

Advanced Research Methods: Clinical Psychological Science
COURSE NUMBER TBD
Fall 2018

Instructor: Dr. Lauren S. Hallion
Email: hallion@pitt.edu
Office: Sennott Square 3327
Office Hours: TBD

DATE/TIME TBD
LOCATION TBD

Course Description

This is a laboratory course that will focus on contemporary research methods in the area of clinical psychology. A major theme of the course will be an exploration of the ways in which advances in other areas of psychology (including new theories, statistical techniques, and research paradigms) can be applied to enhance our scientific understanding of psychological disorders. This theme and other course concepts will be illustrated through an in-depth examination of the role of cognition, broadly construed, in anxiety and related disorders. As a student in this course, you will complete in-class activities as well as individual and group assignments that will provide a hands-on introduction to research in clinical psychological science. Course requirements will include oral presentations as well as written assignments. You will develop an independent research proposal based on a contemporary theory, collect and analyze data to test the hypothesis proposed in the research proposal, and prepare an empirical paper that demonstrates your mastery of the concepts covered during the course.

Prerequisites

This is an advanced course. All students must have successfully completed Abnormal Psychology and Research Methods prior to enrolling in the course. Previous completion or concurrent enrollment in Introduction to Statistics and Cognitive Psychology or Cognitive Neuroscience is highly recommended.

Required and Recommended Texts

There is one required text for the course:

Kazdin, A. E. (2003). *Research design in clinical psychology* (4th ed.). Boston: Allyn and Bacon.

It is strongly recommended that students purchase or borrow a copy of the Publication Manual of the American Psychological Association, Sixth Edition. A copy will be made available on reserve in the library.

Course Objectives

1. Be a competent consumer of psychological research. By the end of this course, you should feel comfortable reading original research articles, thinking critically about the methods and findings, and applying the concepts to new situations and problems.

2. Become familiar with some major ethical considerations involved in conducting clinical psychological research.
3. Be able to conduct a thorough review of the research literature to answer a specific question or learn what is currently known about a specific topic.
4. Be able to develop a testable hypothesis to evaluate an aspect of a prominent psychological theory, based on a review of the literature related to that theory.
5. Gain experience identifying and thoughtfully considering the unique strengths and limitations of a given research study, specifically in light of the research question(s) that the study aims to address.
6. Develop a strong understanding of a prominent psychological theory of anxiety, including an understanding of the strengths and limitations of various approaches to testing that theory.
7. Gain experience identifying the appropriate statistical approach to test a study hypothesis, conducting the relevant analyses in SPSS, and reading and interpreting SPSS statistical output.
8. Become comfortable generating and delivering thoughtful and constructive feedback to peers at various stages of the research process, including on the study justification and hypotheses, research design, data analytic plan, and interpretation and presentation of research findings.
9. Be able to write a comprehensive empirical research paper, including drafting an Abstract, Introduction/Background, Study Hypotheses, Methods, Results, and Discussion, including a thoughtful self-assessment of your study's strengths and limitations.

Course Format

This is a laboratory course. Class will include lecture, demonstrations, discussion, and “hands-on” experience in various aspects of clinical psychological research, including critiquing research studies, identifying and synthesizing relevant research papers, running your own statistical analyses, and interpreting statistical results.

Course Requirements and Grading

1. **Readings.** All assigned readings are required and should be completed *before* the class period for which they are assigned.
2. **Participation.** Much of the learning you do in this course will occur through discussions of the reading with other students and in-class demonstrations. Therefore, attendance and participation are required. Class participation includes showing up on time to class, asking and answering questions, and engaging in thoughtful and respectful discussions with your classmates.

If there are extenuating circumstances that will require you to miss a class, please speak with me privately in advance. Appropriate documentation is required for excused absences. Each unexcused absence will result in a 2-point reduction in your final grade (out of 100).

3. **Exams.** There will be three exams during the semester. The exams will cover concepts

and information from the readings, lecture, and class discussion. The exam format may include any combination of multiple choice, short answer, and long answer questions. Missed exams may not be made up unless arrangements are made in advance, or in the event of a documented excused absence. Makeup exams may differ from the exam offered in class.

4. **Research paper.** Over the course of the term, students will develop an independent research project using one of the provided datasets. Students will develop hypotheses to test aspects of one or more psychological theories that are relevant to course content. Students will select the theory that they wish to test from an approved list of several prominent theories.

During the beginning of the semester, students will select a theory and complete a literature search to identify relevant articles. After reading these articles, students will then develop a hypothesis to test one or more aspects of the theory. These hypotheses may be entirely original, or students may test an existing hypothesis using a novel method.

As the semester progresses, students will refine their hypotheses and prepare a research paper in the format of an empirical article. The final paper will be written independently and should demonstrate a deep conceptual understanding of the material covered during the semester. The manuscript will be completed in multiple sections: Background and Hypotheses, Methods and Data Analytic Approach, Results, and Discussion. Specific point breakdowns for each section of the paper are described below. A detailed rubric will be provided.

Your grade for the course will be calculated as follows:

Exams (3)	30%
Research Paper	
Abstract	5%
Background and Hypotheses:	20%
Methods:	10%
Analysis Plan and Results:	10%
Discussion:	15%
Participation:	10%

CITI training

All students are required to have completed the following online education modules: 1) Responsible Conduct of Research and 2) Human Subjects Research.

The modules can be found and completed at: www.citi.pitt.edu. Please upload a PDF of your certificates to CourseWeb by the second week of class. Completed CITI certificates are required to continue with the course.

