

Introduction to Research Methods PSCH 242

What is an
experiment?

How do I
design a
study?

How can I get
scientific answers to
my burning
questions??

Time and Place

Zoom classroom: First two weeks of class:

<https://uic.zoom.us/j/87361478873?pwd=RWNCD21mb1VRcFFDRzIGdXdRzBlZz09>

Lecture: Monday and Wednesday, 12pm – 12:50 pm, Taft Hall Room 204

Lab: Friday, 12 pm – 12:50 pm, Taft Hall Room 204

Office: 1049 BSB, office hours: Tuesday 12 – 2pm

Zoom office hours link: First two weeks of class:

<https://uic.zoom.us/j/81881706723?pwd=UHVMTMDRzQ1JmRG9uQVBKdzhGTG4xQT09>

COURSE OVERVIEW

I don't know about you, but I often wonder why people behave the way they do. Why do humans wage wars? Why do some people inflict violence upon others? What makes some relationships loving and successful, and others not? Although most people can, and will, speculate on these age-old queries, what if I told you there is actually a systematic way to find answers to these questions? The scientific method is a real, attainable tool that people can apply to research questions, and end up with real answers. From germ theory, to global warming, to matters of the heart, scientists use a vast variety of research methodology to systematically investigate their hypotheses, and develop evidence they can trust.

In this class, you will harness the power of research methodology and the experimental method. By the end of this course, you will be provided with the tools to generate hypotheses, create experimental materials, evaluate research, and find answers to your own scientific questions. In this course, I will guide you through the basics of research methodology in psychology and beyond, and we will learn to decipher what makes research truly scientific. Throughout the semester, you will work with a research team and design your own psychological study—you can finally address those burning questions!

Student learning goals:

- Learn the scientific method

- Understand, and implement the components of a research study:
 - Study design, sampling, creation of study materials, data collection, data interpretation and presentation
- Differentiate between experimental and correlational research
- Critically evaluate your own research, and that of others: Decipher between science and pseudo-science
- Identify the endless possibilities—and ethics—of research
- Author a research paper

Professor: Kathryn Howard (Please call me Kathryn, or Professor Howard, whichever you prefer; pronouns: she/her)

- **Email:** khowar24@uic.edu (expect a response within 24 - 48 hours). If I do not respond to your email within 48 hours, please resend the email!
- **Office hours:** My drop-in office hours are on **Tuesday from 12pm – 2pm**. I will also be available on the office hours zoom link for the first two weeks of class.
- No need to make an appointment for office hours, please stop by! If I must cancel office hours for a particular week, I will try to let you know within 24 hours, and will reschedule my office hours for a different time that week. If you cannot make these office hours, please come talk to me, or send me an email, and we will schedule a time to meet.

COURSE FORMAT

Synchronous class: This class will be entirely synchronous. For the first two weeks of class (as of now) we will meet online. After these two weeks, we will meet in-person (unless told otherwise by UIC). Whether online or in-person, we will meet every Monday and Wednesday from 12 – 12:50 pm, and for our lab class every Friday from 12 – 12:50.

COVID Situation: As we are all very much aware, the last few years have brought many surprises and struggles. If UIC makes the decision that classes will meet online for the entire semester, this class will, of course, switch to an online format over zoom. In this event, I plan to keep the course content almost entirely the same, but will adjust where needed.

Lectures: I will present lectures about the weekly topic on Mondays and Wednesdays. My slides are not posted online. I design my lecture this way to encourage you to take notes, and help you stay engaged. However, if you have an accommodation please let me know, and I can make slides available to you.

Pods: A key component to this class is your pod. You will be assigned to a group of ~4 students who will be your “podmates” for the course. I hope this will provide you with some of the social joy and accountability that comes with group work and taking a class with other people. Together, you will be a team. You will sit with your pod in class, and work through class activities together. You will also work together on your research project that will progress throughout the semester.

COURSE MATERIALS AND RESOURCES

Course Textbook: We will be using a free, online textbook called: “Research Methods in Psychology: The 4th Edition,” by Jhangiani, Chinag, Cuttler, & Leighton.

