

PSY 3100 – ADVANCED EXPERIMENTAL PSYCHOLOGY

SECTIONS 001 / 003, Fall 2019

FIGURE 1.7



Copyright © 2018, W. W. Norton



FIGURE 2.6

Copyright © 2018, W. W. Norton & Co., Inc.

INSTRUCTOR INFORMATION

Eric S. McKibben, Ph.D.
Senior Lecturer
mckibbe@clemson.edu

TA INFORMATION

Office Hours: I want you to get as much as possible from this course and hope that you enjoy it. I'd be delighted to talk with you about any course related issues during my office hours. If you're not free during those times, we can arrange an appointment at another time. Or, if my office door is open, I'd be glad to see you; however, when the door is closed, it's a signal that I'm either not in or prefer not to be disturbed. Also, you can always contact me through e-mail. My Office Hours this term are:

MWF 10 to 12:00
By appt.

COURSE PURPOSE, GOALS, AND SPECIFIC LEARNING OBJECTIVES/OUTCOMES

Course Description and Purpose

Human thought, feeling, and behavior is incredibly complex! The field of psychology has four primary goals concerning human thought, feeling, and behavior. We aim to: describe, explain, predict, and control ourselves and the world around us as accurately as we can. The accuracy of these endeavors is paramount and requires a process for discerning truth about thought, feeling, and behavior. This course is designed to introduce you to psychological research methods as a mechanism for discovering truths about psychology and the claims made by experts in the field.

Psychology students need to be able to think critically about claims made by people in the world around them. Moreover, students need to understand how those claims are or are not supported by data and how those data were collected. This course will teach students how to critically evaluate

claims by teaching students the ways in which data can be collected and analyzed. To fully understand these concepts, students will engage in the research process themselves from start to finish.

This course is a Critical Thinking Seminar and as such is designed to help you to develop critical thinking skills as part of the Clemson Thinks2 (CT2) program. A primary goal of a critical thinking seminar is for you to gain a deeper understanding of how psychological truth is determined and knowledge is constructed. You will learn how to carefully evaluate the assumptions and logic underlying that claims and knowledge construction. This is a different type of learning than that required to memorize facts and definitions, and to which you may not be as familiar or adept. You will likely experience some discomfort early in the semester and will need to work to improve your tolerance of ambiguity. Becoming comfortable with uncertainty and ambiguity is an important skill that will help you cope in a hostile and uncertain world. You can find more information on the CT2 program at <https://www.clemson.edu/academics/programs/thinks2/index.html>.

Student Learning Outcomes

By the time you finish this course you should:

1. Be able to critically evaluate claims made by people in authority positions (media, politicians, professors, etc) and determine the likelihood of their veracity.
2. Describe the basic nature of at least four different forms of data and how those forms of data are used to support psychological claims.
3. Understand the different forms of data reliability and validity and how different measurement practices impact those forms.
4. Conduct statistical analyses on data to test hypotheses (claims) you've made.
5. Effectively communicate your claim, methods for gathering data, results of your statistical analyses, conclusions you draw from those analyses, and inherent assumptions you've made while conducting your research. You will do this in both written and oral formats.

METHOD(S) OF INSTRUCTION

This course combines lecture, discussion, in-class activities, and examinations. You are expected to come to class prepared to hold an open, respectful, and honest discussion of the assigned reading and actively engage in all class activities.

METHOD(S) OF ASSESSING ACHIEVEMENT OF LEARNING OBJECTIVES

- Three exams
- Written lab exercises
- Written research paper
- A final examination

STUDENT FEEDBACK AND GRADING POLICIES AND PROCEDURES

Student feedback will be solicited both formally and informally.

Components of the course grade are:

Exam 1	100	points	
Exam 2	100	points	
Exam 3	100	points	
Lab Exercises/Participation	100	points	
Final Research Project	200	points	
Final Exam (if required)	100	points	
Total	600	points	700 points if final is required

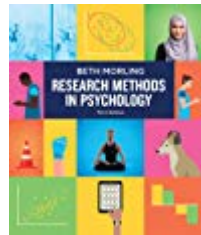
FINAL PAPER GRADING RUBRIC

Percent of grade	Element	Description
10	Paper organization	Paper contains each major section (title page, abstract, intro, method, results, discussion, references). Each section is organized logically following hour glass model.
30	Theoretical Support	Literature review is complete and comprehensive. Purpose for study is clearly stated and hypotheses are relevant to literature presented.
30	Analytical soundness	All statistical analyses are properly conducted and presented. Analyses are interpreted correctly and thoroughly discussed.
20	Clarity of writing	Arguments are clearly presented and cogent. Paper is free from spelling and grammatical errors.
10	APA Format	All sections of the paper are formatted according to APA standards.

