

PSYCHOLOGY

Kirtland Hall, 203.432.4500
<http://psychology.yale.edu>
 M.S., M.Phil., Ph.D.

Chair

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Director of Graduate Studies

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Associate Professors Arielle Baskin-Sommers, Steve Chang, Yarrow Dunham, Avram Holmes

Assistant Professors Dylan Gee, Maria Gendron, Julian Jara-Ettinger, Julia Leonard, Samuel McDougle, Robert Rutledge, Ilker Yildirim

Lecturers Richard Aslin (*Senior Lecturer*), Stephanie Lazzaro, Kristi Lockhart (*Emerita*), Mary O'Brien, Faith Prelli

Affiliated faculty Alan Anticevic (*Psychiatry*), Amy Arnsten (*Neuroscience*), Christopher Benjamin (*Neurology*), Philip Corlett (*Psychiatry*), Maggie Davis (*Psychiatry*), Ravi Dhar (*School of Management*), Irina Esterlis (*Psychiatry*), Tamar Gendler (*Philosophy*), Phillip Atiba Goff (*African American Studies*), Elizabeth Goldfarb (*Psychiatry*), Carlos Grilo (*Psychiatry*), Ilan Harpaz-Rotem (*Psychiatry*), Jeannette R. Ickovics (*Public Health*), Robert Kerns (*Veterans Administration Medical Center*), Hedy Kober (*Psychiatry*), Michael Kraus (*School of Management*), John Krystal (*Psychiatry*), Daeyeol Lee (*Neurobiology*), Becca Levy (*Public Health*), Ifat Levy (*Neuroscience*), David Lewkowicz (*Child Study Center*), Linda Mayes (*Child Study Center*), Carolyn Mazure (*Psychiatry*), James McPartland (*Child Study Center*), Nathan Novemsky (*School of Management*), Laurie Paul (*Philosophy*), Christopher Pittenger (*Psychiatry*), Al Powers (*Psychiatry*), Helena Rutherford (*Child Study Center*), Wendy Silverman (*Child Study Center*), Dana Small (*Psychiatry*), Jane Taylor (*Psychiatry*), Tom Tyler (*Law School*), Fred Volkmar (*Child Study Center*), Gideon Yaffe (*Law School*)

FIELDS OF STUDY

Fields include clinical psychology; cognitive psychology; developmental psychology; neuroscience; and social/personality psychology.

SPECIAL REQUIREMENTS FOR THE PH.D. DEGREE

In order to allow students to be trained in accordance with their own interests and career goals, the general requirements of the department are kept to a minimum. The formal requirements are: (1) Course work selected to meet the individual's objectives with a minimum of three basic-level core courses and one course in data analysis. Two of the three required basic-level core courses must be in two different areas of psychology outside the student's main area of concentration. The basic-level core course requirement must be completed by the end of the second year. Students must attain an Honors grade in at least two term courses by the end of the second year of study. (2) Students are required to assist in teaching four courses by the end of their fourth year. (3) Completion of a First-Year Research Paper due by May 10 of the second term. (4) Completion of a pre-dissertation research project, to be initiated not later than the second term and completed not later than May 1 of the second year. Certification of this research project as well as performance in course work and other evidence of scholarly work at a level commensurate with doctoral study, as judged by the faculty, are necessary for continuation beyond the second year. (5) Submission of a dissertation prospectus, and a theme essay that demonstrates the candidate's comprehensive knowledge and understanding of the area of concentration. Certification of the theme essay completes the qualifying examination. (6) Approval of the dissertation by an advisory committee and the passing of an oral examination on the dissertation and its general scientific implications. The theme essay and the dissertation prospectus are completed during the third year. Students are then formally admitted to Ph.D. candidacy. There are no language requirements.

The faculty considers teaching to be an essential element of the professional preparation of graduate students in Psychology. For this reason participation in the Teaching Fellow Program is a degree requirement for all doctoral students. They are expected to serve as teaching fellows (level 20) for four terms over the course of the second through fourth years in the program. Opportunities for teaching are matched as closely as possible with students' academic interests.

CLINICAL GRADUATE STUDENT INTERNSHIPS

Registered students undertaking their required clinical internships (usually in their sixth year) are typically not eligible for Graduate School stipend funding, since these are paid internships. However, clinical internship stipends for sixth-year students that fall below the current year's Psychology stipend will be topped up to the current year's Psychology stipend. Students will be considered to have fulfilled the final requirement for the degree after successfully completing their internship (typically in July) and will be awarded degrees the following December. They will not be registered in the Graduate School during the fall term in which their degrees are conferred.

