

**Statistics in Psychology**  
**Psychology 300-005**  
**Fall 2021**

Class:	Tuesdays & Thursdays 1:30-2:45pm	Nguyen Engineering Building 1110
Instructor:	Jeff Stuewig ( <a href="mailto:jstuewig@gmu.edu">jstuewig@gmu.edu</a> )	Office: 2007 David King
Office Hrs:	M & T 12:00-1:00, or by appt	
Labs:	F 8:30-10:20am Innovation 317	F 10:30-12:20pm Innovation 203
Teaching Assistant:	Gracie Kelly ( <a href="mailto:akelly32@gmu.edu">akelly32@gmu.edu</a> )	Office Virtual
Office Hrs:	W 2:00pm-3:00pm or by appt	Phone:

**SAFE RETURN TO CAMPUS**

- All students taking courses with a face-to-face component are required to follow the university's public health and safety precautions and procedures outlined on the university Safe Return to Campus webpage (<https://www2.gmu.edu/safe-return-campus>). Similarly, all students in face-to-face and hybrid courses must also complete the Mason COVID Health Check daily, seven days a week. The COVID Health Check system uses a color code system and **students will receive either a Green, Yellow, or Red email response**. Only students who receive a **“green”** notification are permitted to attend courses with a face-to-face component. **If you suspect that you are sick or have been directed to self-isolate, please quarantine or get tested. Faculty are allowed to ask you to show them that you have received a Green email and are thereby permitted to be in class.**
- Students are required to follow Mason's current policy about facemask wearing. As of August 11, 2021, all community members are required to wear a facemask in all indoor settings, including classrooms. An appropriate **facemask must cover your nose and mouth at all times** in our classroom. If this policy changes, you will be informed; however, students who prefer to wear masks either temporarily or consistently will always be welcome in the classroom.

**Official Communications via GMU E-mail:** Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their mason e-mail account, and are **required to activate that account and check it regularly**.

**Description of Course:**

We will cover many of the basic descriptive and inferential statistics that are used in the field of psychology. This is a 4-credit course, which includes both a lecture section and a lab section. During the lecture sessions, the emphasis will be on understanding and applying statistical tests to data, as well as on mathematical derivations (bring a calculator that can calculate square roots ( $\sqrt{\quad}$ ) and exponents ( $x^2$ )). During your lab sessions, you will review and practice the topic(s) from that week's lectures; you will also get hands-on experience using SPSS (Statistical Package for the Social Sciences) to analyze data.

Throughout the year, you will gain hands-on experience through a number of different projects, learning how to draw statistical and substantive conclusions from the results of various analyses. You will often be asked to prepare a written summary of results using APA style, increasing your ability to communicate substantive results to professional audiences.

## **Course Requirements:**

The course requirements include: (1) attendance at class and laboratory sessions; (2) a series of computer assignments and brief write-ups of the results in APA format; (3) six popquizzes, of which one can be dropped; (4) three “midterm” exams, of which one can be dropped; (5) a final exam; (6) research participation.

There will be no make-ups for any midterm exams or quizzes. If extenuating circumstances prevent you from taking a midterm during the scheduled time, then this is the exam/quiz you drop. Subsequent missed exams/quizzes will receive a zero.

Grades will be determined as follows:

- 40% There will be three midterms, of which the two highest will count, each 20%. Due to the nature of the material, each midterm exam is cumulative, although it will focus primarily on the material covered since the last exam.
- 20% Final Exam. The final exam will evaluate the mastery of materials covered throughout the course.
- 25% Laboratory participation, including evaluation of the assigned projects.
- 10% There will be 6 popquizzes throughout the semester given during the first 15 minutes of class. If you arrive to class on time, you will have the full 15 minutes. If you are late, you will have less time to complete the quizzes. You are allowed to drop one of your six quiz grades. There will be no makeup quizzes.
- 5% Research participation. Each student is **required** to accumulate three hours of credit for participation as a subject in psychology experiments. Alternate experiences may be substituted. **This is a course requirement, as much as the exams.** You can sign up for a Sona Systems account by going to the website (<http://gmu.sona-systems.com/>) and then clicking on the “Request an account here” link under New Participant? The actual link is: [http://gmu.sona-systems.com/student\\_new\\_user.asp](http://gmu.sona-systems.com/student_new_user.asp)

From here you can enter in your name, email address, and course to which you will direct credit (PSYC300-005). I suggest visiting this site at the beginning of the semester to learn its features. Plan to complete this requirement early in the semester, as there are often not enough slots for the many of people who try to wait until the last moment.

