

Research Methods and Statistics, I Lab

(PSY 314 AA)

Spring 2021

1 Credits

Tuesday 2:00-3:15

Location: Hixson-Lied Science Building 246

Course website: <https://blueline.instructure.com/courses/1167348>

Instructor Information:

Professor: Katherine Hazen

Contact: katherinehazen@creighton.edu

Office: Hixson-Lied Science Building 305

Office Hours: Tuesday 9:00 - 10:30; Friday 12:00 – 2:00; or by appointment

TA: Hannah Mulholland

TA email: hannahmulholland@creighton.edu

Office: HLSB Rm 326

Office Hours: Monday/Wednesday 2:00-3:00; or by appointment

About this course:

As of now, I am planning this course to be a face-to-face course this semester. That means we will all be meeting in HLSB Rm 246 on Tuesdays from 2:00-3:15. You must sit at least 6-feet apart. Therefore, on the first day of class, please find a seat that is safely distanced from your peers that you are comfortable sitting in all semester! You are also required to wear a mask. I will send anyone who shows up to class without a mask home to get a mask and will be expected to return to class. Please be consciousness about your mask – wear it properly over your nose and under your chin. Be sure to bring your laptop to class each week. **You will need your computer for access to in-class assignments and statistical software.**

Course Description:

This laboratory course will offer you hands-on experience with psychological research methods and statistical procedures. It is designed to complement PSY 313 and allow you the opportunity to apply the knowledge learned in lecture. This laboratory course will focus on research ethics, conducting non-experimental studies, and writing research reports in APA style.

Prerequisite: PSY 201

This course is considered by the university to be an **In-Person Instruction SD100** course. Instructors and students attend synchronous classes on campus in the designated classroom for 100% of course times. Social distancing directives (at least 6 square feet per student) can be met without varying group size, class location or class schedule.

Course Objectives:

1. Develop a better understanding of psychology as a scientific discipline
2. Learn to appreciate the ethical issues that may arise in psychological research
3. Learn to read, interpret, and critically evaluate psychological research articles
4. Learn to use statistical software to analyze data
5. Learn how to conduct various statistical analyses
6. Learn to appropriately and effectively design, conduct, and analyze non-experimental research

Course Materials:

Textbook:

None

There is no required textbook for this lab course. However, you will be required to access **SPSS** through Nunatix FRAME. You will use this program in this lab as well as in your lecture class (PSY 313). In addition, you will use SPSS again when you take PSY 315/316. SPSS guides are available for purchase from Amazon, etc., but attending class should be enough. Note also that there are YouTube videos showing anything using SPSS, from creating tables, data entry, basis statistics, to the most advanced things SPSS is capable of.

We will go over the process for activating your FRAME account and accessing SPSS on the first day of class.

Course website:

All of the course materials and assignments are organized as modules on our Blueline site. Please refer to the site for assignment descriptions and rubrics.

Information Technology Requirement and Assistance:

Please use **Microsoft Office suite** applications for all assignments.

Blueline is where course content, grades, and communication will reside for this course.

The URL to access Blueline is: <https://blueline.instructure.com/courses/1161740>

For Blueline, passwords, or any other computer-related technical support contact the IT Center.

- Phone: 1-855-941-4242
- Website: <https://blueline.instructure.com/courses/1145891/pages/blueline-canvas>

Email etiquette:

Always put PSYC 314 AA in the subject line (or email through Blueline) if you want a prompt response. Every effort will be made to make email replies within 24 hours of receipt (Monday through Friday). I will check and respond to emails between 8:00 am and 5:00 pm. If you email me after 5:00 pm, expect to hear from me the next morning. If you have an issue with technology, I suggest you reach out to the technical staff first.

A short note about basic email etiquette to best represent yourself professionally when corresponding with the instructors -- It is expected that each email will include a subject alerting the instructor to the content of the email, a simple greeting, at least one

sentence, and a closing that includes the student's full name. For more information about email etiquette please visit: <http://owl.english.purdue.edu/owl/resource/636/1/> (Links to an external site.)

