Statistics in Psychology
PSYC 300-003
Spring 2023

Professor: Philseok Lee, Ph.D.
Classroom: Thompson Hall 2022
Time*:* Tuesday and Thursday 10:30 am-11:45 am

Office Hours*:* Wednesdays 9:00 am - 10:15 am or by appointment (Zoom)
Office*:* 3056 David King Hall
Email: plee27@gmu.edu

Lab: TBA
Lab Instructor: Joshua Stein (jstein23@gmu.edu)
                   Madeline Wonders (mwonders@gmu.edu)

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

However, it is ok to use old version.

Online support can be found at: **https://edge.sagepub.com/priviterastats3e/student-resources**
It is recommended that you use these online student resources, as they provide an excellent overview of the textbook materials. Additional support can be found by viewing the excellent resource available at **http://students.brown.edu/seeing-theory**/. Here, you will find visual examples of many of the concepts we will be covering in class. I highly encourage all of you to take a look.

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.

Criteria for evaluation:
   Grades in this course will be based on 5 components:

Total: 700 points
  1. **Exam (300 points)**
     Four exams will be given (3 exams + 1 final exam). **You can DROP one exam (with lowest score) out of the first three exams. Each exam is worth 100 points. Thus, total is 300 points (2 exams + 1 final exam).** The exams will be taken during your lab section. The final exam will be cumulative. You are responsible for all material covered in assigned readings (Textbook) and lecture/laboratory sections.

2. **Attendance and Participation (70 points)**
   Attendance/class participation is worth 70 points of your total score. Any absences without approval from the instructor will result in a deduction from your grade. For every class, it is mandatory to submit the attendance sheet.

3. **Quiz (100 points)**
   Quizzes will account for 100 points of your final grade. Quizzes will be administered through blackboard. The format of the quizzes will consists of 10 multiple-choice questions (within 20 minutes). It is important to note that this is an independent assignment and students are prohibited from discussing the quiz with their peers.

4. **Lab (200 points)**
   The lab portion of this course is worth 200 points of your total score. **Please see the lab syllabus for details.** Each week therewill be a homework assignment. **Late assignments will NOT be accepted** (Official documentation of your situation should be provided for any exceptions). The lab instructor is available via e-mail as well for any questions about these assignments.

5. **Research Participation (30 points)**
   Research participation is worth 30 points of your total score. Each student is required to complete three credits as a participant in psychology experiments. Alternate experiences may be substituted. You can sign up for a Sona Systems account by using this link: http://gmu.sona-systems.com/ and then clicking on the "Request an account here" link under New Participant. Students will need to create a new participant account for the new semester. Students also have an alternative option to complete alternative written assignments (Check Week1-1 folder on blackboard)

	Maximum Points (%)
Exams	300 (42.9%)
Quiz	100 (14.3%)
Attendance	70 (10%)
Lab	200 (28.6%)
Research via Sona Systems	30 (4.20%)
Total Points	**700 (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%

<center>**Important Information**</center>

Use of electronic devices in class meetings: Cell phones, pagers, and other communicative devices are not allowed in this class. Please keep them stowed away and out of sight. Laptops or tablets (e.g., iPads) may be permitted for the purpose of taking notes only, engaging in activities not related to the course (e.g., gaming, email, chat, etc.) will result in a significant deduction in your participation grade.

Technology expectations: All students are expected to maintain and regularly access their Mason e-mail accounts. If you are having your Mason mail forwarded to another account, please ensure that your Mason account does not exceed the assigned limit, causing mail to bounce back to the sender.

Disability accommodations: If you are a student with a disability and you need academic accommodations, please contact me early in the semester. If you have not already done so, contact the Office of Disability Services (ODS) at 703-993-2474. All academic accommodations must be arranged through that office. Please keep in mind that it might not be possible to grant last-minute requests for accommodations, so it is important to make all arrangements well before the date when the accommodation is needed.

Academic Integrity: Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. This course is a "learning community." Academic integrity in a learning community simply means that when you are responsible for a task, you will perform that task; when you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

Enrollment: Every student is responsible for verifying correct enrollment. Graded work will not be returned to students who are not officially enrolled.