COMBINED PH.D. PROGRAMS

Psychology offers a combined Ph.D. degree program with African American Studies. For the combined program with African American Studies, students must apply to the African American Studies department, with Psychology indicated as the secondary department.

Psychology also offers a combined Ph.D. degree program with Philosophy. Students interested in this combined degree can apply to the Philosophy department or the

Psychology department. Students must be accepted into one of these departments (the “home department”) through the standard admissions process, and both departments must then agree to accept the student into the combined program. If a student applies to the Philosophy department for the combined degree program, that student should also contact one or more Psychology faculty members with compatible interests so that a suitable adviser in Psychology can be identified prior to an admissions decision. Students enrolled in the combined program complete a series of courses in each discipline as well as an interdisciplinary dissertation that falls at the intersection of the two. On completing these requirements, students are awarded a Ph.D. either in Philosophy and Psychology, or in Psychology and Philosophy.

Questions about the combined degree programs may be directed to the directors of graduate studies in the participating departments prior to application.

MASTER’S DEGREES

M.Phil. The academic requirements for the M.Phil. degree are the same as for the Ph.D. degree except for the submission of a prospectus, and the completion and defense of a dissertation, which define the Ph.D.

M.S. (en route to the Ph.D.) The M.S. degree is awarded upon satisfactory completion of a first-year research project, a predissertation research project, and the four required core courses. A satisfactory grade must be achieved in the predissertation research project.

The Department of Psychology does not admit students for a terminal master’s degree. If, however, a student admitted to the Ph.D. program leaves the program prior to completion of the doctoral degree, the student may be eligible to receive a master’s degree upon completion of the academic requirements as stated above.

Program materials are available online at <http://psychology.yale.edu>.

COURSES

PSYC 518a, Multivariate Statistics Julian Jara-Ettinger

This is a practical course in statistics that covers classical null-hypothesis significance testing (e.g., binomial and chi-squared tests), regression analyses (multiple regressions, generalized linear models, and mixed-effects models), modern statistical methods (bootstraps and cross-validation), basics of Bayesian data analysis (hierarchical Bayesian models, Bayes factors), and basics of machine learning for data analysis (principal component analysis and classifiers). This course focuses on how to intuitively understand what different tests do, how to run them using R, and how to interpret the results. The course favors intuitions over mathematical rigor, but it’s impossible to teach statistics without some math.

PSYC 539a, Advanced Psychopathology Jutta Joormann

The aim of this course is to have students master information on theory and assessment for major forms of psychopathology using cognitive-behavioral approaches. The focus is on learning how behavior can be conceptualized in cognitive-behavioral terms and to review recent models and empirical findings regarding clinical disorders. Students play an active role in this process by participating in class discussions and making presentations on etiological models and empirical findings for various clinical problems.

PSYC 541b, Research Methods in Psychology Tyrone Cannon

Research design, methodology, and evaluation considered in the context of clinical research. Emphasis on experimental and quasi-experimental designs, threats to validation, confounding, sources of artifact and bias, alternative assessment strategies, and data evaluation methods.

PSYC 554a / MGMT 754, Behavioral Decision-Making II: Judgment Nathan Novemsky and Ravi Dhar

This seminar examines research on the psychology of judgment. We focus on identifying factors that influence various judgments and compare them to which factors individuals want and expect to drive their judgments. Topics of discussion include judgment heuristics and biases, confidence and calibration, issues of well-being including predictions and experiences, regret and counterfactuals. The goal is threefold: to foster a critical appreciation of existing research on individual judgment, to develop the students' skills in identifying and testing interesting research ideas, and to explore research opportunities for adding to existing knowledge. Students generally enroll from a variety of disciplines, including cognitive and social psychology, behavioral economics, finance, marketing, political science, medicine, and public health.

PSYC 625b, Social Perception Brian Scholl

When exploring the structure of the mind, we typically think of visual perception as among the earliest and most basic of our cognitive processes, while we think of social cognition as among the most advanced forms of higher-level cognition. In this seminar we explore how these two aspects of the mind connect. Specific topics include the perception of animacy, agency, and goal-directedness; biological motion; face perception (including the perception of facial attractiveness); gaze processing and social attention; thin-slicing and perceptual stereotypes; and social and cultural influences on perception.

PSYC 664a, Health and Aging Becca Levy

This course explores the ways psychosocial and biological factors influence aging health. Topics include interventions to improve mental and physical health; effects of ageism on health; racial and gender health disparities in later life; and how health policy can best adapt to the growing aging population. Students have the opportunity to engage in discussions and to develop a research proposal on a topic of interest.

