Course Title: Statistics for Psychology 1
Course Prefix: PSYC **Course No.: 2613** **Section No. P**

Department of | **Psychology** | **College of** |

Instructor Name:
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Office Hours:
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Course Location:
Class Meeting Days & Times:
Catalog Description: Introduces basic statistical concepts and the relevance of statistics in the behavioral sciences. Explores the fundamentals of descriptive statistics, elementary probability and sampling methods, and distributions. The student will be introduced to computer applications such as Statistical Package for the Social Sciences. Prerequisite: MATH 1113, College Algebra, or above.

Prerequisites: College Algebra
Co-requisites:

Required Text: Gravetter, F. J., & Wallnau, L. B. (2013). *Statistics for the Behavioral Sciences (9th ed.).* Belmont, CA: Wadsworth/Thomson Learning.

Recommended Text/Readings: Gravetter, F. J. & Wallnau, L. B. (2007). *Study Guide to Accompany Statistics for the Behavioral Sciences (7th Edition)*. Belmont, CA: Thompson Wadsworth. [*Optional*]

Access to Learning Resources:
PVAMU Library:
phone: (936) 261-1500;
web: http://www.pvamu.edu/pages/3585.asp
University Bookstore:
phone: (936) 261-1990;
web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d

Course Goals or Overview:

The goals of this course are to organize data, construct frequency distribution tables, and graph data; compute and interpret basic statistical tests; understand articles containing statistical information in an informed and critical manner; ask research questions of statistics, deciding what techniques are consistent with the data used and answer the relevant research questions; understand and demonstrate the application of Statistical Software for Social Sciences (SPSS).

Course Outcomes/Objectives
At the end of this course, the student will…

		Core Curriculum Objective
1	Students will learn how to organize, summarize data, and interpret and communicate the findings of their analyses to others.	Communication
2	Students will develop the ability to compute and interpret descriptive and inferential statistics.	Empirical and Quantitative Skills
3	Students will develop the ability to understand and critically interpret descriptive and inferential statistics found within the essays.	Critical Thinking
4	Students will identify the appropriate statistics for different types of data.	Critical Thinking
5	Students will understand and demonstrate application of Statistical Package for Social Sciences (SPSS) in the development of a project reflecting data driven results that impact communities, nations, and the world.	Social Responsibility, Communication, and Empirical and Quantitative Skills

Course Requirements & Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

1. ***Midterm Exams*** (3 exams worth 45%) – Social responsibility and Critical Thinking skills will be demonstrated by student performance on three interactive problem solving multiple choice exams with their use of Aplia; **e**ach with 50-items. **Specifically, students will identify the appropriate statistics for different types of data.** Each exam will also include an essay question. **Students will demonstrate the ability to understand and critically interpret descriptive and inferential statistics found within their essay as measured by a** common rubric on a 0 to 4 scale.

2. **A*ssignments*** (10%) **–** Empirical and Quantitative Skills will be demonstrated by student performance on seven home-work assignments (see course schedule below). **Students will be evaluated on the ability to compute and interpret descriptive and inferential statistics.**

3. ***Attendance and in class Quizzes*** (10%) – Students are expected to attend class and stay current with assigned work. Failure to do so will have a negative impact on your class performance and grade. Class attendance will be taken daily. Attendance quizzes will account for 10%. Furthermore, you will be dropped a letter grade for any two (2) unexplained absences (i.e., without prior notification, a verifiable excuse, etc).

4. ***Statistical Package for the Social Sciences (SPSS) Project*** (10%) – Social Responsibility, Communication, Critical Thinking and Empirical and Quantitative skills will be assessed within this project. Students will be asked to Carry-out a project, analyzing data and writing up the results to demonstrate **how to organize, summarize data, interpret while communicate their findings both written and orally**. The project emphasis will be on four issues: (1) generating a question that can be answered using statistics, (2) deciding on the appropriate statistical technique to be used, (3) using SPSS to conduct the statistical analyses and (4) writing up and interpreting your results using correct APA style. **In class presentation will include relating how data driven results can impact public policy and or impact communities, nations, and the world.** The project will be assessed using a common rubric on a 0 to 4 scale.

