

RESEARCH METHODS

Psy 3010-090

Fall 2017

WHEN AND WHERE

COURSE WEBSITE:

<https://utah.instructure.com/courses/461004>

This is a fully online course. There is no requirement to meet in person nor are you required to log in to the website at any particular time. However, to be successful in this course, you will need to participate weekly at a minimum, and you may find that logging in multiple times during the week is what is needed to keep up on assignments.

You will be asked to work in groups of 4 students for the second 2/3 of the semester. Your group is not required to meet in person nor to work synchronously, but some groups choose to do so.

COURSE TEXTBOOK (IT'S FREE)

[Research Methods in Psychology](#):

<http://open.lib.umn.edu/psychologyresearchmethods/>

All of the learning material that you will need for this course will be provided within the weekly modules in the form of readings, videos, and pages on external websites. One of the primary sources of content for our course will be the open source text Research Methods in Psychology. Each weekly module will begin with a listed chapter for you to read from this text. It will follow with content I have created or curated from the web to supplement the text.

In today's times, we are so fortunate to have access to many high-quality free resources for learning just about any topic in higher education. I have reviewed many research methods texts and have actually found that I prefer the approach of this free option than others that would cost you \$100 or more.

Each week I will provide you with a link to a particular chapter to read. Alternatively, follow the link above for options for downloading the complete text in case you prefer reading the chapters on an e-reader or would like to print out a pdf copy.

INSTRUCTOR

Ali Froehlich, PhD

fro@psych.utah.edu

OFFICE HOURS: My office is located within the Faculty Center on the first floor of the Marriott Library. If you would like to meet outside of class, please send me an email to schedule a time.

PREREQUISITE

Psy 3000 Statistical Methods in Psychology (or an equivalent course) is a prerequisite for this course. If your stats skills are a little rusty, be sure to check out the Statistics Resources page in our course to get caught up to speed. You WILL need to perform statistical calculations in this course, and you will need to pass a statistics quiz to unlock the course material.

TIME COMMITMENT

Please note that this is a 4 credit course. According to [U of U policy 6-100-III-B](#), you should expect to allocate about 12 hours of your time per week on this course.

COURSE OVERVIEW

This course is two parts packed into one. In order to truly understand the research process, you will need not only to learn about research methods concepts (such as different types of variables, the validity and reliability of a method, and various types of study designs, for example) but also to try your hand at designing your own mock research studies and writing up research reports. For that reason, throughout the course you will be assigned readings and videos on research methods concepts while also practicing what it is like to design and write up research studies.

Not planning to be a researcher when you grow up? No problem! While this course will give you a foundation for entering the research world, you will also learn how to be an informed consumer of research in your daily life, from looking up the latest on whatever ails you or the current nutritional fad to evaluating the trustworthiness of a website.

COURSE OUTCOMES

By the end of this course, you will be able to...

1. explain terms and apply concepts used in behavioral sciences research methodology to interpret psychological phenomena.
2. describe the research process and the principle activities, skills, and ethics associated with the research process.
3. describe and compare the major study designs used in the behavioral sciences.
4. propose a research study and justify the rationale as well as the methodological decisions, including sampling and measurement.
5. design, conduct, and write up for publication your own research.
6. read, interpret, and evaluate the findings of other researchers.
7. effectively work with others in a group by applying experiences with difficulties that can arise with group work and discovered ways to work around those roadblocks.
8. critically evaluate the work of your peers.

This course also fulfills, in part, the learning outcomes set for the B.S. in Psychology and learning outcomes for the B.A. in Psychology. Further, it fulfills the University's Bachelor's Degree [BS Quantitative Intensive learning outcomes](#) and [Upper Division Communication / Writing requirements](#).

COURSE ORGANIZATION

All of the information and material you will need for each week will be located within the Weekly Guides, which you can access by clicking on the "Guides" button on the home page or within the course navigation menu to the left. Each week, be sure to locate and open that week's guide to get a summary of the week's events, a reminder of things to do, and links to all of the material you need for the week.

MODULE WORK: As mentioned above, this course is two parts rolled into one. One part involves moving through and interacting with the content of the course, taking practice quizzes, contributing to discussions, and occasional graded quizzes. This will be labeled as "Module work" within the weekly guides. You must

complete all of the requirements of a weekly module in order to unlock the next module.