Course Policies

Laptops and Technology

A large and growing body of research shows that cell phones and other digital distractions interfere with learning. I therefore ask that you **do not** use laptops or other technology during class except as part of a designated class activity.

Cellular phones should be silenced and out of view during class meetings. If you need to leave your phone on for any reason, please notify me at the beginning of class.

Late/Missing Work

Written assignments will be penalized 10 points for each 24-hour period after the deadline they are submitted.

Academic Integrity

All students are expected to adhere to the standards of academic honesty. Any student engaged in cheating, plagiarism, or other acts of academic dishonesty would be subject to disciplinary action. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity <http://www.provost.pitt.edu/info/ai1.html>. This may include, but is not limited to the confiscation of the examination of any individual suspected of violating the University Policy. Papers will be uploaded to CourseWeb and will be run through SafeAssign such that plagiarism will be *very easy to detect*.

Disability Resources and Services

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services (DRS), 140 William Pitt Union, (412) 648-7890, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

The above DRS statement is periodically updated. The most current information can be found on <http://www.as.pitt.edu/fac/teaching/disability-resource-statement-syllabi>

Statement on Classroom Recording

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

Weekly Topics, Readings & Assignments

Note: Modifications to the syllabus, reading list or assignments may be made during the course of the semester. Students will be notified in advance of any changes to the syllabus.

Assignments are due prior to class, the night before, before 11:59 PM.

Date	In-Class Topics	Assignments
Aug. 27	<ul style="list-style-type: none"> • Introduction and syllabus review • Fundamentals of clinical science • Levels of analysis • What is a mechanism? 	
Sept. 3	<ul style="list-style-type: none"> • Clinical research ethics • Diagnostic interviewing (video/discussion) • Reintroduction to OCD, GAD, and worry • Transdiagnostic processes 	<ul style="list-style-type: none"> • Kazdin Chapter 17 • Borkovec et al. (2004) • Ehring & Watkins (2008) • Complete CITI training
Sept. 10	<ul style="list-style-type: none"> • Leveraging theories and methods across disciplines • Cognitive theories of worry and anxiety • Contemporary models of cognitive control 	<ul style="list-style-type: none"> • Eysenck & Derakshan (2011) • Hirsch & Mathews (2012) • Armstrong et al. (2011) • Braver (2012)
Sept. 17	<ul style="list-style-type: none"> • EXAM 1 (covering weeks 1 – 3) • Reviewing the literature • Developing and refining a research question • Introduction to the database 	<ul style="list-style-type: none"> • Kazdin Chapter 5 • Identify and bring 3 possible research questions and submit them via CourseWeb (not graded) • Bring a printed version to review in class
Sept. 24	<ul style="list-style-type: none"> • Developing and refining a hypothesis • Reliability, validity, and measurement 	<ul style="list-style-type: none"> • Kazdin Chapter 13 • Begin literature search • Identify 3 possible hypotheses and submit them via CourseWeb (not graded) • Bring a printed version to review in class
Oct 1	<ul style="list-style-type: none"> • Developing the background/introduction 	<ul style="list-style-type: none"> • Kazdin Chapter 18 • Continue literature search
Oct 8	<ul style="list-style-type: none"> • EXAM 2 (covering weeks 4 – 6) • Workshop: Background and hypothesis 	<ul style="list-style-type: none"> • Submit a draft of your background and hypothesis via CourseWeb (not graded) • Bring a printed version to review

		in class
Oct 15	<ul style="list-style-type: none"> • Outlining the Method section 	<ul style="list-style-type: none"> • Revise background and hypotheses based on peer and instructor feedback • <u>Submit your final Background and Hypothesis by 11:59am on Oct. 14th via CourseWeb (Graded)</u>
Oct 21	<ul style="list-style-type: none"> • Basics of applied statistics: correlation, regression • SPSS and interpreting output 	<ul style="list-style-type: none"> • Kazdin, Chapter 15
Oct 29	<ul style="list-style-type: none"> • Basics of applied statistics: <i>t</i>-test, ANOVA • SPSS and interpreting output 	<ul style="list-style-type: none"> • Kazdin, Chapter 16
Nov. 5	<ul style="list-style-type: none"> • EXAM 3 (covering weeks 7 – 10) • Outlining the Data Analytic Plan and Results • Open lab: Data analysis 	
Nov. 12	<ul style="list-style-type: none"> • Peer and instructor feedback: Analysis Plan • Open lab: Data analysis 	<ul style="list-style-type: none"> • Submit a draft of your Hypothesis, Methods, and Analysis Plan via CourseWeb (not graded) • Bring a printed version to review in class
Nov. 19	<ul style="list-style-type: none"> • Developing a Discussion section • Identifying relevant limitations 	<ul style="list-style-type: none"> • <u>Submit your final Method and Analysis Plan by 11:59am on November 18th via CourseWeb (Graded)</u>
Nov. 26	<ul style="list-style-type: none"> • Writing the abstract • Peer review and instructor feedback 	<ul style="list-style-type: none"> • Submit your complete manuscript except abstract and title page via CourseWeb (not graded) • Bring a printed version for in-class review
Dec. 3	<ul style="list-style-type: none"> • Open lab and last-minute instructor help 	<ul style="list-style-type: none"> • Submit your abstract via CourseWeb (not graded) • Bring a complete draft of the manuscript (printed) for last-minute help • <u>Final paper to be submitted via CourseWeb by 11:59am on December 6th (Graded)</u>