

## SYLLABUS

### **PSYCHOLOGY 590 – INTRODUCTION TO FACTOR ANALYSIS AND STRUCTURAL EQUATION MODELS**

**Instructor:** Bob McFatter

**Office:** Girard 210-A; 482-6589

**Internet page:** [www.ucs.louisiana.edu/~rmm2440/](http://www.ucs.louisiana.edu/~rmm2440/)

**E-mail:** [mcfatter@louisiana.edu](mailto:mcfatter@louisiana.edu)

**Texts:** Loehlin J.C. (2004). *Latent variable models, fourth edition*. Mahwah, NJ: Lawrence Erlbaum Associates.

*JMP Statistical Discovery Software*, by SAS Institute.

*LISREL Student Edition*, free download from Scientific Software International (SSI)

### **Course Description**

This course provides an introduction to several widely used methods in the analysis of social science data. Topics to be covered include introductory treatments of structural equation models (path analysis, multiple latent variable models, confirmatory factor analysis, and latent growth models) and exploratory factor analysis. Consideration will be given to the basic logic and application of covariance structure analysis as well as limitations and criticisms of the practice of latent variable modeling.

Part of the course will be devoted to developing practical skill in using the LISREL statistical package to carry out structural equation and factor analyses as well as the JMP package to do exploratory factor analyses.

Two exams, a midterm and a final, will be given, along with numerous homework assignments involving use of the computer to illustrate the theoretical aspects of the course.

### ***Emergency Evacuation Procedures***

A map of this floor is posted near the elevator marking the evacuation route and the ***Designated Rescue Areas***. These are areas where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.

### ***Services For Students With Disabilities***

For information about SSD and SEP services, contact Kim A. Warren, MSW, PhD, LCSW, Supported Education Advisor, at 482-5252, by e-mail at [kimawarren@louisiana.edu](mailto:kimawarren@louisiana.edu), or in the Conference Center, Room 126. Eligibility requirements are described at the SSD website. Also, there is free confidential help on campus for students with psychological disabilities (Bipolar, Depression, Anxiety, etc.).