

Summer 2021
Statistics in Psychology
PSYC 300-C01

This course is entirely 5-week online. There are no required meeting times. Please read this syllabus very carefully to be sure you understand all aspects and requirements of the course.

Professor: Philseok Lee, Ph.D.

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Office hour: If you want to have an office hour. Please send me an email and we can set up an individual office hour.

Lab Instructor: Noushin Jamaatlou - njamaatl@masonlive.gmu.edu

Kevin Loo - kloo@masonlive.gmu.edu

Required Textbook: Statistics for the Behavioral Sciences (3rd edition), Gregory J. Privitera. Thousand Oaks, CA: Sage Publications. ISBN: 978-1506386256

Online support can be found at: <https://edge.sagepub.com/priviterastats3e/student-resources>

It is highly recommended that you use these online student resources, as they provide an excellent overview of the textbook materials.

Course Objectives

Psychology 300 is an introduction to statistics as it applies to psychological research. The emphasis in the lecture will be on understanding and applying statistical tests to psychological data, as well as on mathematical derivations. By completion of the course, you should be able to select appropriate statistics, apply them, and make correct statistical decisions to answer many different questions of interest to psychological researchers.

Course Design

This course is offered online, in an effort to provide a thorough introduction to students who may be unable to travel to campus. The structure of the course is designed such that students are expected to complete individual “modules” to advance through the course materials. You are expected to complete each module in order. Below you will find details with a recommended timeline for completing the course. This is a just recommended timeline, so you can make your own timeline during 5 weeks. **This class is VERY intense 5-week course, thus it is recommended that you take your time to go through the material as you plan.**

Each week, we will cover **two or three chapters** in the textbook. These readings are required and essential to the course. Two or three lectures are posted per week, each one for a given chapter. In addition, a homework assignment is provided for the Lab (see **Lab syllabus for more details**). **The homework assignments are due by 5pm on Saturday of each week.**

The instructor is available by email throughout the entire session. You may email with questions, comments, concerns, etc. Throughout the semester, all emails will be answered within 2 business days – although responses will usually come within 1 business day, please allow 2 business days.

Criteria for evaluation: Grades in this course will be based on 2 components:

1. **Exams (80%):** Five exams will be given. You will have an exam every week. Since this class is a 5-week session, you will have five exams. **Exams must be completed before each deadline.** *Each exam will cover the material for the preceding chapters since the last exam.* Students may not use any course materials (textbook, notes, online resources, etc.) during the exam. The only item you will need is paper for determining the answers, and a calculator. **All exams must be completed in two hours.** To ensure that this time limit is adhered to, **all exams will be timed in Blackboard** – once an exam is begun, **it must be completed within two hours.** Also, exam questions will be randomly selected for each student, so no student will take the same exam. To assist with completing the exam, each exam will come with a formula sheet containing all the formulas that were covered during the preceding portion of the class. Please note that, just because a formula is on this sheet does **not** mean that it is necessarily to be used to answer a question.

In addition, **your lowest exam score from the five exams will be dropped. Thus, only four exam scores will be considered for your final grade.**

Lectures: As outlined above, two or three lectures are presented as videos for each week, accessible via Blackboard. In the course schedule below, you will see the recommended dates on which each lecture should be viewed.

2. **Lab Assignment/Participation (20%):** The lab portion of this course accounts for 20% of your grade. Please see the lab syllabus for details. Each week there is a homework assignment that will be due to the Lab instructor. You will be expected to download the homework assignment from the blackboard, provide the answers, and submit it to the blackboard. The lab instructor is available via e-mail or zoom as well for any questions about these assignments.

	Maximum Points (%)
Four Exams: Each exam is worth 100 points. Each exam will have 25 multiple choice questions. Each question is 4 points. You have to complete the exam within 2 hours.	400 (80%)
Lab Assignments	100 (20%)
Total Points	500 (100%)

Final course grades will be determined using the scale below:

A+ 98-100%	A 93-97.9%	A- 90-92.9%	B+ 87-89.9%
B 83-86.9%	B- 80-82.9%	C+ 77-79.9%	C 73-76.9%
C- 70-72.9%	D+ 67-69.9%	D 63-66.9%	D- 60-62.9%
F Below 60%			

General Policy

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. All violations of the Honor Code will be reported to the Honor Committee. See honorcode.gmu.edu for detailed information.

Disability Statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Services (DRS) at [703-993-2474](tel:703-993-2474). All academic accommodations must be arranged through that office. Please see me as soon as possible about this, as I will not adjust grades for exams after they have been given.

Make-up policy: Make-up exams will only be given if exceptional circumstances are claimed AND substantiated. I must see proof of what you are claiming to verify that it is true.

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. If class has to be canceled, you will be informed via e-mail. Information will be provided in the e-mail about making up the missed class.

Technology: For this class, the only requirement is that you bring a calculator with you. Powerful graphing calculators are not needed – all you will require is a calculator that can calculate square roots ($\sqrt{\quad}$) and exponents (x^2). Please note that calculators are necessary for completing the exams.

Online Course Resources: This course will be run through Blackboard. **It is extremely important to access Blackboard through the MyMason Portal – please follow these instructions:**

1. Go to <http://mymasonportal.gmu.edu/>
2. Login using your Mason ID and password (the same one you use for your GMU email account)
3. Click on the ‘Courses’ tab (toward the top right of the screen)
4. Go to the list of courses entitled “Course List” (in the **middle** of the screen)
5. Click on the link for Psyc 300-C01

The class website in Blackboard will contain access to videos, assignments, the discussion board, exams, and other course resources. Nearly all course activities will take place in Blackboard, so it is important to login and begin to explore the various components in the first days of the semester.

Recommended Course Schedule

This is a recommended timeline for completing the course.

Week	Date	Lecture topics/Activities	Assigned reading
1	6/21-6/23	Introduction to Statistics; Summarizing Data: Central Tendency	Chapter 1 Chapter 3
	6/24-6/25	Summarizing Data: Variability	Chapter 4
	6/26 Saturday	Test 1: Test 1 opens at 7am 6/26 and close at 11:59 pm 6/27 .	
2	6/28-6/30	Normal Distributions and the Central Limit Theorem Sampling Distributions	Chapter 6 Chapter 7
	7/1-7/2	Hypothesis Testing	Chapter 8
	7/3 Saturday	Test 2: Test 2 opens at 7am 7/3 and close at 11:59 pm 7/4 .	
3	7/5-7/7	Testing the Difference of Group Means	Chapter 9
	7/8-7/9	Testing the Difference of Condition Means	Chapter 10
	7/10 Saturday	Test 3: Test 3 opens at 7am 7/10 and close at 11:59 pm 7/11 .	
4	7/12-7/13	Analysis of Variance Between Subjects	Chapter 12
	7/14-7/16	Analysis of Variance Within Subjects Analysis of Variance: Factorial	Chapter 13 Chapter 14
	7/17 Saturday	Test 4: Test 4 opens at 7am 7/17 and close at 11:59 pm 7/18 .	
5	7/19-20	Correlations	Chapter 15
	7/21-22	Linear Regression and Multiple Regression	Chapter 16
	7/23 Frdiay	Test 5: Test 5 opens at 7am 7/23 and close at 11:59 pm 7/24.	

*** Notice

Test must be completed before the deadline (You will not be able to take test after deadline). You will have 25 multiple choice questions and each question is worth 4 points. Test must be completed in two hours. To ensure that this time limit is adhered to, test will be timed in Blackboard – once a test is begun, it must be completed within two hours. Once started, test must be completed in one sitting. Test will save and submit automatically when time expires.