

# Experimental Psychology – PSY 305 – 01E

Spring 2019

TR: 8:00 – 9:15; Henderson Hall – 206

Instructor: Dr. Benton H. Pierce

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**Benton Pierce, Ph.D.**

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## 1 Course Information

### 1.1 Prerequisites

Students in this course are expected to have already taken PSY 302: Psychological Statistics, with a minimum grade of C.

### 1.2 Course Description

This laboratory course is designed to introduce students to the philosophy of scientific inquiry, with an emphasis on experimental methodology. We will accomplish this objective by combining traditional lectures with an application of principles through laboratory experimentation and demonstration. The main course objectives include:

- Learning to review the primary literature (improving library research skills, increasing familiarity with scientific writing, and reading journal articles)
- Learning how research ideas are developed, including the formulation of testable hypotheses
- Development and execution of a research plan (choosing appropriate research method to test specific hypotheses, ethical guidelines, and how to collect data)
- Analysis of research results, including a basic understanding of SPSS
- Presentation of experimental results (including verbal, written, and power point presentations)

## Note to Students:

In order for you to understand the principles of experimental psychology, including how experimental studies are designed and how experimental results are interpreted, it is essential that you have a good understanding of basic statistics. You will be relying on the information that you learned in Psychological Statistics (PSY 302).

### 1.3 Textbook

- Primary texts (required)
  - McBride, D. M. (2016). *The process of research in psychology* (3<sup>rd</sup> ed.). Los Angeles, CA: Sage.
  - American Psychological Association. (2010). *Publication manual of the American Psychological Association*. (6<sup>th</sup> ed.). Washington, D.C.: American Psychological Association.
  - Stanovich, K. E. (2010). *How to think straight about psychology*. (9<sup>th</sup> ed.). Boston; Allyn & Bacon.
- Supplementary materials (recommended, but not required)
  - Dunn, D. S. (2011). *A short guide to writing about psychology*. (3<sup>rd</sup> ed.). Boston: Longman.

## 2 Course Requirements

Each student will be evaluated on several exams, exercises, and a two-part research project that will be presented in class.

### 2.1 Exams (47%)

There will be two exams given during the semester, plus a final exam that will be cumulative. These three exams will be weighted equally.

### 2.2 Lab Assignments (10%)

The lab portion of this course will account for 10% of your grade. In addition, assignments such as your APA style research report will be extensively discussed in the course of the lab, so it is vitally important that you attend your lab sessions. During lab, we will also be reviewing course material covered in lecture and the lab portion of the course will give you the opportunity to get some hands-on practice in applying the theoretical aspects of the course material. You should take advantage of the lab time, your lab instructor, and your classmates to ask questions.

The lab allows students to put into practice the material covered in the lectures. You will be expected to learn how to think scientifically, and an important part of this scientific thinking is practice. By doing exercises and developing research ideas, you will be able to acquire a clear understanding of what comprises scientific research in psychology.

More detailed information on the lab portion of this course in the syllabus supplement that your lab instructor will hand out during your first lab session.

### **2.3 Research Project (40%)**

A research project will account for 40% of your grade. For this project, you will be allowed to work in groups of 2-3 students each. The project will consist of three parts. The first part will consist of a mini literature review of a specific research area. This paper will be due by noon on Friday, March 7. During the middle and second half of the semester, you will be actually conduct the project that you will be assigned. This project will culminate with an APA style report of your research project, along with a presentation of your project to the class. Your research report will be due on Monday, May 2. Part 1 of your project will count for 15% of your total grade. Part 2 (your APA report) will count for 15% of your grade. Part 3 (your presentation to the class) will count for 10% of your grade.

Here are a few details that you should keep in mind:

1. The project that you will carry out will be an **experiment**, not an observational or correlational study.
2. You should be able to replicate the findings of the prior study that you are assigned. If you cannot replicate those findings, it is your responsibility to offer potential explanations as to why your replication failed. You will be provided considerable material in class and in the lab that will help you come up with such explanations. Please keep in mind that your chances of replicating a prior study depends largely on how well you adhere to the design, materials, and procedures that the prior study utilized.

### **2.4 Participation in Research (3%)**

Three percent of your course grade will come from your participation in research that the department is currently conducting. You will need to complete a total of 3 credit hours of research participation, as long as you have no unexcused no-shows (i.e. you do not show up for a study). If you have a no-show, you will need to complete a total of 5 credit hours. Students who complete the 3 credits without acquiring any no-shows will be allowed to complete an additional 2 credits for extra credit. Please note that participation in research is voluntary. Should you elect not to participate, please see me and I will assign alternative assignments to satisfy this portion of your grade.

You will be able to sign up for various studies through the SONA system. Instructions on how to do this will be provided in a separate handout. Studies are worth different amounts of credit depending upon how long it takes to complete the study. You may sign up for any combination of studies you wish as long as you complete the required number of credits.

A pre-screening questionnaire is required before participating in many of the studies. You may earn .5 credits by completing the pre-screening within the first two weeks of the semester.

