RESEARCH METHODS

Psy 3010-090
Spring 2018

WHEN AND WHERE

COURSE WEBSITE:

https://utah.instructure.com/courses/475999

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 at times more than once per week.

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 MATERIALS

- *Discovering the Scientist Within*, by Lewandowski, Ciarocco, and Strohmetz (our text)

- LaunchPad Solo Research Methods (an application with activities, 6-month access)

These two items can be purchased as a package or individually. Also, the text comes in many different formats (paperback, looseleaf, e-text, new, used, rent). You can purchase these materials at the Campus Store (http://www.campusstore.utah.edu/utah/SelectTermDept. aspx), the Macmillan Learning Student Store (https://store.macmillanlearning.com/us/), and elsewhere. Avoid purchasing the LaunchPad Solo application outside of a trusted source in case the access code turns out to have already been used.

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.

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 with me, please send me an email to schedule a time. I love having the opportunity to meet my students in person.

TA

Mateo Fregoso
matthew.fregoso@psych.utah.edu

TIME COMMITMENT

Please note that this is a 4 credit course. According to U of U policy 6-100-III-B (http://regulations.utah.edu/academics/6-100.php), 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 activities 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 bachelor's degree in Psychology (https://psych.utah.edu/undergraduate/).

Further, it fulfills

- the University's Bachelor's Degree BS Quantitative Intensive learning outcomes (http://ugs.utah.edu/general-education/requirements/qi.php) and
- Upper Division Communication / Writing requirements (http://ugs.utah.edu/general-education/requirements/cw.php).

COURSE ORGANIZATION

All of the information 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 within our Canvas course. Each week, be sure to locate and open that week's guide to get a summary of the week's events and a detailed list of things to do.

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, completing activities, taking practice and graded quizzes, and contributing to discussions. 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 REPORT 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 Reports Resource page which will combine all assignments, due dates, and instruction resources in one place. You can access this page by clicking on the Reports 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. We will have regular class discussions 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 assignments designed to help you plan out and conduct a study for your Final 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. Also note that assignments are set up and graded in a way that you can earn the score

you want (regardless of the performance of your group members).

GRADING

Links for assignments due each week will be located within the Guide for that week. Due dates, unless otherwise indicated, will fall on Sundays at 11:59pm. Do note, however, that for Project Group assignments, you must contribute to your group's assignment by the Wednesday before the assignment's deadline. Each point is equivalent to 1% of your final grade.

QUIZZES (35 points total)

There will be seven multiple-choice quizzes, about one every other week.

Quizzes will mostly cover the material from the previous two weeks but will also include at least some questions from earlier weeks. 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.

Good news is that you can retake a quiz as many times as you like. Do note that each time the questions will change. The highest score will be applied to your final grade.

You should complete a quiz in the week it is assigned (by its due date). However, most quizzes will remain available for up to two weeks later, and there will be no penalty for completing a quiz late. It is NOT recommended you wait until the "available until" date to take a quiz. You will not be allowed to take a quiz after its "available until" date.

35 points: 7 Quizzes (5 points each)

DISCUSSION PARTICIPATION (6 points total)

Weeks that we do not have a quiz, we will have a class discussion. You are expected to contribute thoughtfully. Everyone will start the semester with 6 points for discussion participation. As we move through the semester, if participation in a discussion is of poor quality, you will lose Discussion Participation points.

RESEARCH REPORTS 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 Final 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.

PROJECT GROUP ASSIGNMENTS & FINAL REPORT (44 points total)

For the Final Report, you will work in groups of 4 to design a study that your group will eventually write up as a report. Before writing the report, your group will complete and submit a handful of assignments (Project Group assignments) aimed at guiding your group through the process of narrowing down a research topic to a testable hypothesis and then designing a research study to base your report on. You will even get to collect and analyze some data to see if your hypothesis was supported!

The first assignment is a simple introduction discussion. Following this initial discussion, 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).

2 points: Group Introduction

2 points: Group Formation assignment
4 points: Research Topics assignment
4 points: Hypothesis assignment
5 points: Data Analysis assignment

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

3 points: Section Draft
9 points: 3 Peer Reviews (3 points each)
15 points: Final 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 Department of Psychology's Participant Pool website (https://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 Department of Psychology's Participant Pool website (https://psych.utah.edu/research/).

GRADING SCALE

A 100-93l A- 92-90l B+ 89-87l B 86-83l
B- 82-80l C+ 79-77l C 76-73l C- 72-70l
D+ 69-67l D 66-63l D- 62-60l 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: wellness.utah.edu/
- Veterans Support Center: https://veteranscenter.utah.edu/
- LGBT Resource Center: https://lgbt.utah.edu
- University Writing Center: https://writingcenter.utah.edu
- English Language Institute: https://continue.utah.edu/eli
- Office of Equal Opportunity and Affirmative Action (sexual misconduct): https://oeo.utah.edu

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact a Student Success Advocate for support (https://asuu.utah.edu/displaced-students).

