

ORMS 3310

DATA ANALYSIS AND STATISTICS

Spring 2006
Section 002: TR 9:30-10:45a.m. CI 107

INSTRUCTOR: Joseph S. Mollick Ph. D. **OFFICE HOURS:** M 5-7 p.m. and TR 11-1 p.m.
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COURSE DESCRIPTION:

A study of descriptive statistics, probability distributions, the normal distribution, confidence intervals and hypothesis testing, regression analysis and chi-square.

COURSE PREREQUISITES:

Prerequisite: MATH 1314 and MISY 2305 or equivalents

REQUIRED TEXT:

Essentials of Statistics for Business and Economics (4th edition), Anderson, Sweeney, and Williams, Thomson South-Western, Mason, OH, 2006

COURSE OBJECTIVES:

1. You will enhance your knowledge of quantitative concepts and skills.
2. You will develop an understanding of key statistical concepts used in business.
3. You will learn basic statistical methods of data analysis, founded in probability theory.
4. You will draw statistical inferences using the results obtained by the application of basic statistical methods.
5. You will apply basic statistical methods to data with the help of the statistical applications found in Microsoft Excel.

EXPECTATIONS OF STUDENTS:

1. You are responsible for all material presented in lecture and assigned readings.
2. You are responsible for turning in all assignments or projects on time.
3. You are responsible for staying informed of assignments, meeting locations, and any changes to the syllabus announced during class time.
4. You are responsible for doing everything necessary to learn statistics.
5. You are responsible for knowing and abiding by the rules and policies outlined in this syllabus.

INSTRUCTIONAL METHODOLOGY:

Scheduled class time will be used for lectures and student activities. Many of the suggested questions, exercises, and problems will be reviewed during the lectures. You are encouraged to ask questions and to participate in class discussions on statistical methodologies and their applications. In addition, you are encouraged to pay attention to commercials and news items in printed as well as audio-visual media to become aware of the wide use of statistics in our daily lives.

STATISTICAL RESEARCH PROJECT:

You will be given several research projects to choose from. Some of these projects may require you to go out to a real business and conduct interviews with some professionals to explore issues related to the use of statistical tools in businesses. Other projects may involve your use of statistical tools to analyze a data set that you yourself collect or your instructor gives you. You will have to interpret the results and submit the report written in plain English and supported by relevant statistical reports generated by software packages such as Excel, MINITAB or SPSS. A handout and relevant research instruments will be given to you later in the semester to help you complete the research project.

EXAMS & QUIZZES:

Your performance will be evaluated on FOUR examinations and a comprehensive FINAL exam. The exam formats will generally be multiple choice, short answer and problems. Lectures, readings, class activities, and suggested homework problems will be the basis of these exams. Many of the questions will be similar to questions for review and discussion. Rather than being purely numerical, problems will be presented in word format. You will be allowed to use a Formula sheet for each examination. The formula sheet must be turned in with your examination form. ***You should KEEP all of your graded exam forms until the final grades have been posted.*** Pop quizzes will be given in class to test how well you are studying the chapters, doing the suggested homework and following the lectures in class. You are expected to have read the assigned chapter material before coming to each class so that you can meaningfully participate in class.

MAKEUP EXAMS:

Exams are not to be missed for the convenience of the student. You are expected to schedule other activities around the class exam dates. If a major exam is missed due to an excused absence, a make-up exam will be administered at a time and place agreed upon by the student and instructor. In general, make-up exams will be administered within one week of the date of the original exam. Any exam or class activity missed without a pre-approved excuse will be assigned a grade of ZERO.

SUGGESTED STUDY QUESTIONS:

It is the student's responsibility to work the suggested study questions, exercises, and problems. This is how quantitative topics are learned, through practice. It is the student's responsibility to ask questions regarding any issues encountered when working the suggested study questions.

GRADING:

Your grade in this course will be based on your performance on FOUR exams, a comprehensive final exam, quizzes based on assigned homework problems, research project, and any extra-credit points accumulated. **PERCENTAGES ARE NOT USED IN GRADING IN THIS COURSE. IF YOU WANT A PARTICULAR LETTER GRADE YOU MUST EARN THE MINIMUM NUMBER OF POINTS FOR THAT LETTER GRADE.** For example, for a letter grade of "A" you **must** earn at least 900 points (in other words 899 points IS NOT an "A", 899 points IS a letter grade of "B"). The distribution of points per exam and the tentative grading scale are as follows:

Activity	Allocated Points	Comments	Grading Criteria	
			Grade	Points Required
Attendance and Class Participation	50	Daily attendance will be recorded Asking and answering questions, solving problems and explaining ideas, and debating issues to enrich the learning environment.	A	900 or more
Quizzes	100	Unannounced quizzes to test your progress and give you feedback on your efforts	B	800-899
Test1	150	Please bring your scantron, pencil and formula sheet	C	700-799
Test2	150	Please bring your scantron, pencil and formula sheet	D	600-699
Test3	150	Please bring your scantron, pencil and formula sheet	F	below 600
Test4	150	Please bring your scantron, pencil and formula sheet		
Research	100	70 points for the paper and 30 points for presentation		
Final Exam	150	Please bring your own scantron		
Total	1000			

ATTENDANCE POLICY:

Regular and punctual attendance for the **full** period of each class is expected. Excessive absences may adversely affect your grade. Attendance of all classes is expected. Should you miss a class, you are responsible for all material covered, including announcements and handouts. Quizzes missed because of absence cannot be made up but the lowest quiz grade may be dropped.

COB CODE OF ETHICS:

This course, and all other courses offered by the College of Business (COB), requires all of its students to abide by the COB Student Code of Ethics (available online at www.cob.tamucc.edu) Provisions and stipulations in the code are applicable to all students taking College of Business courses regardless of whether or not they are pursuing a degree awarded by the COB.

STUDENTS WITH DISABILITIES:

The College of Business complies with the **Americans with Disabilities Act** in making reasonable accommodations for qualified students with disabilities. If you have an established disability as defined in the "Act" and would like to request accommodation, please see the instructor as soon as possible (within the first week of class).

INSTRUCTOR STATEMENT:

It is my intention to devote the time, effort, and resources to properly instruct each student, and the class as a whole, in the course subject matter and industrial applications in general. I encourage you to devote the time and effort necessary to succeed in this course. The material in this course **IS** cumulative. Hence, you should strive to keep up with the material and not fall behind.

I encourage you to attend class and participate in all aspects of the learning process.

Best wishes for your success in the class.

GENERAL COMMENTS: