PSYC 203-02/L: DESIGN & ANALYSIS I

Fall 2022: Tuesdays & Thursdays, 9:30a – 10:45p (lecture), 11:00p-12:15p (lab) in Oechsle 201

Professor Contact: Professor or Dr. Bell (she/her), bellac@lafayette.edu
Student Drop-In Hours: Tuesdays & Thursdays, 1:30 – 2:30P; book an appointment

WELCOME!

I am Professor Bell and so glad you're here! Please reach out if you have questions or want to learn more about each other. In addition to class, I have weekly drop-in hours during which we can discuss course content, assignments, and/or research. I am happy to meet over Zoom or in person at my office, Oechsle 301. We can arrange an alternative time if these office hours conflict with your schedule. I aim to respond to emails within 1 business day (M-F, 8-5p).

COURSE DESCRIPTION & OBJECTIVES

This course covers contemporary empirical methods for conducting psychological science and the full scope of the research process. Students are trained to become informed consumers and producers of research.

Upon the completion of course requirements, you should be able to:

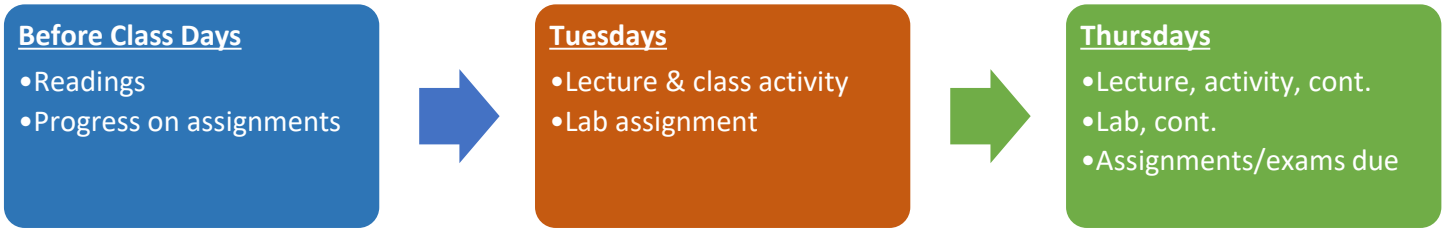
a. use and understand the vocabulary of research in psychology.
b. demonstrate and apply understanding of principles of ethical research.
c. choose appropriate design and analysis approaches for answering basic research questions.
d. interpret and evaluate basic research designs and analyses in psychology.
e. use contemporary research tools to collect data, conduct statistical analyses of data, and report the results of these analyses for common research designs in psychology.
f. write about research methods and results in APA style.

Pre-requisites PSYC 110: Introduction to Psychological Science and PSYC 120: Quantitative Methods. This course will reinforce and expand upon the topics covered in 120 (measures of central tendency and variability, t-tests, analysis of variance, and correlation). This course fulfills the "Q" (Quantitative Reasoning) attribute in the Lafayette College Common Course of Study.

LEANING INTO DISCOMFORT

There may be times when you feel anxiety about practicing research design and statistics in psychological science. Feeling this anxiety is completely normal! I invite you to be curious about your feelings as you continue to engage with course materials so you have the best opportunity to learn. My goal is to provide tools you need to fully participate in daily activities, labs, and assessments in a meaningful way that will prepare you for success after this term is over. If you experience difficulty managing feelings of anxiety, please contact me so we can identify stressors and develop a plan for moving forward together.