Class Cancellation Policy: Should the university shut down for any reason (e.g., snow day; catastrophic power failure), the instructor will send out a class-wide email to confirm whether or not class will be held. Should class be canceled, any revisions to the syllabus and any pertinent assignments will be discussed both in class and through email. *Note: should class be canceled, assignments due during the canceled class still remain due and are expected to be submitted electronically through Blackboard. Late submissions will not be accepted.*

Disclaimer: The instructor reserves the right to adjust the syllabus and its content to improve student learning. Any changes will be announced orally and in writing.

Important Dates
Please check Spring 2023 – Drop / Withdrawal Deadline Changes from this link
https://registrar.gmu.edu/calendars/spring_2023/

Last day to add a class: January 30
Last day to drop (with 100% tuition refund): February 6
Selective withdrawal period: February 28 – April 3
Last day of classes: May 6
Reading day(s): May 8 – May 9
Final exam period: May 10 –May 17

Tentative Course Schedule

Below is a tentative schedule for the semester with corresponding textbook chapters. The topics and due dates listed in this syllabus are tentative and therefore subject to changes made by the professor.

Week	Date	Topic	Chapter	Quiz	EXAM
1	24-Jan	Introduction to the Course			
	26-Jan	Summarizing Data: Frequency and Visualization	Chapters 1 and 2		
2	31-Jan	Summarizing Data: Frequency and Visualization	Chapters 1 and 2		
	2-Feb	Summarizing Data: Central Tendency	Chapter 3		
	7-Feb	Summarizing Data: Variability	Chapter 4	**Quiz1**	
3	9-Feb	Probability, Normal Distributions, and z Scores	Chapter 6		
4	14-Feb	Probability, Normal Distributions, and z Scores	Chapter 6		
	16-Feb	Probability and Sampling Distributions	Chapter 7		
5	21-Feb	Probability and Sampling Distributions	Chapter 7	**Quiz2**	
	23-Feb	Hypothesis Testing: Significance, Effect Size, and Power	Chapter 8		**EXAM1 (2/24): CH1-CH7**
	28-Feb	Hypothesis Testing: Significance, Effect Size, and Power	Chapter 8		
6	2-Mar	Hypothesis Testing: Significance, Effect Size, and Power	Chapter 8	**Quiz3**	
	7-Mar	Testing Means: One-Sample and Two-Independent-Sample t-Test	Chapter 9		
7	9-Mar	Testing Means: One-Sample and Two-Independent-Sample t-Test	Chapter 9	**Quiz4**	
	14-Mar	**Spring Break (No Class)**			
8	16-Mar	**Spring Break (No Class)**			
	21-Mar	Testing Means: The Related-Samples t-Test	Chapter 10		
9	23-Mar	Testing Means: The Related-Samples t-Test	Chapter 10	**Quiz5**	**EXAM2 (3/24): CH8-CH10**
	28-Mar	Analysis of Variance: One-Way Between-Subjects Design	Chapter 12		
10	30-Mar	Analysis of Variance: One-Way Between-Subjects Design	Chapter 12	**Quiz6**	
	4-Apr	Analysis of Variance: One-Way Within-Subjects (Repeated-Measures) Design	Chapter 13		
11	6-Apr	Analysis of Variance: One-Way Within-Subjects (Repeated-Measures) Design	Chapter 13	**Quiz7**	
	11-Apr	Analysis of Variance: Two-Way Between-Subjects Factorial Design	Chapter 14		
12	13-Apr	Analysis of Variance: Two-Way Between-Subjects Factorial Design	Chapter 14	**Quiz8**	
13	18-Apr	Correlations	Chapter 15		

					EXAM3 (4/21): CH12-CH14
	20-Apr	**No Class (Conference)**			
14	25-Apr	Correlations	Chapter 15	**Quiz9**	
	27-Apr	Linear Regression and Multiple Regression	Chapter 16		
15	2-May	Linear Regression and Multiple Regression	Chapter 16	**Quiz10**	
	4-May	Linear Regression and Multiple Regression	Chapter 16		
	9-May	**Reading Day**			
16	12-May (Friday)	**Cumulative Final Exam: 70% will be from CH15 and 16, 30% will be from CH1-CH14**			**FINAL EXAM**