

[Course Features](#)

[Course Requirements](#)

[Course Grading Weights.](#)

[Course Rules and Regs.](#)

[University Course Policies](#)

[Course Reading](#)

[Course Calendar](#)

[Office Hours and Contact](#)

T.A.

[Distributed Competencies](#)

[Pic of Caleb](#)

[Pic of Josh](#)

[MadelynHope](#)

[Pic of Samuel](#)

[Jen and boys](#)

[JustinSavannah](#)

[Curly](#)

Dr. Ben Stephens Psych 310-Advanced Experimental Psychology Spring 2015

Course Description

This course provides an introduction to basic principles of research in psychology. You will primarily do psychology in this course, rather than simply read about it. Research is both exciting and exacting. We hope the course will give you an appreciation of both qualities.

The course is designed to help you master five major aspects of doing research:

1. Design of experiments
2. Execution of experiments
3. Scientific writing

4. Computer analysis of results

5. [Critique of research](#)

Critique of Research

This section of PSYC 3100 is participating in Clemson's [CT2 Quality Enhancement Plan](#), designed to enhance critical thinking in undergraduate education.

This CT2 component of PSYC 3100 is consistent with the long-established student learning goals for a course on research design in psychological science.

Critique of research involves multiple critical thinking skills and understandings, and is involved in each of the [main features of research methods](#):

- ⌋ Design and execution of research requires critical thinking to anticipate and prevent alternative explanations.
- ⌋ Communication of research requires critical thinking to clearly identify, apply, and communicate features of research (e.g. research design) that anticipates critical review by others.
- ⌋ Statistical analysis of results requires critical thinking to select, apply and interpret the correct data analysis technique for a given research design.
What are specific critical thinking skills in PSYC 310?
- ⌋ Determine the relevance of information for evaluating claims made in a scientific study.
- ⌋ Recognize and prevent flaws in scientific methods
- ⌋ Evaluate competing causal explanations through experimental designs
- ⌋ Evaluate hypotheses for consistency with scientific methods and results
- ⌋ Evaluate the appropriateness of scientific procedures for investigating a question of causation
- ⌋ Evaluate the appropriateness of statistical procedures for a given hypothesis and data set.
- ⌋ Evaluate scientific results for consistency with established facts, hypotheses, or methods

Student Critical Thinking Learning Outcomes

- ⌋ Explore and analyze alternative methodological designs for research questions

- } Analyze methodologies and identify how they limit results and conclusions, e.g. quasi-experimental designs versus true experimental designs
- } Apply research design concepts to novel contexts, e.g. identify measured versus experimental operational definitions in research reports
- } Synthesize alternative solutions to multi-dimensional challenges, e.g. derive multiple hypotheses to evaluate psychological theory/explanations
- } Communicate research projects effectively, e.g. apply APA guidelines to produce complete, precise, concise and compelling scientific reports and oral presentations

Teaching/Learning Strategies

- } Homework review: contrasting cases method will be used to identify and compare student critical thinking responses, assessment of knowledge integration, and identification of critical thinking skills
- } Group experimental designs: contrasting cases method to compare problem solving processes and solutions
- } Participation grade: students will demonstrate and identify critical thinking skills (e.g. application of concepts, identification of alternative explanation) in class discussions and activities as part of their daily participation grade
- } Modeling critical thinking and Socratic/discussion method for key concepts: e.g. application of concepts to novel situations
- } Student artifacts / Web site
 - ◆ Students will post all assignments on their course websites
 - ◆ Each assignment will require a ◆critical thinking◆ reflective statement, indicating how the assignment provides (or does not provide) an example of one (or more) of the student critical thinking skills and learning outcomes

You will take the Critical Thinking Assessment Test (CAT) at the beginning and end of the course. CAT scores will be used by the CT2 program to assess how well you learned to think critically (while you also learned material on psychological research methods). You will receive 10 HW assignment points for participating in each assessment.

Course requirements

Exams. There will be three in-class exams. All contain multiple choice, short answer, and application items.

Papers. There will be three papers on each of the experiments. You will be learning the American Psychological Association style of scientific reports, which is the standard for journal articles in psychology. The three short papers will focus on subsections of a journal article, i.e. Methods, Results, Discussion. A final long paper will be a complete write-up of your independent project. An acceptable IRB proposal is prerequisite for an acceptable final paper. Failure to meet prerequisites will result in a grade of zero on the final paper.

