# PSY 3213C Research Methods in Psychology (+Lab)

Summer 2023 C Class Number: 6425/6426 4 Credits

Instructor: Adam E. Tratner, PhD

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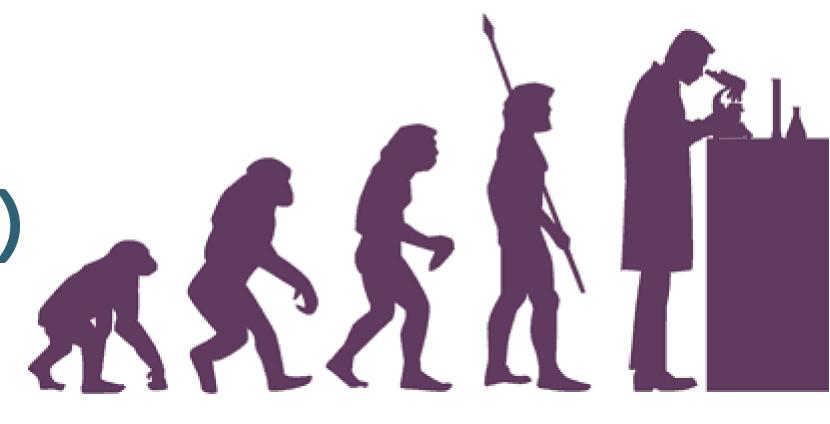
**Office Hour**: Friday 10:00am – 11:00am (Room 201)

## **Class Sessions**:

Monday & Wednesday 2:45pm - 4:15pm in Computer Lab (Room 012)

## Laboratory Sessions:

Thursday 4:00pm - 6:00pm in Computer Lab (Room 012)



# RESEARCH METHODS IN PSYCHOLOGY

4th edition

Rajiv Jhangiani, I-Chant A. Chiang, Carrie Cuttler, & Dana C. Leighton

## **Short Course Description**

This course is an introduction to philosophical and methodological issues in the empirical study of psychology. Laboratory portion includes running simple experiments, analyzing data, and interpreting the results.

Student learning outcomes will be assessed via quizzes, laboratory workshops, and a final research project.









Jhangiani, R. S., Chiang, I. C. A., Cuttler, C., & Leighton, D. C. (2019). Research Methods In Psychology. Kwantlen Polytechnic University.

## **Student Learning Goals**

 Describe the steps of scientific method and be able to apply them to your own research design.
 Critically discuss the difference between science and pseudoscience.

3. Use search engines and other resources to do a literature review on a given psychological topic.
4. Identify whether a study uses a correlational or experimental design, as well as whether causation can be established.

5. Identify, create, and apply different research designs.

6. Collect, analyze, and report data (and know when to use specific statistical procedures).
7. Produce an APA formatted research paper including an abstract, introduction/literature review, method section, results, and discussion of the paper's conclusions.

## **Course Content**

Assignments, announcements, supplemental resources, grades, and other things will be posted to and available through **Canvas** (http://canvas.fsu.edu).

I will post my lecture slides immediately after each class on Monday & Wednesday, quizzes after class on Wednesday, and lab activities by the start of class on Thursday. All assignments can be accessed and completed via Canvas. See schedule below for all due dates.

## **Course Description and Learning Objectives**

This course provides an introduction to the philosophical and methodological issues in the empirical study of psychology. The laboratory portion includes running simple experiments, analyzing data, and interpreting results. Throughout the course, you will learn to think critically about research in psychology, become familiar with ethical conduct in relation to psychological research, gain hands on experience in elementary experimental design, data collection, and simple data analysis, and practice the process of acquiring and communicating information in psychology.

## **Upper-Division Writing**

This course has been approved to meet FSU's Liberal Studies Upper-Division Writing requirement and helps you become a flexible and proficient writer for professional purposes.

By the end of this course, students will:

1. Use appropriate evidence from multiple sources to illustrate how a chosen topic is relevant to the field of Psychology.

2. Convey ideas clearly, coherently, and effectively for a particular purpose, occasion, or audience representative as appropriate for the field.