MOST WEEKS AT A GLANCE



COURSE MATERIALS

The required, free, open access course textbook is:

Jhangiani, R.S., Chiang I-C. A., Cuttler, C., & Leighton, D.C. (2019). Research Methods in Psychology (4th ed.). ISBN: 978-1-9991981-0-7. DOI: https://doi.org/10.17605/osf.io/hf7dq

The textbook can read online or download as a PDF: https://kpu.pressbooks.pub/psychmethods4e/

The required, free, open access lab software is JASP (Just Another Statistics Program):

JASP can be downloaded and installed here: https://jasp-stats.org/

If you need help with JASP beyond what is provided in lab, this online textbook is recommended: Buchanan, E. M., Hopke, T. G., & Donaldson, S. (2018, November 27). Undergraduate Statistics with JASP. https://doi.org/10.17605/OSF.IO/T56KG

As well as this YouTube series from Research by Design, https://www.youtube.com/watch?v=bVR3LrmfNYA&list=PLVI_iGT5ZuRnIqpav1UaadEJmj2e8QHzn
Other course readings and materials will be provided on Moodle.

COURSE EXPECTATIONS

- **Access course materials via our Moodle site.** You should visit our site and check email daily (Mondays – Fridays) to stay on task with assignments, readings, and announcements.
- **Regularly attend and contribute to lectures/labs.** Please show up on time, stay for the entire class period, and come prepared and ready to participate.
- **Communicate with me**, your class dean, and the health center so you have the necessary resources and support when you feel sick. **When you are sick, stay home** for the safety of yourself and our community. You and I will make alternative arrangements to participate virtually when you're able.
- **Use technology appropriately** (e.g., close phone and laptop browsers/applications unrelated to class).

ONGOING PANDEMIC & EXTREME WEATHER EVENTS

Depending on COVID-19 or other illnesses on campus that affect our class attendance, there is always a possibility that we revert in-person meetings to virtual, synchronous Zoom sessions. For inclement weather, Lafayette's practice is to remain open for classes, even if College offices open late or close early. However, if I need to change from in-person to virtual, or cancel class any reason (i.e., illness and family emergencies), I will make announcements over email before class or lab times.

COURSE ASSESSMENTS

Student Engagement. Your participation is incredibly valuable to the course experience and engagement is considered broadly. This includes: being prepared for class (e.g., conduct readings before class time); participating during in-class activities, completing take-home assignments, visiting office hours, and speaking to me about your questions/thoughts about content and assignments throughout the semester.

"Life Happens Pass:" To promote wellness and flexibility, all students receive two "flexible" excused absences without attendance negatively affecting your engagement grade—this includes any day except exams or final presentations. Each student will receive a class engagement grade based on the quality of their contributions at the end of the term. Mid-semester evaluations will be distributed so you can reflect on your current progress. I will post detailed grading criteria on Moodle.

Lab Activities and Homework. Each week, we complete lab assignments and research tasks. During lab time, I expect you to actively work toward completing these assignments. These lab times are essential opportunities to work with me and your peers to enhance your understanding and mastery of course content. I will post detailed instructions and grading criteria on Moodle as the course progresses.

Exams. The exams in the course will be administered synchronously during scheduled class times unless you have made different arrangements directly with Dr. Bell *and* provided a Dean's excuse that covers the day of the exam. Exams must be completed in the time allotted, and you will be required to submit your exam when the allotted time has expired.

The course content- and our exams- are cumulative by design; what you learn in one lecture/lab will be the basis of what you learn in the future. Exams assess your understanding of the course material and your abilities to apply research and theory to everyday contexts. Exams will be comprised of a mix of multiple choice, short-answer, and essay questions from the textbook, lectures, and other supplemental materials.

Research Project. You will complete a project that results in your own original research proposal that effectively matches a design to an appropriate data analytic plan that simulates hypothesized findings. This project features assignments that can be completed individually or in small groups. I will post detailed instructions and grading criteria in a separate handout.

Grading Summary	
Student Engagement	100 points
10 Labs and 10 Homework	200 points
Exams (3 x 125 points each)	375 points
Research Project	325 points
Total points possible	**1000 points**

Grading Procedure. My aim is to return grades within one week of submission. For some assignments, I may not provide detailed individual feedback and instead provide general feedback as part of lectures in class, but I am happy to meet one-on-one to give additional feedback.

