

# PSYC2015 Syllabus

## Welcome to PSYC 2015 Research Methods

### Lectures

<https://gatech.instructure.com/courses/542476/pages/lecture-slides-and-lab-materials> (<https://c>)

## Course Instructor



### Eunbee Kim

PhD in Quantitative Psychology  
School of Psychology

Lecture Time: MW 2:00-3:15PM

Lecture Location: Coon 248

Email: [eunbee.kim@gatech.edu](mailto:eunbee.kim@gatech.edu) (<mailto:eunbee.kim@gatech.edu>)

Office: JS Coon G53C

Office Hours: W 1:00-2:00PM

## Lab Instructor

### Debbie Hsu

PhD Student  
School of Psychology

Lab Time:

Lab Location:

Email:

Office:

Office Hours:

## Course TA

PhD Student  
School of Psychology

Email:

Office:

Office Hours: by appointment

## Course Description & Objectives

Introduction to methods used in conducting research on human behavior. Experimental research emphasized, but course covers other methods and some statistics. This course provides a fundamental understanding of major issues in designing, analyzing, and publishing research. Students will learn about the ethical principles of research including what is and what is not possible in human psychological research, and different research approaches. (Prerequisites: PSYC 1101 & Statistics)

At the end of this course, you should be able to:

- Create testable hypotheses and design a study to these hypotheses
- Frame the problem with the correct research methodology
- Collect data that accurately addresses the research questions
- Use data to make decisions
- Read and critically evaluate empirical research papers as an informed, critical consumer
- Demonstrate writing skills by drafting a research proposal in APA format
- Understand what is necessary for ethical scientific research
- Identify the strengths and weaknesses of a variety of research designs
- Develop abilities to work as part of a research team

## Prerequisites

- PSYC 1101
- Statistics (one of PSYC 2020/MATH 3215/MATH 3670/CEE 3770/ISYE 3770/ISYE 2028)

## Textbook and Other Materials

- Lewandowski, G. W., Ciarocco, N. J., & Strohmets, D. B. (2019). Discovering the scientist within: Research methods in psychology. (3rd edition). Macmillan Learning.
- [Optional] other supplementary materials from
  - Jhangiani, R. S., Chiang, I. C. A., Cuttler, C., & Leighton, D. C. (2019). Research methods in psychology. (4th edition) Kwantlen Polytechnic University.
  - Morling, B. (2021). Research methods in psychology (4th edition). New York: Norton. ISBN: 978-0-393-89370-0
  - Pajo, B (2022). Introduction to Research Methods: A Hands-on Approach Second Edition, Los Angeles, CA: Sage.
- [Optional] free online textbooks for statistics
  - <https://onlinestatbook.com/index.html>
  - <https://open.umn.edu/opentextbooks/textbooks/559>  
(<https://ethanweed.github.io/pythonbook/landingpage.htm>)
  - <https://ethanweed.github.io/pythonbook/landingpage.htm>  
(<https://ethanweed.github.io/pythonbook/landingpage.htm>)

## Assessment of Learning

<b>Lecture Attendance</b>	100 points (10%)
<b>In-Class Activity/Homework</b>	100 points (10%)
<b>Three Article Quizzes</b>	150 points (15%) 50 points each * 3
<b>Ed Discussion</b>	100 points (10%)

<b>Lab Assignments/Project</b>	200 points (20%)
<b>Exam 1</b>	100 points (10%)
<b>Exam 2</b>	100 points (10%)
<b>Final</b>	150 points (15%)
<b>Total Points</b>	<b>1000 points (100%)</b>
	<b>For each section, the earned points will be proportionally converted based on the rubric's weighting.</b> For instance, if you earn 95 out of 100 possible scores for lab assignments/projects, this score will be scaled to 190 out of 200 points according to the rubric.

**LECTURE ATTENDANCE:** From past experience teaching various courses, we have found a strong statistical relationship between class attendance and overall course performance. To that end, attendance will be counted as a small part of the course grade to help students perform better overall.

Beginning on the second week of class, attendance will be taken at all lecture sessions. **To receive points, students are expected to arrive on time and stay for the entire class period. Arriving late, leaving class early, or acting in a disruptive manner during class will forfeit the points.** Students must attend the lecture for which they are officially registered to earn attendance points.

This attendance policy is designed to promote class participation; therefore, no makeups will be permitted under any circumstances, and no absences will be classified as "excused" without official documentation. However, to accommodate valid reasons for missing class, **students can still earn full attendance points even with up to two absences without documentation.**

Attendance will be strictly monitored, and points for a session will be annulled for the entire class if the number of respondents exceeds the total number of students present on that day, so please do not have another student sign in for you, and do not sign in for another student.

Class disruptions of ANY kind will NOT be tolerated and may result in your removal from the classroom and/or loss of participation points for that day. Please show courtesy to your fellow classmates and instructor or teaching assistant by adhering to the following class rules:

- Come to class on time and stay for the entire class period.

- Refrain from conversing with your fellow students.
- Put away any reading materials, cellular phones, and other electronic devices unrelated to the course.

**IN-CLASS ACTIVITIES/QUIZZES/PARTICIPATION:** You are expected to come prepared and actively participate in the class sessions. **In the event of an absence, you are responsible for all missed materials, quizzes, assignments, and any additional announcements or schedule changes given in class.**

Attendance is expected for this course. To further encourage active learning and ensure your understanding of the material, a series of unannounced in-class activities will be administered throughout the semester. Some activities will be completed individually, whereas others will be completed in a group. **Activities will be given at different points during class time (beginning, middle, or end), so it is important that you arrive to class on time and stay for the entire duration of the class.** This should encourage you to attend class on time, keep up with your readings and assignments, and engage in class discussion.

