

# Psychological Research Design & Analysis

PSYCH 310 | Section 003 | Fall Term 2017 | 3:00 – 4:15 | TTh | B032 JFSB

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## **Instructor**

Chris Hawk

1150 SWKT

Email: chrishawk@byu.edu

## **Teaching Assistant**

Ellie Eyestone

Email: Eeyestone5@gmail.com

## Office Hours

I offer office hours each week. The schedule is posted on the door of 1003 SWKT and on Learning Suite. If you have any questions, concerns, or issues with the course, feel free to contact me in person, by phone, or by email. You may also set up an appointment to talk with me, either during or outside of the posted office hours.

## Course Description

This is an undergraduate course designed to cover research methods and designs common to the empirical study of Psychology.

## Learning Objectives

1. Students will be able to critically review the literature to generate a testable hypothesis based on a summation of current research findings and scientific thought.
2. Students will be able to distinguish between methodological designs and implement and execute an appropriate design to test the hypothesis, demonstrating an understanding of and sensitivity to relevant ethical considerations, including how to identify and measure dependent variables and measure or control for independent and other variables critical to the design of the study.
3. Students will be able to prepare a written report of the research project adhering to APA style in all aspects of presentation (e.g., format, figures/tables, referencing) in a format that would be suitable to submit to an APA journal.
4. Students will be able to present the research orally to an audience of peers in either a paper or poster format.
5. Students will be able to critically evaluate the quality of published research.

## Texts

Two texts are required for the course.

### **Research Methods: Are You Equipped?** (2<sup>nd</sup> Edition, 2014)

By Jennifer Bonds-Raacke & John Raacke

Publisher: Kendall Hunt

ISBN: 978-1-4652-5294-4

### **Publication Manual of the American Psychological Association** (6<sup>th</sup> Edition)

By American Psychological Association

Publisher: American Psychological Association

ISBN: 978-1-43-380561-5

## Team-Based Learning

In this course, I will be implementing an instructional approach called Team-Based Learning (TBL). TBL is very different from the standard lecture-based strategies commonly used in post-secondary education. You will be assigned to teams, which will remain constant for the entire course. You will take quizzes, discuss concepts, and apply your knowledge in your teams. The course is broken into modules, one for each part of the book. The vast majority of in-class time will be spent in teams.

## Assessments

### **Exams**

There will be a total of 5 exams, including the final. The exams will be multiple choice. These exams will be completed at the testing center. (Learning Objective 2)

### **CITI Certification**

Students will need to get CITI certification. Instructions can be found on the BYU IRB website, and a link can be found on Learning Suite, under the Content tab (<https://about.citiprogram.org/en/homepage/>). Upon completion, or if you have previously completed it (it is good for 5 years), please submit the certificate on Learning Suite. (Learning Objective 2)

### **Team-Based Learning**

The following are the ways you will be assessed via the Team-Based Learning approach. (Learning Objectives 1, 2, & 3)

1. iRAT (individual Readiness Assurance Test) – These are individual multiple-choice quizzes that will be completed first thing on the first day of a new module. These quizzes will be 25 questions long. There will be one iRAT for each module.
2. tRAT (team Readiness Assurance Test) – These are the same quizzes you took individually, except now you will take them together as a team. You will have time to discuss and record your answers as a team. Additionally, once your team has completed the quiz, you will have a chance to justify why the incorrect answer your team chose is not incorrect. Your team will be able to discuss and write up justifications using outside resources. There will be one tRAT for each module.
3. Peer Evaluations – Each team member will evaluate himself or herself and all other team members. You work with your team every class period, and you know who is and is not contributing, so this is your chance to let me know. Additionally, you will be able to give direct anonymous feedback to your other team members. There will be three evaluations, administered through Qualtrics. Consult the schedule for when those will be.
4. Application Assignments – These assignments will make up a good portion of the team work. They will consist of a set of dilemmas or questions which your team will need to address. These assignments will be turned in on paper and discussed in class. There will be a total of 10, one to three per module.

### **Research Project**

Students will design and execute a research project involving creating a research question, designing a study, collecting data, analyzing the data, writing up the results, and presenting the findings. This project will have several parts due throughout the term.