- You can access the e-book and PDF version of the textbook at the following link: <https://kpu.pressbooks.pub/psychmethods4e/>
- You do not need to create an account to access the textbook. A link to the textbook is also provided on our blackboard site. This textbook is also available for purchase if you would like a hardcopy.

Course articles: Some weeks, you will be assigned an article to read. Sometimes these will be academic articles, and sometimes they will be blog posts, op-eds, or popular science articles. I will upload the articles on the Weekly Assignments and Readings tabs on blackboard.

ATTENDANCE

Due to the collaborative nature of this class, attendance is required and part of your course grade. However, because I understand that life is filled with surprises and can get hectic, there is flexibility built into your attendance grade. **You are able to miss up to TWO lecture classes and ONE lab class without any penalty**, no questions asked. If extenuating circumstances in your life arrive and you are unable to attend class for an extended period of time, please let me know as soon as possible and we will work something out together.

HOW WILL I LEARN EACH WEEK? HOW WILL MY LEARNING BE ASSESSED?

Lecture Classes:

1. **Weekly Readings—Textbook and articles:** Each week you are assigned a textbook reading that will be accompanied by a reading quiz. The textbook readings will typically be due **Wednesday** before class (see schedule, as some weeks may deviate from this pattern). Some weeks you will also be assigned an article to read. You will discuss and complete activities about the readings with your pod, and the rest of the class. **In order to succeed in this class, it is essential that you complete all class readings *before* the class in which they are due.**
2. **Weekly Reading Quizzes:** Before the start of class on Wednesdays, you will take a reading quiz based on the assigned textbook reading for the week. These quizzes will become available on blackboard the **Sunday** before they are due (you have approximately 3 days to complete the quiz). I will drop your TWO lowest reading quiz grades at the end of the semester. These quizzes are not group work.

3. **Weekly Pod Challenges:** On Wednesdays (typically, see schedule), you will work on a set of challenge question with your pod. These challenge questions are based from the assigned readings, lecture, or lab work and are designed to help you collaborate with your pod, and think critically about research and psychology. These will be graded on 40% accuracy, and 60% effort.
4. **Pod-Check:** Twice throughout the semester, you will be given the opportunity to provide **feedback to me** about your pod-mates. You will rate the extent each member contributes to the pod, if they are respectful, etc. You will receive a grade determined by the feedback from your podmates at the end of the semester.
5. **Exams:** This course will have two exams. Exam 1 will be on the content from weeks 1 - 6, and Exam 2 will be on the content of Weeks 8 – 15 (Exam 2 is *not* cumulative). Exams will be taken in-person, and will not be open. The exam will consist of a collection of different types of questions: Multiple choice, short-answer, and essay. These exams will be designed to test your knowledge, and help you encode the important information in this class. As of now, these tests will be in-person. If class is switched online permanently, exams will be taken online, but will still be closed-note.
 - a. **What happens if I know now that I will miss an exam due to a firm, high-stakes scheduling conflict (i.e., court date or a wedding)?** If you know in advance that you will not be present to take an exam, please let me know as soon as you possibly can! We will schedule a different time for you to take the exam (with no penalty to your grade). Your rescheduled exam needs to be taken **before** the rest of the class takes the exam, and you must let me **know at least 3 weeks** before the official exam takes place.
 - b. **Excused absences?** If you miss an exam but you have an excused absence (court-related or sickness-related absence with documentation), please let me know as soon as you possibly can, and we will find a time to reschedule your exam, with no penalty to your grade.
 - c. **What happens if I miss an exam without an excused absence?** We will reschedule a time for you to take the exam. Missing the exam without an excused absence is an automatic 10% point-deduction from your earned score. You lose approximately one letter grade (10% of earned points) for every additional day you do not contact me about missing an exam.

Lab Classes:

In lab, you will apply the skills and information we discuss in lecture-time, and learn additional research skills. This time will also be used for you and your pod to work on your research project. By the end of the semester, you will have created and conducted a research study, how cool is that?

