Welcome to Statistics
MATH 263 – Section 1, Spring 2008

Statistics is the art and science of coping with masses of data and extracting useful information therefrom. In a world awash in numbers, Statistics provides methods for collection, summarization, and analysis of data. It also provides techniques for drawing inferences about a population from a properly designed sample from it. In addition, it is an exciting, beautiful, and challenging intellectual endeavor in its own right. This handout gives you administrative and supplementary information for Section One during the Spring Semester, 2008.

Text

There are two texts for the course; Introduction to the Practice of Statistics, 5th edition, by David S. Moore and George P. McCabe (New York: W. H. Freeman & Co., 2006) and MINITAB Manual for Moore's The Basic Practice of Statistics, 3rd edition by Betsey S. Greenberg (New York: W. H. Freeman & Co., 2004). This manual is recommended, but not required, since MINITAB has considerable help available in the program. MINITAB is an important part of the course.

Office Hours

My office hours are given in the weekly schedule posted to the section web site. One of these office hours will be held in the tutor room in the Math East building, and I will post which one in the announcements on the Section home page, and change the weekly schedule when I know the tutoring schedule.

I will also be available any time I am free, (most afternoons) on request, so you should be able to get help almost any day you want it; just ask! But you must ask, I cannot force help on you. My office is in the Mathematics Teaching Lab, the building to the south of the Mathematics Building, in room 123(A). My office phone is 626-8274, the Math Office (621-6892) will take messages and leave them in my box, and you can call me at home (319-2866) up to about 7 p.m. My e-mail address is alexa@math.arizona.edu, and I check my e-mail every day during the semester. A link to tutoring information is attached to the Section web page.

Calculators

Each student is required to have and to know how to use a graphing calculator that is capable of performing the statistical calculations "Correlation" and "Linear Regression". You do not need to know what these are yet, just make sure your calculator has them (Look in the Manual). Some examinations questions may require the use of such a calculator. No calculator swapping will be permitted during exams. You may use any calculator

you can carry which is not breathing, and which is not capable of communicating beyond your desk. The exams will be designed to take into account the existence of very capable calculators; in particular you may need to show algebraic steps even if your calculator can do the whole problem instantly. I will use a TI-84 in class.

Website

There is a website this section attached to my home page at:

http://math.arizona.edu/~alexa/m263/index3.html.

Information pertinent to the course, such as schedule changes and assignment due dates will be posted to this page and announced in class. There is also a course web page at

http://math.arizona.edu/~stats

This will have MINITAB assignments and other information, including a couple of truly useful summary sheets prepared by the course supervisor.

Attendance

You should plan to attend every class, and are responsible for material covered or announced in class whether you are there or not. Department rules require me to drop anyone who does not attend the first two classes, which I will do. After that, attendance will be taken daily. For the first month, an unexplained week of absence may result in an administrative drop. This is to avoid grade appeals to remove unnecessary failing grades assigned to students who do not drop the course through oversight or negligence. Let me know if you are going to be away and we will schedule a time for me to cover material you miss. Please do not do your homework (or read newspapers) in class; I am old enough to find this extremely rude. Electronic nuisances such as cell phones, pagers, and other modern delights must be turned off before you enter the classroom.

Homework

Homework is assigned for each section of the text. Instructions for the homework are on the posted assignment sheet. Homework to be graded will usually be collected once a week and the due date will be announced in class. It should be neatly written, on one side of standard notebook paper or graph paper (not paper torn out of spiral notebooks), and in dark pencil or ink so I can read it. Graph paper is preferable, as it increases the neatness and accuracy of sketches. Put your name and the date on each sheet, and staple the whole assignment together. Please be neat and leave me plenty of room for comments. If I cannot read a problem, it is done incorrectly. Please do not turn in solutions with incorrect work crossed out, as this makes papers very hard to grade. Some of the homework will require written descriptions of

what you discover about a problem. Ensure your high school English teacher is not embarrassed. I will grade as much as I can, depending on availability of grader assistance. The homework is really worth more than the number of points allotted below, as I will include one homework problem on each of the hour exams. A class at this level should understand that having someone do your math homework for you is very much philosophically like having someone date your girl or boy friend for you, and about as sensible. You've probably heard of Governor Standish and his pal John.

Late homework will not be accepted. This should have no impact on your grade, as I will replace the two lowest homework grades with full credit. Should you have known family or other obligations, you may arrange for a classmate to deliver your homework on the due date, or do it and give it to me no more than a class day early.

MINITAB

The course supervisor will provide MINITAB assignments, and I will collect them on a regular basis. Solutions must be computer generated, using the Windows version of MINITAB, with appropriate Graphics and explanations in complete typeset English sentences. You must label sections of the assignment and present a finished product, such as you would give to your supervisor in a business or professional setting. ANY handwriting on a MINITAB assignment reduces your grade - you have to learn how to do them with the computer. It is easiest to load the MINITAB output into Word and edit it there. Pretty pictures which are not associated with an explanation that makes sense of them are not worth much. Use complete sentences and produce a polished, professional final result.