Laboratory assignments. Each student must assist in designing and running a portion of the subjects in each experiment. Some of the experiments will be run in the scheduled lab, while the other labs will be scheduled more flexibly (e.g. whenever you can convince a friend to be in the experiment). You must complete your portion of the experiment on schedule, since the entire class will rely on your data. Laboratory sessions will meet in various places, as the equipment needs of the experiment dictate.

Homework assignments. Homework will be assigned and graded on a regular basis to motivate you to keep-up with the reading. The 10 pt grading scale ranges from excellent (9-10) to absent (0).

Participation. We will track and evaluate participation by asking rounds of questions in class. Each student's daily participation will be scored from excellent (9-10) to absent (0).

Web File. Students are required to publish all homework, labwork, papers and assignments to a web file using Google Sites or CD/DVD (with Seamonkey).

Class attendance. As in most classes, new material will be presented in the classroom. Unlike most classes, we often will make decisions jointly about the design of experiments in class. Your contribution is important, so come to class. Unexcused absences will result in a zero for all graded assignments associated with the date of the absence. (See Course Rules and Regs.)

Dr. Ben Stephens Psych 310-Advanced Experimental Psychology Fall 2018

Grading.

The relative weights of the grade components are as follows:

Exam I	15%
Exam II	10%
Exam III	10%
Short papers	
Method	5%
Results	5%
Discussion	5%
Long paper	30%
Participation	15%
Oral Report	2%
Homework/Lab	3%

Rules and Regs.

This may be one of the more demanding courses in Psychology. The material can be conceptually difficult, and you must produce on a daily basis. Every day or so, something is due in this class. It would be a serious mistake to get behind in the work. Therefore, to motivate you to complete your work on time, the following policies are in effect, consistent with University guidelines.

Missed exams, papers, labs, homework and participation will result in a grade of zero unless the absence is documented and constitutes a University approved absence. (Documentation must be written, e.g. a doctors excuse, notice of jury duty, etc.) However, if you are sick, and you email by 11:30 a.m. the day of class (9:00 a.m. before lab), you do not need to have documentation in order to have the absence excused due to illness (you must still make-up the missed work/assignments/test/etc). This "email" excuse may be used only for illness, and for a maximum of two times. Subsequent absences will required written documentation.

Homework and lab assignments are docked 2 pts if they are not posted by the specified time, 4 pts if they are not posted before meeting times, and 10 points if they are not posted by midnight on the due date .

Incomplete assignments are graded with a zero weight associated with the missing portions of the assignment.

Laptops are required for each class, and may be used only for note-taking and other assigned tasks. Browsing, checking email or texts, or other distracting use of laptops or mobile devices is not permitted during class or lab. Violations of this rule will lower participation grades.

Dr. Ben Stephens Psych 310-Advanced Experimental Psychology Fall 2016

Grading **System:**

Clemson University's grading system is described in the *2016-2017 Undergraduate Announcements*, p. 25-27. Grades of A, B, C, D, F, I, P, NP and W may be given in accordance with academic regulations. For more information on this grading system, please see the Registrar's web site at <http://www.registrar.clemson.edu/html/finalGrades.htm>.

Academic **Integrity:**

The following is the official statement on academic integrity. Please consider placing this statement in your syllabus, or at a minimum, please reference in the *Undergraduate Announcements* and call your students' attention to it.

“As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a “high seminary of learning.”

Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others.

Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.”

When, in the opinion of a course instructor, there is evidence that a student has committed an act of academic dishonesty, the instructor must make a formal written charge of academic dishonesty, including a description of the misconduct to Dr. Jeff Appling, Associate Dean of Undergraduate Studies. The reporting instructor may, at his/her discretion, inform each involved student privately of the nature of the alleged charge. In cases of plagiarism (I.B.2.) instructors may use the Plagiarism Resolution Form

available from the Office of Undergraduate Studies. Instructors using this form for the first time must consult with Dr. Appling (656-3022) prior to meeting with the student.