The course grading policy is as follows:

90% A
80% B
70% C
60% D
<60% F

TEXTBOOK(S) AND SUPPLEMENTARY READINGS



Morling, B. (2017). *Research methods in psychology: Evaluating a world of information*, (3rd ed.). New York NY: W.W. Norton & Company.



Publication Manual of the American Psychological Association, 6th ed. Washington, DC: American Psychological Association, 2010.

Various journal articles and news websites assigned in class.

COURSE POLICIES

The instructor follows all University policies regarding academic honesty, grading, and attendance as detailed in the University catalog.

Attendance. While Attendance is not mandatory for this course, you are strongly encouraged to attend all classes. The instructor will not be responsible for “reteaching” the lecture material to any student who misses a class.

Lab Attendance. You are **REQUIRED** to attend every lab. The lab represents a very practical approach to helping you understand and complete your assigned project. You will receive specific guidance on how to conduct each step of the research process and be given time to work on your project in lab. This will greatly

reduce the amount of time you need to spend learning how to do research outside of class and lab. Please make sure you attend every lab. Repeatedly missing lab will result in failure in the class.

Make-up Tests and Assignments. Students may inform the instructor **48 hours in advance** of an examination to schedule an alternate date and/or time for an exam. Students representing the university in an officially-sponsored activity will be allowed to make up all work missed during the excused absence within three days of returning to class. It is the student's responsibility to provide documentation of his or her participation in an officially-sponsored university activity. If a student not representing the university in an officially-sponsored activity misses an examination or assignment due to **extenuating circumstances** beyond the student's control, provided the student gives the instructor **appropriate documentation**, the student will be allowed to complete the missed work at a time convenient to the instructor, usually the last week of class.

Late Assignments. Late assignments will be accepted. However, the grading scale for late assignments begins at 80% of the possible points and declines an additional 10% each additional day.

Syllabus Changes. I reserve the right to alter, add to, or delete requirements stated on the syllabus based upon my judgment of what is best for the educational purposes of a particular class. Any changes in the requirements stated above and their influence on the final grading structure will be discussed in class.

Communication with the Instructor. In addition to announcements in class, much of the communication in this course will occur through electronic means. The instructor will use **ONLY** the official Clemson University e-mail address. It is the student's responsibility to gain access to the university e-mail system and check his or her e-mail regularly.

Students are welcome to send electronic mail to the instructor. The instructor will read and respond to student e-mail within 24 hours during the week. E-mail received over the weekend will generally not receive a response until Monday. Questions about student grades on quizzes, exams, or assignments will not be answered by e-mail or by telephone. Students must appear in person to inquire about their grades. No student grades or other educational records will be disclosed to other students or to family members unless prior written consent has been provided by the student.

Proper etiquette is required for electronic mail, just as with any other written correspondence. In particular, the student cannot expect a response if he or she is not identified. Therefore, the instructor will only respond to student e-mail messages from official Clemson University addresses displaying:

1. A specific subject line identifying the purpose of the communication.
2. The student's name and class.
3. The student's return e-mail address.

In addition to the above, proper netiquette demands that the student be polite, the student avoids writing in ALL CAPITALS (which is considered yelling in cyberspace), and that the student checks his or her own e-mail for a response in a timely fashion.

SAFETY CONCERNS

All students and employees should be familiar with the following guidelines. For additional information about safety see <http://www.clemson.edu/cusafety/preparedness/>.

Evacuation:

- When evacuating buildings, do not use elevators as they may lose power, stranding riders.
- Familiarize yourself with the locations of stairwells and exits.
- Individuals needing assistance evacuating should move to a stairwell away from the hazard, dial 911, and provide the Dispatcher with their exact location and what they need regarding evacuation.
- When evacuating follow the instructions provided by Public Safety personnel to reach a safe place.
- To seek “Tornado Safer Places,” get to the lowest level of the building time allows, stay away from areas with windows and glass, and put as many walls as you can between yourself and the outside. In public buildings, bathrooms typically have an additional wall.

Active Shooter:

- Always call 911 as soon as you possibly can.
- Run away from the area, if it is safe to do so, time allows and the gunman is not nearby.
- Hide if the gunman is too close to your location. Find a safer place, lock and barricade doors, turn lights out and cell phones off or to vibrate.
- Fight. As a last resort, resolve to fight the intruder with everything you have at your disposal.