- 1. Group Research Project:** With your pod, you will create a psychological research study from start to finish. You will research a topic of interest, develop a research question and hypothesis, create study materials, collect data, analyze and interpret your data, and then write up your results in a research report. You will report your findings with your classmates at the end of the semester, either through a poster or powerpoint presentation. You will turn in your own research report, but present the project as a group.

PARTICIPATION

Because this is a collaborative class, your attendance is necessary! And therefore, it is required. You will lose points if you routinely arrive after 12 pm (however, if there is a significant reason why you frequently will not be able to make it to class on time, please let me know as soon as possible!) Although attendance is required, **you can miss two lecture days, and one lab class day, without losing points.**

HOW WILL MY GRADE BE CALCULATED?

Reading Quizzes: 14%
Pod Challenges: 15%
Pod check: 5%
Exams: 25%
Lab work/Final project: 35%
 -Final project paper: 20%
 -Final project presentation: 5%
 -Other lab activities: 10%
Attendance: 6%

Grading:

I am committed to making sure the assessment of your learning in this course is comprehensive, fair, and equitable. Your grade in this class will be based on the number of points you earn out of the total number of points possible and is not based on your rank relative to other students. Furthermore, grades are assigned without limits on the proportion of each letter grade given in the course. If, for any reason you have concerns about your grade in the course, please reach out to me (through email, in class, or office hours) so we can schedule a time to discuss your grade, plan study techniques, or alternative strategies to help you.

Grading	
A	90 – 100%
B	80 – 89.99%
C	70 – 79.99%
D	60 – 69.99%
F	59.9% or lower

LATE WORK: The late policy is slightly different for each assignment.

- **Reading Quizzes:** You cannot make up a reading quiz. HOWEVER, you can miss up to one quiz without a penalty. If you complete all quizzes by the end of the semester, you can choose two quiz grades to drop.
- **Pod Challenges:** You cannot make up a pod challenge. However, you can miss up to two pod challenges without a penalty.
- **Lab Assignments:** Even if you are not physically in lab, you are responsible for turning in all lab work. Every day a lab assignment is late you will lose 10 percentage points.
- **Course Project:** Every day your course project is late you will lose 10 percentage points.

EXTRA CREDIT: One can earn extra credit in this course in two ways. First, because you can miss up to two lecture classes, and one lab class without a penalty, **you will receive 1.5 extra percentage points to your final grade if you attend all lecture and lab classes** (.5 points per class). Second, you can complete up to *two* Summary and Synthesis assignments. For this assignment, you will choose two empirical, peer-reviewed articles from psychology journals that investigate the same topic. In a 500 word, double-spaced paper, you will briefly summarize the methodology and main findings from each article, and compare and contrast the methodology and findings. You will offer your interpretation of the results, and note whether you are convinced by the papers, and if you think one paper is stronger than the other. You can earn up to **.75 additional percentage points to your final grade per assignment. These assignments are due April 29th at 11:59 pm.**

CLASSROOM ATMOSPHERE

In this class, we will interact with each other a great deal. We will get to know each other, and it is my hope that you get to know your pod members. Because of our extensive interactions, and the simple fact that we're humans, it is imperative we all exhibit sensitivity and respect. This means:

- Be mindful of different cultural and linguistic backgrounds, as well as different political ideologies and religious beliefs.
- Be respectful of others' views and opinions.
- **Please avoid behaviors that are disrespectful and distracting to your peers, and to me.** We are all here to learn, and distractions inhibit other peoples' ability to learn. Behaviors that could be perceived as distracting include: Talking during a lecture, or while one of your peers is sharing or presenting, texting during class during lecture.