In this course, you will compose as a process, including drafts, revision, and editing. The writing cultivated by this process conforms to FSU's definition of "college-level writing", which is writing that:

- 1. Presents a clearly defined central idea or thesis;
- 2. Provides adequate support for that idea;
- 3. Is organized clearly and logically;
- 4. Is presented in a format appropriate to the purpose, occasion, and audience; and
- 5. Utilizes the conventions of a standard language.

As such, this course requires the completion of two or more substantial writing assignments or the equivalent. Instructors will provide criteria for evaluating your performance on writing, feedback on your writing (including instructor response), and opportunities for revision. In order to fulfill FSU's Upper-Division Writing requirement, the student must earn a "C–" or higher in the course, and earn at least a "C–" average on the required writing assignments. If the student does not earn a "C–" average or better on the required writing assignments, the student will not earn an overall grade of "C–" or better in the course, no matter how well the student performs in the remaining portion of the course.

## **Scholarship in Practice**

This course has been approved to meet FSU's Liberal Studies Scholarship in Practice requirement and helps you become a critical thinker, a creative user of knowledge, and an independent learner. By the end of this course, students will:

1. Apply relevant areas of scholarship to produce an original project. In order to fulfill FSU's Scholarship in Practice requirement, the student must earn a "C-" or higher in the course.

## **Digital Literacy**

Every day, we are inundated with information through our interaction with social media, news sites, and search engines. In addition, as Psychology majors, you are expected to develop skills in finding and evaluating empirical information from scientific sources. In this course, you will learn how to find, read, understand, and interpret primary scientific literature and review papers, as well as how to scrutinize information found in everyday, non-scientific sources. All of this information is easily and readily accessed online, and in both your profession and your personal life, it is critical that you can (1) identify credible vs. non-credible sources of information, (2) develop the tools necessary to locate the primary source of information and determine if claims are valid based on the experimental design, data collection, and statistical analysis, and (3) conceptualize the relevance of a stated claim to the question or problem at hand. Furthermore, as a student in your major coursework, you must be able to differentiate between appropriate and inappropriate uses of digital information in order to uphold the high standard of academic integrity to which you are held. Research Methods in Psychology has been approved to fulfill your Digital Literacy requirement.

Upon successful completion of this course, you will be able to:

- 1. Evaluate and interpret the accuracy, credibility, and relevance of digital information.
- 2. Discuss the ways in which society and/or culture interact with digital technology.

3. Demonstrate the ability to use digital technology effectively.

4. Demonstrate the knowledge to use digital technology safely and ethically.

Because these topics are integral to the entirety of this course, assessment of these learning outcomes will occur on each sectional exam, your lab assignments, and the state quiz at the end of the semester. In order to meet the Digital Literacy requirement, you must earn a grade of at least a "C-" in the course.

#### **Grade Determination**

The class is out of 400 total points split between 5 grade categories:

Attendance	Quizzes	Lab Workshops	Research Project Presentation	<b>Research Paper</b>
30 points	90 points	110 points	50 points	120 points

**30 points - Attendance:** Attending class and laboratory sessions is **mandatory**. Each class that you attend is worth 1 point. If you attend every single class session, you will earn 34 points (i.e., because there are 34 class sessions). If you show up to class more than 5 minutes late without a legitimate excuse, you will not earn credit for attendance.

**90 points - Quizzes**: There will be a weekly quiz that assesses your knowledge/understanding of the information presented in the lecture and readings. Quizzes are timed (30 minutes) and may include a mixture of multiple choice/written response questions. Quizzes become available at the end of Wednesday class sessions, cover the material presented/assigned on Monday & Wednesday, and are **due before each Thursday lab workshop session** (4:00pm). There are 9 quizzes throughout the semester and each quiz is worth 10 points. At the end of the semester, your lowest quiz score will be dropped and replaced by your highest quiz score.

110 points – Lab Workshop Activities: Every Thursday we will meet in the FSU Panama computer lab and participate in a hands-on laboratory activity. Specific directions will be announced during each lab session. These activities are meant to be completed by the end of each 2-hour lab session, but the deadline for submitting completed lab activities is 4:00pm on
Friday. There are 11 lab workshop activities throughout the semester and each activity is worth 10 points.