PSYC 684a, Introduction to Psychotherapy: Technique Mary O'Brien

The focus of the seminar is on formulating and conceptualizing psychological problems from a cognitive-behavioral perspective. Special consideration is paid to individual and cultural diversity in conceptualizing cases and planning treatment. Also discussed are ways in which cognitive-behavioral perspectives can be integrated with other theoretical orientations (e.g., interpersonal theory, experiential therapy).

PSYC 685b, Introduction to Psychotherapy Mary O'Brien

Open only to doctoral students in clinical psychology. This course is designed to prepare students to conduct therapy as clinical scientists. The class blends theoretical and empirical readings with practical training in applying interventions. Evidence-based therapy processes as well as the development of nonspecific therapeutic techniques (such as communicating empathy and structuring therapy sessions) are emphasized so that these skills can be applied across a wide range of client populations and problem presentations. In this second term of the yearlong course we discuss

and practice skills related to dialectical behavior therapy (DBT), psycho-educational family therapy with serious mental illness, and three evidence-based approaches to couple therapy: a cognitive behavioral approach taken by John and Julie Gottman, an acceptance-enhanced CBT approach taken by Christensen and Jacobson, and Emotionally Focused couple work by Sue Johnson. The course includes discussion of multicultural and diversity issues as they apply to these therapeutic approaches.

PSYC 689a, Psychopathology and Diagnostic Assessment Mary O'Brien

Didactic practicum for first-year clinical students. Main emphasis is initial assessment. Treatment planning and evaluation of progress also covered. Students first observe and then perform initial interviews. Applicable ethics and local laws reviewed.

PSYC 690b, Ethics, Diversity, Supervision, Consultation, and Professional Practice

Mary O'Brien

Introduction to ethical and legal guidelines for clinical practice. In addition, supervision on diagnostic interview using the Structured Clinical Interview for DSM-IV is provided.

PSYC 699a, Teaching in Psychology Staff

This course will teach students how to teach courses in psychology.

PSYC 702a or b, Current Work in Cognition Staff

A weekly seminar in which students, staff, and guests report on their research in cognition and information processing.

PSYC 704a or b, Current Work in Behavior, Genetics, and Neuroscience Staff

Examination of the current status of research and scientific knowledge bearing on issues of behavior, genetics, and neuroscience. Weekly speakers present research, which is examined methodologically; recent significant journal articles or technical books are also reviewed.

PSYC 708a or b, Current Work in Developmental Psychology Staff

A luncheon meeting of the faculty and graduate students in developmental psychology for reports of current research and discussion on topics of general interest.

PSYC 710a or b, Current Work in Social Psychology and Personality Staff

Faculty and students in personality/social psychology meet during lunchtime to hear about and discuss the work of a local or visiting speaker.

PSYC 720a or b, Current Work in Clinical Psychology Staff

Basic and applied current research in clinical psychology that focuses on the cognitive, affective, social, biological, and developmental aspects of psychopathology and its treatment is presented by faculty, visiting scientists, and graduate students. This research is examined in terms of theory, methodology, and ethical and professional implications. Students cannot simultaneously enroll in PSYC 718 or 719.

PSYC 724a or b, Research Topics in Cognition, Emotion, and Psychopathology Jutta Joermann

This weekly seminar focuses on the role of cognition and emotion in psychopathology. We discuss recent research on basic mechanisms that underlie risk for psychopathology such as cognitive biases, cognitive control, and biological aspects of psychological disorders. The seminar also focuses on the interaction of cognition and emotion, on the construct of emotion regulation, and on implications for psychopathology.

PSYC 725a or b, Research Topics in Human Neuroscience Gregory McCarthy
Discussion of current and advanced topics in the analysis and interpretation of human neuroimaging and neurophysiology.

PSYC 727a or b, Research Topics in Clinical Neuroscience Tyrone Cannon
Current research into the biological bases of schizophrenia and bipolar disorder, including topics related to etiology, treatment, and prevention.

PSYC 728a or b / AFAM 778a or b, Research Topics in Racial Justice in Public Safety
Phillip Atiba Goff

In this seminar, graduate students and postdoctoral fellows have a chance to present their research, and undergraduate research assistants learn about how to conduct interdisciplinary quantitative social science research on racial justice in public safety. The course consists of weekly presentations by members and occasional discussions of readings that are handed out in advance. The course is designed to be entirely *synchronous*. Presenters may request a video recording if they can benefit from seeing themselves present (e.g., for a practice talk). This course is intended for graduate students, postdocs, and undergraduates interested in conducting original quantitative social science research about race and public safety. Permission of the instructor is required.