CLASS POLICIES

COVID policy: The past two years have been incredibly hard in so many multitudes of ways. I cannot imagine what it is like to be a college student during a pandemic, and I will try my best to emphasize with you, and your experience. Because I want to make sure we stay in-person for as long as we can, while also staying as safe as possible, there are some rules for this class:

1. If you are not feeling well, and/or have a fever, please do not come to class! Let me know over email, and we will work it out.
2. You must wear your mask, **covering your nose and mouth, at all times**. If you are not properly wearing your mask, I will ask you immediately to fix your mask, regardless if I am lecturing.
3. **The only exception** to the rule above is to have a sip of water. You may bring water to class, but I ask that you immediately cover your nose and mouth after taking a sip.
4. No eating of any kind in the classroom.
5. I do not want anyone suffering of hunger or caffeine withdrawal, so please do not hesitate to step outside the class and quickly eat a snack, or get your caffeine fix, if you must.

Computer policy: I do not have a preference as to whether you take notes with paper and pen, or with your laptop (***research does find that paper-and-pen notes increase learning compared to typing***). However, please refrain from non-note related activity, as this can be heavily distracting to your peers.

EMAIL and BLACKBOARD

Please do not hesitate to send me an email! I will get back to you in 24 – 48 hours. If you do not hear back from me in over 48 hours, please resend the email!

For best results in this class, please:

1. Please put the course number in the email subject line, i.e., “242”
2. Turn in all assignments in **word document**, or google doc form. I will not read your assignment if you turn it in as a PDF.
3. **PUT YOUR NAME ON ALL OF YOUR PAPERS**, and **SAVE YOUR PAPER WITH YOUR NAME ON IT** unless directly asked to do otherwise.

TENTATIVE COURSE SCHEDULE *subject to change*****

Assignments are due before class on the day they are listed. For example, the Get to Know You Survey is due on Wednesday, January 12 at 11:59 am

Week	Topic	Class Happenings	Assignments Due
M, January 10 th	Class Introduction, Science of Psychology	-Syllabus review, Introduction and What is science?	
W, January 12 th	Science of Psychology	-Lecture	-Get to Know You survey
F, January 14 th	LAB	-Meet your pod -Go over project syllabus -Is this Science?	-TB: Ch 1.1 – 1.5

M, January 17 th	MLK DAY NO CLASS		
W, January 19 th	Scientific Method	-Lecture	-TB: Ch 2.7 – 2.10 - Reading Quiz Ch 2
F, January 21 st	LAB + Scientific Method	-Generating research questions	2.11 – 1.13 -Article + Worksheet
M, January 24 th	Finish up Scientific Method and Research Ethics	-Lecture	
W January 26 th	Research Ethics	-Pod Challenge -Lecture	-TB: Ch 3.15 – 3.17 -Reading Quiz 3
F, January 28 th	LAB	-Searching for Research Articles	-Article
M, January 31 st	Psychological Measurement	-Lecture	
W, February 2 nd	Psychological Measurement	-Pod Challenge	-TB Ch 4.19 – 4.21 -Reading Quiz 4
F, February 4 th	LAB	-Finalize research Q, write hypotheses	-Article
M, February 7 th	Survey Research	-Lecture	
W, February 9 th	Survey Research	-Pod Challenge -Lecture	-7.34 – 7.36 -Reading Quiz 7
F, February 11 th	LAB	-Scale design	-Article
M, February 14 th	Experimental Research	-Lecture	
W, February 16 th	Experimental Research	-Pod challenge	TB Ch 5.23 – 5.26 -Reading Quiz 5
F, February 18 th	LAB....POTENTIALLY ONLINE	-Creating study materials	
M, February 21 st		EXAM 1, Ch 1 – 5 + 7	
W, February 23 rd	Non-Experimental Research	-Pod Challenge	-TB Ch: 6 -NO quiz
F, February 25 th	LAB	-Finalize study materials	
M, February 28 th	Quasi-Experimental Research	-Lecture	
W, March 2 nd	Quasi-Experimental Research	-Lecture -Pod Challenge	-TB Ch: 8.38 – 8.40 -Reading Quiz 8
F, March 4 th	LAB	-Taking surveys	
M, March 7 th	Theory in Psychology	-Lecture	