## FINAL RESEARCH PROJECT

During the last four weeks of the semester, you will compose an original research project in groups of 1-5 students. You will first create a proposal that is due at the end of Week 9, which specifies your research plan. The research project is comprised of two parts:

**50 points – Research Project Presentation**: As a group, you will present your research project during the Thursday lab session on Week 12. Grades will be assigned on the basis that the presenters clearly explain their Introduction, Methods, Results, and Discussion in a scientific and professional manner.

**120 points – Research Paper**: You will complete a research paper in which you formulate and test a hypothesis using a dataset provided to you and document your findings. Your paper must include the following sections:

- Introduction: Summarizes the purpose and rationale behind your research and presents a novel hypothesis that builds from related research.
- Methods: Describes your methodology used test the proposed hypothesis.
- Results: Describes and graphs the results.
- Discussion: Critiques the internal and external validity of the study, provides suggestions for future research.

Research papers must follow APA formatting guidelines, complete with references. Grades will be assigned on the basis that the paper follows APA guidelines, thoughtfully reviews the relevant literature, provides thorough analyses, and is well-written. **Due Wednesday, August 2<sup>nd</sup>, 2023, at 12:30pm.** 

### **Grade Calculator**

Percent Grade	Letter Grade
92-100%	А
90-91%	A-
88-89%	B+
82-87%	В
80-81%	B-
78-79%	C+
72-77%	С
70-71%	C-
68-69%	D+
62-67%	D
60-61%	D-
≤59%	F

## **Course Expectations**

#### **General Expectations**

All correspondences must be in **English**. It is expected that students will devote roughly <u>15</u> <u>hours</u> per week on this course, split between attending classes and lab session, completing assignments, studying, reading, and meeting with the professor (if needed). Students are expected to complete all assignments individually unless otherwise stated.

## **Expectations for Students**

(1) Have a reliable internet connected computer with the most updated Canvas-compatible web browsers (e.g., Chrome, Firefox, Safari, Edge). You may also need up-to-date versions of a Flash player, Java, and a PDF viewer (e.g., Adobe).

(2) Have a backup plan to be able to log in from another computer or another location in the event that your computer crashes or internet goes down. Be prepared to take quizzes and submit assignments using other devices!

(3) Log in to Canvas at least 3-5 times a week; checking Canvas daily is recommended.

(4) Follow the calendar of events and complete all of the quizzes assignments by their deadlines.

(5) Respond to emails within 24 hours during weekdays (48 hours on weekends).

(6) Participate in a thoughtful and polite manner.

(7) Observe proper classroom etiquette by respecting each other's privacy, using constructive criticism, and refraining from derogatory/inflammatory comments.

## **Expectations for the Instructor**

(1) I (the instructor) will log in to the course daily and will alert students if I will be absent [this is unlikely to happen].

(2) I (the instructor) will respond to your questions, concerns, and emails within 24 hours [48 hours on weekends].

(3) I (the instructor) will grade all assignments in a timely manner [within 2-3 days].

## **\*SUDDEN LOSS OF INTERNET ACCESS\*:**

If you lose access to a reliable internet connection, it is necessary to contact me as soon as possible. Without internet, you will be unable to complete quizzes, or submit assignments. If you cannot reach me by email, you may call me/WhatsApp me. The sooner that I am aware of your situation, the faster I can guide you towards resources to obtain internet access and work with you to come up with a solution. Here is my phone number in case of emergency: (507) 6345-1607

## **Technical Support**

If you are unfamiliar with the Canvas platform, are or are unsure of how to navigate the online resources, or are experiencing other technical difficulties, here are some useful resources:

• FSU Information Technology Services: <u>https://its</u>.fsu.edu/its-service-desk

For more Canvas tutorials and learning support:

• <u>https://community</u>.canvaslms.com/t5/Student-Guide/tkb-p/student

## **Course Policies**

## Attendance

Students who do not attend the first class session will be dropped from the course by the academic department that offers the course. This policy applies to all levels of courses and to all campuses and study centers. It remains the student's responsibility to verify course drops and check that fees are adjusted. If you miss a day of class, you are responsible for any materials or lecture that day and for any reading assignments. If you miss a quiz or lab workshop, you cannot make it up (unless you have a legitimate excuse and documentation to show it). I strongly recommend that you get the names, phone numbers, and email addresses of at least 3 people in this class from whom you can get missed notes.