5. ***Final Exam*** (25%) **– Critical thinking, Empirical and Quantitative Skills will also be demonstrated using interactive problem solving multiple choice exams with their use of Aplia on 100-item multiple-choice final exam.** Students will be tested on their ability to compute and interpret descriptive and inferential statistics.

Grading Matrix

Instrument	Value (points or percentages)	Total
Assignments	7 assignments (10%)	10%
Projects	1 SPSS project	10%
Mid Term Exams	3 Mid Term Exams at 15% each	45%
Class Participation/ Attendance	10%	10%
Final Exam	25%	25%
Total:		**100%**

Grade Determination:
A = 90% – 100%
B = 80% – 89%
C = 70% – 79%
D = 60% – 69%
F = < 60%

Course Procedures

Class sessions will consist of lectures on assigned material and activities where you will get "hands on" experience in statistical methods. While I will spend part of our time together supplementing your text through lectures, learning is best accomplished when we share information through open classroom discussions. Therefore, I expect you to come to class having read the assigned pages and having completed the assigned work.

Submission of Assignments:
Assignments are to be turned on www.aplia.com on the due dates.

Formatting Documents:
Microsoft Word is the standard word processing tool used at PVAMU. If you're using other word processors, be sure to use the "save as" tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

Exam Policy
Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).

Professional Organizations and Journals

American Psychological Association, www.apa.org

References

American Psychological Association. (2009). *Publication manual of the American Psychological Association (6th ed.)* Washington DC: Author

Camara, W. J., & Echternacht, G. (2000). *The SAT 1 and high school grades: Utility in predicting success in college* (College Board Report No.RN-10). New York: College Entrance Examination Board. .

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences.* Hilladale, NJ: Lawrence

Erlbaum Associates
Hallam, S., Price, J., & Katsarou, G. (2002). The effects of background music on primary school pupils' task performance. *Educational Studies, 28,* 111-122.
Von Hippel, P. T. (2005). Mean, median, and skew: Correcting a textbook rule. *Journal of Statistics Education, 13.*
Wilkinson, L., & the Task Force on Statistical Inference. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist, 54,* 594-604

COURSE SCHEDULE

Date	Topic	Assignment Due
Week 1 1/14	Introduction to the course	
1/16	Introduction to Statistics: G& W Ch. 1 Frequency Distributions: G&W Ch. 2	
Week 2 1/21	Martin Luther King Holiday	
1/23	Central Tendency: G&W Ch. 3	Assignment # 1 due
Week 3 1/28	Variability: G&W Ch. 4	
1/30	z-scores**:** Freq. Distributions & Descriptives in SPSS—Intro. La	Assignment # 2 due Activity/Lecture
Week 4 2/4	z-scores (cont.) Wrap-up and Review	
2/6	**Exam # 1 (chapters 1 – 5)**	
Week 5 2/11	Probability: G&W Ch. 6	
2/13	Probability/z-score Practice—Intro.	Assignment # 3 due
Week 6 2/18	The Distribution of Sample Means: G&W Ch. 7 Hypothesis Testing: G&W Ch. 8	
2/20	Understanding Hypothesis Testing Logic—Intro.	Assignment # 4 due
Week 7 2/25	One Sample t-test: G&W Ch. 9	
2/27	Independent Samples t-test: G&W Ch. 10 One-sample t-tests in SPSS—Intro. Lab 4	Assignment # 5 due Lecture/Activity
Week 8 (Midterm) 3/4	Wrap-up and Review Independent-Samples t-tests in SPSS—Intro. Lab 5	Lecture/Activity

