

STAT 2040-01 BUSINESS STATISTICS
Spring 2012

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 9:00 am – 9:50 am
 F 11:00 am – 11:50 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 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. If you need help with the quality of your writing the Writing Center has a series of workshops this semester. The schedule is attached to this syllabus.

EXAMS: Four exams are scheduled. Each of these will cover the specified text chapters. No makeup 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 Wednesday, May 2nd 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: Disability Statement: If you suspect or are aware that you have a disability that may affect your success in the course you are strongly encouraged to contact the Disability Resource Center (DRC) located in the North Plaza Building. The disability will be evaluated and eligible students will receive assistance in obtaining reasonable accommodations. Phone # 435-652-7516

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
Jan 9-12	Chap 1 - Introduction to Statistics; Chap 15 - Projects, Procedures Perspectives	Chapters 1 and 15
Jan 16	HOLIDAY	
Jan 17-18	Chap 2 - Summarizing and Graphing Data	Chapter 2
Jan 19, 23-25	Chap 4 - Probability	Chapter 4
Jan 26	EXAM 1 - Chapters 1, 2 & 4	
Jan 30-Feb 2	Chap 3 - Statistics for Describing, Exploring and Comparing Data	Chapter 3
Feb 6-9	Chap 5 - Discrete Probability Distributions	Chapter 5
Feb 13-16	Chap 5 continues; Chap 6 - Normal Probability Distributions	Chapter 6
Feb 20	HOLIDAY	
Feb 21-22	Chap 6 continues	
Feb 23	EXAM 2 - Chapters 3, 5 & 6	
Feb 27-Mar 1	Chap 7 - Estimates and Sample Sizes	Chapter 7
Mar 5-8	Chap 8 - Hypothesis Testing	Chapter 8
Mar 12-15	SPRING BREAK HOLIDAY	
Mar 19-22	Chap 8 continues; Chap 9 - Inferences from Two Samples	Chapter 9
Mar 26-28	Chap 9 continues	
Mar 29	EXAM 3 - Chapters 7-9	
Apr 2-5	Chap 10 - Correlation and Regression	Chapter 10
Apr 9-11	Chap 11 - Goodness-of-Fit and Contingency Tables	Chapter 11
Apr 12	PROJECT TEAM DAY	
Apr 16-18	Chap 11 continues; Chap 12 - Analysis of Variance (ANOVA)	Chapter 12
Apr 19	EXAM 4 - Chapters 10-12	
Apr 23-24	PROJECT TEAM DAYS	
Apr 25-26	Student Presentations	
May 2	COMPREHENSIVE FINAL UHB 149	10:00 am -12:00 pm

Writing Center Workshops: Schedule of Concepts

January 17	Who Did What?: Identifying Subject and Verb	MCDONALD 110 6:00 PM-6:50 PM
January 24	The Words We Use: Misused words, Slang and Euphemisms, and Clichés!	MCD 110 6:00 PM-6:50 PM
January 31	Tricky Sentences: Fixing Fragments, Run-ons, and Comma Splices	MCD 110 6:00 PM-6:50 PM
February 7	Comma Confusion: Comma Rules—Part I	MCD 110 6:00 PM-6:50 PM
February 14	More Comma Confusion: Comma Rules—Part II	MCD 110 6:00 PM-6:50 PM
February 21	One Of These Things Does Not Agree With the Other!: Subject/Verb and Pronoun/Antecedent Agreement	MCD 110 6:00 PM-6:50 PM
February 28	In the Wrong Place: Misplaced and Dangling Modifiers	MCD 110 6:00 PM-6:50 PM
March 6	Keeping It All Together: Parallelism	MCD 110 6:00 PM-6:50 PM
March 20	Tricky Punctuation Marks (Where Do They Go?): Apostrophes, Colons and Semicolons, Hyphens, and Quotation Marks	MCD 110 6:00 PM-6:50 PM
March 27	I'm Supposed To Spell It Out?: Numbers and Abbreviations	MCD 110 6:00 PM-6:50 PM
April 3	Strong Subjects: Passive Voice versus Active Voice	MCD 110 6:00 PM-6:50 PM
April 10	Tricky Words: Identifying Homophones and Commonly Misspelled Words	MCD 110 6:00 PM-6:50 PM

April 17	Prepositions: What are they, and how do they work?	MCD 110 6:00 PM-6:50 PM
April 24	Past, Present, Future: Working with Tenses	MCD 110 6:00 PM-6:50 PM