For grade disagreements, you must notify me within 1 week of the original grade being posted; after 1 week, your grade will be considered final. Keep in mind that I may choose to re-grade the entire assignment, not just the portion about which you disagree.

For confidentiality reasons, I discuss grades face-to-face and not over e-mail. Students receive grades and overall progress in the class at multiple points throughout the semester. Finally, ***I do not "round up" nor do I produce extra-credit opportunities after assignments are complete.*** All grades are determined by the final number of points earned divided by the points possible.

Late Submissions. You can still receive credit for labs/homework and aspects of your research project if you submit past the deadline (10% total point reduction for each 24-hours passed).

Extra Credit. You can earn extra credit for participating in research studies in the psychology department. At the end of the drop/add period of the semester you will receive an email notification with your login information for SONA (http://lafayettecollege.sona-systems.com). Research is voluntary and

extra credit opportunities are NOT guaranteed. You have until the last day of class to participate. If you do not want to use SONA, I will provide alternative writing assignments and research-related activities. Note that extra credit can only apply 2% (20 points) to your overall grade.

STUDENT ACCESSIBILITY & DISABILITY

I am happy to work with students to best support your learning needs. Communicate with me and register with Accessibility Services Office and the Academic Resource Hub for the most essential accommodations. See Dr. Bell the first two weeks of class to discuss your accommodations in advance of tests and assignments. Refer to Lafayette College's Accessibility Services for more information.

INTERNET PRIVACY AND ACADEMIC INTEGRITY

Proper Usage of Course Materials: At Lafayette College, all course materials are proprietary and for class purposes only. This includes posted recordings of lectures, worksheets, discussion prompts, and other course items. Do not repost such materials. Online discussions should also remain private and not be shared outside of the course. You must request my permission prior to creating your own recordings of class materials; do not share recordings online or on social media even when permission is granted to record. Please contact me if you have any concerns about being recorded in course-related activities.

Lafayette College Moodle Privacy Statement*:* "Moodle contains student information that is protected by the Family Educational Right to Privacy Act (FERPA). Disclosure to unauthorized parties violates federal privacy laws. […]remember that this information is protected by these federal privacy laws and must not be shared with anyone outside the class. Questions can be referred to the Registrar's Office."

Academic Honesty: Students are required to abide by the standards of academic honesty described in the Student Handbook (https://conduct.lafayette.edu/student-handbook/student-code-of-conduct/). Please also see the section in Appendix II, "How to Avoid Plagiarism" (https://conduct.lafayette.edu/student-handbook/appendices/). You may also find the library page with resources for finding, evaluating, and citing information useful: https://library.lafayette.edu/services-help/help/. The Department of Psychology Academic Honesty Statement and Policy is available in its entirety on Moodle and I will assume you have read it.

Academic and research integrity is integral in adhering to standard procedures and practices to collecting data, interpreting results, and disseminating our findings. When working collaboratively there can be a fine line between work that is individually completed or completed with others. Work for all drafts of your APA-style lab report are written individually and should be your own original work. In-class assignments and lab reports will indicate when working collaboratively and turning in shared work is and is not appropriate. Sharing assignments, exam content, data fabrication, and passing off the work of others as your own (plagiarism) are all considered serious violations of the Principles of Intellectual Honesty. The long-term (e.g., post-final exam) retention, out-of-class sharing, distribution or posting of any remote instruction materials associated with the course is not allowed. Any Lafayette College student not enrolled in our class and willingly in receipt of remote instruction materials from this class is also in violation. I refer violations to the Dean of College for investigation and further action.

CREDIT HOURS

The student work in this course is in full compliance with the federal definition of a four-credit-hour course. Please see the Registrar's Office web site for the full policy and practice statement.