1. Research Question – Find something you are curious about. Keep an eye out as you go about your normal routine and take note of any ideas that pop up. Your idea should consist of a dependent variable (what you want to measure) and an independent variable(s) (what you are manipulating). On Learning Suite, you will turn in a document noting what your research question is, what your dependent and independent variables will be (including how they will be measured), and why you think this question is worth asking.
2. Literature Review – You will need to do some background research and write an introduction to your study. Your lit review should cite scholarly sources and give a general rationale for how this study adds knowledge to the literature. On Learning Suite, you will submit a rough draft of your lit review and references.

3. Method – On Learning Suite, you will turn in a document noting your proposed project. It should include who your planned participants will be, your procedure for collecting the data, and how you plan to analyze your data.
4. Data Collection – You will be responsible for collecting your data and treating your participants appropriately. You should not collect any identifying information, e.g. names, dates of birth, etc., but you should collect general demographic information, e.g. age, sex, class standing, etc. In addition to being unethical, fabricating data is considered academic dishonesty and will be treated as such.
5. Results and Discussion – After all of your data have been collected, you will need to analyze them in the way you proposed in your method section. On Learning Suite, you will turn in a document noting your results section, making sure to explain how you analyzed the data and any changes you made to the data, as well as a discussion section where you explain what the results mean and tie it back to the literature. You should include tables and figures if they will aid in the explanation of your results.
6. Poster Presentation – You will create a small poster about your project. Your poster should include components of your lit review, method, results, and discussion, as well as tables or figures. You will present your poster at an in-class poster session at the end of the semester.

You will turn in a final copy of your whole project on the day of the poster session. This project should be completed on your own. Students may assist each other during various steps, but students may not collaborate on the same project. (Learning Objectives 1, 2, 3, 4, & 5)

### **Extra Credit**

Students may fill out the official course evaluation and my personal course evaluation. My personal course evaluation will post to Learning Suite under the Content tab immediately after the Final. You will have until the end of finals week to complete my evaluation.

### **Format**

All papers should be 12-point font and double spaced, with one-inch margins. Please use an easy to read font. All papers should be free of spelling and grammatical errors, and formatted in accordance with the Publication Manual of the American Psychological Association, Sixth Edition. The writing center is located at 3322 HBLL or 1175 JFSB.

## Grading Scale

Final grades are not rounded.

A	93 – 100	B-	80 - 82	D+	66 – 69
A-	90 – 92	C+	76 – 79	D	63 – 65
B+	86 – 89	C	73 – 75	D-	60 – 62
B	83 - 85	C-	70 - 72	E	<60

## Grading

The weight of each assignment.

Assignments	Weight
Exams	25
CITI Certification	5
Research Project	30
iRAT	5
tRAT	5
Peer Evaluations	15
Application Assignments	15

## Course Policies

### Honor Code

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 801-422-2847 if you have questions about those standards.

## **Preventing Sexual Misconduct**

As required by Title IX of the Education Amendments of 1972, the university prohibits sex discrimination against any participant in its education programs or activities. Title IX also prohibits sexual harassment—including sexual violence—committed by or against students, university employees, and visitors to campus. As outlined in university policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of “Sexual Misconduct” prohibited by the university. University policy requires any university employee in a teaching, managerial, or supervisory role to report incidents of Sexual Misconduct that come to their attention through various forms including face-to-face conversation, a written class assignment or paper, class discussion, email, text, or social media post. If you encounter Sexual Misconduct, please contact the Title IX Coordinator at [t9coordinator@byu.edu](mailto:t9coordinator@byu.edu) or 801-422-2130 or Ethics Point at <https://titleix.byu.edu/report-concern> or 1-888-238-1062 (24-hours). Additional information about Title IX and resources available to you can be found at [titleix.byu.edu](https://titleix.byu.edu).

## **Student Disability**

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 801-422-5895, D-285 ASB.

## **Academic Honesty**

The first injunction of the Honor Code is the call to “be honest.” Students come to the university not only to improve their minds, gain knowledge, and develop skills that will assist them in their life’s work, but also to build character. “President David O. McKay taught that character is the highest aim of education” (The Aims of a BYU Education, p. 6). It is the purpose of the BYU Academic Honesty Policy to assist in fulfilling that aim. BYU students should seek to be totally honest in their dealings with others. They should complete their own work and be evaluated based upon that work. They should avoid academic dishonesty and misconduct in all its forms, including but not limited to plagiarism, fabrication or falsification, cheating, and other academic misconduct.