W, March 9 th	Theory in Psychology	-Pod Challenge -Lecture	-Article (will be on blackboard) -Reading Quiz 9
F, March 11 th	LAB	- Writing literature reviews and introduction	
M, March 14 th	Single Subject Research	-Lecture	
W, March 16 th	APA style day	-Pod Challenge -Lecture	-TB: Ch: 10.44 – 10.46 -Chapter 10 quiz
F, March 18 th	LAB	--Methods and Discussion section, group project review	-TBD
M, March 21 st	NO CLASS SPRING BREAK ☺		
W, March 23 rd			
F, March 25 th			
M, March 28 th	Descriptive Statistics		
W, March 30 th	Descriptive Statistics	-Pod Challenge	--TB Ch: 12.52 – 12.55 -Chapter 12 quiz
F, April 1 st	LAB	-Analyze Results, writing up results	-Due: Introduction Methods, and Reference section draft, 11:59pm online
M, April 4 th	Presenting Your Research	-Lecture	
W, April 6 th	Presenting Your Research	-Pod Challenge	TB Ch: 11.48 – 11.50 -Chapter 11 quiz
F, April 8 th	LAB	-Writing up Results and discussion	-TBD
M, April 11 th	Inferential Stats	-lecture	
W, April 13 th	Inferential Stats	-Pod Challenge -	-TB Ch 13.57 – 13.60 -Chapter 13 quiz
F, April 15 th	LAB	-Work on Project Pres or poster	
M, April 18 th	TBD	-Lecture	
W, April 20 th	TBD	-Pod Challenge, -Work on Presentation or poster	TBD
F, April 22 nd	LAB	-Work on Project Presentation or Poster	-Due: Results and discussion section draft, 11:59 pm online
M, April 25 th	Project Day	-Work on Project Presentation or Poster	

W, April 27 th	Presentations	Final projects due this day before start of class	
F April 29 th	Presentations		
Tuesday, May 3	Final Exam 8 – 10am		-Final paper due Friday, May 6 at 11:59pm

OUR INCLUSIVE LEARNING ENVIRONMENT

Your instructors value diversity and inclusion. Regardless of age, disability, ethnicity, race, gender, gender identity, sexual orientation, socioeconomic status, geographic background, religion, political ideology, language, or culture, we expect all members of this class to contribute to a respectful, welcoming, and inclusive environment for every other member of our class. If there are aspects of the instruction or design of this course that result in barriers to your inclusion, engagement, accurate assessment or achievement, please notify me as soon as possible.

Disability Accommodation Procedures

UIC is committed to full inclusion and participation of people with disabilities in all aspects of university life. If you face or anticipate disability-related barriers while at UIC, please connect with the Disability Resource Center (DRC) at drc.uic.edu, via email at drc@uic.edu, or call (312) 413-2183 to create a plan for reasonable accommodations. In order to receive accommodations, you will need to disclose the disability to the DRC, complete an interactive registration process with the DRC, and provide me with a Letter of Accommodation (LOA). Upon receipt of a LOA, I will gladly work with you and the DRC to implement approved accommodations.

ACADEMIC INTEGRITY

As a student and member of the UIC community, you are expected to adhere to the Community Standards of integrity, accountability, and respect in all of your academic endeavors. When accusations of academic dishonesty occur, the Office of the Dean of Students investigates and adjudicates suspected violations of this student code. Unacceptable behavior includes cheating, unauthorized collaboration, fabrication or falsification, plagiarism, multiple submissions without instructor permission, using unauthorized study aids, coercion regarding grading or evaluation of coursework, and facilitating academic misconduct. Please review the UIC Student Disciplinary Policy for additional information about the process by which instances of academic misconduct are handled towards the goal of developing responsible student behavior.

By submitting your assignments for grading you acknowledge these terms, you declare that your work is solely your own, and you promise that, unless authorized by the instructor or proctor, you have not communicated with anyone in any way during an 9 PSCH 312 Fall 2020 exam or other online assessment. Let's embrace what it means to be a UIC community member and together be committed to the values of integrity.