Instructors suspecting a violation of the academic integrity policy should *not* assign a grade penalty until the process is complete. For suspected academic dishonesty outside the course setting, please consult with the Associate Dean of Undergraduate Studies.

Instructors should include a class policy on submission of work that has been turned in for credit for a previous course.

Please call 656-3022 with any questions about academic integrity.

Class Rolls:

Students can use iROAR to add courses through August 23, to drop courses without record through August 30, and to drop with a *W* grade through October 21.

Students that have not attended class by the second week, after the last day to add a class (August 23), should be removed from the roll using the enrollment correction form:
<http://www.registrar.clemson.edu/html/facultyForms.htm>

The Clemson University Title IX (Sexual Harassment) statement must be included: Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at <http://www.clemson.edu/campus-life/campus-services/access/title-ix/>. Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 110 Holtzendorff Hall, 864.656.3184 (voice) or 864.656.0899 (TDD).

Attendance Policy:

The academic resources of Clemson University are provided for the intellectual growth and development of students. Class attendance is critical to the educational process; therefore, students should attend scheduled courses regularly if they are to attain their academic goals.

In the event of an emergency, the student should make direct contact with the course instructor, preferably before a class or an exam takes place. Students should speak with their course instructors regarding any scheduled absence as soon as possible and develop a plan for any make-up work. It is the student's responsibility to secure documentation of emergencies, if required. A student with an excessive number of absences may be withdrawn at the discretion of the course instructor.

Course instructors must implement fair grading procedures and provide an opportunity to make up missed assignments and examinations that does not unfairly penalize the student when an excused absence is accepted. Such make-up work shall be at the same level of difficulty with the missed assignment or examination. Course instructors shall hold all students with excused absences to the same standard for making up missed assignments and examinations. While course instructors should seek to make reasonable accommodations for a student involved in University-sponsored activities, students should understand that not every course can accommodate absences and that absences do not lessen the need to meet all course objectives.

Absence from class is detrimental to the learning process, so course instructors may use reasonable academic penalties which reflect the importance of work missed because of unexcused

absences. Course instructors who penalize students for unexcused absences must specify attendance requirements as related to grading in the course syllabus and must keep accurate attendance records. Course instructors are obligated to honor exceptions to the university attendance policy for students covered by the Americans with Disabilities Act, as verified through paperwork issued by Student Accessibility Services.

Notification of Absence:

The Notification of Absence module in Blackboard (<http://bb.clemson.edu>) allows students to quickly notify instructors (via an email) of an absence from class and provides for the following categories: court attendance, death of family member, illness, illness of family member, injury, military duty, religious observance, scheduled surgery, university function, unscheduled hospitalization, other anticipated absence, or other unanticipated absence. The notification form requires a brief explanation, dates and times. Based on the dates and times indicated, instructors are automatically selected, but students may decide which instructors will receive the notification. This does not serve as an “excuse” from class, and students are encouraged to discuss the absence with their instructors, as the instructor is the only person who can excuse an absence. If a student is unable to report the absence by computer, he/she may call the Dean of Students Office for assistance.

Faculty members should feel free to call the Dean of Students for help in considering the validity and sufficiency of the documentation provided by students. The Dean of Students Office also assists students in identifying appropriate methods of documenting absences and assists families in using the electronic Notification of Absence system when students are unable to do so themselves.

Grading:

It is very important for the success of our students that exams and other forms of graded work be evaluated and returned in a timely manner.

Mid-term Grades:

No later than five days before the last day students can drop courses without receiving final grades (October 21), instructors of every undergraduate course shall make available for each student (a) the student's numerical course grade or (b) that student's letter ranking to date in that course (A-F or P/NP). More frequent feedback is strongly encouraged.

Both student and instructor are to recognize that this feedback reflects the student's performance up to that point in time, and as such, that student's final course grade may change based upon subsequent coursework performance(s).

Last Week of Classes:

No examinations, other than laboratory examinations, are permitted on the last two days classes (December 1st & 2nd)

Final Examinations

At their own discretion, instructors may excuse from the final examination, all students having the grade A on the coursework prior to the final examination. For all other students, examinations are required in all subjects at the end of each semester, except in courses in which final examinations are not deemed necessary as approved by the department faculty.