### **Inappropriate Use of Course Materials**

All course materials (e.g., outlines, handouts, syllabi, exams, quizzes, PowerPoint presentations, lectures, audio and video recordings, etc.) are proprietary. Students are prohibited from posting or selling any such course materials without the express written permission of the professor teaching this course. To do so is a violation of the Brigham Young University Honor Code.

### **Mental Health**

Mental health concerns and stressful life events can affect students' academic performance and quality of life. BYU Counseling and Psychological Services (CAPS, 1500 WSC, 801-422-3035, [caps.byu.edu](https://caps.byu.edu)) provides individual, couples, and group counseling, as well as stress management services. These services are confidential and are provided by the university at no cost for full-time students. For general information please visit <https://caps.byu.edu>; for more immediate concerns please visit <http://help.byu.edu>.

### **Plagiarism**

Intentional plagiarism is a form of intellectual theft that violates widely recognized principles of academic integrity as well as the Honor Code. Such plagiarism may subject the student to appropriate disciplinary action administered through the university Honor Code Office, in addition to academic sanctions that may be applied by an instructor. Inadvertent plagiarism, which may not be a violation of the Honor Code, is nevertheless a form of intellectual carelessness that is unacceptable in the academic community. Plagiarism of any kind is completely contrary to the established practices of higher education where all members of the university are expected to acknowledge the original intellectual work of others that is included in their own work. In some cases, plagiarism may also involve violations of copyright law.

### **Respectful Environment**

"Sadly, from time to time, we do hear reports of those who are at best insensitive and at worst insulting in their comments to and about others... We hear derogatory and sometimes even defamatory comments about those with different political, athletic, or ethnic views or experiences. Such behavior is completely out of place at BYU, and I enlist the aid of all to monitor carefully and, if necessary, correct any such that might occur here, however inadvertent or unintentional... I worry particularly about demeaning comments made about the career or major choices of women or men either directly or about members of the BYU community generally. We must remember that personal

agency is a fundamental principle and that none of us has the right or option to criticize the lawful choices of another" (President Cecil O. Samuelson, Annual University Conference, August 24, 2010).

### **Electronic Devices**

Please either silence or turn off your cellphones before class, and refrain from using them during class. Laptops and tablets may be used in class, but only if they are not used for checking email, instant messaging, or surfing the web frivolously. It can be distracting to others and to me. If your electronic use becomes overly distracting, you may be asked to leave.

### **Late Policy**

Work submitted past the due date will be considered late. For each day the work is late,  $3.\bar{3}\%$  will be deducted, e.g. if your assignment is two days late and it would have originally received a 90, it would receive an  $83.\bar{3}$  for being late. The grade will continue to decrease until it is submitted or the grade reaches zero.

### **Assistance**

If at any point, you become overwhelmed in your course work, feel free to come talk with me. I am willing to work with you to resolve any issues.

### **Disclaimer**

I reserve the right to make changes to the course, and this syllabus is subject to change without prior notice; however, any changes will be announced in class or through email.



## Schedule

See Learning Suite for the most up-to-date schedule.

Date	Reading/Agenda	Assignment
September 5	Introduction	
September 7	Part 1	
September 12	Part 1	
September 14	Part 1	CITI Certification
September 19	Exam 1	Research Question
September 21	Part 2	Peer Evaluation
September 26	Part 2	
September 28	Part 2	
October 3	Part 2	Method
October 5	Exam 2	
October 10	Part 3	
October 12	Part 3	
October 17	Part 3	
October 19	Part 3	

Date	Reading/Agenda	Assignment
October 24	Exam 3	Peer Evaluation
October 26	Part 4	
October 31	Part 4	Lit Review
November 2	Part 4	
November 7	Part 4	
November 9	Exam 4	
November 14	Stats Workshop	
November 16	Stats Workshop	
November 28	Part 5	Results & Discussion
November 30	Part 5	
December 5	Part 5	
December 7	Exam 5	Peer Evaluation
December 12	Peer Review	
December 14	No Class	Research Paper
December 20	Poster Session 3:00 – 6:00 pm	Poster