PSYC 203/L CALENDAR

Working Schedule - Topic, readings, and assignment due dates may change

Last Updated: 08.28.22

Dates		Topic/Event	Readings
Week 1	Tues Aug 30	**Lecture: Welcome back! Course Intro** **Lab:** Lab Intro & Activity #1	Syllabus
	Thurs Sept 1	**Lecture:** The Science of Psychology **Lab:** Activity #1, continued	Ch 1 Jordan & Zanna (1999)
Week 2	Tues Sept 6	**Lecture:** The Scientific Method; Reading & Writing in Psych **Lab:** Activity #2	Ch 2 Ch 11
	Thurs Sept 8	**Lecture:** The Scientific Method; Descriptive Statistics **Lab:** Activity, cont.	Ch 2 Ch 12
Week 3	Tues Sept 13	**Lecture:** Research Ethics; Open Science **Lab:** Activity #3	Ch 3 Ch 13
	Thurs Sept 15	**Lecture:** Research Ethics; Open Science **Lab:** Activity, cont.	Ch 3 Ch 13
Week 4	Tues Sept 20	**Lecture:** Lecture Review **Lab:** Exam 1 Jeopardy Review	Review previous
	Thurs Sept 22	**Lecture:** Exam 1 **Lab:** Project introduction	
Week 5	Tues Sept 27	**Lecture:** Psych Measurement; Survey Research **Lab:** Activity #4	Ch 4 Ch 12
	Thurs Sept 29	**Lecture:** Psych Measurement; Survey Research **Lab:** Activity, cont.	Ch 4 Ch 12
Week 6	Tues Oct 4	**Lecture:** Non-Experimental; Single-Subject Research **Lab:** Activity #5	Ch 6 Ch 10
	Thurs Oct 6	**Lecture:** Non-Experimental; Quasi-Experimental Research **Lab:** Activity, cont.	Ch 6 Ch 8
Week 7	Tues Oct 11	**Fall Break –** Treat Yo Self.gif	
	Thurs Oct 13	**Lecture:** Quasi-Experimental Research; Inferential Statistics **Lab:** Activity #6	Ch 8 Ch 13
Week 8	Tues Oct 18	**Lecture:** Lecture Review **Lab:** Exam 2 Jeopardy Review	Review previous
	Thurs Oct 20	**Lecture:** Exam 2 **Lab:** Project, cont.	

Week 9	Tues Oct 25	**Lecture:** Experimental Research; Inferential Statistics **Lab:** Activity #6	Ch 5 Ch 13
	Thurs Oct 27	**Lecture:** Experimental Research; Inferential Statistics **Lab:** Activity, cont.	Ch 5 Ch 13
Week 10	Tues Nov 1	**Lecture:** Experimental Research (3+ groups) **Lab:** Activity #7	Ch 5 Alon (2009)
	Thurs Nov 3	**Lecture:** Experimental Research (3+ groups) **Lab:** Activity, cont.	Ch 5 Alon (2009)
Week 11	Tues Nov 8	**Lecture:** Factorial Designs **Lab:** Activity #8	Ch 9 ***Election day – go vote!***
	Thurs Nov 10	**Lecture:** Factorial Designs **Lab:** Activity, cont.	Ch 9
Week 12	Tues Nov 15	**Lecture:** Lecture Review **Lab:** Exam 3 Jeopardy Review	Review previous
	Thurs Nov 17	**Lecture:** Exam 3 **Lab:** Project, cont.	
Week 13	Tues Nov 22	**Lecture:** Project Day **Lab:** Project, cont.	Project Research
	Thurs Nov 24	**Another Fall Break – Treat Yo Self.gif**	
Week 14	Tues Nov 29	**Lecture:** Research & Survey Design **Lab:** Activity #10	Project Research
	Thurs Dec 1	**Lecture:** Writing & Presenting Your Research **Lab:** Activity, cont.	Ch 11
Week 15	Tues Dec 6	**Lecture:** Catching up **Lab:** Project, cont.	Project Research
	Thurs Dec 8	**Lecture:** Professional Development & Wrapping Up **Lab:** Project, cont.	
Week 16	TBD Finals	Submit Presentations Submit Final Papers	