

# **Research Methods and Statistics, I (PSY 313 B)**

Fall 2020

3 Credits

Tuesday/Thursday 11:00 - 12:15

Location: Hixson-Lied Science Building Rm 368

Course website: <https://blueline.instructure.com/courses/1161736>

## **Instructor Information:**

**Professor:** Katherine Hazen

**Contact:** [katherinehazen@creighton.edu](mailto:katherinehazen@creighton.edu)

**Office:** Hixson-Lied Science Building 305

**Office Hours:** Monday 2:00-3:00; Thursday 9:00-10:30, or by appt

## **About this course:**

As of now, I am planning this course to be a hybrid course: half of you will be in class each day of the week and half of you will be attending via zoom. You have been assigned to groups of four (4) or five (5) for your poster project and each group has been assigned a day of the week to attend class in person and a day of the week to attend via zoom. That schedule is included below and posted on Blueline.

## **Course Description:**

This course will teach and apply the statistics and research methods utilized in non-experimental psychological research. The content covered in this course will provide a strong foundation for understanding psychology as a science and will include application of course material using statistical software.

**Prerequisite:** PSY 201

This course is considered by the university to be a Hybrid Instruction (SD200) course. Instructors and students attend synchronous class meetings in a rotating schedule mix of in-person and remote instruction (e.g., Zoom). Scheduled room permits social distancing directives to be met only with **half** the number of enrolled students at a time.

## **Course Objectives:**

1. Form a better understanding of the science of psychology.
2. Appreciate the ethical and methodological challenges involved in conducting psychological research with humans and animals.
3. Recognize the advantages and disadvantages of different statistics and research methodologies in scientific investigation.
4. Learn to critically evaluate statistics, research designs, and conclusions in the social sciences.
5. Learn to appropriately design, conduct, and analyze a non-experimental descriptive study.

## Course Materials:

Textbook:

Beins, B.C. and McCarthy, M.A. (2012). *Research methods and statistics* (1<sup>st</sup> ed.). USA: Pearson ISBN-13: 978-0205624096

American Psychological Association. (2020). *Publication Manual* (7th ed.). Washington, DC.

<https://apastyle.apa.org/products/publication-manual-7th-edition?tab=2>

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/1161736>

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 313 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). 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:

Exams (4):

There will be four (4) exams this semester, each covering three (3) to four (4) chapters of the book. Exams will be administered through Blueline and will be timed. You will be allotted 60 minutes (one hour) to complete the exam and are expected to do so independently. While you will be able to use your notes and textbook, I will ask you to certify that you did not use resources outside those provided or obtained through this course. The exams will include multiple choice questions and essays.

Material covered on the exams is not limited to topics discussed in the lectures or the full class discussions. Students are responsible for assigned readings.

No make-up exams will be given without a valid, documented excuse and notification to the instructor before the scheduled exam. For example, if you are ill on a particular exam day, you will need to call the instructor's office or email before missing the exam and obtain written proof of your condition from a physician. The instructor reserves the right to alter the form of any make-up exams.

The final exam will cover the last few chapters of material and include some cumulative content to ensure you have learned the core concepts over the course of the semester.

#### Lab Project:

You will work in groups of 3-4 to create an APA style poster based on your work in Lab. Details of the project will be handed out and posted to BlueLine later in the semester as we begin to devote more class time to this. The data you collect will be analyzed using SPSS and/or Excel, and you will make a poster of your results and present it to the class. You will also turn in an individual copy of the poster for a grade. **Since you have to present the poster to the class it cannot be late.**

#### Reading quizzes:

Throughout the semester you will complete one (1) introductory survey, ten (10) reading quizzes, and four (4) exam review assignments. Each of these assignments is worth 10 points (1% of your grade). They will be available through BlueLine.

