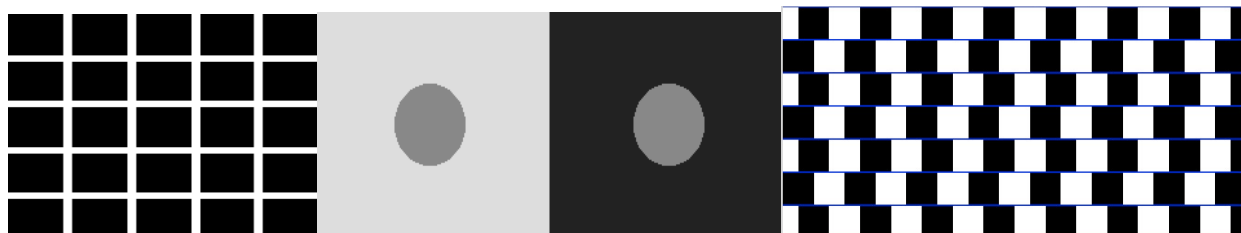


Introduction to Research in Psychology (Psych. 400)



Fall 2025, Thursdays, 4:00 - 6:45 pm, BH 28

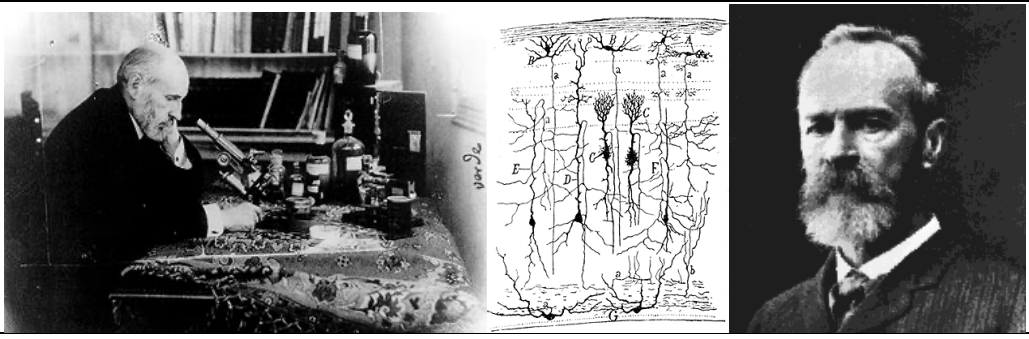
Description of Psychology 400: An introduction to the primary scientific methods, paradigms, and phenomena used to illuminate the nature of mind, brain, and behavior. In the process, the course is intended to hone your reasoning skills and make you a wiser consumer of science.

Professor: Ezequiel Morsella, Ph.D. (Columbia, 2002; Yale Postdoc., 2003-2007)

Virtual Office hours: Fridays 10:30 am to 12:30 pm, and by appointment.

Course Textbooks: L. D. Sander's *Discovering Research Methods in Psychology: A Student's Guide*.

Syllabus

	Topics and Readings
MODULE 1 (Classes Meetings 1 & 2)	 The foundations of scientific reasoning, including the initial stages of evaluating hypotheses. Falsifiability, parsimony, operational definitions, existence proofs, confounds, correlational approaches versus experimental approaches, measuring variables, validity versus reliability. Readings: Sanders Chpts. 1 (How to use this book), 2 (Ethics), and 18 (Survey Methods)

MODULE 2 (Classes 3 & 4)	IVs and DVs, designing control conditions, spotting confounds, between-subjects versus within-subjects designs. Readings: Sanders Chpt. 3 (Randomized Control Trial).
MODULE 3 (Classes 5 & 6)	Control conditions via subtraction techniques, blocking versus randomization of trials, how to review the literature, discovering and building upon a reliable phenomenon or finding, Type I versus Type II errors. Readings: Sanders Chpts. 4 (Matched Pairs Design: “Music and Stress”). Quiz 1 – open-note and open-book
MODULE 4 (Classes 7 & 8)	General principles, reductionism, interaction designs, piggyback techniques, and the introduction to <i>response interference paradigms</i> (the Stroop task and flanker task). Readings: Sanders Chpts. 8 (Three-factor design), 9 (Mixed 2-factor design), and 15 (Survey Methods: “Choices and Decisions”)

MODULE 5 (Classes 9 & 10)	Perceptual illusions, top-down effects, psychophysical methods (self-report), perceptual development. Readings: Sanders Chpts. 6 (Single Sample Design: “Change Blindness”) and 7 (Program of experiments: “Acoustic Preferences”). Quiz 2 – open-note and open-book
MODULE 6 (Classes 11 & 12)	Emotion DVs, sympathetic activation, fear conditioning. Readings: Sanders Chpts. 5 (Repeated Measures Design: “Competitive Anxiety”), 10 (Structured Observation: “The Autistic Spectrum”), and 16 (Survey Methods: “Measuring Romance”)
MODULE 7 (Classes 13 & 14)	Episodic memory and mental representations, working memory, priming, attention. Readings: Sanders Chpt. 11 (Clinical/Laboratory Observation: “Cognitive Maps”) and 14 (Clinical case study: “Face Recognition”). Quiz 3 – open-note and open-book
MODULE 8 (Class 15)	Limitations of neuroimaging, reconciling neuroimaging data and neurological findings, consciousness and the brain Readings: Sanders 20 (Contrasting the Methods).
During “finals week” of university	Final Exam (<i>On all material, cumulative</i>)