PSYC 731a or b, Research Topics in Cognition and Development Frank Keil
A weekly seminar discussing research topics concerning cognition and development. Primary focus on high-level cognition, including such issues as the nature of intuitive or folk theories, conceptual change, relations between word meaning and conceptual structure, understandings of divisions of cognitive labor, and reasoning about causal patterns.

PSYC 733a or b, Research Topics in Social Cognitive Development Yarrow Dunham
Investigation of various topics in developmental social cognition. Particular focus on the development of representations of self and other, social groups, and attitudes and stereotypes.

PSYC 735a or b, Research Topics in Thinking and Reasoning Woo-Kyoung Ahn
In this lab students explore how people learn and represent concepts. Weekly discussions include proposed and ongoing research projects. Some topics include computational models of concept acquisition, levels of concepts, natural kinds and artifacts, and applications of some of the issues.

PSYC 737a or b, Research Topics in Clinical and Affective Neuroscience Avram Holmes
Seminar focusing on ongoing research projects in clinical, cognitive, and translation neuroscience. Prerequisite: permission of the instructor.

PSYC 739a or b, Research Topics in Autism and Related Disorders Fred Volkmar
Focus on research approaches in the study of autism and related conditions including both psychological and neurobiological processes. The seminar emphasizes the importance of understanding mechanisms in the developmental psychopathology of autism and related conditions.

PSYC 741a or b, Research Topics in Emotion and Relationships Margaret Clark
Members of this laboratory read, discuss, and critique current theoretical and empirical articles on relationships and on emotion (especially those relevant to the functions

emotions serve within relationships). In addition, ongoing research on these topics is discussed along with designs for future research.

PSYC 742a or b, Research Topics in Computation and Cognition Julian Jara-Ettinger
Seminar-style discussion of recently published and unpublished research in cognitive development and computational models of cognition.

PSYC 744a or b, Research Topics in Philosophical Psychology Joshua Knobe
The lab group focuses on topics in the philosophical aspects of psychology.

PSYC 745a or b, Research Topics in Disinhibitory Psychopathology Arielle Baskin-Sommers

This laboratory course focuses on the study of cognitive and affective mechanisms contributing to disinhibition. We discuss various forms of disinhibition from trait (e.g., impulsivity, low constraint, externalizing) to disorder (e.g., antisocial personality disorder, psychopathy, substance use disorders), diverse methods (e.g., psychophysiology, self-report, neuroimaging, interventions), and multiple levels of analyses (e.g., neural, environmental, social). Members of this laboratory read and critique current articles, discuss ongoing research, and plan future studies.

PSYC 752a or b, Research Topics in Social Neuroscience Steve Chang

This weekly seminar discusses recent advances in neuroscience of social behavior. We discuss recent progress in research projects by the lab members as well as go over recently published papers in depth. Primary topics include neural basis of social decision-making, social preference formation, and social information processing. Our lab studies these topics by combining neurophysiological and neuroendocrinological techniques in nonhuman animals.

PSYC 753a or b, Research Topics in Legal Psychology Tom Tyler

This seminar is built around student research projects. Students propose, conduct, and analyze empirical research relevant to law and psychology. Grades are based upon final papers. Permission of the instructor required.

PSYC 754a or b, Research Topics in Clinical Affective Neuroscience and Development
Dylan Gee

This weekly seminar focuses on current research related to the developmental neurobiology of child and adolescent psychopathology. Topics include typical and atypical neurodevelopmental trajectories, the development of fear learning and emotion regulation, effects of early life stress and trauma, environmental and genetic influences associated with risk and resilience, and interventions for anxiety and stress-related disorders in youth.

PSYC 755a or b, Research Topics in Intergroup Relations Jennifer Richeson

Students in this laboratory course are introduced to and participate in social-psychological research examining interactions and broader relations between members of socioculturally advantaged and disadvantaged groups. For instance, we examine the phenomena and processes associated with one's beliefs about members of social groups (stereotypes), attitudes and evaluative responses toward group members (prejudice), and behaviors toward members of a social group based on their group membership (discrimination). We also study how these issues shape the experiences of social group members, especially when they are members of low-status and/or minority groups. We primarily focus on large societal groups that differ on cultural dimensions of identity,

with a focus on race, ethnicity, and gender. Notably, we apply the theoretical and empirical work to current events and relevant policy issues.

PSYC 758a or b, Research Topics in Cognitive Neuroscience Nick Turk-Browne
Seminar-style discussion of recent research in cognitive neuroscience, covering both recent studies from the literature and ongoing research at Yale.

