Course Syllabus

Course Information

Statistical Decision Making
2013 Fall

Section	Time	Room	Instructor
STAT 1342.001	TuTh 8:30-9:45am	FO1.502	Chattopadhyay

Professor Contact Information

Bhargab Chattopadhyay,
972-8836693,   bhargab@utdallas.edu,
Office hour: FO 2.402 A, TuTh 12.45-1.45 PM

Course Pre-requisites, Co-requisites, and/or Other Restrictions

MATH 1314 or Equivalent

Course Description

Principles of quantitative decision-making: summarizing data, modeling uncertainty, loss
functions, probability, conditional probability, and random variables. Introduction to statistics:
estimation, confidence intervals, hypothesis testing, and regression.

Student Learning Objectives/Outcomes

This course will give students a working knowledge of the ideas and tools of practical
statistics. Students will develop skills listed below.
- To present data graphically (histograms, stem plots, scatter plots) and identify
    possible outliers.
- To explain the concepts of and to find the mean, standard deviation, correlation;
    identify explanatory and response variables and find Least Square linear
    regression lines from the data.
- To use the tools of statistical inference, i.e., confidence intervals and tests of
    significance (Z-procedures, t-procedures).

Required Textbooks and Materials

Understanding Basic Statistics, 6th edition
Author: Brase/Brase
Options:
1. Accesss Code to Enhanced WebAssign EWA (contains a digital copy of the text)
   ISBN: 1285181816
2. Hardbound text bundled with Enhanced WebAssign access code.
   ISBN: 1133798152

Please note that homework will be assigned through WebAssign. Please read the following carefully.

WebAssign contains an equation editor, which allows you to present your solutions in a mathematically correct form--beware parentheses. Once you submit a solution, it is graded immediately - - for some problems you will have multiple attempts at the solution, for others only one attempt. Assignment grades will be transferred to elearning.

Getting started

1. Go to eLearning and get your username under the label "WAUsername."

2. Go to   www.webassign.net

3. Under "Account Log In" type your USERNAME, INSTITUTION, and PASSWORD. The INSTITUTION is "utdallas" and the PASSWORD was (will be) given to you by your instructor.

4. On the next page, you will have 3 options.

   a) "Purchase access online" if you do not already have an access code and you want to buy access to the ebook and homework problems without printed text
   b) "Enter an access code" if you have already purchased an access code
   c) "Continue my trial period" if you want to start using the system before purchasing. The deadline is given in red.

5. Upon subsequent returns, you will only need your username, password, and institution code to enter the course.

Suggested Course Materials

A calculator or scientific calculator is required (permitted on quizzes and exams)
No Mobile phones can be used for calculation during exams
No additional course materials requested

Tentative Assignments and Academic Calendar*

Exam: there will be two midterms and a comprehensive final.

Topics and exams	Chapters
Introduction	1
Variables and distributions	2
Numerical summary	3
Bivariate summaries	4
Probability, random variables	5
Binomial distribution	6
Exam 1 (based on the first part)	**Oct 3**
Normal distribution, sampling distribution	7
Estimation	8
Statistical inference of population mean: one sample problem	9
Exam 2 (based on the second part)	**Nov 5**
Statistical inference of population mean: two sample problem	10
Final (cumulative)	**As per UTD final schedule**

*Instructors reserve the right to change the dates and schedule if necessary.

Important Dates and Holidays

Last day to drop without a "W"   Sep 11
Exam I   Oct 3
Exam II   Nov 5
Fall Break   Nov 25-30
Final   As per UTD final schedule

Grading Policy
Course grade will be based on exams, quiz and homework assignments.
Exam1: 25%
Exam2: 25%
Final exam: 30%
Homework and Quiz: 20%

Grading Scale
A+: [97, 100], A: [93, 97), A-: [90, 93)
B+: [87, 90), B: [83, 87), B-: [80, 83)
C+: [77, 80), C: [73, 77), C-: [70, 73)
D+: [67, 70), D: [63, 67), D-: [60, 63)
F: [0, 60)

Course & Instructor Policies
Attendance Policy: You are expected to attend and participate in all class sessions. If you are absent from any meeting, you may inform me in advance. You are also responsible for dropping

the course if you choose to stop attending classes.

Conferences: You are welcome to confer with me during office hours.

Make up exam: With prior arrangement.
Late homework: Accept with penalty.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.