

Applied Multivariate Statistical Analysis

Instructor:

Dr. Ferry Butar, Lee Drain Building 439C, Phone 294-1596.

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Office Hour:

Mon, Wed 8:30-10:00 a.m. and 1:30-2:00 p.m.

Tue, Thur 8:15-9:15 a.m. and 1:00- 2:00 p.m. or by appointment.

Required books:

Johnson, R. A. and Wichern, D. W. (2007), Applied Multivariate Statistical Analysis, 6th ed. Prentice Hall, N.J.

Related References:

Khattree, R., and Naik, D.N. (2005), Applied Multivariate Statistics with SAS Software, Wiley Interscience.

Khattree, R., and Naik, D.N. (2000), Multivariate Data Reduction and Discrimination with SAS Software, Wiley Interscience.

COURSE DESCRIPTION:

The major objective of this course is understanding of statistical multivariate and its applications. We will cover the concept in multivariate normal distribution, inferences about mean and variance vector. We also study discriminant analysis, classification procedures, principal component, factor analysis and canonical correlation analysis.

COURSE OUTLINE:

I will cover most of the material in Chapters 1 through 12 of the text book. Sections that are to be omitted, if any, will be announced.

Approach:

Lectures on New Concepts and applications,
 Assigned problems for experience and familiarities with techniques,
 Classroom discussions,
 Examinations to demonstrate understanding and ability to utilize methods.

GRADING POLICY:

During the semester, there will be homeworks, paper, three in-class exams and a final. You are allowed to use one ($8\frac{1}{2} \times 11$) of note.

If you are unable to take a test on the scheduled time because of illness, accident, or circumstances beyond your control, notify me by telephone before the test is given. A make-up test will be scheduled as soon as possible.

Calculator can and should be used.

Item	Total point	Date
HW	100	every week
Paper	50	end of exam 3
First Mid-Term Exam	100	Tue, September 18, 2007
Second Mid-Term Exam	100	Tue, October 23, 2007
Third Mid-Term Exam	100	Tue, December 4, 2007
Final Exam	150	Tuesday, December 11, 8:00-10 a.m.

Your final course will be determined by your cumulative score out of a maximum possible of 600. There is no set formula used to determine the letter grade for the course, but the following are some guidelines,

Total point	Grade
540 – 600	A
480 – 539	B
420 – 479	C
360 – 419	D
≤ 359	F

Homework Assignments and Attendance

Some of your assignments will involve SAS

Attendance is very important. Class attendance is a requirement of this course. Regular attendance will indicate the amount of interest and effort a student is willing to exert in learning.

ACADEMIC HONESTY:

All work that is handed in for evaluation is to reflect solely your individual performance. Cheating will not be tolerated. A violation will result a grade of F for the semester.

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

LEARNING DISABILITIES:

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center

and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until you register with the Counseling Center.

Classroom Rules of Conduct:

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

Visitors in the Classroom:

Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

This policy is not intended to discourage the occasional visiting of classes by responsible persons. Obviously, however, the visiting of a particular class should be occasional and not regular, and it should in no way constitute interference with registered members of the class or the educational process.