

PSYC 300 (Section 004) Analysis and Interpretation of Psychological Data

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OFFICE HOURS Tuesdays, 5:00 – 6:00 PM or by appointment

MEETINGS Lecture: IN 205, Tuesdays/Thursdays 12:00 - 1:15 PM
Labs: #207 (IN 330, Fridays 8:30 – 10:20 AM), #208 (IN 330, Fridays 10:30 AM - 12:20 PM)

DEADLINES February 7 is the last day to add this class; February 24 is the last day to drop this class.

REQUIRED TEXT

Gravetter, F. J., & Wallnau, L. B. (2004). *Statistics for the behavioral sciences* (6th ed). Belmont, CA: Wadsworth.

COURSE GOALS

This course introduces students to the use of quantitative methods to investigate psychological phenomena. By the end of the semester, you should be able to compute many of the most widely used statistics. More importantly, you should know when to use specific statistics, what a given result implies, and whether others' interpretations of statistical findings are accurate and fair.

CLASS FORMAT

Class meetings will include lectures, discussions, and small group activities. A description of the weekly labs will be included in the lab syllabus, which will be distributed in your first lab meeting.

TENTATIVE SCHEDULE

Students are responsible for being aware of any changes in this schedule announced in class. See lab syllabus for Information about other types of assignments (e.g., homework, in class, SPSS).

Week	Lecture Topic	Reading	Lab Exams
1/23	Role of statistics in research; variables and measurement; notation	GW 1	
1/30	Frequency distributions of individual scores: Getting a feel for the data	GW 2	
2/6	Measures of central tendency: Where's da middle?	GW 3	
2/13	Measures of variability: It's all about diversity	GW 4	
2/20	Transforming and standardizing individual scores; the normal curve	GW 5-6	Exam 1 (GW 1-4)
2/27	Distributions of sample means; introduction to confidence intervals	GW 7	
3/6	Using the <i>t</i> -score to create confidence intervals for a single mean	GW 9.1-9.2	
3/13	SPRING BREAK!!!		
3/20	Hypothesis testing 101: one sample problems and basic concepts	GW 8, GW 9.3	
3/27	Effect size; hypothesis testing for two sample problems	GW 10, GW 11	Exam 2 (GW 5-9)
4/3	One-factor ANOVA (independent measures) and posthoc tests	GW 13	
4/10	Extensions of ANOVA: Repeated measures and two-factor ANOVA	GW 14.1, GW 15	
4/17	Nonparametric tests for nominal and ordinal data	GW 17, GW 19.1	Exam 3 (GW 10-11, 13-15)
4/24	Correlation coefficients; the odds ratio; simple linear regression	GW 16	
5/1	Multiple regression; catch up		
	Comprehensive Final Exam: IN 205, 10:30 AM – 1:15 PM, Tuesday, May 16		

USE OF TECHNOLOGY

The lab section for this course 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 will be used to post grades, course materials, and email messages; thus, students should check their WebCT pages regularly.

ATTENDANCE

Students are expected to attend all scheduled class and lab meetings. Regular attendance is important for good comprehension of the material in this course. Students are responsible for all material and announcements presented in class and lab, including announcements about changes in the schedule and assignments.

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.

EXAMS

Three regular exams and a comprehensive final exam will be given. Exams will include a variety of question formats, including multiple choice, statistical problem solving, and short essay questions. Please carefully read the policy for making up missed exams (see below), as no exceptions to the policy will be granted. The three regular exams will be administered during scheduled lab meetings. For all exams, students may use the course textbook, their personal notes from class, and a calculator. Exam study guides will be posted on WebCT. It may be useful to type or handwrite succinct notes for each item in the study guides.

HOMEWORK AND OTHER ASSIGNMENTS

Formal assignments will be given in lab throughout the semester to help students deepen their understanding of course material. Information about these assignments, including grading procedures and policies, will be given in the lab syllabus.

EXTRA CREDIT

You may earn extra credit points in two ways: (1) Unscheduled "pop quizzes" will be given at the very beginning of four classes during the semester. Taken together, these quizzes will allow you to earn up to ten extra credit points. (2) You may earn extra credit points by participating in up to 3 hours of research. You will earn one extra credit point for each hour of participation. You can access the website for research at <https://experimatrix2.com/GMU/>. At this website you can view all research opportunities and sign up for them. If you do not wish to participate in research, you can also sign up for the alternative lecture options.

EVALUATION AND GRADES

The final grade will be based on a total of 400 points as follows:

Lab assignments	80 points (= 20% of final grade)
Exams 1-3 (@ 72 points each)	216 points (= 3 x 18% = 54% of final grade)
Final exam (cumulative)	104 points (= 26% of final grade)

A grade of B denotes work that surpasses basic course objectives and is considered a mark of distinction. Work exceeding this standard receives an A. Grades will be assigned according to the following points (all decimal points will be "rounded down"):

A+ = 388-400 (97-100%)	A = 372-387 (93-96%)	A- = 360-371 (90-92%)
B+ = 348-359 (87-89%)	B = 332-347 (83-86%)	B- = 320-331 (80-82%)
C+ = 308-319 (77-79%)	C = 292-307 (73-76%)	C- = 280-291 (70-72%)
D = 240-279 (60-69%)	F = below 240 (below 60%)	

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.

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.

CLASSROOM CONTACTS

Please write down the names, email addresses, and/or phone numbers of at least two classmates, in case you miss class and need notes or other forms of assistance.

Name: _____ Phone: _____

Email: _____

Name: _____ Phone: _____

Email: _____