

**M358K 2ndSum 12, Syllabus
Applied Statistics #92380 in RLM 5.116**

e-mail: Rhodes@math.utexas.edu

Telephone: 232-6189

M-Thursday 2-3p.m.

Other times by appointment

Prerequisite: M362K with grade of C or better.

Text: Introduction to the Practice of Statistics, 7th edition, by Moore, McCabe and Craig.

NATURE OF THE COURSE:

This is an introductory course in applied statistics for upper division math majors and minors who have completed M362K or an equivalent course in probability. The emphasis is on applying the material, but not in a cookbook fashion. Students are expected to understand what they are doing and why. Interpreting the results of your analysis in context is important.

| | | |
|-----------------|----------------|-----|
| GRADING: | Weekly Quizzes | 40% |
| | Homework | 40% |
| | Final Exam | 20% |

Letter Grades: A, A-, B+, B, --- based on the total points earned.

Pass-Fail option: Pass if your total points are greater than or equal to a C- letter grade.

Projects: Projects will not be required during this five-week summer session.

Computer Software: A variety of statistical packages are available on campus. You are encouraged to choose what is appropriate for you.

Blackboard: Blackboard will be used for e-mail communication of schedule changes. Handouts given during class will be scanned and posted in the course documents. Grades will not be posted on Blackboard.

Honor Code: In-class and take-home exams should be your own work. Any assistance you get should be from the instructor. Classmates, tutors and friends can be used to help on homework but the objective is to understand what you are doing and why. Projects may include prior work done by others as long as your source is cited.

Schedule: Schedule 1 is available. It represents a plan for each class. It shows the topics and textbook sections for each class, homework due dates and quiz and exam dates. Modified schedules will be issued if required.

Icebreaker Assignment: Each student should submit written answers to the following questions.

1. Do you currently have a college degree? If so, describe it. Will you graduate from UT this semester? If not, when do you expect to graduate?
2. What do you expect to be doing five years from now? Describe a “most likely” scenario and assign a percentage that describes how confident you are about this forecast. Limit your answer to 0.5 pages.
3. What other courses are you currently taking? Write a brief description of each.
4. Are you currently employed? If so, describe what you do and the approximate hours per week you work.
5. What is the most satisfying work you have ever done? If you were not paid to do this work, describe the circumstance.
6. Any other information that you feel I should know. Students with disabilities, athletes, and others with job commitments should specify them.

Schedule 1

| Class | Date | Activities and Text Sections | Materials Due |
|--------------|-------------|---|----------------------|
| 1 | 7-09 | Handouts, Section 1.3, 4.3, 4.4, $N(0,1)$ Integration | |
| 2 | 7-10 | Sections 2.5, 3.2, 3.3, Simulation $N(0,1)$ | H1 |
| 3 | 7-11 | Sections 2.2, 2.3, 5.1, 5.2, Dominate eye | H2 |
| 4 | 7-12 | Sampling distribution exercise | H3 |
| 5 | 7-13 | Review and Quiz 1 | Icebreaker |
| 6 | 7-16 | Sections 3.1, 6.1, 6.2, Type I, Type II errors | |
| 7 | 7-17 | Sections 7.1, 7.2 | H4 |
| 8 | 7-18 | Sections 8.1, 8.2 | H5 |
| 9 | 7-19 | Sections 6.3, 6.4 | H6 |
| 10 | 7-20 | Review and quiz. | Quiz 2 |
| 11 | 7-23 | Sections 9.1, 9.2 | |
| 12 | 7-24 | Section 10.1 | H7 |
| 13 | 7-25 | Section 10.2 | H8 |
| 14 | 7-26 | Section 9.3 | H9 |
| 15 | 7-27 | Review and quiz | Quiz 3 |
| 16 | 7-30 | Section 11.1 | |
| 17 | 7-31 | Section 11.2 | H10 |
| 18 | 8-01 | Section 12.1 | H11 |
| 19 | 8-02 | Section 12.2 | H12 |
| 20 | 8-03 | Review and quiz. | Quiz 4 |
| 21 | 8-06 | TBD | |
| 22 | 8-07 | TBD | H13 |
| 23 | 8-08 | TBD | H14 |
| 24 | 8-09 | Review | |
| 25 | 8-10 | Review | |

Final Exam

