Spring 2020
Statistics in Psychology
PSYC 300-008

Professor: Philseok Lee, Ph.D.
Class Hours: Tuesday and Thursday 12:00 PM-1:15 PM
Location: Buchanan Hall (formerly Mason Hall) D003

Office Hours: Tuesday and Thursday 11:00 am - 12:00 am or by appointment
Office: 3056 David King Hall
Email: plee27@gmu.edu

Lab: PSYC 300-217: Friday 9:30 AM to 11:20 AM @Innovation Hall 327
PSYC 300-218: Friday 11:30 PM to 1:20 PM @Innovation Hall 326
Lab Instructor: John Anthony Aitken
Email: jaitken4@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. 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:***

1. **Exam (60%)**
   Four exams will be given (3 exams + 1 final exam). Each exam is worth 200 points. You can drop the lowest score from the first three exam. But, you cannot drop the final exam (The final is required). Therefore, total is 600 points [i.e., highest two exams (400) + final exam(200)]. The first three exams will be taken during your lab section, but the final exam will be taken in class. The final exam will be cumulative. You are responsible for all material covered in assigned readings and lecture/laboratory sections.
2. **Attendance (10%)**

Attendance/class participation is worth 100 points of your total score. Attendance will be checked in every class. Everytime you attend class, you will be given 3.85 points. Any absences without approval from the instructor will result in a deduction from your grade.

3. **In-Class Activity/Participation (7%)**
   Throughout the lecture portion of the course, you will have class activities. In-class activity /class participation is worth 70 points of your total score. Participation in lectures is also required. "Participation" is considered active engagement in class – following along with lectures, taking notes, answering questions as necessary, etc. Use of laptops/tablets for nonacademic purposes, use of cell phones, and talking to neighbors are all examples of behaviors that will result in a deduction from your grade.
4. **Lab Assignments (20%)**
   The lab portion of this course is worth 200 points of your total score. Please see the lab syllabus for details. Each week there is a homework assignment that will be due to the Lab instructor. You should print it out and submit it to the lab class on the due date. **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 (3%)**
   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. Each completed research credit will count as 10 points.

	Maximum Points (%)
Exams	600 (60%)
Attendance	100 (10%)
In-Class Activity / Participation	70 (7%)
Lab Assignments	200 (20%)
Research via Sona Systems	30 (3%)
Total Points	1000 (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%			

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	EXAM
	21-Jan	Introduction to the Course		
1	23-Jan	Introduction to Statistics	Chapter 1	
	28-Jan	Central Tendency	Chapter 3	
2	30-Jan	Variability	Chapter 4	
	4-Feb	Probability, Normal Distributions, and z Scores	Chapter 6	
3	6-Feb	Probability, Normal Distributions, and z Scores	Chapter 6	
	11-Feb	Probability and Sampling Distributions	Chapter 7	
4	13-Feb	Probability and Sampling Distributions	Chapter 7	
	18-Feb	Hypothesis Testing: Significance, Effect Size, and Power	Chapter 8	**EXAM1 (2/21): CH1,3,4,6,7**
5	20-Feb	Hypothesis Testing: Significance, Effect Size, and Power	Chapter 8	
	25-Feb	Testing Means: One-Sample and Two-Independent-Sample t-Test	Chapter 9	
6	27-Feb	Testing Means: One-Sample and Two-Independent-Sample t-Test	Chapter 9	
	3-Mar	Testing Means: The Related-Samples t-Test	Chapter 10	
7	5-Mar	Estimation and Confidence Intervals	Chapter 11	
	10-Mar	**Spring Break (No Class)**		
8	12-Mar	**Spring Break (No Class)**		
	17-Mar	Analysis of Variance: One-Way Between-Subjects Design	Chapter 12	**EXAM2 (3/20): CH8-CH11**
9	19-Mar	Analysis of Variance: One-Way Between-Subjects Design	Chapter 12	
	24-Mar	Analysis of Variance: One-Way Within-Subjects (Repeated-Measures) Design	Chapter 13	
10	26-Mar	Analysis of Variance: One-Way Within-Subjects (Repeated-Measures) Design	Chapter 13	
	31-Mar	Analysis of Variance: Two-Way Between-Subjects Factorial Design	Chapter 14	
11	2-Apr	Analysis of Variance: Two-Way Between-Subjects Factorial Design	Chapter 14	
	7-Apr	Correlations	Chapter 15	
12	9-Apr	Correlations	Chapter 15	**EXAM3 (4/10): CH12-CH14**
	14-Apr	Linear Regression and Multiple Regression 1	Chapter 16	
13	16-Apr	Linear Regression and Multiple Regression 2	Chapter 16	
	21-Apr	Linear Regression and Multiple Regression 3	Chapter 16	
14	23-Apr	**No Class (Conference)**		
	28-Apr	Nonparametric Tests	Chapter 17-18	
15	30-Apr	Nonparametric Tests	Chapter 17-18	
	5-May	Reading Day (Final Review - Optional)		
16	7-May	**FINAL EXAM (Cumulative): 70% will be from CH15-18, 30% will be from CH1-CH15**		**FINAL EXAM 10:30 am-1:15pm**

Important Information

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 2020 – Drop / Withdrawal Deadline Changes from this link

https://registrar.gmu.edu/calendars/spring-2020/

Last day to add a class: January 28
Last day to drop with 100% Refund: Feb 5
Last day to drop (Last Day for 50% Refund): Feb 11
Unrestricted Withdrawal Period: Feb 12-Feb 24
Last day of classes: May 4
Final exam period: May 6 – May 13
