### Fall 2012 McKinney

**Class:** Section 1 (CRN 13239): Tu Th 9:30-10:45 in Barret 035

Section 2 (CRN 13241): Tu Th 11:00-12:15 in Barret 035

Office: Buckman 331

**Phone:** 843-3566

**Email:** mckinneyn@rhodes.edu

Office Tu 3:30-4:00pm Hours: W 2:00-4:00

Th 3:30-4:00pm

Additional hours will be announced around exam times. Feel free to stop by

anytime my door is open.

**Peer Tutor:** Jamie Maxey has agreed to be the peer tutor for this class. She will hold office

hours from 6:30-9:30 pm on Wednesdays in Buckman 105.

**Attendance:** I will not have time to take roll on a regular basis, but don't use this as an excuse to

skip class. Keep in mind that grades are highly correlated with attendance.

We will cover a lot of material in this class every day. I encourage you to take notes in class, then review your notes and re-work sample problems after class. If you wait until the night before an exam to study, you may be able to memorize the material, but you will have trouble applying it. You will also find that if you don't take the time to truly learn the material in this class, you will struggle in many other upper-level Business and Economics classes.

There are no "bonus points" for simply showing up to class and not paying attention. Do not come to class if you plan to sleep, work on other assignments, or

play on the computer.

**Academic** The honor code applies to all assignments in this class. If you cheat in this class I **Dishonesty:** will fail you and I will turn you over to the Honor Council for further sanctions.

**Text:** Anderson, Sweeney & Williams. Essentials of Statistics for Business and

*Economics*. Revised 6<sup>th</sup> edition.

### Exams:

The following three exams make up 60% of your final grade. The weight of each exam is given in parenthesis.

Exam 1 (17.5%): Thursday September 27<sup>th</sup> Exam 2 (17.5%): Thursday November 8<sup>th</sup>

Final Exam (25%): Section 1: December 10<sup>th</sup> at 5:30pm Section 2: December 9<sup>th</sup> at 5:30pm

As long as you let me know at least 1 week in advance you can take any of my tests early. If you have to be away for a school approved function, you must take the test early. I do not give late tests or make-up exams. I typically do not allow anyone to take a test after the scheduled time. If something happens and you miss a test I may allow you to take an extended final exam that will cover the material you missed. I will look at medical documentation if you are sick and I will discuss other issues with the Dean of Students' Office, but I will make the final decision on whether or not you take the extended final or receive a zero.

I don't want time to be a factor. You will have 1½ hours for the first two tests. The exams will start 10 minutes early and will end 5 minutes late. If this causes a conflict with another class please let me know and we can work out another solution. These are pen and paper exams. You will not use the computer. All you need to bring is a few pencils. I will provide you with paper and a calculator. I will also provide you with a formula sheet, but most of the formulas in statistics are intuitive and I will expect you to know them. The formula sheet will include integral\* tables and a few of the more complex formulas. You must show your work. I will not give any partial credit if you just turn in answers. If I can't tell how an answer was derived, I will mark it wrong. Most of the material in this class builds on itself so the exams are all "cumulative."

\*You should have learned all the mathematics you need for this course in high school. You are expected to do considerable amounts of algebra and basic mathematics on all exams and you need to keep in mind that you will not have an advanced graphing calculator at your disposal. I will not ask you to do any calculus in this class, but some of the most important concepts in this class are derived from integral calculus. If you do not know what integral calculus is, you may consider adding Math 115/121 to your schedule if you still can.

### Quizzes and Homework:

There will be short 5-minute quizzes on Thursdays. After you take the quiz you will either turn it in or turn in your homework (see below). There are no dropped quizzes and there are no make-up quizzes. As long as I get either a quiz or homework from you, you will receive a grade. If you miss a quiz for any reason just send your homework with another student. Each quiz (or homework assignment) carries equal weight. Quizzes and homework make up 25% of your final grade.

I will occasionally give bonus pop quizzes on days when there is no homework due. The bonus quizzes can only help your grade. There will not be any make-up

quizzes.