Course Assignments:

In-class assignments: (200 pts)

There will be a number of small exercises done in class throughout the semester. These exercises are designed to illustrate specific points, or to give you practice with certain challenging concepts. The major in-class assignments are as follows:

- Ethical Balancing **(30 points)**
- Identifying the parts **(30 points)**
- Writing operational definitions **(20 points)**
- Recoding data and creating variables in SPSS **(30 points)**
- Data visualization and reporting exercise **(30 points)**
- Data entry in SPSS & diagnostics **(30 points)**
- Create a Qualtrics survey **(30 points)**

Homework Assignments: (200 pts)

You will have a number of homework assignments throughout the semester. These assignments are designed to help you get familiar with the various parts of the research process, including study design, data collection, data analysis, and APA-style academic writing. In some cases, we may begin parts of these assignments in class before you finish them at home. In other cases, they will be completed entirely on your own time.

The major homework assignments are as follows:

- Writing research questions and hypotheses **(15 points)**
- CITI Training (IRB Ethics Training) **(25 points)**
- Literature search assignment **(50 points)**
- Article summary and synthesis **(50 points)**
- Descriptive statistics exercise **(20 points)**
- Developing a Likert scale **(40 points)**

Research Projects:

Several times during this semester, you will write up reports of several research projects. There will be several steps to each of these, including developing data collection tools, collecting data, and analyzing it before writing it up. These reports will vary in length and content, but will always need to be in complete APA style. We will go over APA style throughout the course. The major research reports are as follows:

- **Archival Data Project (125 Points)**
 - Data analysis with archival data **(50 points)**
 - Report on archival data **(75 points)**
- **Observational Data Project (200 points)**
 - Developing a behavioral checklist **(55 points)**
 - Collecting observational data **(35 points)**

- Analyzing observational data **(55 points)**
- Report on observational data **(55 points)**
- **Correlational Data Project (275 Points)**
 - Hypothesis development **(55 points)**
 - Creating an online survey **(55 points)**
 - Data analysis with correlation and regression **(55 points)**
 - Graphical presentation of data **(55 points)**
 - Report on correlational data **(55 points)**

Assignment re-do policy:

You will have **one** opportunity to correct in-class and homework assignments to earn full credit. The corrections must be submitted in Blueline **within one week of the original assignment being graded**. I will try to have assignments graded within one week of submission. Therefore, if the assignment is due by the end of class on April 5th, I will aim to have it graded before the beginning of class on April 12th, and you will have until the beginning of class on April 19th to submit corrections to the assignment.

You may NOT make corrections to or re-do any work related to the projects in this class. The purpose of in-class and homework assignments is to practice the knowledge and skills you are learning between the lecture and the lab. Therefore, correcting the mistakes is part of the learning process. However, the projects are about demonstrating what you have learned about research methods and statistics. I encourage you to come to office hours with me or my TA if you would like help with a project BEFORE it is due.

Course Expectations:

Academic Integrity:

All students will be bound by all aspects of Creighton University Policy on Academic Honesty. As part of the Creighton University community, you are expected to adhere to every aspect of this policy. Some (but not all) of the activities that are restricted by this policy are as follows:

1. "Plagiarizing or representing another's ideas as one's own..."
2. "Falsely obtaining, distributing, using or receiving test materials..."
3. Unauthorized collaboration on projects and assignments (including homework)
4. "Engaging in any conduct which is intended or reasonably likely to confer upon one's self or another an unfair advantage or unfair benefit respecting an academic matter."

For more information about the University Policy on Academic Honesty, please refer to the following documents and websites:

Learning in the Academy: An Introduction to the Culture of Scholarship
<https://ccas.creighton.edu/.../Academic%20Honesty%20Policy.pdf>

If you are found to have violated the University Policy on Academic Honesty you will be penalized. This penalty may range from receiving a grade of 0 on the related assignment to receiving a 0 in the course, or even suspension from the University. The severity of the penalty will be determined by the severity of the infraction.

Attendance and Participation:

Attendance and participation are required. However, if you are unable to come to class at all or for a period of time during the semester for health and safety reasons, please contact me by email before the end of the day on January 27th or as soon as otherwise possible. Please do not come to class if you are not feeling well but please email me as soon as you are able. I will ensure you are able to participate in the activities and connect with other students.

Creighton University may modify, suspend, or postpone any and all activities and services immediately and without notice because of force majeure causes beyond Creighton's control and occurring without its fault or negligence including, but not limited to, acts of god, fire, war, governmental action, terrorism, epidemic, pandemic, weather, national emergencies, or other threats to the safety of students or staff. Creighton may, at its option, alter the academic schedule or provide alternate instruction modalities to meet course objectives and competencies and program outcomes, including, but not limited to, distance or remote learning, until such time as Creighton determines normal operations may resume safely.

