

STAT 2040-01 BUSINESS STATISTICS
Spring 2010

Location and Time: UHB 149 MTWR 11:00-11:50 am
CRN: 20891

Instructor: Mary Townsend-Manning
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Office Hours: UHB 337 MW 10:00 am - 11:00 am

Text: Triola, Mario F., (2010). Elementary Statistics Using Excel^(R), 4th Edition. Addison-Wesley. ISBN 13:978-0-321-56496-2

Course Description: This course is an introduction to basic statistical reasoning. Statistical reasoning is critical to understand decision making in a world of uncertainty. The course begins with a general discussion of data distributions and descriptive statistics. The likelihood of events occurring is then covered under the topics of probability and probability distributions, and sampling distributions. All of these principles will help the student understand how inferential statements about a population can be implied based solely on a sample of data. Inferential methods covered will include tests of hypotheses, analysis of variance, Goodness of Fit, and regression. Prerequisites: CIS 1200 and MATH 1010.

Course Objectives:

The objective of this course is to provide students with a fundamental knowledge of probability and statistics. This knowledge is essential for good decision making, not only in business but for life in general. Students will learn the methods for developing good surveys and statistical data, use of the properties of probability distributions, evaluation of population parameters and sample statistics, and use of inferential methods. MS Excel^(R) will be the primary calculation tool. Students will also develop their oral and written communication skills. By the end of the course, students should be able to:

1. Recognize, calculate and interpret statistical values.
2. Demonstrate the ability to collect a random sample of data.
3. Use the computer (Excel) to solve statistical problems.
4. Use and interpret inferential methods of tests of hypotheses, analysis of variance, Goodness of Fit and regression to solve statistical problems.
5. Effectively express what they have learned, both in oral and written form.

Grading and Course Content:

Grades will be based on the following:

Homework Assignments and Quizzes	20%
Group Presentation and Report	20%
Exams (4)	40%
<u>Final</u>	<u>20%</u>
Total	100%

HOMEWORK ASSIGNMENTS AND QUIZZES: Homework assignments will be given each class period and collected on a random basis throughout the term. Students should work all problems, but expect to turn in homework about once a week. **NO LATE HOMEWORK WILL BE ACCEPTED.** Only assignments turned in during class will be accepted. Students may collaborate on homework assignments, but remember that your performance on the examinations and final will require you to understand and practice the homework problems. There will be short quizzes given in class on a random basis to assess level of understanding of chapter concepts. Students that attend class and read the text should perform well. All quizzes are open book, but strictly timed.

GROUP PRESENTATION AND REPORT: The class will be divided into groups for a group project. Oral group presentations are scheduled near the end of the term. A written report is included as part of the group project. Free Rider Mitigation is also factored into individual grades.

EXAMS: Four exams are scheduled. Each of these will cover the specified text chapters. No make up exams will be given. These exam are open book examinations, but are strictly timed. You should not memorize formulae, but be able to locate what you need in your text or notes.

FINAL: The final will be comprehensive. The Final will be on May 5th at 10:00 am in UHB 149.

Boilerplate:

BEHAVIOR: My expectation is that you are all adults. Please don't disappoint me. Be on time to class, as we will start on time, and finish on time. Turn off or silence cell phones. Pay attention in class. If you use a computer to take notes that is fine. If you use it to surf the net, that is not fine. Please be considerate of others. We will be having only one conversation at a time, and expecting everyone's participation. If you have trouble paying attention, please sit toward the front of the room. If you are distracting or disturbing to the class you will be asked to leave. In general I will do everything I can to make the class interesting and exciting, and anything that detracts from the learning experience will not be tolerated.

REBELMAIL: Important class and college information will be sent to your Rebelmail email account. This information includes your DSC bill, financial aid/scholarship notices, notification of dropped classes, reminders of important dates and events, and other information critical to your success in this class and at DSC. All DSC students are automatically assigned a Rebelmail email account. If you don't know your user name and password, go to www.dixie.edu and select "Rebelmail," for complete instructions. You will be held responsible for information sent to your Rebelmail email, so please check it often.

CHEATING: Cheating will not be tolerated. Cheating includes all forms of academic dishonesty, **including allowing another person to copy your work.** Cheaters will be disciplined according to school policy.

ATTENDENCE: Students are expected to attend every class session and are responsible for material covered and announcements, whether they are in class or not.

ADA DISCLAIMER: Proper documentation of a disability is required in order to receive services or accommodations. Any student eligible for and requesting reasonable academic accommodations due to a disability must provide a letter of accommodation to their professor from the Disability Resource Center within the first two weeks of the beginning of classes. Please contact the Center on the main campus to follow through with the documentation process. They are located in the Student Services Center, Room #201, or you may call for an appointment and further information regarding the Americans with Disabilities Act (ADA) at 652-7516.

GENERAL DISCLAIMER: Information contained in this syllabus, other than the grading criteria, may be subject to change with advance notice, during class time, as deemed appropriate by the instructor.

Schedule:

Date	Subject	Reading Due	Assignment Due
Jan 11-14	Chap 1 - Introduction to Statistics	Chapters 1	
Jan 18	HOLIDAY		
Jan 19-21	Chap 2 - Summarizing and Graphing Data	Chapter 2	
Jan 25-26	Chap 3 - Statistics for Describing, Exploring and Comparing Data	Chapter 3	
Feb 1	EXAM 1 - Chapters 1-3		
Feb 2-4	Chap 4 - Probability	Chapter 4	
Feb 8-11	Chap 4 continues; Chap 5 - Discrete Probability Distributions	Chapter 5	
Feb 15	HOLIDAY		
Feb 16-18	Chap 5 continues; Chap 6 - Normal Probability Distributions	Chapter 6	
Feb 22-24	Chap 6 continues		
Feb 25	EXAM 2 - Chapters 4-6		
Mar 1-4	Chap 7 - Estimates and Sample Sizes	Chapter 7	
Mar 8-11	SPRING BREAK HOLIDAY		
Mar 15-18	Chap 8 - Hypothesis Testing	Chapter 8	
Mar 22 -25	Chap 8 continues; Chap 9 - Inferences from Two Samples	Chapter 9	
Mar 29-30	Chap 9 continues		
Mar 31	EXAM 3 - Chapters 7-9		
Apr 1	Chap 10 - Correlation and Regression	Chapter 10	
Apr 5-8	Chap 10 continues; Chap 11 - Goodness-of-Fit and Contingency Tables	Chapter 11	
Apr 12-15	Chap 11 continues; Chap 12 - Analysis of Variance (ANOVA)	Chapter 12	
Apr 19-21	Chap 12 continues		
Apr 22	EXAM 4 - Chapters 10-12		
Apr 26-29	Student Presentations and Course Review		
May 5	COMPREHENSIVE FINAL	10:00-12:00	UHB 149