PSY 5105 Teaching Psychology - Fall 2015

The following Syllabus for PSY 2301 will be used as

preparation for Introduction to Statistics (Fall 2015)

PSY 2301.251 – INTRODUCTION TO STATISTICS (MW 11:00-12:20, ELA 118)

Instructor: Dr. Howard Teaching
Assistant: Stephen Ramos **Office:**
Psychology UAC 269

Course Description

The course provides an introduction to statistical methods in behavioral sciences with special emphasis on application to psychological research. The topics covered include descriptive statistics, principles of statistical inference and common hypothesis testing techniques such as z-test, t-tests, analysis of variance, correlation and regression, and selected non-parametric tests.

Required Textbook

Gravetter, F. J. & Wallnau, L. B. *Essentials of statistics for the behavioral sciences* (**8th edition**). **Wadsworth.**

The textbook is very well designed with numerous examples, demonstrations, learning checks and end-of-chapter problems (the solutions to the odd-numbered problems are provided at the end of the book). It is critical for your success in this course that you read the assigned chapters and take a full advantage of learning aids in the textbook.
Calculator
You will need a basic calculator that has square root function. You may <u>NOT</u> use the calculator on your phone during *Tests* or *Final Exam*.

Communicating with Your Instructor & Teaching Assistant

If you have questions related to course content or organization, we encourage you to use the *FORUM* tool on TRACS. Doing so allows other participants of the course to benefit from answers to your questions. Don't hesitate to email one of us directly if your concern is of personal nature.

FORUM and Email Response Time
We will try to answer all questions promptly but may not always be able to do so. Generally, we will respond to your *FORUM* questions and emails within one day of receiving them. Start the assigned readings and practice *Assignments* early each week to *allow enough time for communication before the deadlines.* Please include **PSY 2301.251 in the subject line** of your email so we will know to attend to it quickly.

Course Organization & Requirements

This is a lecture course divided into weekly blocks. Typically, we will cover two topics per week, corresponding to two textbook chapters. The outlines of all lectures will be posted in the *RESOURCES* on TRACS.
Systematic work and practice is essential for succeeding in this course. The practice *Assignments,* due on Mondays by class time, are designed to help you review and better understand the material covered in class lectures. In addition, by completing the *Assignments* you will be preparing for tests that will have similar questions to the questions included in practice *Assignments*. There are four *Tests* scheduled for the semester and the *Final Exam* (see below for more details and the *Class Schedule* for all deadlines).

Assignments (30 points each)
- A practice *Assignment* for each week (11 Assignments total) will be published in the *ASSESSMENTS* on TRACS on Monday before class, and will be due on the following Monday by class time.
- Each will consist of approximately 20 multiple-choice questions and few open-ended questions.
- The questions are not timed and you will not have to complete the assignment in one session (i.e., you can complete part of it, save your work and return later that week to finish).
- In order to receive credit, the *Assignment* must be submitted by the due date on the class schedule, via *ASSESSMETS* on TRACS.
- You may submit partially completed assignments for partial credit.
- There will be no make-up opportunity for missed *Assignments* after the deadline.
- The lowest *Assignment* grade will be dropped from the total point calculation at the end of the semester.

Tests (100 points each)
- There are four Tests scheduled for the course (see the *course schedule* for the dates)
- Each *Test* will consist of approximately 50 multiple-choice and true/false questions.
- Your three highest test scores will count towards your final grade and the fourth test score will be discarded.
- There will be no make-up opportunity for missed tests. If you miss a test, the scores from the other three tests will automatically be counted towards your final grade.

Final Exam (100 points)
- The final exam is mandatory.
- It will cover the last unit of the course material and selected review topics (more details will be provided in class and posted in the *Resources* on TRACS at the end of semester).
- It will consist of approximately 80 multiple-choice and true/false questions.

Attendance
Class attendance is required. Students are expected to attend all class sessions and come to class prepared (i.e., after reading the textbook chapter assigned for the day). While attendance is not formally factored in as a part of your grade, missing lectures will likely impede your ability to

perform well in this course. If a student misses a class, he/she remains responsible for keeping up with the course material.

Grading

The final grade will be based on the total number of points you have earned for the *Assignments*, *Tests* and *Final Exam*. Your lowest *Assignment* and *Test* score will be dropped before the final calculation of total points earned.

The letter grade will be assigned based on the following scale derived from the 700 possible points for the course (i.e., *Assignments* – max 300 points, *Tests* – max 300, and *Final Exam* – max 100 points):

A = 700-630 points
B = 629-560 points
C = 559-490 points
D = 489-420 points
F = 419 points or less

All grades will be posted in the *GRADEBOOK* on TRACS. During the semester, the credit points for *Assignments* and *Tests* will be displayed in the *GRADEBOOK* with a red line across to indicate that these scores are not automatically included in the total points earned. The accurate total scores for *Assignments* and *Tests* will be computed and entered to the *GRADEBOOK* at the end of the semester, after discarding the lowest grades.

