Dr. Melanie Page   Quantitative Methods II, Psychology 5413   Spring 2009

Office: 408 NM; Phone: 744-7334; Email: melanie.page@okstate.edu
Office Hours: Wed 11-1 in 328 Scott Hall or by appt.

TA: Cam Weaver
Email: cam.weaver@okstate.edu Office hours: 10-12 Tuesday in 015 NM.

"Forget not that the earth delights to feel your bare feet, and the wind longs to play with your hair"
Kahlil Gibran

What will I learn in the course?

Goal: You will have a basic understanding of what types of analyses you can run in Analysis of Variance (ANOVA). You will be able to compute test statistics by hand as well as by computer.

Why is this material important?
As a psychology researcher and consumer of research, it is vital that you thoroughly understand ANOVA. This understanding is important in designing your own research as well as for critiquing the research of others.

Doing well in this course
To do well in this course, you must understand the basics in the beginning, so if you have a question, please ask. We want to help you be successful, so please take advantage of office hours and review sessions. You do not need to be a math genius to do well in statistics, but basic math skills of adding, subtracting, multiplying, and dividing are important. It is really important to start the homework projects far in advance of their due date. I also suggest working the review sheet for each exam as we cover the material. This will help you retain the information long-term, as well as make it easier to study for the exams.

What does this class look like? Some nuts and bolts
D2L: I use D2L extensively in this course. If a course change deadline is necessary, I will post it as well as email it to you. D2L is a great resource to get you information in a timely manner.

Attendance: There is no penalty per se for missing class, but you are responsible for all assignments and announcements. If you have excessive absences, I will inform your major advisor so that they may help you through whatever crisis is causing you to miss so many classes.

Classroom ethics:
        Academic honesty is expected. See the section on academic dishonesty at
        http://osu.okstate.edu/acadaffr/aa/syllabus.htm for OSU penalties.

        Appropriate behavior in class and in all interactions with me and classmates is expected.

Accommodations: Any student who needs special accommodations should see me to make proper arrangements.

Philosophy: The course consists of lectures, handouts, homework and tests, in-class work, and computer work. I will try and make this class fun and interesting, but you are ultimately responsible for how you do in this class. We really, really want people to come and see us. We do not think people with questions are dumb or stupid and strive to make the classroom a safe place to ask questions. Statistics is a hard subject for many people and it is our job to help you understand the material – please help us do our job and let us know when things are not clear.

Calculator: You should have a simple calculator that can take square roots. You should bring your calculator to class and to your exams.

Texts: None of your books are in the bookstore. I am going to lecture based on a combination of your text you used last semester, a text I have used in the past, or you are welcome to find another ANOVA text. I would also be happy to lend you one of mine. The exact text is less important than the fact that you find one and read it before class. The one book that is required and can be gotten from several internet sources (and that most students report using after class!) is the book for lab which is Levine's Guide to SPSS for ANOVA (2nd ed) by Page, Braver, and Mackinnon (yes, the Page is me).

Possible texts: Statistical Methods for Psychology (6th ed) by David Howell; Design and Analysis: A Researcher's Handbook (4th ed) by G. Keppel & Zedek. Again, any higher level ANOVA text (one that covers contrasts) is fine. There may also be additional readings assigned in class.

Assignments and points they are worth

Tests: There are four tests. You must take all tests. Tests will be a combination of your conceptual and SPSS knowledge, so be prepared to read output, write syntax). You get a 1 page cheat sheet. Make-ups are given only in documented emergencies. The tests are cumulative in two senses. The first is that I assume you know the material we already went over and thus will use terms and concepts from earlier tests. The second is plain old regular cumulative. All of the research that is coming out on long-term learning suggests that repeated and cumulative testing on topics is the best way to learn. The final exam will have a large focus on the material post-test 3. You have the entire class period to take the exam.

Homework: There will be four homework assignments; they will be worth 15 points each. These will focus on running the analyses with SPSS. Please make sure to staple or clip all the pages. Homework will be available on D2L. I suggest you start an assignment at least two weeks before it is due to give yourself time to not only complete the work well, but to find one of us should a problem arise (and arise they do!). The majority of the work in this class is the homework – they are intense. You will also notice that tests and homework are due very close in time to each other – yet another reason to start your homework early. You should not be leaving lab early unless you have completed the section of the homework that is applicable to that lab.

Final Grade: Your final grade for the course will be based upon the total number of points you receive. If you get 91-100% of the points you get an A; B, 81-90; C, 72-80: D, 62-71: F, 61 or less. I follow rules of rounding for determining grades – if you get a .5 or above I round up to the next whole number. Thus a 90.4 is a B.

The syllabus is my best guess at what we will cover and what our pace will be. As such, it is subject to revision. Any changes in due dates or test dates announced in class supersede those in the syllabus.

	Class Outline	**Lab Topic**
Day:		
1/12	1 factor ANOVA, Assumptions, power, effect size	Overview of syntax
1/19	No class, MLK Day	class material from 1/12
1/26	Planned comparisons in the 1 factor	same
2/2	Trend Analysis and Post-hocs	same

2/9	Finish 1 factor topics and review for test 1	review test 1
2/16	Test 1	HW 1 due
2/23	2 factor ANOVA	2 factor
3/2	finish 2 factor	work on HW 2
3/9	3 factor ANOVA	3 factor
3/16	Spring Break!	
3/23	finish 3 factor and review for test 2	review for test 2
3/30	Test 2	HW 2 due
4/6	Within subjects	1 factor within subjects
4/13	2 factor within, mixed	2 factor within
4/20	mixed designs	mixed designs
4/27	ANCOVA	review final
5/4	Final exam	HW3 due