All the Quizzes/Exams are closed-notes and closed-books; cheat sheets are NOT allowed. The work on all exams must be your OWN work, that is, they are not to be completed with the help or aid of others or outside materials. See [http://www.catalog.gatech.edu/policies/honor-code/Links to an external site. \(http://www.catalog.gatech.edu/policies/honor-code/%22%20%5Ct%20%22\\_blank\)](http://www.catalog.gatech.edu/policies/honor-code/Links%20to%20an%20external%20site.%20%5Ct%20%22_blank) or [http://www.catalog.gatech.edu/rules/18/Links to an external site. \(http://www.catalog.gatech.edu/rules/18/%22%20%5Ct%20%22\\_blank\)](http://www.catalog.gatech.edu/rules/18/Links%20to%20an%20external%20site.%20%5Ct%20%22_blank) for information on Georgia Tech's Academic Honor Code.

**Make-Up Assessments (Quizzes/Exams/Presentations):** Make-up assessments may be arranged only with an Institute-Approved Absence or an official letter from the Dean of Students. Documentation must be provided prior to the scheduled quiz/exam date and before arranging the make-up exam.

**ASSIGNMENTS:** Credit for assignments will be based on your individual contribution to the in-class activity and the accuracy of your responses. **Late assignments are NOT accepted. Missed assignments can only be made up with an Institute Approved Absence or an official letter from the Dean of Students and must be completed within 2 days of the original in-class activity day.** No exceptions will be made to this policy. It is your responsibility to contact the instructor via email to make up missed activities.

**ED DISCUSSION:** While in-class participation will be encouraged, this course also includes an asynchronous discussion component via Ed Discussion. This platform is designed to provide fast and efficient support from classmates, the TA, and myself.

**To earn full credit for the Ed Discussion portion of your grade, you must average at least one post per week, either by asking a question or answering a classmate's question. A total of 12 posts is required by November 30 to receive full credit.** Posts can include lecture/lab contents-related questions, psychological concepts, problem-solving inquiries, approaches to assignments, or any other course-related topics. *Simple posts that ask about logistics (e.g., "When is the exam?", "Do we have a class tomorrow?") rather than course content wouldn't count towards the requirement unless they stimulate further discussion on course-related topics.*

You are encouraged to actively engage by answering each other's questions; however, course instructors will also participate, and particularly insightful or notable posts may be highlighted during lectures or labs for further discussion.

Most of your Ed Discussion posts should be made to the full class. The exception is if you have a question about a particular assignment, quiz, or anything else that could spoil answers for classmates. In these cases, you should post to instructors only, as we may determine they are OK to make public if we think it would be helpful to others.

### **Grading Scale:**

<b>Grade</b>	<b>%</b>	<b>Score Range</b>
<b>A</b>	90% or above	900 – 1000 points
<b>B</b>	80 – 90%	800 – 899.999 points
<b>C</b>	70 – 80%	700 – 799.999 points
<b>D</b>	60 – 70%	600 – 699.999 points
<b>F</b>	Below 60%	599.999 points or fewer

This grading scale **already accounts for rounding** and any applicable curve. No further rounding or adjustments will be made on an individual basis.

**\*\*Please refrain from contacting your instructors to request additional rounding or adjustments to the curve.**

# Course Policies

All work for this class is to be done individually. You are strongly urged to familiarize yourselves with the [GT Student Honor Code \(http://osi.gatech.edu/content/honor-code\)](http://osi.gatech.edu/content/honor-code) rules. Specifically, the following is not allowed:

- Copying, with or without modification, someone else's work when this work is not meant to be publicly accessible (*e.g., a classmate's program or solution*).
- Submission of material that is wholly or substantially identical to that created or published by another person or persons, without adequate credit notations indicating authorship (*plagiarism*).
- Putting your projects on public. Otherwise, if a student (*in the future*) copies your codes/projects, the student obviously violates the honor code but you will also be implicated.

## Academic Integrity

Students are expected to uphold the highest standards of academic integrity. Any form of cheating, plagiarism, or dishonesty will not be tolerated and may result in disciplinary action.

## Zero Tolerance Policy on Cheating and AI Assistance (e.g., Chat GPT, Gemini)

We maintain a strict zero-tolerance policy regarding academic dishonesty, including the use of ChatGPT and other AI tools. Any student found using AI to complete assignments/quizzes/exams will be reported immediately, receive a grade of zero for the submission, and risk a final grade of F.

## Disability Accommodations

If you require any accommodation due to a disability, please inform the instructor at the beginning of the course to ensure that appropriate arrangements can be made.

# Preliminary Course Schedule (subject to Change)

**Week 1: Course Overview**

**Week 2: Ch01. Psychology As a Science**

**Week 3: Ch02. The Research Process**

**Week 4: Ch03. Ethics and Open Science**

**Week 5: Ch04. The Psychologist's Toolbox**

**Week 6: Ch05. Qualitative Research**

**Week 7: Ch06. Observational Research**

**Week 8: Ch07. Correlational Research and Survey Design**

**Week 9: Ch08. Two-Group Design**

**Week 10: Ch09. Multigroup Design**

**Week 11: Spring Break**

**Week 12: Ch10. Within-Subjects Design**

**Week 13: Ch11. Factorial Design**

**Week 14: Ch12. Mixed Design**

**Week 15: (Ch13. Program Evaluation)**

**Week 16: Catch-up week**

## **PSYC 2015 Research Methods**

**This is a Core IMPACTS course that is part of the Social Sciences area.**

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I understand human experiences and connections?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will effectively analyze the complexity of human behavior, and how historical, economic, political, social, or geographic relationships develop, persist, or change.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Intercultural Competence
- Perspective-Taking
- Persuasion