Final examinations **must** be given (or due) on the dates and at the times designated in the final examination schedule, except in laboratory and one-credit-hour courses where the final exam will be given at the last class meeting. All courses that do not specify a standard day of the week and meeting time are not assigned a final exam date and time, and the final exam must be given during the examination week at a date and time announced by the instructor. This time must be stipulated in the syllabus at the beginning of the term.

Circumventing the designated date/time for a final examination via consenting signatures from students for a different date/time, though freely agreed to, is a violation of the final examination policy.

Posting of Grades

The United States Family Educational Rights and Privacy Act (FERPA) prohibits the public distribution of grades or graded work. This is commonly understood to include posting grades by student names, initials, or student number. It is also understood to include placing of graded material in a public place where students go through the material to find their own graded work.

Faculty use iROAR to submit grades at the end of each academic term. Follow the steps below. (Note: Grades recorded in Blackboard are outside the official grade collection system.)

Emergency Procedures

Emergency procedures have been posted in all buildings and on all elevators. Students should be reminded to review these procedures for their own safety.

Copyright Statement

Materials in some of the courses are copyrighted. They are intended for use only by students registered and enrolled in a particular course and only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act. Students should be reminded to refer to the Use of Copyrighted Materials and “Fair Use Guidelines” policy on the Clemson University website for additional information: <http://www.clemson.edu/library/>

Course Reading

Research Methods, Statistics, and Applications by Kathryn A. Adams and Eva K. Lawrence.

In addition to this text, readings may be assigned as needed.

[Natalie](#) - [Student Sites](#)

Course Calendar

Date	Topic in class	Read before class	Due: Posted to Website by 7:00 a.m. before Class	Lab: Due post website by end of lab period
1/9	Course overview Science in society Laptop study Participation scoring Demo	CH 1 IV and DV	CH1 HW - Define independent variable and dependent variable. Give an example of each in a study about	Use Classic Google Sites to Create Web Archive - make it private, but allow me and Natalie to edit and or view it. -Post your HW to your site (Define

	Coffee		football 10 HW pts How to do HW	independent variable and dependent variable. Give an example of each in a study about football.) Upload to website using label for page as Jan9HW -share url with Natalie, and verify that she can see the posts on her computer Check your verify that your SPSS app works. Use SPSS to calculate the mean and standard deviation of these scores 88, 78, 82, 80, 93, and 65. Export SPSS output to an excel file and post it to your website as Jan9LAB 10 LAB pts
1/14	Scientific Method Laptop study (Class does not meet today. Make-up assignments are due.)	Ch 1 Laptop study	HW CH 1 Define three terms, give example of each as applies to the article concerning Multitasking with Laptop Study Upload to website as Jan14HW 10 HW pts	

			<p>Take CT Assessment test</p> <p>- Post CT test screenshot of score to your site (call it CTpretest)</p> <p>10 Participation pts</p>	
1/1 6	<p>Validity, Reliability and Measurement</p> <p>L.O.S. Want More Money? full pdf report</p> <p>http://www.ted.com/talks/ben_goldacre_battling_bad_science</p>	Ch 3	<p>HW Ch 3</p> <p>Define three terms, give example of how each might apply to a study on Multitasking on laptops in class.</p> <p>(10 HW pts)</p>	<p>Design EX 1, Post Method Protocol (10 HW pts)</p> <p>LOS w Likert</p>
1/2 1	<p>Describing your sample</p> <p>DUI</p> <p>Water</p> <p>Eye Witness</p>	Ch5	<p>HW CH 5</p> <p>Define three terms, give example of each in a baseball or football study</p> <p>(10 HW pts)</p>	
1/2 3	<p>Causal claims</p> <p>DWT</p> <p>Shocking</p>	Ch 8	<p>CH 8 HW</p> <p>Define three terms, give example in a baseball or football study</p> <p>Topic I (10 HW pts)</p>	<p>Data Collect, Post data file (10 LAB pts)</p>