I will assign 6-8 homework problems each week. When you turn in your homework, I will only grade a subset of the problems. Most of the time the selection will be random, but occasionally, I will intentionally pick certain problems to grade. Either way, you will not know which problems I will grade until you turn them in to me; so you still have every incentive to work every problem. Homework will be due on quiz days. I will put answer keys on the network after I collect the assignments.

Feel free to work with other people, but don't simply copy their work. Copying someone else's work is a violation of the honor code. Copying an old answer key is also a violation of the honor code. You must show your work. I will not give any partial credit if you just turn in answers.

All homework must look professional. Some assignments can be done in Excel, but you need to make sure it prints in a neat and orderly manner. There are a number of options under "Print Preview - Setup" that you can use to customize the way your document prints. Before you print out an assignment, spend 5 minutes looking at some of the options below and decide which ones will make your assignment look acceptable.

- Change the orientation from portrait to landscape.
- Fit to x pages wide by y pages tall (this one works great, just don't let it make the font too small).
- Add page numbers in the footer.
- Shrink the margins down to ¼ inch.
- Print the gridlines and the row/column headers.
- Make sure the column width is wide enough so that none of the text is hidden.
- You may want to paste Excel tables into a Word document before you print.

If you have trouble with a problem in Excel, you can hit "CTRL" and "~"to print out your formulas. I can usually tell what you did wrong if I can see your formulas.

Homework is due when I collect the quizzes. If you can't make class, you need to either turn it in before I leave my office or you need to have someone in your section hand it in for you before class or with their quiz. Late homework will not be accepted. I will not take it at the end of class.

# Take Home Test (15%):

Due October  $11^{th}$ . This take home test is worth 15% of your final grade. I will hand it out at least one week before it is due.

The take home exam is an extensive computer assignment. I will give you approximately 1 week to complete the assignment. It will take you a number of hours to complete, so plan accordingly.

You can use any non-human aid such as your book, notes, on-line help, etc. You may not discuss the test with anyone except me. You will turn this assignment in electronically via the inbox in my faculty folder.

## Grading Scale:

I will round your grade to the nearest percentage and assign grades according to the scale below:

	A 93% and above	<b>A-</b> 90%-92%
<b>B</b> + 87% to 89%	<b>B</b> 83% to 86%	<b>B-</b> 80% to 82%
<b>C</b> + 77% to 79%	<b>C</b> 73% to 76%	<b>C-</b> 70% to 72%
<b>D</b> + 67% to 69%	<b>D</b> 63% to 66%	<b>D-</b> 60% to 62%
F below 60%		

I do not give any extra credit assignments.

Once again, the distribution of points is:

Quizzes and Homework:25%Take-Home Exam:15%Exam 1:17.5%Exam 2:17.5%Final Exam:25%

## Course Outline:

Introduction, Definitions, Basic Excel Applications, Tables, Charts, and

Graphs (Chapters 1-2)

Descriptive Statistics (Chapter 3)

Probability (Chapter 4)

Discrete Distributions (Chapter 5)

Continuous Distributions (Chapter 6)

### EXAM 1

Sampling and The Central Limit Theorem (Chapter 7)

Estimation (Chapter 8)

Means Hypothesis Testing – Single Populations (Chapter 9)

Means Hypothesis Testing – Two Populations (Chapter 10 & 11)

Variance Hypothesis Testing (Not in the Text. Handouts will be provided)

### EXAM 2

Non-Parametric Chi Squared tests (End of chapter 11)

ANOVA (End of Chapter 10)

Regression (Chapters 11 & 12)

### EXAM 3

This is simply an outline. Some topics may get pushed down (or up). I will let you know exactly what is covered on each test when the time comes. Use the text book to supplement your notes. Keep in mind that the text doesn't necessarily cover all the same topics in the same order that I will in my lectures.

### **Class Goals:**

By the end of the class you should understand all the material outlined above. You should be able to take a dataset and use the tools from this class to reinforce, prove, or disprove your hypotheses. You should also be fluent in Microsoft Excel and be able to create orderly and meaningfully presentations of data and statistical results.