A short video prepared and presented by the Department of Homeland Security can be found at the following link: dhs.gov/video/options-consideration-active-shooter-preparedness-video.

HARASSMENT / DISCRIMINATION

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. Title IX of the Education Amendments of 1972 (amending the Higher Education Act of 1965) is a federal gender equity law that prohibits discrimination based on sex in education programs and activities that receive federal funding. Sexual harassment, which includes sexual violence and other forms of nonconsensual sexual misconduct, is a form of sex discrimination and is prohibited under this law. Title IX policy is located at: <http://www.clemson.edu/campus-life/campus-services/access/titleix/index.html> 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).

ACCOMODATIONS FOR STUDENTS

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive

Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester. You can access further information here: <http://www.clemson.edu/campus-life/campus-services/sds/>.

ACADEMIC INTEGRITY

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.

INCLEMENT WEATHER / E-LEARNING

Clemson University follows state government guidelines concerning inclement weather. When county government offices are closed, local Clemson University campuses also are closed. You may receive updates about closings by following Clemson University on social media, through email, and through CU Safe Alert text messages.

Should classes be canceled because of inclement weather or for any other reason, I will send an email to the class with any assigned reading, exercises and the due date for the assignments that you will complete in lieu of coming to class. These assignments will be posted in Canvas (<https://clemson.instructure.com/courses/>).

PSY 3010 Advanced Experimental Psychology
Tentative Course Calendar

Day	Date	Topic	Assigned Reading	Homework/Project Due Date	Lab
Wed.	8/21	Course Introduction and Overview			
Fri.	8/23	Goal Exercise (Research focused)			
Mon.	8/26	Consumer vs Producer Research	Chapter 1		
Wed.	8/28	Cont.			Project Management/Theory/Purpose Statement Generation
Fri.	8/30	Finding truth	Chapter 2		
Mon.	9/2	Sources of truth			Lit Review
Wed.	9/4	Sources of truth cont.			
Fri.	9/6	Variables/Claims	Chapter 3		
Mon.	9/9	Variables/Claims/Validity			Hypothesis Generation
Wed.	9/11	Validity			
Fri.	9/13	Validity Cont.			
Mon.	9/16	Ethics	Chapter 4		APA Citations
Wed.	9/18	Ethics cont.			
Fri.	9/20	Ethics Cont./Review		Lit Review Due	
Mon.	9/23	Exam 1 Chapters 1-4			IV/DV Identification/Research Design
Wed.	9/25	Measurement principles	Chapter 5		
Fri.	9/27	Reliability			
Mon.	9/30	Reliability/Validity of Measure			Measures
Wed.	10/2	Survey design/observations	Chapter 6		
Fri.	10/4	Behavioral Observations		Method Due	
Mon.	10/7	Sampling	Chapter 7		IRB
Wed.	10/9	External Validity			
Fri.	10/11				
Mon.	10/14	Fall Break			
Wed.	10/16	Bivariate correlation	Chapter 8		
Fri.	10/18	Bivariate correlation cont.			SPSS File Setup
Mon.	10/21	Validity of association claims			
Wed.	10/23	Multivariate/regression	Chapter 9	Final Proposal Due	
Fri.	10/25	Regression cont.			Data Collection
Mon.	10/28	Exam 2 Chapters 5-9			
Wed.	10/30	Simple experiments	Chapter 10		
Fri.	11/1	Experimental design and confounds	Chapter 11		Data Collection/Data Analysis

Mon.	11/4	Null effects			
Wed.	11/6	Confounds cont.			
Fri.	11/8	Multiple independent variables	Chapter 12		Data Analysis
Mon.	11/11	Factorial designs			
Wed.	11/13	Multiple IVs cont.			
Fri.	11/15	Interactions			Results Writeup, APA Tables/Figures
Mon.	11/18	Small sample designs	Chapter 13		
Wed.	11/20	Cont.			
Fri.	11/22	External validity and generalization	Chapter 14		Poster Generation
Mon.	11/25	Cont.			
Wed.	11/27	Thanksgiving Break			
Fri.	11/29	Thanksgiving Break			
Mon.	12/2	Review		Final Paper Due	
Wed.	12/4	Exam 3 Chapters 10 - 14			Poster Presentation
Fri.	12/6	Review Final Exam			
Thurs	12/12	8 am Section Final Exam 11:30 to 2			
FRI	12/13	9 am Section Final Exam 8 to 10:30			