

SYLLABUS: LINKED SECTIONS OF PSYC 300-003/301-003
Fall, 2006
James F. Sanford

Date	Topic	Assignment
Aug 28-30	Intro/scientific method, scales of measurement	S-1, R-1, 2
Aug 31-Sep 5	Frequency distributions, percentiles	S-2
	Note: Classes do not meet on Labor Day, September 4.	Enjoy!
Sep 6-11	Ethical issues	R-3
Sep 12	First Exam (Last day to add classes)	
Sep 13-14	Central tendency	S-3
Sep 18-20	Variability	S-4
Sep 21-25	z-scores, normal distribution	S-5
Sep 26	Second Exam	
Sep 27-28	Observational research	R-4
Sep 29	Last day to drop classes	
Oct 2-3	Survey research	R-5
Oct 4-11	Correlation/regression	S-16, 17
	Note: Classes do not meet on Columbus Day, October 9. Monday classes meet on Tuesday, October 10	Enjoy!
Oct 12-16	Unobtrusive measures	R-6
Oct 17	Third Exam	
Oct 18-19	Probability	S-6
Oct 23-24	Sampling distributions	S-7
Oct 25-30	Intro to hypothesis testing	S-8
Oct 31	Fourth Exam	
Nov 1-2	Independent groups designs	R-7
Nov 6-8	Independent Measures <i>t</i> -tests/ANOVA	S-9, 10, 13
Nov 9-13	Repeated measures designs	R-8
Nov 14-15	Repeated-/Related measures <i>t</i> -test/ANOVA	S-11, 14
Nov 16-21	Complex designs	R-9
	Note: Classes do not meet for Thanksgiving holiday, Nov. 22-23.	Enjoy!
Nov 27-28	Two-factor ANOVA	S-15
Nov 29	Fifth Exam	
Nov 30-Dec 4	Estimation/ Single-case and small <i>n</i> designs	S-12, R-10
Dec 5-7	Quasi-experimental designs, non-parametric statistics	R-11, S-17-19
Dec 12 or 18 (7:30-10:15 A.M.)	Final Exam (Donuts will be provided!)	

Assignment Key and Texts:

S (Statistics): Gravetter, G. A., & Wallnau, L.B. (2007). *Statistics for the behavioral sciences* (7th ed.). Belmont, CA: Thomson.

R (Research Methods): Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2006). *Research methods in psychology* (7th ed.). New York: McGraw-Hill.

Required for lab: (1) Dunn, S. D. (2004). *A short guide to writing about psychology*. New York: Pearson.

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

Recommended for lab: *Publication Manual of the American Psychological Association* (5th ed., 2001). Washington, D.C.: American Psychological Association.

About the Linked Courses. PSYC 300 and 301 present introductions to statistics and research methods commonly used by psychologists. All psychology students must have a good grasp of statistics and methods to understand how psychologists investigate and understand topics in human behavior, cognition, clinical psychology, etc. Future graduate students need to be especially cognizant of this subject matter because research is an essential part of graduate training. By completion of these linked courses, you should have a good grasp of the major methodologies used in psychology, their major advantages and drawbacks, and the statistics used to support each of them. You should be able to select a research problem, operationalize the concepts, choose the appropriate design, complete the study, analyze the data, and draw appropriate conclusions based on your statistical analysis.

As you can see by the schedule above, the courses will be presented in true linked fashion. Assignments have been made and topics are scheduled by their content rather than by whether the material fits appropriately into PSYC 300 or 301. Each exam will cover both the material from 300 and 301 discussed and assigned in that unit (the final exam will be comprehensive; see below), and a common final grade will be assigned for both courses. Additionally, a single course evaluation will be administered near the end of the semester.

Exams. The six in-class exams will consist of multiple choice questions, construction of figures and tables, identification questions, and short essays (a maximum of 3-4 paragraphs). Theory, assumptions, applications, etc. will be emphasized. Little or no computation will be required, although you may use a calculator if you wish. Use of books and notes will not be allowed. You will not have to memorize formulas; all necessary formulas will be provided at each exam. The first five exams will cover only material from the just-completed unit, although material in statistics and research methods builds on earlier information, so knowledge of concepts studied in prior units is important. The final exam will emphasize material from the last unit, but it will also include some review questions and integrative essays.

Laboratories. You must be enrolled in one of the PSYC 300 labs associated with section 003 (PSYC 205 or 206) and one associated with PSYC 301-003 (205 or 206). These are assigned back-to-back on Friday mornings in the same classroom, allowing a four-hour block of time. However, in general, labs will meet for only about three hours. Labs are designed to use statistics we have covered in class and to provide hands-on use of the research methods already covered. New statistical and methodological concepts will normally not be introduced. A lab syllabus will be distributed during the first or second lab meeting.

The lab instructor is Richard Hermida. He is responsible for all aspects of the laboratory, including grading of quizzes and in-lab exercises.