## **University Attendance Policy**

Excused absences include documented illness, deaths in the immediate family and other documented crises, call to active military duty or jury duty, religious holy days, and official

University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

## Late or Missed Quizzes, Lab Work, & Final Projects

All coursework is due BEFORE the assigned due dates indicated on the course schedule. Late work will NOT be accepted unless you have a legitimate excuse (note: loss of internet access is legitimate). If you must miss a class session or cannot submit an assignment for whatever reason, inform me as far in advance as possible (e.g., for religious holidays or University events). If it is not possible to notify me in advance (e.g., for last-minute illness or emergency), contact me as soon as possible by email (atratner@fsu.edu). I may ask for documentation to show that your absence or missed assignment was for a legitimate reason. All makeups must occur as soon as possible.

## **Grade Disputes**

If something seems wrong with your grade, please bring it to my attention as soon as possible. Honest mistakes do occasionally happen. If you would like to dispute a grade, you will have 7 days to bring your grade dispute to my attention. However, in order for me to amend your grade, you cannot simply state that I am wrong; you must appeal to me using concrete evidence and/or logical reasoning for why you deserve a better grade.

## **Student Eligibility for an Incomplete Grade**

Incomplete ("I") grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory (C average).

## **Academic Honor Policy**

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." Florida State University Academic Honor Policy, found at <u>http://fda</u>.fsu.edu/Academics/Academic-Honor-Policy.

Plagiarism is the unauthorized use of other people's intellectual product. Borrowing material from other sources without giving credit to the original author shows disrespect for intellectual property, it and will not be tolerated. Plagiarism can take several forms: careless paraphrasing that maintains a considerable part from the original without quotation marks; downloading essays from a web site and using them as one's own; having someone else write an essay; "forgetting" to place quotation marks around a borrowed passage; paraphrasing a document and including it in your work without citing the original source. Whenever you decide to consult secondary sources, do so responsibly: give credit to the author by indicating the source, and quote appropriately. Any written work that shows signs of plagiarism will receive a failing score without any opportunity to make up. Repeated cases of plagiarism may result in a failing grade.

Please be aware that using social media to collaborate on and share course exams or assignments with other students that are not identified by the course instructor as group work is a violation of the FSU Academic Honor Policy.

## **Special Considerations & Americans With Disabilities Act**

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student:

- Must register with and provide documentation to the Office of Accessibility Services (OAS);
- (2) Must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and,
- (3) Should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities please visit the Office of Accessibility Services website (https://dsst.fsu.edu/oas), or contact the office directly:

874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) oas@fsu.edu https://dsst.fsu.edu/oas

### **Tutoring & Other Assistance**

The Writing Center of FSU Panama can provide support with your essays and research projects. Additionally, the Reading/Writing Center of FSU located in Tallahassee can provide tutoring online. For more information and appointments visit: <u>http://wr.english.fsu.edu/Reading-Writing-Center/RWC-Online.</u> If you have questions about any aspect of this class or any aspect of the assignments, please reach out to me. A wealth of resources on research guides, and citation styles can be found through the FSU libraries online: <u>www.lib.fsu.edu</u>

## **Confidential Campus Resources**

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program University Center A, Rm. 4100 (850) 644-7161 Available 24/7/365 Office Hours: M-F 8-5 <u>https://dsst.fsu.edu/vap</u> Counseling and Psychological Services Askew Student Life Center, 2<sup>nd</sup> floor 942 Learning Way (850) 644-8255 <u>https://counseling.fsu.edu/</u>

University Health Services Health and Wellness Center (850) 644-6230 https://uhs.fsu.edu/

## **Title IX Statement**

As a recipient of Federal financial assistance for education activities, FSU is required by Title IX of the Education Amendments of 1972 to ensure that all of its education programs and activities are free from discrimination on the basis of sex. Sexual discrimination includes sexual misconduct (sexual violence, stalking, intimate partner violence, gender based animosity and gender based stereotyping). If you have questions about Title IX or wish to file a Title IX complaint, please visit the FSU Title IX website: www.titleix.fsu.edu or call the Title IX Director 850-644-6271. Please note that as Responsible Employees, all faculty are required to report any incidents of sexual misconduct to the Title IX Office. The Victim Advocate Program at FSU has a confidential advocate on call twenty-four hours a day to respond to FSU students, faculty, and staff who are victimized, or any other person who is victimized on our campus, or by an FSU student. Daytime Phone: 850.644.7161, 850.644.2277, or 850.645.0086. Nights, Weekends & Holidays 850.644.1234 (FSUPD) Ask to speak to the on-call advocate.

