# PSYC 300 LAB, Sections 207/208 Analysis and Interpretation of Psychological Data Wednesdays 8:30 & 10:30AM; Innovation Hall room 319

Instructor: Katherine (Katy) Ryan Office: Robinson B, room 213C Office Phone: (703) 993-1375 Email: kryanc@gmu.edu (\*\*best way to contact me\*\*) Office Hours: Mondays 12:00-1:00PM in Robinson B 213C, and by appointment Mailbox: labeled "Ryan" and located in hallway of David King Hall across from the Graduate Psychology Office in the graduate student section.

# Required Materials (always bring to lab):

• Gravetter, G. A., & Wallnau, L.B. (2007). *Statistics for the behavioral sciences* (7<sup>th</sup> ed.). Belmont, CA: Wadsworth.

• Notebook/paper and writing utensil.

• Reliable calculator (that computes addition, subtraction, multiplication, division, and square root and that can hold simple previous calculations in memory).

• One data saving device-- Computer disk (A:), jump/flash drive, etc

### Lab Goals and Layout

This statistics lab is designed to allow students to be able to master the material learned in the PSYC 300 lecture portion of the class and to properly apply the concepts. The lab also will introduce students to a statistics software package, SPSS. Weekly homework assignments, in-class worksheets, and an SPSS assignment will be given to meet these objectives. As deemed appropriate, lab meetings will consist of some or all of the following: review of graded homework and exams, in-class assignments, Q/A sessions, problem-solving, and instruction in SPSS.

### **General Expectations**

I expect all students to attend lab, show up on time, and complete all assignments in a timely manner. I assume you are all mature, responsible college students who are respectful of your classmates and of me. This means showing up on time (to lab or appointments with me), turning off your cell phones in lab, and generally encouraging a good learning environment. It is my goal to be as available to you as possible to answer any questions, address concerns, review concepts, etc. Please do not hesitate to email me, but give me at least 24 hours (during the week) to respond to any question/issue/inquiry (aka no midnight emails expecting an answer by 2am). Email response time may be somewhat delayed on weekends.

### **Use of Technology**

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 and also to make sure that their mailbox is not "overquota" and can still receive messages. You must maintain your GMU email account as it will be used to communicate announcements and distribute some course materials.

### Attendance

Students are expected to attend all lab meetings. Regular attendance is important for good comprehension of the material in this course. *If a student fails to turn in a homework assignment during class or misses an in-class assignment, this cannot be made up at a later date.* Regardless of whether you were in lab, YOU are responsible for all material and announcements presented in lab, including announcements about changes in the schedule and assignments. I would suggest exchanging email addresses or phone numbers with at least 2 of your lab-mates in the unlikely event that you are absent and need to know what you missed. Although attendance is not directly calculated into your grade, failure to hand in an assignment during class and/or not completing an in-class assignment will result in zero credit for those tasks (see "Homework and In-Class Assignments" for more details).

Last day to add: 9/12/06, Last day to drop: 9/29/06,last day for elective withdrawal: 10/27/06. You are responsible proper PatriotWeb registration, drop and withdrawal.

Week	Laboratory	Chapters covered	Homework
8/30	Topic: Role of statistics in research; variables and measurement; notation	GW 1	HW#1
9/6	HW#1 due Topic: Frequency distributions of individual scores: Getting a feel for the data In-class assignment #1	GW 2	HW#2
9/13	HW#2 due Topic: Measures of central tendency: Where's da middle? In-class assignment #2, <b>SPSS activity #1</b>	GW 3	HW#3
9/20	HW#3 due Topic: Measures of variability: It's all about diversity Q&A for Exam #1 In-class assignment #3	GW 4	HW#4
9/27	Exam #1 (GW1-4)		*HW#4*
10/4	HW#4 due Go over Exam #1 Topics: Correlation coefficients; simple linear regression, Transforming & standardizing individual scores; the normal curve In-class assignment #4	GW 16, 17.1, 5	HW#5
10/11	HW#5 due Topic: Probability; Distributions of sample means In-class assignment #5, <b>SPSS activity #2</b>	GW 6, 7	HW#6
10/18	HW#6 due Topic: Using the <i>z</i> -score & <i>t</i> -score to create confidence intervals for a single mean Q&A for Exam #2 In-class assignment #6	GW 9.1, 12 (to p. 370)	HW#7
10/25	Exam #2 (GW 16, 17.1, 5, 6, 7, 9.1, 12 (to p.370)		*HW#7*
11/1	HW#7 Go over Exam #2 Topic: Hypothesis testing: one sample problems/basic concepts In-class assignment #7	GW 8, 9.2-9.4	HW#8
11/8	HW#8 due Topic: Effect size; hypothesis testing for two sample problems (Ch 8-9) In-class assignment #8, <b>SPSS activity #3</b>	GW 10, 11	HW#9
11/15	HW#9 due One-factor ANOVA (independent measures) and posthoc tests (Ch 8-9), Extensions of ANOVA: Repeated measures and two- factor ANOVA (Ch 10-11) Q&A for Exam #3 In-class assignment #9	GW 13, 14.1, 15	HW#10 SPSS assignment
11/22	No Lab Thanksgiving Break!!		*HW#10
11/29	Exam #3 (GW 8, 9.2-9.4, 10, 11, 13, 14.1, 15)		*HW#10
12/6	HW#10 due Go over Exam #3 Nonparametric tests for nominal and ordinal data (one-way ANOVA) Q&A for Final Exam	GW 18, GW 20.1	
	Comprehensive Final Exam: IN 133, 10:30 AM – 1:15 PM, Thursday, Dec 14		