RESEARCH PROJECT WORK: The second part of this course involves designing research studies and writing up research reports. As with the Module work, you will find information for this part, as well as links to all corresponding assignments, within the Weekly Guides. I have also created a Research Projects Resource page which will combine all assignments, due dates, and instruction resources in one place. You can access this page by clicking on the Projects button on the home page.

ANNOUNCEMENTS & DISCUSSIONS

I will use the Announcements board to communicate unexpected information as it comes up. Please be sure to [set up your Canvas notifications](#) to be notified when a new Announcement is made. You will be held responsible for any information posted there.

The Discussions area is a place where information can be posted by anyone in the course and others can add their comments. I will regularly create and post links to Discussion topics within the weekly module pages that will guide you in applying (and for you to see how others apply) certain topics we are learning about. The Discussions area is a wonderful way to enhance what you get out of this course and to keep you connected with the rest of the class.

GROUP WORK

A few weeks into the semester, you will begin to work in a group of 4 students on the Group Report. Research in the real world is always completed in groups of peers, and so the group work aspect of this class is designed to give you that experience. I have also found that, particularly with an online class, students really benefit from working with each other to share ideas and collaborate efforts. Despite this, group work can sometimes be challenging- particularly when your project depends on cooperation with others. I understand this, and while the challenge of learning to work with others will help prepare you for that real world research experience, please know that I am here to help should any issues arise.

GRADING

Links for assignments due each week will be located within the Guide for that week. Due dates, unless otherwise indicated, will always fall on Sundays at 11:59pm. Each point is equivalent to 1% of your final grade.

QUIZZES (40 points total)

There will be four multiple-choice quizzes to be completed throughout the semester. Quizzes will be completed individually- not in groups.

Quizzes will mostly cover the material from the previous three to four modules but will also include at least some questions from previous modules. Quizzes are open book and open material, but they are timed. Once you begin a quiz, you will be locked out of it at the end of that time, so do be sure to prepare for the quizzes *before* beginning them. You will not have time to look up the material during the quiz if you have not prepared for it. You will have a one week window in which to initiate each quiz.

40 points: 4 Quizzes (10 points each)

RESEARCH PROJECTS ASSIGNMENTS

(60 points total)

MINI REPORT (15 points)

The Mini Report will be a mini version of a full research report. This will be completed at the beginning of the semester to give you an opportunity to get your feet wet and get a sense of what is involved in writing up a report of a research study. It will also give me a chance to give you some initial feedback before you start working on the much larger Group Report. Before writing your Mini Report, you will be asked to participate in an online experiment as though you are a participant in the study you will write your report on. You will also be given some hypothetical data to analyze for your report.

GROUP PROJECT & REPORT (45 points total)

For the Group Report, you will work in groups of 4 to design a mock study that your group will eventually write up as a report. Before writing the report, your group will complete and submit four assignments aimed at guiding your group through the process of narrowing down a research topic to a testable hypothesis and then designing a mock research study to base your report on.

You will even get to collect and analyze some data to see if your hypothesis was supported!

These four assignments will be completed together as a group. Each group should submit only one copy of each completed assignment (you will receive further instructions for how to go about doing this in the first assignment).

3 points: Group Formation assignment

4 points: Research Topics assignment

4 points: Hypothesis assignment

4 points: Data Analysis assignment

After your group has completed these four initial assignments, you will begin writing the Group Report. Each group member will write one section of the report, and group members will be asked to peer review each other's sections. A complete Group Report will then be assembled and submitted by each individual for an individual grade.

15 points: 3 Peer Reviews (5 points each)

15 points: Group Report

EXTRA CREDIT

You can earn extra credit towards your final grade in two ways. One is by participating in experiments run by the psychology department. This is a wonderful way to see what the research process is all about from the participant's point-of-view. You may earn 1 extra credit point for each hour of participation, *up to 3 points max*. Go to the website <http://www.psych.utah.edu/research> for more information. All research participation must be completed by the last day of classes.

You may also receive additional points of extra credit by completing extra credit assignments that will be offered throughout the semester. I will post these assignments within the Weekly Guides as we cover certain topics. You can also find these assignments by going to the Assignments tab along the left-hand side of the course site. You will need to wait until you get to their respective modules in the course before they will become accessible to you. Extra credit assignments that are submitted after the due date can be turned in for up to half credit through the last day of classes.