3/6	**Exam # 2 (Mid-term Exam) (covers chapters 1 – 10)**	Exam # 2
Week 9 3/11& 3/13	*Spring Break—No classes*	
Week 10 3/18	Related Samples t-test	G&W Ch. 11
3/20	Introduction to ANOVA Related Samples t-tests in SPSS –Intro. Lab 6	G&W Ch. 12 Assignment # 6 due Lecture/Activity
Week 11 3/25	ANOVA (cont.)	
3/27	Repeated-Measures ANOVA Single-factor B/tw Subjects ANOVA in SPSS—Intro. Lab 7	G&W Ch. 13 Lecture/Activity
Week 12 4/1	Repeated-Measures ANOVA (cont.) Repeated Measures ANOVA in SPSS—Intro. Lab 8	Lecture/Activity
4/3	**Exam # 3 (covers chapters 11 – 13)**	
Week 13 4/8	Introduction to factorial ANOVA/SPSS	G&W Ch. 14
4/10	Correlation and Regression	G&W Ch. 15 G&W Ch. 16
Week 14 4/15	Chi-Square	Assignment # 7 due G&W Ch. 17
4/17	Chi-Square in SPSS	Lecture/Activity
Week 15 4/22 - 4/24	Statistics for ordinal data	Assignment # 8 due G&W Ch. 18
4/24	Statistics for Ordinal Data in SPSS—Intro. Lab 10	Lecture/Activity
Week 16 4/29	Course Review Day (Last Day of Class)	SPSS Project Due
Wed., 5/1 -5/7	**Exam # 4: FINAL EXAM: Cumulative (Date and time: TBA)**	

University Rules and Procedures

Disability statement (See Student Handbook):
Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):
You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.

2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.

3. Fabrication: use of invented information or falsified research.

4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)
The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook):
Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy:
Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

Student Academic Appeals Process
Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

Technical Considerations for Online and Web-Assist Courses

***Minimum* Hardware and Software Requirements:**

-Pentium with Windows XP or PowerMac with OS 10
-Wireleess or network access
-Internet provider with SLIP or PPP
-8X or greater CD-ROM
-256 MB Ram
-Hard drive with 40MB available space
-15" monitor, 800x600, color or 16 bit
-Sound card w/speakers
-Microphone and recording software
-Keyboard & mouse
-Microsoft Internet Explorer ver. 5.0 /plug-ins, Moczilla Firefox
-Participants should be proficient in the following:
  ·Sending and receiving email
  · Internet searching
  ·Microsoft Word
  ·Acrobat PDF Reader
  ·Windows or Mac O.S.

Netiquette (online etiquette): students are expected to participate in all discussions and virtual classroom chats when directed to do so. Students are to be respectful and courteous to others in the discussions. Foul or abusive language will not be tolerated. When referring to information from books, websites or articles, please use APA standards to reference sources.

Technical Support: Students should call the Prairie View A&M University Helpdesk at 936-261-2525 for technical issues with accessing your online course. The helpdesk is available 24 hours a day/7 days a week. For other technical questions regarding your online course, call the Office of Distance Learning at 936-261-3290 or 936-261-3282

Communication Expectations and Standards:
All emails or discussion postings will receive a response from the instructor within 48 hours.

You can send email anytime that is convenient to you, but I check my email messages continuously during the day throughout the work-week (Monday through Friday). I will respond to email messages during the work-week by the close of business (5:00 pm) on the day following ***my receipt*** of them. Emails that I receive on Friday will be responded to by the close of business on the following Monday.

Submission of Assignments:
Assignments, Papers, Exercises, and Projects will distributed and submitted through your online course. Directions for accessing your online course will be provided. Additional assistance can be obtained from the Office of Distance Learning.

Discussion Requirement:
Because this is an online course, there will be no required face to face meetings on campus. However, we will participate in conversations about the readings, lectures, materials, and other aspects of the course in a true seminar fashion. We will accomplish this by use of the discussion board.

Students are required to log-on to the course website often to participate in discussion. It is strongly advised that you check the discussion area daily to keep abreast of discussions. When a topic is posted, everyone is required to participate. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.