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

COURSE CALENDAR & DUE DATES

WEEK 1: JAN 8 – 14   PSYCHOLOGY AS A SCIENCE: THINKING LIKE A RESEARCHER

Module work

Ch 1 Psychology as a Science: Thinking Like a Researcher

module requirement   LaunchPad: A Scientific Look at Psychics

module requirement   Class Discussion #1

Extra Credit

due Jan 21   Introductions discussion

WEEK 2: JAN 15 – 21   THE RESEARCH PROCESS: IDEAS TO INNOVATIONS

Module work

Ch 2 The Research Process: Ideas to Innovations

module requirement   LaunchPad: Determining Key Study Elements

module requirement   Literature Review activity

WEEK 3: JAN 22 – 28   ETHICS

Module work

Ch 3 Ethics; Ch 4, "APA-Style Papers" section pp. 108- 110

module requirement   LaunchPad: Being an Ethical Researcher

due Jan 28   Quiz #1 (available until Feb 11)

Extra Credit

due Feb 4   Breaking Down a Journal Article activity

WEEK 4: JAN 29 – FEB 4   THE PSYCHOLOGIST'S TOOLBOX

Module work

Ch 4 The Psychologist's Toolbox

module requirement   LaunchPad: Is the Swagger-Meter 1.0 a Quality Measure?

module requirement   Class Discussion #2

Research Project work

due Feb 4   Gender Perception Lab completed
                     (ungraded)

due Feb 4   Gender Perception Stats quiz
                     (ungraded)

WEEK 5: FEB 5 – 11   QUALITATIVE RESEARCH

Module work

Ch 5 Qualitative Research

module requirement   LaunchPad: You're Hired!

due Feb 11   Quiz #2 (available until Feb 25)

Research Project work

due Feb 11   Mini Report

due Feb 11   Join a Project Group (ungraded)

WEEK 6: FEB 12 – 18   OBSERVATIONAL RESEARCH

Module work

Ch 6 Observational Research

module requirement   LaunchPad: Is Public Affection a Public Affliction?

module requirement   Class Discussion #3

Research Project work

due Feb 18   Project Group Introductions discussion

Extra Credit

due Feb 25   Operational Definitions

WEEK 7: FEB 19 – 25   SURVEY DESIGN AND SCALE CONSTRUCTION

Module work

Ch 7 Survey Design and Scale Construction

module requirement   LaunchPad: Which Professor Should You Take?

due Feb 25   Quiz #3 (available until Mar 11)

Research Project work

due Feb 25   Group Formation assignment

WEEK 8: FEB 26 - MAR 4   TWO-GROUP DESIGN

Module work

Ch 8 Two-Group Design

module requirement   LaunchPad: To Multitask or Not to Multitask?

module requirement   Class Discussion #4

Research Project work

due Mar 4   Research Topics assignment

Extra Credit

due Mar 11   Correlation activity

WEEK 9: MAR 5 – 11   MULTIGROUP DESIGN

Module work

Ch 9 Multigroup Design

module requirement   LaunchPad: Dressing for Distress?

due Mar 11   Quiz #4 (available until Mar 25)

Research Project work

due Mar 11   Hypothesis assignment

WEEK 10: MAR 12 – 18   WITHIN-SUBJECTS DESIGN

Module work

Ch 10 Within-Subjects Design

module requirement   LaunchPad: Left Out and Feeling Low

module requirement   Class Discussion #5

WEEK 11: MAR 19 - 25   SPRING BREAK

WEEK 12: MAR 26 – APR 1 DIGGING DEEPER	
Module work	
Digging Deeper Resource Page	
module requirement	LaunchPad: Acknowledging the Contributions of Others
due Apr 1	Quiz #5 (available until Apr 15)
Research Project work	
due Apr 1	Study data collected (ungraded)
WEEK 13: APR 2 – 8 FACTORIAL DESIGN	
Module work	
Ch 11 Factorial Design	
module requirement	LaunchPad: Can the News Influence Our Implicit Prejudice
module requirement	Class Discussion #6
Research Project work	
due Apr 8	Data Analysis assignment
WEEK 14: APR 9 – 15 MIXED DESIGN	
Module work	
Ch 12 Mixed Design	
module requirement	LaunchPad: Do Speed Daters Become Pickier the Later It Gets?
due Apr 15	Quiz #6 (available until Apr 29)
Research Project work	
due Apr 15	Section Draft submitted
WEEK 15: APR 16 - 22 SOURCES OF INFORMATION	
Module work	
Sources of Information Resource page	
module requirement	LaunchPad: The Structure of an APA-Style Paper
module requirement	Activity: Sources of Information website quiz & discussion
Research Project work	
due Apr 22	Peer Reviews
WEEK 16: APR 23 - 24 WRAP UP	
Module work	
due Apr 29	Quiz #7
Research Project work	
due Apr 29	Final Report
Extra Credit	
due Apr 29	Research participation completed
due Apr 29	End of Course Feedback Survey
due Apr 29	Late extra credit assignments for ½ credit