SPRING SYLLABUS

PSY 5321: Multivariate Statistics

Tuesday, 9:30 am - 10:50 am, ELA 283B

Thursday, 9:30 am -10:50 am, ELA 224

**Instructor Information**

Dr. Yueqin Jean Hu, PhD.

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Office hours: Monday 9:00 am – 2:00 pm

**Course Description**

Multivariate Statistics is a 3 credit graduate course that introduces advanced statistical analyses commonly used in psychology and other behavioral science. Topics include multivariate analysis of variance and covariance, Path Analysis, Factor Analysis, and Structural Equation Modeling. This course is required for all first year psychology graduate students. No prerequisite is required.

**Class Structure**

Instruction will consist of face-to-face lectures and hands-on practice using a computerized data analysis program (SPSS) in the computer lab.

**Assessment and Grading**

Assessment will occur through weekly homework exercises, and four exams given during the semester. Attendance is not required.

Homework 20%

Quiz 20%

Midterm 30%

Final Exam 30%

**Textbook**

Craig A. Mertler & Rachel A. Vannatta. Advanced and multivariate statistical methods. Fourth Edition. ISBN13: 978-1884585845, ISBN10: 1884585841

**Academic Honesty**

Examples of academic dishonesty include cheating on a test, collusion to evade academic rules, and plagiarism—i.e., turning in work that is in any way not your own. Any cases of academic dishonesty will result in a failing grade for the course and will lead to additional disciplinary actions. Please refer to the University Honor Code Page for details: <http://www.txstate.edu/effective/upps/upps-07-10-01.html>. Please also see the following link for the University Honor Code: <http://www.txstate.edu/effective/upps/upps-07-10-01-att1.html>.

**Special Needs**

Students who require accommodations for the completion of this course must notify the Office of Disability Services and the instructor in the first week of the semester.

**Learning Outcomes**

The Department of Psychology has adopted expected student learning outcomes for the undergraduate major, the graduate major, and for PSY 1300, a general education course meeting a requirement for the social and behavioral science component. These expected student learning outcomes are available for your review at the following website: <http://www.psych.txstate.edu/assessment/>.

**Course Schedule**

Date Topic Materials Events

Jan. 20 Introduction Lecture note

Jan. 22 Lab Lab note HW 1

Jan. 27 MANOVA Lecture note & Chap6

Jan. 29 Lab Lab note HW 2

Feb. 03 MANCOVA Lecture note & Chap6

Feb. 05 Lab Lab note HW 3

Feb. 10 Repeated MANOVA Lecture note& Chap6

Feb. 12 Lab Lab note Quiz 1

Feb. 17 Discriminant Analysis Lecture note& Chap10

Feb. 19 Lab Lab note HW 4

Feb. 24 Path Analysis Lecture note& Chap8

Feb. 26 Lab Lab note HW 5

Mar. 03 Path Analysis Lecture note& Chap8

Mar. 05 Lab Lab note HW 6

Mar. 10 Review Lecture note

Mar. 12 Midterm Exam Lab note Midterm

Mar. 17 Spring Break No Class

Mar. 19 Spring Break No Class

Mar. 24 Factor Analysis Lecture note & Chap9

Mar. 26 Lab Lab note HW 7

Mar. 31 Factor Analysis Lecture note & Chap9

Apr. 02 Lab Lab note HW 8

Apr. 07 Factor Analysis Lecture note & Chap9

Apr. 09 Lab Lab note Quiz 2

Apr. 14 Introduction to SEM Lecture note

Apr. 16 Lab Lab note HW 9

Apr. 21 Repeated Measures Lecture note

Apr. 23 Lab Lab note HW 10

Apr. 28 Review

Apr. 30 Lab

May. 05 Reading Day No Class

May.12 Final Exam Final