Final grades will be assigned according to the following percentages:

A = 93-100	A- = 90-92	B+ = 87-89				
B = 83-86	B- = 80-82	C+ = 77-79	C = 73-76	C- = 70-72	D+ = 67-69	D = 63-66
D- = 60-62	F = below 60					

## **Lab Requirements**

Attendance and participation will account for 25% of the total lab grade. Students are responsible for all materials and assignments covered in the lab. The lab instructor will give you more details in the lab.

## **Honor Code:**

George Mason University has an Honor Code, which requires all members of this community to maintain the highest standards of academic honesty and integrity. Cheating, plagiarism, lying, and stealing are all prohibited. It is every student’s responsibility to familiarize himself or herself with the Honor Code. The Honor Code is available at:

<https://oai.gmu.edu/mason-honor-code/>

All violations of the Honor Code will be reported to the Honor Committee. The instructor for this course reserves the right to enter a failing grade to any student found guilty of an honor code violation.

Students may not reproduce (including uploading to the Internet) any portion of the exams or quizzes. Students who attempt to photograph or in any way capture information about the exams/quizzes for others’ use will be reported for an honor violation.

## **Title IX Statement:**

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking: As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student

Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing [titleix@gmu.edu](mailto:titleix@gmu.edu).

**Class Cancellation Policy:**

This class will entail frequent use of email. Please check your email regularly. If the university is closed, we will not meet. If class is cancelled for another reason, I will notify you by email.

**Classroom needs:**

Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students by upholding the laws that ensure equal treatment of people with disabilities. If you are seeking accommodations for this class, please first visit <https://ds.gmu.edu/> for detailed information about the Disability Services registration process. Then please discuss your approved accommodations with me. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: [ods@gmu.edu](mailto:ods@gmu.edu) | Phone: (703) 993-2474. All academic accommodations **must** be arranged through that office.

Life is stressful and we all need a little support sometimes. Students are encouraged to contact Counseling & Psychological Services (3129 Student Union Building I, <http://caps.gmu.edu/>) at 993-2380 for assistance with any kind of psychological/life problem or crisis situation.

**Required Texts:**

Please note that the readings listed in the course outline are to be read before class.

Salkind, N. J. & Frey, B. B. (2019). *Statistics for People Who (Think They) Hate Statistics* (7<sup>th</sup> edition). Thousand Oaks, CA: Sage Publications. ISBN: 9781544381855

**Optional Texts and Readings:**

\*Other articles or chapters may be suggested as the semester progresses.

**Tentative Course Outline**

Students are responsible for being aware of **any changes** in this schedule announced in class, lab, or over email.

Last day to **add** classes: August 30, 2021

Last day to **drop** classes with no tuition penalty: September 7, 2021

Last day to **drop** classes with 50% tuition penalty: September 14, 2021

**Final drop** deadline: September 27, 2021

<b>Date</b>	<b>Lecture Topics</b>	<b>Assigned reading</b>
8/24	Course Overview & Introduction	
8/26	Introduction to Variables	Chapter 1
8/31	Measures of Central Tendency	Chapter 2
9/2	Measures of Variability	Chapter 3
9/7	Correlations	Chapter 5
9/9	Correlations	
9/14	Reliability & Validity	Chapter 6
9/16	Review	

9/21	<b>EXAM 1</b>	
9/23	Hypothesis Testing and z scores	Chapter 7
9/28	Hypothesis Testing and z scores	Chapter 8
9/30	Statistical Significance and z tests	Chapter 9
10/5	One sample t tests	Chapter 10
10/7	Independent samples t-tests	Chapter 11
10/12	<b>Fall Break</b>	
10/14	Dependent samples t-tests	Chapter 12
10/19	Exam Review	
10/21	<b>EXAM 2</b>	
10/26	Analysis of Variance	Chapter 13
10/28	Analysis of Variance	
11/2	Factorial Analysis of Variance	Chapter 14
11/4	Factorial Analysis of Variance	
11/9	Exam Review	
11/11	<b>EXAM 3</b>	
11/16	Linear Regression	Chapter 16
11/18	Linear Regression	
11/23	Non-parametric tests	Chapter 17
11/25	THANKSGIVING BREAK	
11/30	Interpreting Results or TBD	
12/2	Exam Review	
Final	<b>December 14, 1:30pm (For 005 class)</b>	