RESEARCH METHODS
Psy 3010 Fall 2021
Sections 090 and 290

WHEN AND WHERE

COURSE WEBSITE:
https://utah.instructure.com/courses/722641

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.

COURSE MATERIALS

Our course is enrolled in the Campus Store’s Inclusive Access program (https://www.campusstore.utah.edu/inclusiveaccess/). This means that you will have automatic access to course materials in an electronic form through Canvas at a reduced cost, and the charge for course materials will automatically be added to your tuition bill as a course fee of $88.40. You do not need to do anything for this to happen.

- Discovering the Scientist Within, 2nd edition by Lewandowski, Ciarocco, and Strohmetz
  LaunchPad version (ISBN: 9781319134693)

Within each weekly guide, you will find a link to the e-text so that you can read the assigned chapter for that week. You will also find links to any LaunchPad activities to be completed that week.

If you prefer to purchase the course materials yourself, you can opt out of the Inclusive Access program (https://portal.verba.io/utah/login) up until the add/drop day. You will pay more for the course materials if you purchase them on your own. If you would like to purchase a printed “loose leaf” copy of the text, inquire at the Campus Store or check with me.

Automatic access is provided to all students for the first couple of weeks into the semester. If you opt out of the Inclusive Access program, you will need to purchase your own materials before automatic access to everyone is discontinued.

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: If you would like to meet with me, please send an email or Canvas message to schedule a time. I love having the opportunity to meet my students.

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 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. interpret psychological phenomena through the lens of behavioral sciences research methodology.
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. evaluate sources of information for their trustworthiness.

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)
- 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 from the Home page. 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.

LEARNING CONTENT & APPLICATION ACTIVITIES:

As mentioned above, this course is two parts rolled into one. One part involves going through the content of the course and completing activities that get you to apply and practice what you are learning (i.e., LaunchPad activities, practice and graded quizzes, and class discussions). This will be labeled as "Learning Content" and "Application Activities" within each weekly guide. Some weeks you will even see an “Extra Credit” section. Please note that each week you must complete all of that week’s Application Activities before the Application Activities for the next week will unlock.

RESEARCH PROJECT WORK: The second part of this course involves designing research studies and writing up research reports. You will find information on the steps to take for this part of the course within the “Research Project Work” section of each weekly guide. I have also created a Research Projects Resource page, which combines all assignments, due dates, and instruction resources in one place. You can access this page by clicking on the Research Projects Resources button on the home page.

ANNOUNCEMENTS & DISCUSSIONS

I will use the Announcements board to communicate important 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 we can interact as a class and where you all as students can share your ideas with each other. 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 for you to be connected with the rest of the class, which enhances learning.

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. 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) in order to stay on track in the course and not fall behind. However, most quizzes will remain available for up to two weeks later so that you can complete them, 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 for the first time. 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 the Discussion Participation point for that discussion.

6 points: 6 Discussions (1 point each)

**RESEARCH PROJECT ASSIGNMENTS** (38 points total)

**MINI REPORT** (10 points)

The Mini Report will be a mini version of a full research report. This will be completed in the first half 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.

**CLASS RESEARCH PROJECT ASSIGNMENTS & FINAL REPORT** (28 points total)

For the second half of the semester, you will complete a series of assignments for our Class Research Project, which will culminate in an individually written Final Report. This project will involve the class collecting actual data on participants (family and friends), analyzing that data, and writing up the Final Report to describe the study. The Class Research Project will launch with each student submitting a proposed study to be the basis for the Class Research Project, and the class will vote on their favorite proposal. The Class Research Project will be based on the proposal with the highest number of votes.

8 points: Research Project Proposal
5 points: Research Project Data Collection
15 points: Final Report

**LAUNCHPAD ACTIVITIES** (14 points total)

Each week you will be prompted to complete a LaunchPad activity- an activity that is built into our e-text book that will give you the opportunity to apply what you have just read in the text that week.

14 points: 14 activities (1 point each)

**OTHER APPLICATION ACTIVITIES** (7 points total)

Some weeks you will be asked to complete an activity that involves a quiz intended to get you to apply what you have just learned. These other application activity quizzes can be taken ask many times as needed to earn the full points.

7 points: 4 activities (various points each)

**EXTRA CREDIT**

You can earn extra credit towards your final grade in a few 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/](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. 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.

Finally, we have multiple discussion boards dedicated to student questions, such as the Course Questions discussion board. If you are able to answer another student’s question before I am able to get to it, and if your
answer is of high quality, you will earn 1/2 point of extra credit for each question answered in this way.

**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 strive 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.

**Safety Statement**

The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

**Inclusivity Statement**

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students’ learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status, and other unique identities. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

**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
- Utah Neurodiversity Workforce Program https://unwp.utah.edu/
- Dream Center (for undocumented students): https://dream.utah.edu/
- Student Success Advocates https://ssa.utah.edu/
- University Counseling Center https://counselingcenter.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. You can find more information on the Basic Needs Center website: https://union.utah.edu/resources-spaces/basic-needs-center/.

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

**COVID-19 Information**

**Please Remember:** Students must self-report if they test positive for COVID-19 via this website: https://coronavirus.utah.edu/.

**Student Mental Health Resources:**
- Rates of burnout, anxiety, depression, isolation, and loneliness have noticeably increased during the pandemic. If you need help, reach out for campus mental health resources (https://studentaffairs.utah.edu/mental-health-
resources/index.php), including counseling, trainings and other support.

