

Advanced Statistics and Research Methods for Psychology I
Psychology 611
Fall 2012

Class:	Thursday 1:30-4:10pm Robinson Hall B208		
Instructor:	Jeff Stuewig (jstuewig@gmu.edu)	Office:	2007 David King
Office Hrs:	W 3:00-5:00 or by appt	Phone:	993-4252
Labs:	R 8:00pm-9:50pm Innovation 319	F 12:30pm-2:20pm Innovation 323	F: 2:30-4:20pm Innovation 323
Teaching Assistant:	Shannon Scurlock (sscurloc@gmu.edu)	Office :	Aquia 337
Office Hrs:	R 7:00pm-7:45pm and F 11:30pm-12:15pm	Phone:	703-993-5212

Official Communications via GMU E-mail: Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their mason e-mail account, and are required to activate that account and check it regularly.

Description of Lab:

This lab will coordinate with course material each week to provide time to practice and work in small groups. Typically, lab will consist of guided practice, a worksheet or group activity, and then a homework assignment. The goal of this lab is to integrate concepts learned in class into practice and to gain experience using them. It is expected that texts will be read before the course and therefore it is also expected that they will be read before lab each week.

Unless stated otherwise, all writing is to be in APA-style to allow for practice in presenting methods and statistics to professional audiences.

As part of the course, doctoral students are required (and master's students are invited) to identify a substantive area of interest, conduct a review of the relevant theoretical and empirical literature, formulate a specific research question, and develop a detailed research plan, culminating in a written research proposal. If you are a doctoral student, you should work to identify a research supervisor over the next few weeks and begin identifying an area of personal interest. If you are a Masters student, you can opt for the Proposal plan if you have identified a faculty member willing to serve as your research supervisor. Students enrolled in the Basic Plan complete all requirements for the course (lecture, lab, exams, etc.), but will not be required to conduct the literature review and proposal.

Lab Requirements:

Attendance and participation will account for 20% of the total lab grade, 80% will be homework. Lab grades are added to course grades to receive the final grade. No separate lab grade is given. Participation will be graded on a 3-point scale: not present (0), present with limited participation (1), and substantial participation (2). Students are responsible for all materials and assignments covered in the lab. Homework will be graded on a 5-point scale (1-5) to reflect correct answers as well as work shown. All homework assignments must be typed, printed out (i.e., hard copy), stapled, and turned in at the BEGINNING of each lab meeting. Any notes on outputs or documents must be legible to receive credit. If assignments are turned in late, but within a week of the due date, they will count for half

the points possible. If assignments are turned in more than a week late, they will not be worth any points. If you need to attend another lab session, you must receive permission from your lab instructor in advance. Homework assignments will still be due at the beginning of your assigned lab.

Honor Code:

All students in this course are to become familiar with and follow the University's honor code, which does not tolerate any form of cheating and attempted cheating, plagiarism, lying, and stealing. The instructor for this course reserves the right to enter a failing grade to any student found guilty of an honor code violation. For more information on the Honor Code please visit: <http://academicintegrity.gmu.edu/honorcode/>

Student Disabilities:

If you are a student with disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 709-993-2474. All academic accommodations must be arranged through that office.

Tentative Course Outline

Students are responsible for being aware of **any changes** in this schedule announced in class, lab, or over email.

Week 1– Overview of Course. Intro to Variables

Week 2 – Basic descriptive statistics. Normal Curve. Exploring assumptions. Cleaning

Homework 1 due

Week 3 – Reliability & Validity. Measurement. Basic concepts of inferential stats

Homework 2 due

Week 4 – Z-tests, t-tests

Exam 1: Covering classes 1-3

Week 5 – More on variance, covariance, and correlation

Homework 3 due

Week 6 – Simple Linear Regression

Homework 4 due

Week 7 – Multiple Regression

Homework 5 due

Week 8 – Multiple Regression

Homework 6 due

Week 9 – ANOVA

Exam 2 - covering classes (1-3) and 4-8

Week 10 – ANOVA

Homework 7 due

Week 11 – ANCOVA

Homework 8 due

Week 12 – Factorial ANOVA, GLM

Exam 3 - covering classes (1-8) and 9-11

November 22nd and 23rd -- Happy Thanksgiving!!!!

Week 13 – (if time) Intro to SEM and/or other advanced statistics

Homework 9 due

Week 14 – Putting it all together.

Homework 10 due

Final Exam: Thursday December 13, 1:30-4:15pm