, you must practice the material every day and ask questions in class about anything you do not fully understand. Each section we go over carries over to the next section, so it is important to stay on top of the material. If you are having any difficulties, you have many options available to you. You can visit me in my office, talk to your peers, and/or use the supplemental material that is available to you in the library. This material may be very useful to you and includes the student solution's manual and instructional videotapes. **Good luck and have fun!**

Finally, the tentative schedule is as follows:

- Week 1:** Chapter 1 – Describing data with graphs
- Week 2:** Chapter 2 – Describing data with numerical measures
- Week 3:** Chapter 3 – Describing bivariate data
- Week 4:** Chapter 4 – Probability and probability distributions
- Week 5:** Chapter 5 – Several useful discrete distributions
- Week 6:** Chapter 6 – The normal probability distribution
- Week 7:** Chapter 7 – Sampling distributions
- Week 8:** Chapter 8 – Large-sample estimation
- Week 9:** Chapter 9 – Large-sample tests of hypotheses
- Week 10:** Chapter 10 – Inference from small samples