- Consider participating in a Mental Health First Aid (https://studentaffairs.utah.edu/mental-health-first-aid.php) or other wellness-themed training (https://wellness.utah.edu/workshops-training/) provided by our Center for Student Wellness and sharing these opportunities with your peers, teaching assistants and department colleagues.
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<th>PSYCHOLOGY AS A SCIENCE: THINKING LIKE A RESEARCHER</th>
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<td><strong>Learning Content</strong></td>
<td>Ch 1 Psychology as a Science: Thinking Like a Researcher</td>
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| **Application Activities** | LaunchPad: A Scientific Look at Psychics  
Class Discussion #1 |
| **Extra Credit** | due Sept 5  
Introductions discussion |

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<th>THE RESEARCH PROCESS: IDEAS TO INNOVATIONS</th>
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<td><strong>Learning Content</strong></td>
<td>Ch 2 The Research Process: Ideas to Innovations</td>
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| **Application Activities** | LaunchPad: Determining Key Study Elements  
Literature Review activity |
| **Extra Credit** | due Sept 12  
Breaking Down a Journal Article activity |

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| **Application Activities** | LaunchPad: Being an Ethical Researcher  
Quiz #1 (available until Sept 26) |
| **Extra Credit** | due Sept 19  
Basic Principles of the Belmont Report |

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<td>Ch 4 The Psychologist’s Toolbox</td>
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| **Application Activities** | LaunchPad: Is the Swagger-Meter 1.0 a Quality Measure?  
Class Discussion #2 |
| **Research Project work** | due Sept 19  
Gender Perception Lab completed (ungraded)  
due Sept 19  
Mini Report Statistics quiz (ungraded) |

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| **Application Activities** | LaunchPad: You’re Hired!  
Quiz #2 (available until Oct 10) |
| **Research Project work** | due Sept 26  
Mini Report |
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<th>WEEK 6: SEPT 27 - OCT 3</th>
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<td>Ch 6 Observational Research</td>
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| **Application Activities** | LaunchPad: Is Public Affection a Public Affliction?  
Class Discussion #3 |
| **Extra Credit**         | due Nov 21  
Operational Definitions activity |
| **Research Project work** |                          |

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<td>Ch 7 Survey Design and Scale Construction</td>
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| **Application Activities** | LaunchPad: Which Professor Should You Take?  
Quiz #3 (available until Oct 31) |
| **Research Project work** | due Oct 10  
Mini Report Resubmission (optional) |

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<td><strong>Learning Content</strong></td>
<td>Ch 8 Two-Group Design</td>
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| **Application Activities** | LaunchPad: To Multitask or Not to Multitask?  
Class Discussion #4 |
| **Extra Credit** | due Oct 31  
Correlation activity |
| **Research Project work** | due Oct 24  
Class Research Project: Proposal |

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<td><strong>Learning Content</strong></td>
<td>Ch 9 Multigroup Design</td>
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| **Application Activities** | LaunchPad: Dressing for Distress?  
Quiz #4 (available until Nov 14) |
| **Research Project work** | due Oct 31  
Class Research Project: Proposal Comment & Vote (ungraded) |

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<th>WEEK 11: NOV 1 - 7</th>
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<td>Ch 10 Within-Subjects Design</td>
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| **Application Activities** | LaunchPad: Left Out and Feeling Low  
Class Discussion #5 |
### WEEK 12: Nov 8 - 14 | **DIGGING DEEPER**

**Learning Content**
- Digging Deeper Resource Page

**Application Activities**
- LaunchPad: Giving Credit Where Credit Is Due
- Quiz #5 (available until Nov 28)
- 3 Types of Research Questions activity
- Sampling: Populations, Frames, & Samples activity

**Research Project work**
- due Nov 21: Class Research Project: Data Collection

### WEEK 13: Nov 15 - 21 | **FACTORIAL DESIGN**

**Learning Content**
- Ch 11 Factorial Design

**Application Activities**
- LaunchPad: Can the News Influence Our Implicit Prejudice
- Class Discussion #6

**Research Project work**
- due Nov 21: Class Research Project: Data Collection (continued)

### WEEK 14: Nov 22 - 28 | **MIXED DESIGN**

**Learning Content**
- Ch 12 Mixed Design

**Application Activities**
- LaunchPad: Do Speed Daters Become Pickier the Later It Gets?
- Quiz #6 (available until Dec 12)

**Research Project work**
- due Nov 28: Class Research Project: Statistics quiz (ungraded)

### WEEK 15: Nov 29 - Dec 5 | **SOURCES OF INFORMATION**

**Learning Content**
- Sources of Information Resource page

**Application Activities**
- LaunchPad: The Structure of an APA-Style Paper
- Sources of Information website activity

**Research Project work**
- due Dec 5: Class Research Project: Final Report (part 1)

**Extra Credit**
- due Dec 5: Last day for Research participation extra credit
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<td><strong>Extra Credit</strong></td>
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<td>due Dec 12</td>
<td>End of Course Feedback Survey</td>
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<tr>
<td>due Dec 12</td>
<td>Late extra credit assignments for ½ credit</td>
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<td><strong>Research Project work</strong></td>
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<tr>
<td>due Dec 12</td>
<td>Class Research Project: Final Report (part 2)</td>
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