Students in this course will adhere to all community standards described in the following link, which include, but are not limited to, the classroom mask mandate.

[http://viewer.zmags.com/publication/d841e339#/d841e339/8.](http://viewer.zmags.com/publication/d841e339#/d841e339/8)

Technology Policy:

You may use a personal computer or tablet for note-taking during this class. However, I will not tolerate cell phone use or inappropriate computer use. Computers can very quickly become a distraction for you, your classmates, and me. If I find your technology becomes disruptive to class, I will ask you to put it away. More than three (3) offenses will result in a semester ban for the individual.

You may not share materials from this class, including but not limited to slides, assignments, or recordings. They are the intellectual property of the instructor and university, prepared for the people in this class.

Accommodations:

If you are entitled to any accommodations, please schedule a meeting with me in the first two weeks of the semester to discuss how I can best teach and support you this semester.

The Office of Disability Accommodations (ODA), located in the Harper Center, is available to assist students with disabilities. In order to receive services, documentation must meet the criteria set-forth by the ODA. Accommodations are specified on an individual basis and are determined by the type and severity of the disability and the characteristics of the course for which the student is enrolled. The purpose of these accommodations is to provide access to education and to create a "level playing field" for the student. These accommodations are not designed to provide unfair advantages or guarantee success for the student.

You may contact the Office of Disability Accommodations at the follow address, and phone number: Office: Old Gym, Room 437, 2500 California Plaza, Omaha, NE 68178
Phone: 402-280-2166, email: LeClair@creighton.edu

Late work:

If for some reason you are unable to complete any of the course materials by the deadline, you will receive a 10% penalty if you turn in the assignment within five days (including weekends) of the due date. If you turn in an assignment after that first week, but before the last day of class (May 4, 2020), you will receive a 50% penalty on your grade for that assignment. Course materials turned in after the end of the course will not be accepted. Please try to turn your work in on time, as it will make everything easier for the both of us.

Grades:

Assignments	Points	Percentage
In-class assignments (ICA)	200	20%
Homework Assignments (HW)	200	20%
Research projects (PRO)	600	60%
Total	1000	100%

Grade Distribution:

A	=	93-100%
A-	=	90-92.99%
B+	=	87-89.9%
B	=	83-86.9%
B-	=	80 – 82.99%
C+	=	77-79.9%
C	=	73 – 76.9%
C -	=	70 – 72.99%
C	=	70-76.9%
D	=	60-69.9%
F	=	less than 60%

Course Schedule (Table):

Date	Topic	Assignment Due
2/2	Welcome to Research Methods Lab!	
2/9	Ethics	Writing research question and hypothesis (HW) Ethical Balancing (ICA)
2/16	Introduction to APA-style	CITI Training (HW)
2/23	How to find, read, and synthesize research articles	Writing operational definitions (ICA)
3/2	How to interpret research articles	Identifying the parts (ICA)
3/9	Introduction to SPSS: descriptive statistics	Article Summary and Synthesis (HW) Literature search assignment (HW)

		Computing & Recoding Variables (ICA)
3/16	Using SPSS: analyzing and reporting archival data	Data Reporting and Visualization (ICA) Descriptive statistics exercise (HW)
3/23	Observational research: Creating a behavioral checklist	Full Archival Data Project (PRO)
3/30	SPSS Practice: data entry and diagnostic analyses	Make a Behavioral Checklist (PRO) Collect observational data (PRO) Data Entry in SPSS & Diagnostics (ICA with PRO data)
4/6	Creating Surveys: Introduction to Qualtrics	Full Observational Data Project (PRO) Developing a Likert Scale (HW) Create a Qualtrics survey (ICA)
4/13	Creating surveys (<i>continued</i>); Downloading data from Qualtrics	Hypothesis development (PRO) Creating an Online Survey (PRO) (<i>by end of class</i>)
4/20	Data “Cleaning”; Correlational data analysis (For your data)	Dataset and analysis from your online survey (PRO)
4/27	Writing up a study in APA Style	Data analysis for your project (PRO) Graphical presentation of data (PRO)
4/4	Identifying appropriate designs and analyses	
	Final Correlational Project (PRO) (<i>Due via BlueLine by 5/12 at 11:59pm</i>)	