

Principles of Psychological Research

PSYC 2094 (CRN 16233)

Instructor: Amanda Halliburton, M.S.

Class Meets: Tuesdays & Thursdays, 2:00 PM - 3:15 PM

Class Location: Williams Hall—Room 320

Instructor's Email: ahallibu@vt.edu

Office: Williams Hall—Room 325

Office Hours: T 3:30 PM-5:00 PM, TH 10:30 AM-12:00 PM, or by appointment

Prerequisite: Introductory Psychology (PSYC 2004)

Textbooks:

REQUIRED (older editions of the book are not acceptable):

American Psychological Association (APA; 2010). *Publication manual of the American Psychological Association* (Sixth edition). Washington, DC: APA.

RECOMMENDED (older editions of the book are acceptable, if cost is an issue):

Rosnow, R. L., & Rosenthal, R. (2013). *Beginning behavioral research: A conceptual primer* (Seventh edition). Upper Saddle River, NJ: Pearson.

Note: All optional chapters listed in the course schedule (see page 4) come from this textbook.

Course Overview

Psychology, as a modern science, is built on research. Everything we know about how human beings think, behave and feel comes from experimentation and, on a more basic level, someone asking why things are the way that they are and how they could be different. If you have ever wanted to ask a question like that about yourself or the world you live in, this course is for you!

This class is designed to take you through the research process, from the development of initial hypotheses to the construction of a research design and the analysis and interpretation of data. You will actually walk through (almost) the whole process over the course of the semester by completing a group project. The class format will consist primarily of lectures and discussions, though there will be opportunities for individual and group work inside and outside of class.

Assignments and Grade Composition

Grade Breakdown (TOTAL = 500 points):

Exams – 5 @ 50 points each – **250 points total** [50%]

Research Proposal – **150 points** [30%]

Article Review – **50 points** [10%]

Mini-Assignments – 6 @ 10 points each – **50 points total (one is dropped)** [10%]

Grading Scale:

93-100%: A	83-86%: B	73-76%: C	63-66%: D
90-92%: A-	80-82%: B-	70-72%: C-	60-62%: D-
87-89%: B+	77-79%: C+	67-69%: D+	59% or less: F

Note: Please do not ask me to round your final grade, as it would not be fair to all students.

Exams: We will have five exams over the course of the semester, four during the semester and one during finals week (**the final exam will be held in our regular classroom on Wednesday, May 13, 2015 from 1:05-3:05 PM**). Exams will be comprised of a variety of question types, including multiple choice, true/false, short answer, matching, fill-in-the-blank, essay, and computations. Each exam will cover three chapters' worth of material, and none of the exams (including the final exam) will be cumulative. More information about the expectations for each exam will be given in class.

Group Research Proposal: Your major project for the semester will be a group research proposal. This project is designed to allow you to apply concepts covered in class to a topic that interests you. We will form groups in class. The project will be completed in parts, so that you can get feedback from me on small chunks of the project at a time. You will have the option, as a group, to resubmit your edited proposal within a limited time frame to get some points back (see the proposal rubrics for more details on this opportunity). The project must be written using APA style (which is why I require you to purchase the APA manual). Rubrics for each part of the project are posted on Scholar.

Article Reviews: During the semester, you will be asked to review a recent psychological article. First, you will review the article individually using a worksheet available on Scholar. We will also spend time during the class period after I assign the article to discuss the article further as a class.

Mini-Assignments: To help you practice skills, you will be asked to complete six "mini-assignments" over the course of the semester. Some will be completed in class and others will be assigned as homework. Out of the six assignments, your lowest score will be dropped at the end of the semester.

Extra Credit: Extra credit can be earned by participating in SONA research conducted in the Psychology Department (<https://vt-psyc.sona-systems.com/>). For every 30 minutes of research participation, you will receive 1 point that can be added to your total grade. You may earn up to 10 points. **Extra credit points must be completed by the last day of class** (Tuesday, May 5, 2015). Students who are uncomfortable with or unwilling to participate in research may still earn extra credit; please email me or come see me in office hours to discuss the alternative assignment.

Course Policies

What I Expect of You: I conduct my class using a *self-regulated learning* approach. This means that I expect you to take the initiative in ensuring that you understand the material we're discussing in class and seeking help when you don't understand something. Do not tell me or yourself that you "can't" do well!

A successful self-regulated learner, for example, engages in the following behaviors:

- Comes prepared for class, ready to take notes, and assesses his or her comprehension frequently
- Completes optional textbook readings if he or she is having trouble with course concepts
- Participates fully in class—pays attention, asks questions, engages in discussion
- Begins working on assignments and studying for exams in advance as much as possible
- Is honest about his or her own performance, especially as it pertains to group assignments
- Seeks help early and often—for example, by frequently attending the instructor's office hours

What You Can Expect of Me: I respect your willingness to learn and, as a result, you can expect that I will provide reminders about important scheduling concerns or information needed to prepare for class, return graded assignments in a timely manner, be available during my office hours (and, as needed, by appointment) to address concerns and answer questions, and help you learn to regulate more effectively.