\*Note: This is a tentative schedule, and topics/assignments are subject to change. Any changes will be announced in lab.

# Homework, In-Class Assignments, and SPSS Assignment

<u>Ten homework assignments</u> (10 points each) will be assigned throughout the semester. Homework grades will be based on accuracy and work shown. Completed homework will only be accepted within the first 15 minutes of the scheduled lab meeting, therefore failure to attend lab when a homework assignment is due will result in zero credit. Homework turned in during lab, but after the first 15 minutes, will be penalized 10% of that assignment grade, or 1 point. Homework will not be accepted before or after the assigned due date except if approved by the instructor. There will be no homework makeups or extensions except for circumstances listed below in the exam make-up policy. These circumstances will be considered on an individual basis. *To account for unforeseen circumstances, your lowest homework grade will be dropped*.

<u>Nine in-class assignments</u> (5 points each) will be 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. Again, *to account for unforeseen circumstances, your lowest in-class assignment grade will* be dropped.

<u>Three SPSS assignments</u> (10 points each). Each SPSS assignment will be an in-lab activity using the statistical concepts learned in order to complete data analyses using this software program. Each activity will be graded on the accuracy of your analyses and appropriate interpretation/explanation of the results. SPSS in-lab activities cannot be made up at a later date; *there will be no make-ups or extensions without penalty (the only exceptions are listed in "Exam make-up policy")* 

# **Grading Policy**

Your lab grades counts for 80 points, or 20% of your total grade for PSYC 300. The breakdown of your grade is as follows:

Homework Assignments (9 out of 10 count toward your final grade) = 10 points each In-Class Assignments (8 out of 9 count toward your final grade) = 5 points each SPSS Assignments = 30 points 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 entire course.

# **Exam Make-up Policy**

The following policy refers to all scheduled exams. Not included in this policy are exams taken ahead of time (through arrangement with the professor and TA). Policies regarding missed or late assignments (e.g., homework) will be described in the lab syllabus. *There will be no exam make-ups or extensions without penalty except in instances such as the following:* 

- hospitalization or illness that has been documented and judged by your instructor as preventing you from (a) preparing adequately for a test or (b) sitting for a test
- death or serious illness in your family
- court appearances

Documentation must be provided by health officials (e.g., a physician or member of the student center health staff) in the case of illness; an immediate family member in the case of a death or serious illness in the family; and official paperwork in the case of court dates. Students failing to produce such documentation will be penalized at least one full letter grade. Decisions about whether and when to allow a student to make up an exam will be made on a case-by-case basis.

# **GMU Honor Code**

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.

### **Accommodation of 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. Note that this provision includes the range of disabilities, including physical, psychiatric, and learning disabilities.

#### **Student Support Services**

George Mason offers services to support students' academic development and emotional development. The Learning Center, located in SUB I (room 364, see http://www.gmu.edu/departments/csdc/ls.htm), offers workshops in academic skills and a tutor referral program. The Counseling Center, located in SUB I (room 364, see

http://www.gmu.edu/departments/csdc/), offers stress management training, as well as individual and group counseling for students who would like some help with social, emotional, or educational concerns—or who have concerns about their friends. Consider taking advantage of these free resources.

Lab Grade Tracker

# Goal for Lab Grade (Letter Grade): \_\_\_\_\_

Points needed to attain goal: \_\_\_\_\_

Assignment #	Homework (10pts	In-class assignments	SPSS Assignments
	each drop lowest)	(5pts ea drop lowest)	(10 points each)
1	/10	/8	/10
2	/10	/8	/10
3	/10	/8	/10
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		