

Analysis and Interpretation of Psychological Data PSYC 300 – 206, SPRING 2006

Instructor:	Caitlin Groeber	E-mail address:	cgroeber@gmu.edu
Class time:	Tuesday 2:30 – 4:20 PM		
Class location:	IN 319	Office phone #:	703-993-1358
Office hours:	Wed 12:30-1:30& by appt.	Office location:	DK 2027

Goals of Lab: This lab is designed to reinforce the material covered in the lecture portion of PSYC 300 and to help with mastery and proper application of the learned concepts. Lab meetings will consist of a combination of, but not limited to, weekly homework assignments and in class review, in-class assignments, and introduction and learning of the computer program SPSS (Statistical Program for Social Sciences).

Materials You Need To Purchase:

- ❑ Gravetter, F. & Wallnau, L. (2004). *Statistics for the behavioral sciences* (6th ed). Belmont, CA: Wadsworth.
- ❑ A reliable calculator

****Students are expected to attend all lab meetings.** If you do miss class, please ask fellow classmates for notes before coming to me for help. If you know you will be absent for a class ahead of time, talk to me and we can discuss alternate arrangements if there is an excused or pre-approved absence. **You are responsible for any and all announcements and modifications made to the syllabus whether you are present each week or not.** Feel free to meet with me during office hours or by appointment concerning this material or send me questions and/or comments via e-mail.

****Homework:** There will be ten homework assignments, worth 10 points each, assigned throughout the semester. Completed homework must be turned in at the beginning of class and will only be accepted for full credit *within the first 15 minutes* of the lab meeting. There will be an automatic grade-loss penalty of 10% each day the assignment is late (beginning after the first 15 minutes of class) up to the week after the initial due date. Make-up work and extensions will only be considered if your circumstance falls under a category from the “exam make-up policy” of your PSYC 300 lecture syllabus. *To account for unforeseen circumstances, your lowest homework grade will be dropped.*

****In-Class Assignments:** There will be nine in-class assignments, worth 5 points each, given throughout the semester. These will include individual projects, small group activities, and class activities. Failure to attend class when an in-class assignment is assigned will result in zero credit. *To account for unforeseen circumstances, your lowest in-class assignment grade will be dropped.*

****SPSS Assignment:** Students will be expected to incorporate everything they have learned about SPSS and apply these skills to an SPSS project. The project will be due on April 25, 2006 and will be worth 30 points. The same grade-loss penalties apply. The assignment is due in the first 15 minutes of class, and beginning after that, there is an automatic grade-loss penalty of 10% each day the assignment is late. Computers with SPSS are located throughout campus and there will be time given after some lab meetings to work on this assignment. **HINT:** Take thorough notes during class in order to remember how to carry out specific tasks in SPSS. This will make the project much easier and less time consuming!

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****The GMU honor code will be strictly enforced.** Students are expected to abide by the GMU Honor Code: “Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.” Exams and assignments are expected to be individual efforts unless noted otherwise by the instructor or teaching assistant. Violations of the GMU Honor Code can result in failure of an assignment or exam, depending on the severity of violation. All violations will be reported to the Honor Committee.

****Technology Statement:** This lab section will include instruction in statistical analysis using SPSS software. All students in the class will also be expected to check their GMU email account on a regular basis, as email will be used to communicate announcements and distribute some course materials. WebCT (<https://webct41.gmu.edu/>) will be used to post grades, course materials, and email messages; thus, students should check their WebCT pages regularly.

****Students with Disabilities:** If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

Class	Lab Topic	Chapters Covered	Assignments, In-Class Projects, and Exams
1/24	Role of statistics in research; variables and measurement; notation	GW 1	Introduction
1/31	Frequency distributions of individual scores: Getting a feel for the data	GW 2	HW #1 Due; In-Class Assignment #1
2/7	Measures of central tendency: Where's da middle?	GW 3	HW #2 Due; In-Class Assignment #2
2/14	Measures of variability: It's all about diversity	GW 4	HW #3 Due; In-Class Assignment #3; Review for Exam 1
2/21	Transforming and standardizing individual scores; the normal curve	GW 5-6	Exam 1 (GW 1-4)
2/28	Distributions of sample means; introduction to confidence intervals	GW 7	HW #4 Due; In-Class Assignment #4
3/7	Using the <i>t</i> -score to create confidence intervals for a single mean	GW 9.1-9.2	HW #5 Due; In-Class Assignment #5
3/14	SPRING BREAK		NO CLASS
3/21	Hypothesis testing 101: one sample problems and basic concepts	GW 8, GW 9.3	HW #6 Due; In-Class Assignment #6; Review for Exam 2
3/28	Effect size; hypothesis testing for two sample problems	GW 10, GW 11	Exam 2 (GW 5-9)
4/4	One-factor ANOVA (independent measures) and posthoc tests	GW 13	HW #7 Due; In-Class Assignment #7
4/11	Extensions of ANOVA: Repeated measures and two-factor ANOVA	GW 14.1, GW 15	HW #8 Due; In-Class Assignment #8; Review for Exam 3
4/18	Nonparametric tests for nominal and ordinal data	GW 17, GW 19.1	Exam 3 (GW 10-11, 13-15)
4/25	Correlation coefficients; the odds ratio; simple linear regression	GW 16	HW #9 Due; In-Class Assignment #9; **SPSS Assignment Due**
5/2	Multiple regression; catch up		HW #10 Due; Review for Final Exam
5/16			Comprehensive Final Exam: IN 205, 10:30 AM – 1:15 PM, Tuesday, May 16

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****PSYC 300 Lecture:** Exams for the lecture part of this class will be given during lab meetings. Be sure to bring your text book, notes you plan to use, pencil(s), and a calculator. Your lab grade counts for 80 points, or 20%, of your total grade for PSYC 300.

****Grades:**

Homework Assignments (10 pts x 9)	90 points
In-Class Assignments (5 pts x 8)	40 points
<u>SPSS Assignment</u>	<u>30 points</u>
Total	160 points

The following grade breakdowns are approximate:

A+ = 156-160 pts, **A** = 149-155 pts, **A-** = 144-148 pts,

B+ = 139-143 pts, **B** = 132-138 pts, **B-** = 128-131 pts,

C+ = 123-127 pts, **C** = 117-122 pts, **C-** = 112-116 pts,

D range= 96-111 pts, **F** = below 96 pts

Note: The total number of points you earn will be divided by two, and that total (out of 80 points) will be used to calculate your final grade for the overall PSYC 300 course.

Lab Grade Tracker

Assignment #	Homework (10 points each—drop lowest)	In-Class Assignments (5 points each—drop lowest)	SPSS Assignment (30 points)
1	/10	/8	/30
2	/10	/8	
3	/10	/8	
4	/10	/8	
5	/10	/8	
6	/10	/8	
7	/10	/8	
8	/10	/8	
9	/10	/8	
10	/10		
TOTAL points	/90	+ /40	+ /30
	= /160		