Please note: You will be able to see when you receive extra credit for a given assignment. However, *extra credit will not be incorporated into the Total grade until*

the end of the semester, when all other assignments have been graded. The reason is that funky things happen to the Total grade when extra credit is only partially completed. So, until I announce that extra credit has been added to the Total grade at the end of the semester, just mentally add those extra credit points to your Total grade. Research participation will not show up in the grades until the end of the semester, but you can track your participation at the Psychology department's research website: <http://www.psych.utah.edu/research>.

GRADING SCALE

A 100-93| A- 92-90| B+ 89-87| B 86-83|
B- 82-80| C+ 79-77| C 76-73| C- 72-70|
D+ 69-67| D 66-63| D- 62-60| E below 60

STUDENTS WITH DISABILITIES

I am slowly learning how to make online course content and materials accessible to everyone. If you find it difficult to access this course or any of its content, please let me know so that I can make improvements for everyone.

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability & Access (<http://disability.utah.edu/>), 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability & Access.

OTHER STUDENT SUPPORT RESOURCES

- Center for Student Wellness:
<http://wellness.utah.edu/>
- Veterans Support Center:
<http://veteranscenter.utah.edu/>
- LGBT Resource Center: <http://lgbt.utah.edu>
- University Writing Center:
<http://writingcenter.utah.edu/>
- English Language Institute:
<https://continue.utah.edu/eli>
- [Office of Equal Opportunity and Affirmative Action](#)
(sexual misconduct): <https://oeo.utah.edu/>

Additional Campus Resources:
<http://ctle.utah.edu/related/>

COURSE CALENDAR

WEEK 1: AUG 21 – 27	THE SCIENCE OF PSYCHOLOGY
WEEK 2: AUG 28 – SEPT 3	GETTING STARTED IN RESEARCH
• Sept 3	Introductions Discussion due (extra credit)
WEEK 3: SEPT 4 – 10	THE SCIENTIFIC LITERATURE
• Sept 10	Breaking Down a Journal Article activity due (extra credit)
• Sept 10	Gender Perception Lab due
• Sept 10	Gender Perception Stats due
WEEK 4: SEPT 11 – 17	PSYCHOLOGICAL MEASUREMENT, PART 1
• Sept 17	Mini Report due
• Sept 17	Join a Project Group
• Sept 17	Operational Definitions activity (extra credit)
WEEK 5: SEPT 18 – 24	PSYCHOLOGICAL MEASUREMENT, PART 2
• Sept 24	Quiz 1 due
• Sept 24	Group Formation assignment due
• Sept 24	Group Introductions Discussion Video due (extra credit)
WEEK 6: SEPT 25 – OCT 1	EXPERIMENTS, PART 1
• Oct 1	Research Topics assignment due
WEEK 7: OCT 2 – 8	EXPERIMENTS, PART 2
• Oct 8	Hypothesis assignment due
<i>WEEK 8: OCT 9 - 15 FALL BREAK</i>	
WEEK 9: OCT 16 – 22	QUASI- & PRE-EXPERIMENTS
• Oct 22	Quiz 2 due
WEEK 10: OCT 23 – 29	NON-EXPERIMENTAL RESEARCH
• Oct 29	Correlation activity (extra credit)
WEEK 11: OCT 30 – NOV 5	SURVEYS & SAMPLING
WEEK 12: NOV 6 – 12	COMPLEX RESEARCH DESIGNS
• Nov 12	Quiz 3 due
• Nov 12	Data Analysis assignment due
WEEK 13: NOV 13 – 19	ETHICAL CONSIDERATIONS
• Nov 19	Section Draft due
WEEK 14: NOV 20 – 26	OTHER RESEARCH ACTIVITIES
• Nov 27*	Peer Reviews due (*following Monday due to Thanksgiving holiday)
WEEK 15: NOV 27 – DEC 3	COURSE REVIEW
• Dec 3	Group Report due
• Dec 3	Quiz 4 due
WEEK 16: DEC 4 – 7	WRAP UP
• Dec 7	Research Participation due (extra credit)
• Dec 7	End of Course Feedback Survey due (extra credit)