Writing/homework Assignments. In addition to lab assignments, you will be responsible for several writing and homework assignments during the semester. The assignments will generally take the form of writing "Letters to Elvis" and answering challenge questions at the end of the chapters in the Shaughnessy et al. text. For each "Letter to Elvis" assignment, you are required to

turn in a letter you have written to a relative; friend (real or imaginary); your congressperson; one of the Hiltons, Clintons or Bushes; yourself; Elvis, or anyone else that describes **an application of** at least three concepts covered since the last letter. The purpose of these assignments is to help you understand course material by explaining it to another person. One of the best ways to learn something is to teach it to someone else, after all! I will return the letters with comments within a week. Letters must be handed in in hard copy **at the beginning** of the class on the dates they are due. If you are unable to attend one of these classes, you may e-mail it to be before that time.

Late papers will not be accepted. Each letter will earn 1/2% or 0% (unacceptable, not submitted, or submitted late) toward the final grade. Please note that you will not be graded down for minor errors; it is better to try to explain more complex concepts and come up a little short than to discuss only simple concepts that you already fully understand.

Grading of Challenge Question assignments will be the same as that of letter-writing assignments. On the days when challenge questions are due, we may discuss some of your answers before you turn them in. Like the letters, they are due **at the beginning** of the class period.

For both types of assignments, collaboration with other people in the class is allowed (and encouraged). Group discussion of these assignments may help some of you to better understand statistics and methods concepts. However, the writing that you submit must be your own.

Extra Credit. You may earn up to two points (2%) toward your final grade in each course by serving as a participant in a maximum of two hours of research through the Psychology Department subject pool (one hour per point).

Grades. Grades will be computed as follows: first four exams, 10% each; fifth and final exams, 12 1/2% each; lab, 30%; assignments and class participation, 5%.

Participation implies class attendance and active involvement in class discussion. In the case of borderline grades, consistency and direction of change may be taken into account.

Possible grades include A+ (98% or better), A (92-97%), A- (90-91%), B+ (88-89%), B (82-87%), B- (80-81%), C+ (78-79%), C (70-77%), D (60-69%), and F (less than 60%). All percentages above are approximate. I normally do not award grades of C-.

Writing and Technology. PSYC 301 is an approved writing intensive course. This means that in the laboratory you will have multiple writing assignments that build upon one another and that the total amount of writing equals or exceeds GMU's specified minimum. The lab will include an introduction to Statistical Package for the Social Sciences (SPSS) and on-line searches using PsycINFO, and other electronic databases, meeting part of the technology-across the curriculum requirement. Most extra-class communications will be completed by e-mail.

Office hours, et al.

Office hours: 10:30-11:45 T, 1-2 Th

Office location: 2046 David King Hall

Telephone number: 703-993-1351

E-mail address: jsanford@gmu.edu I may also reply to you from home using jsan52@aol.com. However, please write to me using my GMU address. I check that far more frequently than the AOL account. All GMU messages are automatically forwarded to my home account.

Cell phones et al. Please turn off or turn to vibrate mode all cell phones, pagers, etc. during class. If a cell phone rings during class, we will assume that it is the pizza delivery person confirming your pizza order for the rest of the class.

Psychology in the Community. You may earn one (1) hour of additional credit by enrolling in Psychology in the Community Laboratory (PSYC 328) and completing service learning by working in a research setting with psychology faculty or other social/behavioral scientists. To be eligible for this credit, work must include statistical applications, research design, etc. A maximum of six (6) hours of credit may be applied toward a psychology major from PSYC 327, 328, 421, 422, 548, and 549. Additional hours may be applied toward general elective credit, however. I must approve your service learning site and the activities that you are applying toward PSYC 328 credit.

E-mail list. Course instructors can now access student e-mail addresses automatically through the registrar's Website. I will use these addresses for most communication, distribution of handouts, etc. Thus, please check your GMU account frequently. You are also invited to use it for class-related functions (e.g., establishing times for review sessions). Please use it only for class-related purposes, however. To distribute information to other class members, simply click on "reply all" to my latest class e-mail. Please use the most recent communication because the class roster may change, particularly early in the semester.

George Mason University has established a policy that precludes sending any personal information (e.g., grades) to students using any non-GMU e-mail account. This policy was enacted to ensure students' privacy and protection. Therefore, it is especially important that you use your GMU account regularly and that you delete old messages frequently to ensure that there is sufficient space in your in-box for new communications.

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

Honor Code. All provisions of the GMU Honor Code will be followed in this class. Books, notes, personal interaction, etc. will not be allowed during exams. All writing assignments must be completed individually (although, as described above, student discussion is allowed and encouraged). The Honor Code as it applies to labs will be discussed during an early lab period.

And finally.... The material covered in these linked classes is what sets psychology apart as a behavioral science. When Wilhelm Wundt established the first psychology laboratory in Germany more than 100 years ago, psychology became recognized as a scientific discipline. Since then, psychologists have always emphasized the scientific method, whether in basic research or application (e.g., the "science-practitioner model" in clinical psychology). Neither statistics nor research methodology is difficult to understand. However, as in math and foreign language courses, material covered later in the courses is based on material presented earlier. Thus, it is important that you have a basic understanding of the concepts as we proceed through the semester. Be sure to avail yourselves of class and lab times, office hours, writing assignments, etc., to help you understand the material. Also, please make a best friend or three among classmates and study together, questioning each other about concepts. Good luck, and enjoy the linked classes!