### **Sexual Harassment Policy**

Sexual harassment is a form of discrimination based on a person's gender. Sexual harassment is contrary to the University's values and moral standards, which recognize the dignity and worth of each person, as well as a violation of federal and state laws and University rules and policies. Sexual harassment cannot and will not be tolerated by the Florida State University, whether by faculty, students, or staff; or by others while on property owned by or under the control of the University.

## **Syllabus Change Policy**

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Note: Changes will be noted online in Canvas, and a current version of the syllabus reflecting any changes will be available at all times through Canvas. Students are responsible for ensuring they are referencing the most current version of this syllabus. This course will observe all deadlines posted on the FSU Panama Academic Calendar, including add/drop dates

Week	Date	Торіс	Assigned Reading	Assignment Due
Μ	15/5/23	Introduction to the Class	Syllabus	
1 W	17/5/23	The Science of Psychology	Chapter 1	
TR (Lab)	18/5/23	Research Ethics Lab		Quiz #1
Μ	22/5/23	Overview of the Scientific Method (I)	Chapter 2	
2 W	24/5/23	Overview of the Scientific Method (II)	Chapter 2	
TR (Lab)	25/5/23	Hypothesis Testing Workshop (with Non-Parametric Tests)		Quiz #2
Μ	29/5/23	Psychological Measurement (I)	Chapter 4	
3 W	31/5/23	Psychological Measurement (II)	Chapter 4	
TR (Lab)	1/6/23	Scale Measures & Inventories Workshop		Quiz #3
Μ	5/6/23	Experimental Research (I)	Chapter 5	
<b>4 W</b>	7/6/23	Experimental Research (II)	Chapter 5	
TR (Lab)	8/6/23	Experiment Workshop		Quiz #4
Μ	12/6/23	Non-Experimental Research (I)	Chapter 6	
5 W	14/6/23	Non-Experimental Research (II)	Chapter 6	
TR (Lab)	15/6/23	Correlation Workshop		Quiz #5
Μ	19/6/23	Survey Research (I)	Chapter 7	
6 W	21/6/23	Survey Research (II)	Chapter 7	
TR (Lab)	22/6/23	Survey Workshop		Quiz #6

M	26/6/23	Quasi-Experimental Research (I)	Chapter 8	
<b>7</b> W	28/6/23	Quasi-Experimental Research (II)	Chapter 8	
TR (Lab)	29/6/23	Quasi-Experiment Workshop		Quiz #7
Μ	3/7/23	Factorial Designs (I)	Chapter 9	
8 W	5/7/23	Factorial Designs (II)	Chapter 9	
TR (Lab)	6/7/23	Factorial Design Workshop		Quiz #8
Μ	10/7/23	Research Project Brainstorming		
9 W	12/7/23	Research Project Brainstorming		
TR (Lab)	13/7/23	Research Project Proposal Workshop		Research Project Proposal
Μ	17/7/23	Descriptive Statistics (I)	Chapter 12	
10 W	19/7/23	Descriptive Statistics (II)	Chapter 12	
TR (Lab)	20/7/23	Descriptive Statistics Workshop		
Μ	24/7/23	Inferential Statistics (I)	Chapter 13	
11 W	26/7/23	Inferential Statistics (II)	Chapter 13	
TR (Lab)	27/7/23	Inferential Statistics Workshop		Quiz #9
Μ	31/7/23	Finals Week (No Class)		
12 W	2/8/23	Research Project Presentation 12:30pm-3:00pm		Research Project Presentation Research Paper
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**Research Paper**: Due Wednesday, August 2<sup>nd</sup>, 2023, at 12:30pm.