### 3 Communication and Support

- Each student is encouraged to contact the professor for assistance with any class-related problem.
- If you cannot talk to me in person, the best way to reach me is through email.
- Your performance in this course is very important to me. If you are having problems, please see me as soon as possible. Do not wait until the end of the semester to voice your concerns to me.
- Students are responsible for all course announcements, either in class or distributed through email.

### 4 Course and University Procedures and Policies

#### 4.1 Course-specific Policies

##### 4.1.1 Academic Conduct & Honesty.

Texas A&M University-Commerce has explicit rules and regulations governing academic dishonest and academic misconduct. These policies are stated in the Students Guide Handbook. Each student is expected to read and abide by these policies, which will be followed in this class. In essence, **cheating** and **plagiarism** of all forms will not be tolerated. Plagiarism means that you cannot use the words and ideas of another person without giving that person credit. Therefore, quotation marks should be used to indicate the exact words of another. In addition, each time you paraphrase another author, you must credit the source in the text. If you have questions or concerns about what constitutes cheating or plagiarism, please see me. Acts of cheating and plagiarism will result in severe consequences, including the possibility of receiving an F in the course.

##### 4.1.2 Attendance Policy

Class attendance is extremely important in this course. I will cover a considerable amount of material, much of which will be included on the exams, that is not in your textbook. I reserve the right to drop you from the course if you have **four or more unexcused absences**. Absences will only be excused with documented proof (e.g., a doctor's note). In addition, I expect you to be on time for class. I understand that on occasion, students are forced to be late to class. If you know that you will be late, please let me know in advance if possible. Furthermore, if you need to leave early for any reason, I expect you to notify me in advance. Coming in late and leaving early are disruptive to the rest of the students. Please be considerate of your fellow students.

### **4.1.3 Exam and Assignment Policy**

Exams must be taken at the time indicated on the syllabus. Missed exams can only be made up if the student provides documentation of a legitimate University-approved excuse (e.g., medical emergency) within a week of the missed exam.

All assignments must be turned in at the beginning of class on the day it is due. No late assignments will be accepted.

### **4.1.4 Cell Phones/Laptops/Other Electronic Devices.**

Cell phones must be turned off or placed on silent during class. If you have an emergency and may need to take a call during class, please see me before class and leave your cell phone on top of your desk. Otherwise, I expect to see **no** cell phones during class. Students using cell phones without permission during class will be asked to leave the classroom. If you interact with your cell phone in any way during an exam, I will assume that you are cheating and you will receive a zero on that exam. If you want to bring a laptop to class to take notes, I expect that you use it for that purpose, and not to “surf”.

## **4.2 University Policies**

### **4.2.1 Accommodations for Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services  
Texas A&M University-Commerce  
Halladay Student Services Building  
Room 303 A/D  
Phone (903) 886-5150 or (903) 886-5835  
Fax (903) 468-8148  
StudentDisabilityServices@tamuc.edu

### **4.2.2 Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **4.2.3 Campus Concealed Handgun Policy**

#### **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

### **4.2.4 Student Conduct**

The Student Handbook (Policies and Procedures, Code of Student Conduct) University states that "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." Violation of this code will lead to an initiation of the disciplinary procedures described in the Student Handbook.

### **4.2.5 TAMUC Attendance Policy**

For more information about the university attendance policy, visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/12students/academic/13.99.99.R0.01.pdf>

### **4.2.6 Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

## Tentative Schedule

Week	Dates	Class Topics	Text
Week 1	Jan. 15, 17	The scientific approach to psychology	Ch. 1 Stanovich – Ch. 1, 2, 4
Week 2	Jan. 22, 24	Research ideas, literature review, and hypothesis development	Ch. 2
Week 3	Jan. 29, 31	Basic research methods & APA style	Ch. 4, 8 Stanovich – Ch. 3, 6, 7
Week 4	Feb. 5, 7	Ethics in research, Manipulating and Measuring Variables	Ch. 3, 5
Week 5	Feb. 12 <b>Feb. 14</b>	No class <b>Exam 1</b>	
Week 6	Feb. 19, 21	Sampling, One-factor experiments	Ch. 6, 11
Week 7	Feb. 26, 28	Classic experimental designs (cont.) Multi-factor experiments	Ch. 11 Ch. 12
Week 8	Mar. 5, 7	Multi-factor experiments (cont.) Quasi-experiments	Ch. 12. Ch. 13
Week 9	Mar. 12, 14	Project Development	
Week 10	<b>Mar. 18-22</b>	<b>Spring Break</b>	
Week 11	Mar. 26 <b>Mar. 28</b>	Review day <b>Exam 2</b>	All since Exam 1
Week 12	Mar. 28 Mar. 30	In class work day Descriptive and inferential statistics	Ch. 7, 15
Week 13	Apr. 2, 4	Descriptive and inferential statistics (cont.)	Ch. 7, 15
Week 14	Apr. 9, 11	Descriptive and Inferential statistics (cont.)	Ch. 7, 15
Week 15	Apr. 16, 28	Reporting research	Ch. 8
Week 16	Apr. 23, 25	Other research designs	Ch. 9, 10
Week 17	<b>April 30, May 2</b>	<b>Project presentations</b>	
Week 18	TBA	<b>Final exam</b>	<b>All chapters</b>