#### Research Participation:

You can receive extra credit by participating research. You will earn 2.22 points for each 15 minutes of participation time. You can receive up to 20 points of research credit **you must complete a total of 2.25 hours of participation**. If you sign up to participate in a study, and fail to show up or notify the experimenter, 1.0 point will be deducted from your research participation total. To complete the 2.75 hours of participation you may need to participate in more than 1 study depending on the required length of the study. You will not get credit for participating in the same study more than once!!!!

#### **Your research hours are kept track by Sona Systems**

**When signing up for Sona be sure to do the PRESCREEN and makes you eligible for a majority of the studies that will be offered during the semester.** Here is the link to the website for Sona Systems: <http://creighton.sona-systems.com/>

If you are unable or unwilling to participate in research, other assignment alternatives are available. Please let me know if you don't want to do research and I will discuss alternatives with you. I ask that you discuss this with me **by October 15.**

## 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 August 18<sup>th</sup> 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](mailto: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 (November 25, 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:

<b>Assignments</b>	<b>Points</b>	<b>Percentage</b>
Exams (2)	250	27.6%
Final Exam	200	22.1%
Research poster	250	27.6%
Reading Quizzes	185	20.4%
Research Participation	20	2.2%

Total	905	100%
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#### 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-	=	70-72.9%
D	=	60-69.9%
F	=	less than 60%

#### Course Schedule (Table):

Date	In class	Topic	Reading Assignment	Other
T 8/18	1, 2, 3	Syllabus; Psychology, Science, and Life	Chapter 1 (pp. 1-10)	Who am I? quiz
R 8/20	4, 5, 6	Continued	(pp. 10-22)	Reading quiz 1
T 8/25	1, 2, 3	Planning Research: Generating a Question	Chapter 3 (pp. 51 – 66)	Reading quiz 2
R 8/27	4, 5, 6	Continued	(pp. 66-80)	
T 9/1	1, 2, 3	Ethics in Research	Chapter 2 (pp. 23-38)	Reading Quiz 3
R 9/3	4, 5, 6	Practical Issues in Planning your Research	Chapter 4 (pp. 81-93)	
T 9/8	1, 2, 3	Continued	(pp. 93-103)	Reading Quiz 4
R 9/10	4, 5, 6	Catch-up and Review		Write 3 exam questions
T 9/15		Exam 1 - online	Ch. 1-4	
R 9/17	1, 2, 3	Organizing Data with Descriptive Statistics	Chapter 5 (pp. 105-113)	
T 9/22	4, 5, 6	Continued	(pp. 113-128)	Reading Quiz 5
R 9/24	1, 2, 3	Wrapping up/ Conducting an Experiment: General Principles	Chapter 6 (skim pp. 129-141); (Start 7 pp. 149-156)	Reading Quiz 6
9/29	4, 5, 6	Basics of Inferential Statistics	Chapter 7 (pp. 156-176)	Reading Quiz 7
10/1	1, 2, 3	Finish Basics of Inferential Statistics		
10/6	1, 2, 3	Catch-up and Review		Write 3 exam questions
10/8		Exam 2 – Online	Ch. 5-7	
10/13	4, 5, 6	Principles of Survey Research	Chapter 11 (pp. 157-270)	Reading Quiz 8
10/15	1, 2, 3	Continued	(pp. 270-279)	
10/20	4, 5, 6	Writing a Research Report/Review	Appendix A (pp. 359-286); APA Manual	Reading Quiz 9
10/22	1, 2, 3	Continued		
10/27	4, 5, 6	Correlation	Chapter 12 (pp. 281-291)	Reading Quiz 10

10/29	1, 2, 3	Chi-square	Chapter 12 (pp. 295-301)	
11/3	4, 5, 6	Continued/ Presenting Research	Appendix B and C	Practice Test (20 points)
11/5	1, 2, 3	Regression	Chapter 12 (pp. 291-395)	
11/10	4, 5, 6	Continued/Work-day		
11/12	All online	Poster Presentations		Poster PDF
11/17	1, 2, 3	Catch-up and Review		Write 3 exam questions
11/24 1:00-2:40		Final Exam - Online	Chapter 11, 12, APA, & key concepts	