			Experimental Design e.g. LOS , Snakes	
1/2 8	Writing Beyond descriptives	Ch 6 Appendix B (Methods section) Methods rubric Methods style	HW CH 6 HW pick 3 terms, define each term, and apply each to LOS study.	
1/3 0	Independent Groups Critique	Ch 9 (up through p. 325)	Review Ch 1,3,5,6,8,9 list 6 terms needing clarification. Define each from text, give example from text, indicate nature of confusion Sample	Cronbach alpha example, LOS Results (10 HW pts) Practice data set tasks CH 3 https://statistics.laerd.com/spss-tutorials/cronbachs-alpha-using-spss-statistics.php https://statistics.laerd.com/spss-tutorials/independent-t-test-using-spss-statistics.php Results paragraph example Draft of Method section
2/4	Exam I (15% grade)			
2/6	Dependent Groups	CH 9 (p 325 - 345) Ch 10	Method Section LOS (5% grade due in class hard copy)	Lit Search (Topic II 10 HW pts)

2/1 1	Building a proposal Design Snake Lab NPR Backus	CH 2	HW CH Pick 4 terms from CH 9, 10, or 2 that are confusing. Define each term and indicate what the nature of the confusion is. (10 HW pts)	
2/1 3	Descriptive research Brains	Ch 4	HW Pick 4 terms from CH 4 that are confusing. Define each term and indicate what the nature of the confusion is. (10 HW pts)	Data Collect (10 HW pts) Snake ppt hamster Proposal Development
2/1 8	Writing Results Dependent ANOVA http://www.ted.com/talks/ben_goldacre_battling_bad_science More illusions			
2/2 0	Review	Review 9 (p325-345),10,2,4	HW: 6 terms from CH 9, 10, 2, and 4. What part of the concept is confusing?	Data Anal (10 HW pts) Laerd Project Materials (10 HW pts) Proposal development CITI
2/2 5	Exam II (10% grade)	CH 9 (p325-		

		345), 10,2,4		
2/2 7	Factorial Design	CH 11	Results section due (5% grade due in class hard copy)	Data Collect Proposal development (Topic III) Finalize project materials CITI 10 HW pts
3/3	Factorial Design	CH 11	HW Pick 4 terms from CH 11 that are confusing. Define each term and indicate what the nature of the confusion is. (10 HW pts)	
3/5	Correlational design Conclusions: Writing Discussion Overview results Lab III Discussion paper: outline	Ch 7 p 224 - 237	Post CITI certification (10 pts) HW Pick 4 terms from CH 7 that are confusing. Define each term and indicate what the nature of the confusion is. (10 HW pts)	Data Anal Laerd (Optional - 10 HW pts) Prepare IRB Form, Info Letter (Required - 10 HW pts)
3/1 0	Non-parametric	CH 12 p 431- 450	Topic III and proposal ppt (10HW pts)	
3/1 2	Proposals		Proposals (10HW pts)	Proposals

3/1 7	Spring Break			
3/1 9	Spring Break			
3/2 4	Generate final IRB proposals		Discussion section due (5% grade due in class hard copy)	
3/2 6	Writing Introduction How to decide Cuddy Talk	Ch 14	HW Pick 4 terms from CH 14 that are confusing. Define each term and indicate what the nature of the confusion is. (10 HW pts)	Individual meetings
3/3 1	Review	CH 11,7,12,14, Proposals, Cuddy Talk	HW: 6 terms shaky (10 pts) - What part of definition confusing?	
4/2	Exam III (10% grade)			Individual meetings
4/7	Final Report Checklists and Appendix B p 547-555		Intro Draft due (10 pts)	
4/9	IM		Prelim Methods due (10 pts)	Individual meetings
4/1 4	IM		Prelim Results due (10 pts)	Individual meetings
4/1 6	CAT assessment (10 pts)		ppt draft due (10 pts)	

4/2 1	Final Presentations (2%)		final ppt due	
4/2 3	Final Presentations			Final Presentations
4/2 4			Final Report (30%)	

Office Hours and Contact

PSYCH 3100, section 600
Brack 122

Contact

Ben Stephens
bstephe@clermson.edu
Brackett 312L
656-4982

Office Hours Spring 2020

T 10-12
W 8-10
and by email (anytime!) or appointment

Office Hours and Contact

PSYCH 3100, section 600
Brack 122

Contact

Ben Stephens
bstephe@clermson.edu
Brackett 312L
656-4982

Office Hours Spring 2020

T 10-12

W 8-10

and by email (anytime!) or appointment