

**Statistical Methods for the Life and Social Sciences
STA 1993 (Ten week term, Summer 2001)**

- Instructor:** Dr. Ming-Ying Leung
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<http://www.math.utsa.edu/~leung/>
- Office Hours:** TR 9:30 - 11:00 am or by appointment
- Text:** "Elementary Statistics, 8th Edition" by Mario F. Triola
- Prerequisite:** Any one of STA 1053, 1063, 1073, or their equivalent.
- Course Objective:** To acquire the skills and knowledge for problem-solving in life and social sciences using statistical methods with objective reasoning and logical presentation.
- Course Description:** Point estimator properties, inference about the means and variances of two or more populations, categorical data analysis, linear regression, analysis of variance, and nonparametric tests.
- Syllabus:**
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|---------------|---|
| Chapters 6, 7 | Basic concepts of statistical inferences (Review) |
| Chapter 8 | Inferences from Two Samples |
| Chapter 10 | Multinomial Experiments and Contingency Tables |
| Chapter 11 | Analysis of Variance |
| Chapter 9 | Correlation and Regression |
| Chapter 13 | Nonparametric Statistics |
- Calculator:** Texas Instrument TI-83.
- Grading:**
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| Homeworks: | 20% | (Due in class on 6/7, 6/14, 6/28, 7/12, 7/26) |
| Class exercises: | 20% | (group work during class) |
| Group Exams: | 30% | (In class on 6/21 and 7/19) |
| Individual Exam: | 30% | (In class 7/5) |
- (Note: There will be no final exam for this course)

NO MAKEUP EXAM will be given except for emergency or medical reasons. In such cases, the student should submit a written request accompanied by official documents to arrange for a makeup test. **Overdue assignments** will only be accepted for a good reason. However, the instructor reserves the right to discount part or all of the credit for any late homework.

LAST DAY TO DROP an individual course is 7/11.

Goals of UTSA Core Curriculum:

Enable Students:

- To assess the perspectives and accomplishments of the past
- To move to the future with an informed and flexible outlook

Promote:

- Intellectual adaptability
- Ethical awareness
- Transfer among diverse modes of thought

Cultivate:

- Verbal, numerical, and visual skills that are necessary to analyze and synthesize information
- Identify and solve problems

Foster:

- Understanding of the intellectual and cultural pluralism of modern society as it is reflected in each of the following:
 - Natural Science and Mathematics
 - Behavioral, Cultural, and Social Sciences
 - Language, Literature, and Artistic Expression

Develop:

- Critical awareness of the continuities and discontinuities of human thought, history, and culture to help prepare students to meet the demands of change

Rhetoric Objectives:

Students must demonstrate:

- Competency in writing English
- Critical proficiency in oral and graphic communication
- Competency in constructing valid arguments and criticizing arguments
- Critical proficiency in using diverse theoretical perspective to identify and formulate problems and draw conclusions

Domain I: Science, Technology, and Mathematics Objectives

Students must demonstrate:

- Knowledge of higher mathematics sufficient to understand the bases of mathematical reasoning
- Knowledge of the methods, intellectual approaches, social significance, and history of the physical and natural sciences
- Understanding of the role of technology and of the relationship between science and technology
- Competence in the use of computers and/or acquaintance with the elements of logic in
 - Mathematics
 - Science and Technology
 - Computer Science/Logic

Scholastic Dishonesty

The University expects every student to maintain a high standard of individual integrity for work done. Scholastic dishonesty is a serious offense which includes, but is not limited to, cheating on a test or other class work, plagiarism (the appropriation of another's work and the unauthorized incorporation of that work in one's own work), and collusion (the unauthorized collaboration with another person in preparing college work offered for credit). In cases of scholastic dishonesty, the faculty member responsible for the class may initiate disciplinary proceedings against the student.