Scholar: I will be using a Scholar site to post announcements, give information on grades, and facilitate the turning in and returning of assignments. Please make sure you check Scholar often!

Attendance: It's important that you come to class unless you have a documented excused absence. Please contact the Dean of Students Office as soon as possible (109 E. Eggleston Hall, (540) 231-3787, <http://www.dos.vt.edu>) after an absence/before an anticipated absence to receive documentation. Also, please come see me during office hours to plan any make-up assignments.

Lecture Notes: I will post my lecture notes in PDF form on Scholar. However, there will be material that I give only verbally in class that will be necessary for you to fully understand the notes and will also be fair game for the exams. Thus, you are expected to come to class prepared to take additional notes to go along with your copies of the lectures. I highly recommend printing the notes or bringing your laptop so that you can follow along. If you miss class, please talk with your classmates (e.g., proposal group) in order to get information beyond the lecture notes that you missed in class.

Late Work: The proposal, because it is a group assignment, may **not** be turned in late. If there are extreme extenuating circumstances that prevent you from turning in the proposal parts on time, please make an appointment as a group to meet with me about them. Exams may be made up with appropriate documentation from the Dean of Students. All other assignments will be accepted up to one calendar week late, with a 5% deduction each day. Late work will not be accepted after a week.

Honor Code: Academic honesty is to be maintained at all times. Any cheating, plagiarism, or falsification will result in heavy penalties up to expulsion. ***The VT Honor Code will be strictly enforced in this class. All of your coursework is covered by the Honor System. Any suspected violations of the Honor Code will be promptly reported.*** For more information, please see <http://www.honorsystem.vt.edu/>.

Accommodations: If you need accommodations because of a disability, have emergency medical information to share with me, or need special arrangements if the building must be evacuated, please make an appointment to discuss this with me as soon as possible. You must also contact Services for Students with Disabilities: Lavery Hall Suite 310, (540) 231-3788, <http://www.ssd.vt.edu/>.

Course Objectives: Upon completion of this course, the student should be able to:

- Describe the process of searching the literature and identifying research questions
- Discuss common ethical considerations associated with psychological research
- Identify different options for designing a research project, including data collection, group design, and data analysis, and the strengths and weaknesses associated with those choices
- Perform basic descriptive statistics and some advanced tests used in psychological research
- Apply course concepts to a topic of his or her choice in the form of a research proposal

Course Schedule

(may be altered if necessary at instructor's discretion)

Week / Dates	Topic	Important Events / Assignments	Readings
1 (1/20, 1/22)	Syllabus Introduction to Behavioral Research	Form proposal groups in class (1/20)	Ch. 1
2 (1/27, 1/29)	Beginning the Research Process	Email due with group proposal topic (1/27) Library Presentation (1/29)	Ch. 2
3 (2/3, 2/5)	Ethical Considerations	Mini-Assignment #1 due (2/3) Exam #1 (2/5)	Ch. 3
4 (2/10, 2/12)	Observational Research		Ch. 4
5 (2/17, 2/19)	Survey Research	Part 1 of Research Proposal due (2/19)	Ch. 5
6 (2/24, 2/26)	Reliability & Validity	Mini-Assignment #2 due (2/24) Exam #2 (2/26)	Ch. 6
7 (3/3, 3/5)	Experimental Design	Mini-Assignment #3 in class (3/3)	Ch. 7
8 (3/10, 3/12)	SPRING BREAK – NO CLASSES Complete optional (but recommended) anonymous mid-semester feedback survey!		
9 (3/17, 3/19)	Quasi-Experimental Design Article Review Discussion	Article Review (3/19)	Ch. 8 Woidneck et al. (2014)
10 (3/24, 3/26)	Sampling	Mini-Assignment #4 in class (3/24) Exam #3 (3/26)	Ch. 9
11 (3/31, 4/2)	Introductory Statistics	Part 2 of Research Proposal due (4/2)	Ch. 10
12 (4/7, 4/9)	Correlations		Ch. 11
13 (4/14, 4/16)	Null Hypothesis Significance Testing	Mini-Assignment #5 in class (4/14) Exam #4 (4/16)	Ch. 12
14 (4/21, 4/23)	<i>t</i> -tests	Part 3 of Research Proposal due (4/23)	Ch. 13
15 (4/28, 4/30)	Analysis of Variance		Ch. 14
16 (5/5)	Chi-square	Mini-Assignment #6 in class (5/5)	Ch. 15