

Experimental Psychology – PSY 305 - 001

Spring 2015

TR: 11:00 – 12:15; Henderson Hall – 206

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1 Course Information

1.1 Prerequisites

Students in this course are expected to have already taken and passed 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)
- Coming up with a research idea, including specifying a testable research idea, and developing hypotheses
- Development and execution of a research plan (choosing appropriate research method to test specific hypotheses, ethical guidelines, and how to collect data)
- Basic analysis of research results
- Presentation of experimental results (including verbal, written, and power point presentations)

Essentially, we will cover the basic mechanisms by which we put together and complete a research project in psychology. To this end, we will cover all fourteen chapters of the

textbook. Class sessions will consist of both lectures and discussions and/or exercises related to assigned readings. It is critical that students read assigned chapters prior to class sessions. Below is a proposed schedule of the topics we will cover this semester. Please note that any changes to this schedule will be announced in class.

	Date	Class Topics	Text
Week 1	Jan. 20, 22	The scientific approach to psychology	Ch. 1 Stanovich – Ch. 1,2,4
Week 2	Jan. 27, 29	Research ideas, literature review, and hypothesis development	Ch. 2
Week 3	Feb. 3, 5	Basic research methods & APA style	Ch. 3, 8 Stanovich – Ch. 3, 6
Week 4	Feb. 10, 12	Ethics in research, Manipulating and Measuring Variables	Ch. 5, 4
Week 5	Feb. 17	Variables (continued)	Ch. 4
	Feb. 19	Exam 1	
Week 6	Feb. 24, 26	Sampling, Classic experimental designs	Ch. 6, 11
Week 7	Mar. 3, 5	Classic experimental designs (cont.)	Ch. 11
Week 8	Mar. 10, 12	Other experimental designs	Ch. 12, 13
Week 9	Mar. 16-20	Spring Break	
Week 10	Mar. 24	Review day	
	Mar. 26	Exam 2	
Week 11	Mar. 31, Apr. 2	In class work days	
Week 12	Apr. 7, 9	Descriptive statistics	Ch. 7, 14
Week 13	Apr. 14, 16	Inferential statistics	Ch. 7, 14
Week 14	Apr. 21, 23	Reporting research	Ch. 8
Week 15	Apr. 28, 30	Other research designs	Ch. 9, 10 Stanovich – Ch. 5
Week 16	May 5, 7	Project presentations	
Week 17	TBA	Final exam	All chapters

1.3 Textbook

- Primary texts (required)
 - McBride, D. M. (2013). *The process of research in psychology* (2nd ed.). Los Angeles, CA: Sage.
 - McBride, D. M., & Cutting, J. C. (2013). *Lab manual for psychological research* (3rd ed.). Los Angeles, CA: Sage.
 - Stanovich, K. E. (2010). *How to think straight about psychology*. (9th ed.). Boston: Allyn & Bacon.
 - American Psychological Association. (2010). *Publication manual of the American Psychological Association*. (6th ed.). Washington, D.C.: American Psychological Association.
- Supplementary materials (recommended, but not required)
 - Dunn, D. S. (2011). *A short guide to writing about psychology*. (3rd 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 (40%)

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 (15%)

The lab portion of this course will account for 15% 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, along with a proposal for a conceptual replication project. This paper will be due by noon on Friday, March 6. During the middle and second half of the semester, you will be actually carrying out the proposed project. This project will culminate with an APA style report of your research, along with a presentation of your project to the class. Your research report will be due on Monday, May 4. 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. You must design and carry out an **experiment**, not an observational or correlational study.
2. Your project must be a conceptual replication of published research findings. That is, you will not be allowed to pursue a project that has no theoretical basis or one that has not been addressed at some level in the literature.
3. Your project must be designed by YOU and YOUR GROUP. No experimental project designed by faculty members will be permissible (for example, a project that is currently being conducted in the lab you work in).
4. If you are using a technique or instrument that is somewhat complex (e.g., the Implicit Association Test), you are responsible for fully understanding every step of the procedure and how/why it is designed that way.
5. It would be wonderful if your project results in statistically significant results. However, this is not necessary for your group to obtain full credit for the project. Properly designing and conducting an experiment is more important in this course than your results.

2.4 Participation in Research (5%)

Five 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 4 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 6 credit hours.

Students who complete the 4 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. **Students who engage in cheating or plagiarism will earn an F in the course.**

4.1.2 Attendance Policy

Class attendance is mandatory. Please note that I will take roll at the beginning of each class period. However, I understand that students may miss a class on occasion. Therefore, you will get two “freebies” or unexcused absences. After these first two absences, points will be deducted from your overall grade in the course. I also 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. 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 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 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.

- **Nondiscrimination Statement**

A&M-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, 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.