PSYC 759a or b, Research Topics in Affective Science and Culture Maria Gendron
A seminar-style discussion of recent research and theory in affective science and culture. The lab group focuses on the social and cultural shaping of emotions. We also discuss the biological constraints on variation and consistency in emotion as revealed by physiological research on emotion (in both the central and peripheral nervous system). Some discussion of current and planned research in the lab group also takes place.

PSYC 760a or b, Research Topics in Cognitive and Neural Computation Ilker Yildirim
Lab meetings of the Cognitive & Neural Computation Laboratory at Yale.

PSYC 761a or b, Research Topics in Computational Decision and Affective Neuroscience Robb Rutledge
Seminar focusing on ongoing research projects in computational approaches to clinical, cognitive, and affective neuroscience.

PSYC 762a or b, Research Topics in Skill Learning Samuel McDougle
This weekly seminar covers various themes in human learning, with an emphasis on motor learning, motor memory, reinforcement learning, and decision-making. We discuss recently published and ongoing research on these topics, with special attention to behavioral studies, computational models of learning, and neural correlates.

PSYC 763a or b, Research Topics in Implicit Social Cognition Melissa Ferguson
Weekly seminar on contemporary research projects in implicit social cognition, with a special focus on the topics of changing minds, prejudice, and self-control. Permission of the instructor required.

PSYC 764a or b, Research Topics in Children's Learning and Motivation Julia Leonard
This weekly seminar covers cutting-edge research in cognitive science, developmental psychology, and neuroscience on young children's learning and motivation. We discuss how theoretically and empirically grounded science can be applied to the real world. Permission of the instructor required.

PSYC 765a or b, Research Topics in Philosophy and Cognitive Science Laurie Paul
A weekly meeting to discuss relevant philosophical and psychological topics. Permission of the instructor required.

PSYC 766a or b, Research Topics in Perception and Cognition Brian Scholl
Seminar-style discussion of recent research in perception and cognition, covering both recent studies from the literature and the ongoing research in the Yale Perception and Cognition Laboratory.

PSYC 771a, Research Topics in Nonconscious Processes John Bargh
The lab group focuses on nonconscious influences of motivation, attitudes, social power, and social representations (e.g., stereotypes) as they impact on interpersonal behavior, as well as the development and maintenance of close relationships.

PSYC 775a or b, Research Topics in Animal Cognition Laurie Santos

Investigation of various topics in animal cognition, including what nonhuman primates know about tools and foods; how nonhuman primates represent objects and number; whether nonhuman primates possess a theory of mind. Prerequisite: permission of the instructor.

PSYC 778a or b, Research Topics in Clinical and Affective Neuropsychology Hedy Kober

Lab meeting is held once a week throughout the year and is attended by undergraduate and graduate students, research staff, postdoctoral fellows, and other researchers interested in the weekly topics. In a rotating fashion, both internal and external speakers present data and ideas from various research projects, and/or research and methods papers in related areas, including the use of functional magnetic resonance imaging to answer questions in clinical and affective psychology.

PSYC 803a or b, Cognitive and Social Bases of Behavior Arielle Baskin-Sommers

The course is designed to provide students an overview of key topics in cognitive and social psychology. Readings include reviews and empirical articles that highlight core issues relevant to the topic and new advancements in the fields of cognitive and social psychology. Topics broadly fall into several domains, including perception, attention, decision-making, self and other processing, moral reasoning, and biases.

PSYC 805a or b, Affective and Developmental Bases of Behavior Dylan Gee

This course aims to provide a broad survey of the affective and developmental bases of behavior, drawing on key topics in affective science and developmental psychology. Readings include reviews and empirical articles that highlight core issues relevant to the topics, from early theoretical perspectives to recent advances in the field. Topics broadly fall into several domains, including evolutionary, cultural, and developmental perspectives on emotion; neurocognitive and affective development; early experiences, attachment, and sensitive periods; emotional reactivity and regulation; and the role of emotion in illness and well-being.

PSYC 811a or b, Mood and Anxiety Disorders Practicum Mary O'Brien

This is a course for graduate students in clinical psychology. Group supervision of therapy provided at the Yale Psychology Department Clinic.

PSYC 920a or b, First-Year Research Staff

By arrangement with faculty.

PSYC 923a or b, Individual Study: Theme Essay Staff

By arrangement with faculty.

PSYC 925a or b, Individual Tutorial Staff

By arrangement with faculty and approval of DGS.

PSYC 930a or b, Predissertation Research Staff

By arrangement with faculty.