

MA506: Statistics for Teachers

Fall SEMESTER 2009

Mon-Wed 4:30 - 5:45 p.m., ILB 245

- Instructor:** Dr. Madhuri Mulekar,
http://www.southalabama.edu/mathstat/personal_pages/mulekar/
- Office:** ILB 301 (Inside ILB 325)
- Contact:** Phone: 460-6264 Ext 62625; e-mail: mmulekar@jaguar1.usouthal.edu
- Office Hours:** Mon-Wed 3:30-4:30 pm and 7:15-8:15 pm or by appointment
- Textbooks:** 1. *Elementary Statistics*, 10th Edition, Johnson & Kuby, Duxbury Press.
2. *Seeing Through Statistics*, 3rd Edition, Jessica Utts, Duxbury Press.
- Final Exams:** Friday December 4, 6:00-8:00 pm.
- Coverage:** All or parts of all chapters of the textbooks mentioned above.
- Description:** The purpose of this course is to provide the prospective high school statistics teachers a data based approach to statistics. This course emphasizes the designing of experiments, data collection methods, pattern recognition and inference. Students in this course will learn to identify appropriate statistical techniques for a given problem and apply them. Topics covered are those that a prospective high school teacher should expect to encounter in the teaching of an introductory or Advanced Placement statistics course. Students will be introduced to use of technology for statistical analyses and hands-on-activities for development of concepts. This course can be used for credit in Masters in Education Program.
Pre-requisite: One year of Calculus or permission of instructor
- Objective:** This course is intended to provide high school teachers a data based approach to teach statistics. Students in this course will learn basics of designing an experiment, different data collection methods, methods of pattern recognition, and inference procedures.
- Calculator:** A scientific/programmable calculator with statistical capabilities (such as TI-83, TI-83 plus) is recommended.
- MA506 Web Page:** Supplemental course materials, announcements, and assignments will be provided at a MA506 web page. The students are responsible for any materials given on this page. Hence, the student is encouraged to check the page daily. The address for

this page is

http://www.southalabama.edu/mathstat/personal_pages/mulekar/MA506

Attendance: Students are expected to attend all classes. Students will be responsible for getting materials from the instructor for any missed classes and catching up with the rest of the class.

Assignments: Assignments include home works, quizzes, and projects. No make-up assignments will be given.

Final Grade: The grade will be determined by work on assignments (individual and group), participation in class (or group) discussions and presentations, and scores on examinations whereby the student demonstrates an ability to communicate statistical ideas and uses problem solving skills to investigate and solve statistical problems.

Assignments	Exam 1	Exam 2	Exam 3	Final Exam	Total
20%	20%	20%	20%	20%	100%

A final letter grade of A, B, C, D, or F will be assigned based on the 90, 80, 70, or 60 percent of the total points.

Make-ups: No make-up exam will be given. However, if the student gives a prior notification and has a valid doctor's excuse, he/she will be allowed to use the final exam grade for the missed exam grade.

Disabilities: Any student with a qualified disability requiring special accommodations should talk with the instructor immediately so that proper arrangements can be made. Note that, before any arrangements can be made the student must have verification documentation from the *Special Student Services Office* (460-7212) in UC270.

Reading: The student is expected to read appropriate sections of text books every day before coming to the class.

Changes: Any changes to the course coverage, assignments, or policies will be posted on the MA506 web page. Students are encouraged to check it regularly.