Course Policies and Requirements

The final grade in this course will depend on class participation (**12%** of the grade) four quizzes (including the final exam), each of which is worth **19%** of the class grade. The quiz with the lowest grade will be “dropped” and not taken into consideration when calculating the final grade. Importantly, all quizzes must be taken, and the final exam is the one quiz that cannot be dropped. Because one quiz can be dropped, there will be no make-up exams. Class participation (**12%** of the grade) will consist of completing required (but ungraded) quizzes that will be given during each class meeting. Because this class meets only once per week, you are expected to attend every class. You are permitted only two excused absences. Tardiness will be penalized.

Students enrolled in Psychology Psy 400 are required to serve as psychological research participants for a total of four hours (4 SONA credits) or complete an alternative research related assignment provided by the course instructor, or do a combination of both. All students are required to register in the SONA system (<https://sfsu.sona-systems.com>) and sign up for studies, participate, gain participation credits, and assign those credits to this class through that system. Fulfillment of this research participation requirement is worth **12%** of your total grade.

Objectives: The course is intended to furnish a solid understanding of the primary scientific methods, paradigms, and phenomena used to illuminate the nature of mind, brain, and behavior. More generally, an objective of this class is to offer you opportunities to think flexibly about research and to become knowledgeable about the different ways you can ask different scientific questions. In short, for you to become ‘critical consumer’ of the products of scientific inquiry.

Policy Concerning Academic Dishonesty: Any form of Academic Dishonesty (including all forms of plagiarism) will result in an F or (zero on that assignment) and the second offence will result in an F in the course. For information regarding forms of academic dishonesty such as plagiarism, read the website <http://www.azete.com/plagiarism>.

Course schedule: Topics, readings and deadlines

Readings. Readings will consist of chapters from the textbook.

Statement on Religious Holidays

The faculty of San Francisco State University shall accommodate students wishing to observe religious holidays when such observances require students to be absent from class activities. It is the responsibility of the student to inform the instructor, in writing, about such holidays during the first two weeks of the class each semester. If such holidays occur during the first two weeks of the semester, the student must notify the instructor, in writing, at least three days before the date that he/she will be absent. It is the responsibility of the instructor to make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed.

Disability Accommodations statement

Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The [Disability Programs and Resource Center (DPRC)] is available to facilitate the reasonable accommodations process. The [DPRC] is located in the [Student Service Building and can be reached by telephone (voice/TTY 415-338-2472) or by email (dprc@sfsu.edu).? (<http://www.sfsu.edu/~dprc>)]

Tutoring and Academic Support Center (TASC)

- **Phone: (415) 405-5516**
- **TASC Website**
- **TASC Email: tutoring@sfsu.edu**

Student Health Services (SHS)

Student Health provides confidential basic health services as well as primary care, psychiatry, pharmacy, laboratory, and x-ray. We encourage health awareness and educate about preventive care, disease management and treatment choices. Our goal during each visit is that you and SHS medical staff work together to make decisions to promote your health and well-being, now and into the future. To view their services or schedule an appointment please visit the Student Health Services Website

Sexual Violence

SF State fosters a campus free of sexual violence including sexual harassment, domestic violence, dating violence, stalking, and/or any form of sex or gender discrimination. If you disclose a personal experience as an SF State student, the course instructor is required to notify the Dean of Students. To disclose any such violence confidentially, contact:

The SAFE Place: (415) 338-2208; http://www.sfsu.edu/~safe_plc/

Counseling and Psychological Services Center: (415) 338-2208; <http://psyservs.sfsu.edu/>

For more information on your rights and available resources: <http://titleix.sfsu.edu>

Other Important Academic Policy Reminders

Course Repeat Policy:

Students may only enroll in a course a maximum of two times. Courses taken Fall 2008 or after, will count as enrollment, including grades of AU, I, IC, RD, RP, W, and WU, traditional grades (A, B, C, D, and F, and their plus and minus designations), and CR/ NC. The course repeat

policy is intended to balance unfettered and equitable access to SF State resources. It will also promote careful planning of academic schedules, facilitate student advising at pivotal academic points, and increase enrollment opportunities for all students. For complete details please go to <http://www.sfsu.edu/~senate/documents/policies/S09-248.html>.

Withdrawal Policy:

Undergraduate students may withdraw from a course a maximum of two times and from no more than 18 semester-units of course work. This does not include total semester withdrawals of all courses or classes taken in CEL (College of Extended Learning). Please refer to the Bulletin for complete information, <http://www.sfsu.edu/~bulletin/current/genpol.htm>.

IMPORTANT DATES

First Day of Instruction: August 25th

Last day for Faculty Drops: September 10th

Audit Grading Option Deadline: September 15

Last Day to Drop/Withdraw Classes for Serious and Compelling Reasons: Nov. 17th

Withdrawal from Classes or University by Exception for Documented Serious and Compelling Reasons: Nov. 18th