

PSY 273 Research Methods and Statistics in

Psychology I

Winter 2024

Course Credits: 4

Contact Hours: 56 hours

Instructor: TBA

Email:TBA

COURSE OBJECTIVES

Psychology is a research-based science, thus yielding out great demand for research methodologies and statistical techniques to interpret data and provide evidence for both theories and observed phenomenon. This course is designed to instruct students to the in-depth understanding of scientific research methods and statistical analysis. Topics involved in this course will cover variables, samples, descriptive, experimental, quasi-experimental and correlational methodologies, validity, qualitative approaches, ethical issues, etc.

Upon Completion of this Course, students will be able to:

- 1. Describe the basic concepts of research methods and statistics in psychology
- 2. Gain insight into the application of scientific methods and statistics to the study of psychological phenomena
 - 3. Analyze psychological data with statistical techniques
- 4. Evaluate ethical principles and standards within the context of research in psychology
- 5. Report the observed psychological issues and the collected data with written paper

PREREQUISITES

PSY 100 Introduction to Psychology



GRADING

Grades will be determined by accumulating points, with 100 points being the maximum, as follows:

ITEM	POINTS
4 Labs	40 Points
Final Paper	10 Points
Midterm	20 Points
Final Exam	30 Points
Total	100 Points

Late submissions will be graded at the end of the course. Grades will be assigned according to the following rule:

$$A \ge 90 > B \ge 80 > C \ge 70 > D \ge 60 > F$$
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We reserve the right to make adjustments to the overall grading policy.

COURSE MATERIALS

Required Texts:

Hugh Coolican, *Research Methods and Statistics in Psychology*, 6th Edition, Psychology Press.

Recommended (Optional) Texts or Other Materials:

None

COURSE TOPICS

MODULE	TASKS
Module 1	Topics:
	Topic 1: Why Psychology And Science?
	Topic 2: Scientific Method
	Topic 3: Variables & Samples
	Topic 4: Qualitative Critique
	Assessments:
	Lab#1: Literature Searches



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	Topics:
Module 2	Topic 5: Experiments & Experimental Designs
	Topic 6: Validity in Experiments & Types of Validity
	Topic 7: Quasi-experiments and Non-experiments
	Topic 8: Control and Validity in the Laboratory and in the Filed
	Assessments:
	Lab#2: SPSS
Module 3	Topics:
	Topic 9: Observational Methods
	Topic 10: Observational Methods (Cont.)
	Topic 11: Interview Methods
	Topic 12: Psychological Tests
	Assessments:
	Lab#3: Data Files and Proposal Topics
	Midterm
Module 4	Topics:
	Topic 13: Measurement Scales
	Topic 14: Comparison Studies
	Topic 15: Cross-sectional Studies
	Topic 16: Longitudinal Studies
	Assessments:
	Lab#4: Data Collection
Module 5	Topics:
	Topic 17: Cross- cultural Studies
	Topic 18: Qualitative Approaches in Psychology
	Topic 19: Qualitative Approaches in Psychology (Cont.)
	Topic 20: Ethical Issues in Psychological Research
	Assessments:
	Final Paper
	Final Exam

ATTENDANCE

1) Class attendance is required. Missing classes without permission will lead to decrease in overall grade.

Missing less than two classes: no penalty.

Missing more than two classes: 7% will be taken off from the overall grade.

If the instructor reports a student's frequent missing of class to the Soochow University Academic Administration Office, the student might get a written warning and might be prohibited from attending final exam.



2) Participants in this course are expected to arrive in class promptly and adequately prepared. The primary objective of this course is to critically engage with the readings and the subject matter. Therefore, course participants are expected to have completed the reading prior to class and prepare thoughtful reflections/commentaries to share with fellow colleagues.

LEARNING REQUIREMENTS

- 1) Late assignments are not acceptable and are subjected to grade deductions.
- 2) Assignments submitted in the wrong format will be counted as not submitted.
- 3) Failure to submit or fulfill any required course component results in failure of the class.
- 4) Make-up for midterm and final exams only with valid excuses, as defined by the University.
- 5) In order to earn a Certificate of Completion, participants must thoughtfully complete all assignments by stated deadlines and earn an average quiz score of 50% or greater.

TECHNOLOGY POLICY

The use of electronic devices in class is distracting, both for the user and for the rest of the class. Only non-programmable calculators can be used in the tests and exam. Any attempts to use cell phones and other electronic communication devices will be seemed as cheating. Laptops are discouraged, unless you use them for activities DIRECTLY related to the course (eg., note taking, reading course documents).

ACEDEMIC INTEGRITY POLICY

Soochow University highly values the academic integrity and aims to promote the academic fairness, honesty and responsibility. Any academic dishonesty behaviors and any attempts to cheats and plagiarism will be reported to the university administration office. A written warning and the relevant penalties will be imposed. The record might be shown on the official university transcript.

DISABILITY ACCOMMODATION



Soochow University is committed to maintaining a barrier-free environment so that students with disabilities can fully access programs, courses, services, and activities at Soochow University. Students with disabilities who require accommodations for access to and/or participation in this course are welcome.

Note:

Please contact the University Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material.