

MATH 2280 & BUSA 2280 Introduction to Statistics
Syllabus (Fall 2009)
Professor: Dr. Yuna Chen

I. Contact Information

Office: Collins Hall, Room 210 Homepage: <http://faculty.sgc.edu/ychen/>
Phone: 912.260.4251 Office Hours: 4:00 – 6:00 pm (M); 1:00 – 6:00 pm (T);
Email: ychen@sgc.edu 9:15 am – 12:15 pm (W) or by appointment.

II. Course Description

This is an introductory course in statistical decision making methods including sampling, measures of central tendency, frequency distributions, and hypothesis testing. (Prerequisite: MATH 0099)

III. Textbook and a Calculator

(1) Allan G. Bluman: *A Brief Version: Elementary Statistics - A Step by Step Approach*. 4th edition, McGraw-Hill Publishing. ISBN: 007353496x

(2) The calculator's function should at least include square root.

You are expected to bring the textbook and the calculator to all of the classes.

IV. Course Content

Chapter 1. The Nature of Probability and Statistics

Chapter 2. Frequency Distributions and Graphs

Chapter 3. Data Description

Chapter 4. Probability and Counting Rules

Chapter 5. Discrete Probability Distributions

Chapter 6. The Normal Distribution

Chapter 7. Confidence Intervals and Sample Size

Chapter 8. Hypothesis Testing

Chapter 9. Testing the Difference among Means, Variances, and Proportions

V. Course Objectives

In completion of the course, a student should be able to:

1. Employ statistical methods to summarize, analyze and present data;
2. Describe and interpret the concepts of probability distributions including the binomial and normal distributions;
3. Use various statistical procedures to draw inferences regarding population characteristics from statistical data;
4. Apply statistical techniques to solve real-world problems;
5. Prepare to take more advanced statistical course work.

Note: This course will enhance the following General Education Learning Outcome

C. Students will apply critical thinking processes in the development of informed opinions and values.

D. Students will demonstrate the ability to understand mathematical information and perform mathematical manipulations to analyze data from a variety of sources.

H. Students will demonstrate the ability to use appropriate technology to produce presentations and reports and/or to conduct research and data analysis.

VI. Requirement

(1) **Three exams** will be administered during the semester. Each exam counts 25% of the final grade. Missing any one of the exams will be graded F. Make-up exam will be given only in the case of extreme illness or personal tragedy and should be taken no later than one week after the exam date. There will be no make-ups for the final exam.

(2) **Homework assignments** take 15% of the final grade. Homework is due in class on the due day before the lecture starts. Late assignments will be given half of the credits. Once the assignments have been graded and returned to the class, late assignments will not be accepted.

(3) **Activities and quiz** count 10% of the final grade. Credits are given to students who actively participate in classroom activities. The lowest score of quiz will be dropped. **Activities and quiz cannot be made up.**

(4) Students are required to **attend all of the classes and on time**. It is the student's responsibility to make up any missed work due to absence and tardiness. Once students decide to stop taking the course, they should go to the Registrar's Office to withdraw the course and request for refund. **The instructor will not withdraw any student from the course.**

(5) When answering questions in the exams, test, and homework, students must **show their work** (formula, derivation, calculation and solution). Students will not get any credits if they do not show how to get the solution. Cell phones are not allowed to be used in exams or tests.

(6) Cell phone should be turned off during the class. Answering phone calls and sending/receiving text messages are not allowed in the class.

(7) **Academic honesty** is a requirement. Cheating of any type will not be tolerated. Punishment includes the assignment of a failing grade in the course. In the class students are expected to **show respect and not to use profanity.**

VII. Evaluation

The following formula will be applied to have your total scores of the course:

1st midterm scores	_____	x 0.25 =	_____
2nd midterm scores	_____	x 0.25 =	_____
Final exam scores	_____	x 0.25 =	_____
Homework scores	_____	x 0.15 =	_____
Activity and quiz scores	_____	x 0.10 =	_____
		Total scores	_____

Your letter grade of the course will be assigned as follows:

A = 90 - 100; B = 80 - 89; C = 70 - 79; D = 60 - 69; F = Below 60.

VIII. Special Needs Statement

Students requiring classroom accommodations or modifications because of a documented disability should discuss this need with the instructor at the beginning of the semester. Students who have not presented validation for learning disabilities from the Regents' Center for Learning Disabilities (University System of Georgia) should complete proper paperwork with Ms. Angela Nuga in Student Support Services. The telephone number is (912) 260-4435. Students who have not presented validation for physical disabilities should register with the Office of the Vice President for Student Affairs. The telephone number is (912) 260-4430.