Prerequisite

Throughout this course, we will use elementary algebra such as is covered in MATH-110, the prerequisite for this course. I do not have time to review much of this material, and I will assume that you know it. I will be happy to help with specific problems on an individual basis outside of class. However, if your grasp of the concepts in Reference 2 in the posted bibliography, one text for the prerequisite, is shaky, you are going to have serious problems in MATH-263. There will be an algebra quiz early in the course, and a poor grade carries an obvious message. I will put on reserve in the Science Library a review book, Just Enough Algebra for Students of Statistics which might prove useful.

Grades

Grades will be taken weekly, often on Friday, by class work, homework, and/or hour exam. Class work may be the results of whole-class or group efforts, or individual efforts. I use "pair work" on occasion; two students start a problem at the end of a class period, and finish it at home. The first

couple of minutes of the next class period is used to check answers. Most class work is of such a nature that it will be impossible to make up, so I will make no attempt to do so. The lowest two of the class work scores will also be replaced with full credit at the end of the course. Individual effort class work will look remarkably like a quiz. I will use the following grading scheme:

Homework:	100 points
Class work:	50
MINITAB:	100
Hour Exam I:	150
Hour Exam II:	150
Hour Exam III:	150
Final:	300

Homework and class work are separately graded, and the scores adjusted so that flawless work is worth the number of points above. This totals 1000 points to make the arithmetic easy. You are invited to work together, lots of very good learning is generated by sharing ideas about problems, and graduate students routinely belong to several study groups. I'd be delighted to meet with a study group, just ask me.

Grades will be recorded as follows:

A 900-1000

B 800-799

C 700-799

D 600-699

E Anything less

Any small adjustments to the grade intervals due to class performance will be made at the end of the semester, but the thresholds will only be lowered. If you earn 900 or more points you are assured an A. Note that all quizzes and hour exams are closed book and closed notes. The University policy with respect to incomplete grades will be strictly followed; incompletes will be given only under extremely rare circumstances.

Students anticipating issues related to the format or requirements of this couse are requested to meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal disability–related accomodations are necessary, it is very important that you

be registered with Disability Resouces (621-3268; drc.arizona.edu) and notify me of your eligibility of accomodations. We can then plan how to best coordinate your accomodations. This should be completed one week before the first hour exam. It is your responsibility to register for exams, and you should do so as soon as possible. You are also responsible for monitoring the time you are allotted for each exam.

Missed Exams

If you miss an exam for any reason, I will assign the same percentage score you earn on the final. A second exam missed for any reason is scored zero. It is to your advantage to take all exams at the scheduled times unless you are gifted with clairvoyance, and avail yourself of this scheme only in case of dire emergency. If you can get to the exam late, do so, and if possible I will stay to give you time to finish. The final exam will be from 8 a.m.- 10 a.m. on Friday, 16 May 2008. The University's Exam regulations will be followed strictly, in particular those regarding students with multiple examinations that day. You are encouraged to check your final exam schedule in a timely fashion to preclude problems.

Dropping the Course

Should you decide to drop the course, please come and see me. Until 12 February 2008, the drop is your decision, without penalty, but I ask that you tell me that you are leaving (so I don't keep a useless grade record), and why (I may learn something). From 13 February to 11 March, the decision is still yours, but your academic record will reflect your current grade, calculated on the basis of work completed at the time of the drop, and a W will be recorded for passing work. Late withdrawals will be dealt with on a case by case basis, and such requests without a valid reason may or may not be honored. I am available to discuss your grades with you any time you I am available to discuss your grades with you any time you wish, however University policy forbids discussion of grades by phone or e-mail.

Academic Integrity

Academic Integrity is extremely important. Please glance through the booklet on the Code of Academic Integrity which governs responses to violations, such as plagiarism, which is the use of other's work as your own. The material in this course is important to you. Cheating is stupid as well as highly penalized. Don't.

Questions

Please ask as many questions as you have, and share them with the entire class, as others may have the same question. The only dumb question is one you cannot answer and do not ask. At the end of the day, the thing that really counts is how much you have learned - get your money's worth,

you are paying for this. On occasion I may have to defer a question that bothers you to cover necessary class material; if this happens or if for some other reason the issue is not cleared up, see me afterwards, or in my office, or call me, or e-mail me.

Again, welcome to Math 263. This is fun stuff, the legacy of centuries of work by truly creative mathematicians. It is fascinating in itself, and the gateway to lots of other fun stuff. I am very much looking forward to this semester, and to sharing the pleasure I get from mathematics and statistics with you.

Edward H. Alexander, Ph.D.
MTL-123A
626-8274
alexa@math.arizona.edu
http://math.arizona.edu/~alexa