By enrolling in this course, you agree to uphold a class honor code in which we trust one another and engage only in behaviors that reflect our community standards of academic integrity.

If any part of you feels even slightly tempted to engage in academic dishonesty for the sake of a better grade, come talk to me and I'll give you all sorts of tips and tricks to earn that grade you're hoping for.

EXPERIENCING PERSONAL AND ACADEMIC CHALLENGES

As an undergraduate at UIC, you may experience challenges such as struggles with academics, finances, student life, or your personal well-being. Please know this is completely normal and you shouldn't hesitate to ask for help. Come to me, or if it is about an issue beyond the scope of this class, please contact your college advisors, or get help from any number of other support services and resources available to all UIC students. A comprehensive list is available on the Current Student Resources website. Academic resources that I encourage you to explore as needed are listed on the Student Academic Resources website.

If you are in immediate distress, please call the UIC Counseling Center at (312) 996-3490 to speak directly with a counselor or to schedule an appointment with a counselor. If calling after business hours (which at UIC are typically from 9 am - 5 pm CT, M-F), press 2 to be connected to a crisis counselor. You can find additional online mental health resources on the [Counseling Center Resources](#)

If you experience sexual violence, identity-based harm, or any other personal crisis at any point during the course, please don't hesitate to reach out so I can (1) help you get caught up in class, (2) put you in contact with the appropriate resources and services, and (3) answer questions to the extent that I am qualified to do so. Note that Faculty and TAs are required by both university policy and federal law to report all disclosures of sexual violence to the appropriate campus authorities. But please know that I am more than willing to support survivors throughout the process. If you'd rather not talk to your professor about these issues, I completely understand. Please see the resources below.

Finally, as an educator, I fully support the rights of undocumented students to an education. If you have any concerns in that regard, feel free to discuss them with me, and I will respect your wishes concerning confidentiality. Furthermore, I am committed to resisting any and all attacks on immigrants.

Campus Resources

The Writing Center offers friendly and supportive tutors who can help you with reading and writing in any of your courses, not just English. Tutors are ready to help other writing as well, such as job applications, personal statements, and resumes. The tutor and you will work together to decide how to improve your writing. If you have not started your assignment, that is OK. A tutor can help you brainstorm or make an outline. Tutors understand that you might be using the Writing Center for the first time. They are ready to guide you through your first session. You can choose to work with a tutor in real time using chat and a white board, or submit up to 5 pages of text and receive written feedback within 48 hours. For more information and to schedule an appointment, visit the Writing Center website.

The Academic Center for Excellence (ACE) can help if you feel you need more individualized instruction in reading and/or writing, study skills, time management, etc. Please call (312) 413-0031 or visit <https://ace.uic.edu/> for more information.

Counseling Services are available for all UIC students. You may seek free and confidential services from the Counseling Center at www.counseling.uic.edu. The Counseling Center is located in the Student Services Building; you may contact them at (312) 996-3490 during normal business hours (M-F, 9 am - 5 pm). If calling after hours, press 2 to be connected to a crisis counselor. In addition to offering counseling services, the Counseling Center also operates the InTouch Crisis Hotline from 6:00 p.m.-10:30 p.m. They offer support and referrals to callers, as well as telephone crisis interventions; please call (312) 996-5535.

The Campus Advocacy Network provides information and offers resources to all UIC students, faculty, and staff. Under the Title IX law you have the right to an education that is free from any form of gender-based violence and discrimination. Crimes of sexual assault, domestic violence, sexual harassment, and stalking are against the law and can be prevented. For more information or for confidential victim-services and advocacy, contact UIC's Campus Advocacy Network at 312-413-1025 or visit <http://can.uic.edu/>. To make a report to UIC's Title IX office, email TitleIX@uic.edu or call (312) 996-5657.

Syllabus Disclaimer: This syllabus is intended to give you guidance on what will be covered during the semester, and will be followed as closely as possible. However, I may modify, supplement, and make changes throughout the semester.

***This syllabus was inspired in part by Rebecca Littman and Leslie Berntsen**