TRACS Support

If you have questions about TRACS, click on the *TRACS Facts* on the TRACS login page. The TRACS Facts site contains training documents, tutorials, and tips on using TRACS. If you are unable to find an answer to your question in *TRACS Facts* or experience any technical problems with TRACS, contact the ITS help team by email at tracs@txstate.edu or by phone at (512) 245-5566.

COURSE SCHEDULE

Class Dates	Topic	Textbook Reading	Assignment Due (by class time)
Jan 21	Welcome: Course overview		
Jan 26	Introduction to Statistics [Basic Math Review]	Ch. 1 Appendix A	
Jan 28	Frequency Distribution	Ch. 2	
Feb 2	Central Tendency	Ch. 3	**Assignment 1** (ch. 1-2)
Feb 4	Variability Review forTest 1 (ch. 1-4)	Ch. 4	
Feb 9	**Test 1 (ch. 1-4)**		**Assignment 2** (ch. 3-4)

Class Dates	Topic	Textbook Reading	Assignment Due (by class time)
Feb 11	Z-score	Ch. 5	
Feb 16	Probability	Ch. 6	**Assignment 3** (ch. 5)
Feb 18	Distribution of Sample Means	Ch. 7	
Feb 23	Hypothesis Testing	Ch. 8	**Assignment 4** (ch. 6-7)
Feb 25	Review for Test 2 (ch. 5-8)		
Mar 2	**Test 2 (ch. 5-8)**		**Assignment 5** (ch. 8)
Mar 4	*t*-tests Part I: One-Sample	Ch. 9	
Mar 9	*t*-tests Part II: Two Independent Samples	Ch. 10	**Assignment 6** (ch. 9)
Mar 11	*t*-tests Part III: Two Related Samples	Ch. 11	
Mar 15-22	*SPRING BREAK!*		
Mar 23	Review: Testing hypothesis with *t*-tests (ch. 9-11)		**Assignment 7** (ch. 10-11)
Mar 25	**Test 3 (ch. 9-11)**		
Mar 30	One Factor ANOVA	Ch. 12	
Apr 1	Two-Factors ANOVA	Ch. 13.3	
Apr 6	Two-Factors ANOVA	Ch. 13.3	**Assignment 8** (ch. 12)
Apr 8	Review: Testing hypothesis with ANOVA (ch. 12 & 13.3)		
Apr 13	**Test 4 (ch. 12 & 13.3)**		**Assignment 9** (ch. 13.3)
Apr 15	Correlation	Ch.14.1-14.4	
Apr 20	Introduction to Regression	Ch. 14.6	
*Apr 22	Chi^2 test: Goodness of Fit	Ch.15.1-15.2	**Assignment 10** (ch. 14)
Apr 27	Chi^2 test: Independence	Ch.15.3-15.5	

Class Dates	Topic	Textbook Reading	Assignment Due (by class time)
*Apr 29	Finding correct statistics for your data	Statistics Organizer	**Assignment 11** (ch. 15)
May 4	Review for the Final Exam & the course wrap-up.	Statistics Organizer	
May 6 11:00-1:30	**FINAL EXAM (ch.14-15 and selected review topics)**		

* Wed due date for Assignment 10 & 11

Psychology Department and Texas State University Policies

University Assessment of Student Learning Outcomes for Psychology 2301:
- Demonstrate understanding of statistical concepts and an ability to evaluate the appropriateness of research conclusion.
- Identify and carry out the appropriate statistical procedure for many basic research situations
- Understand and be able to explain to others the statistical analyses in behavioral and social science research reports
- Develop quantitative and analytic thinking skills
- Prepare for more advanced courses in statistical methods
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The Department of Psychology has adopted expected student learning outcomes for the undergraduate major, the graduate major, and for Psy 1300, a general education course meeting a requirement for the social and behavioral science component.
Student Learning Outcomes will be assessed at the end of semester. This assessment is a requirement for the University's re-accreditation with the Southern Association of Colleges (SACS). Accreditation through SACS is done every ten years and is an important part of making your degree valuable.

Special Accommodations
Texas State University is dedicated to providing appropriate academic accommodations for students with disabilities. If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me as soon as possible. You will be asked to provide documentation from the Office of Disability Services. Failure to contact me in a timely manner may delay your accommodations. For more information please contact the Office of Disability Services at 512-245-3451 or see http://www.ods.txstate.edu/.

Academic Honor Code & Honesty Statement
Psychology Department Policy: The study of psychology is done best in an atmosphere of mutual trust and respect. Academic dishonesty, in any form, destroys this atmosphere. Academic dishonesty consists of any of a number of things that spoil a good student-teacher relationship. A list of academically dishonest behaviors include: (1) passing off others' work as one's own, (2) copying off of another person during an examination, (3) signing another person's name on an attendance sheet, (4) in written papers, paraphrasing from an outside source while failing to

credit the source or copying more than four words in sequence without quotation marks and appropriate citation.

The Psychology Department faculty believe that appropriate penalties for academic dishonesty include an "F" in the course and/or prosecution through the Student Justice System. Students are strongly encouraged to refer to the Texas State student handbook for policies related to academic dishonesty. These policies may be found at http://www.txstate.edu/effective/upps/upps-07-10-01.html and http://www.dos.txstate.edu/handbook/rules/honorcode.html