

DEPARTMENT OF PSYCHOLOGY

Professors

- Edward S. Awh
- Marc G. Berman, Chair
- Jean Decety
- David A. Gallo
- Susan Goldin-Meadow
- Leslie M. Kay
- Boaz Keysar
- Katherine D. Kinzler
- Susan Cohen Levine
- Daniel Margoliash, Organismal Biology and Anatomy
- Howard C. Nusbaum
- Shigehiro Oishi
- Brian Prendergast
- Steven K. Shevell
- Richard Shweder, Comparative Human Development
- Edward K. Vogel
- Amanda Woodward

Associate Professors

- Wilma A. Bainbridge
- Lin Bian
- Sarah London
- Greg J. Norman, Associate Chair
- Monica D. Rosenberg
- Alex Shaw

Assistant Professors

- Xuechunzi Bai
- Akram Bakkour
- Marisa Casillas, Comparative Human Development
- Lydia Emery
- Kyshia Henderson
- Yuan Chang Leong
- Jai Yu

Department website: <http://psychology.uchicago.edu>

Since its founding over a century ago, the Department of Psychology has been renowned for scientific research and scholarship that cuts across traditional disciplinary boundaries. Today, this broad and integrative vision of psychological science is reflected in the diversity of laboratories and collaborations within the Department, as well as research initiatives that connect psychology to other areas of the University and beyond. This vision also is reflected in the Department's teaching. The PhD program encourages students to take advantage of the many research opportunities at the University, emphasizing intellectual breadth as well as training in specific areas.

The Department of Psychology is organized into specialized programs that reflect the contemporary state of the discipline and the wide-ranging interests of its own faculty. The areas of concentration are cognition, computational cognitive neuroscience, developmental psychology, integrative neuroscience, and social psychology. Consistent with the multidisciplinary traditions of the University of Chicago, many faculty members serve on more than one of the department's programs. Faculty and students participate in courses, colloquia, workshops and joint research ventures with scholars in other departments. These include biology, computer science, education, human development, linguistics, neuroscience, philosophy, and others, as well as the University's professional schools of business, public policy, law, medicine, and social service administration.

The Department of Psychology offers a course of study leading to a PhD in Psychology. Doctoral study typically spans five years and includes a common curriculum of eight courses with other requirements set by the student's area of specialization. In addition, each student will complete a trial research project under the guidance of a faculty advisor or advisors and complete a dissertation. Advisors are a critical component of students' experience in the doctoral program, providing guidance and collaboration in conducting research and academic advising. Students receive practical pedagogical experience, usually through completing five teaching assistantships.

DEGREES

Programs of graduate study offered by the department lead to the PhD degree at the University of Chicago. The Department of Psychology does not offer courses of study leading to the degree of Master of Arts (MA). However, students admitted to doctoral study may take the MA degree as an optional step in the doctoral program. Similarly, a student admitted who must leave the program, for whatever reason, may apply for a terminal MA degree, providing the student has met the program requirements of the particular program of the Department of Psychology.

JOINT DEGREES

Students admitted to a doctoral program in Social Sciences may subsequently petition the University to create a joint program with another department. Such individually-created joint degree programs begin in the second year of graduate studies or later. In all cases, students complete the separate program requirements for each degree, with no additional residence requirement, and write one Ph.D. dissertation that meets the dissertation requirements of each department. One such established program in Psychology is the J ([https://psychology.uchicago.edu/graduate-study/joint-degrees/joint PhD in Business and Psychology](https://psychology.uchicago.edu/graduate-study/joint-degrees/joint-phd-in-business-and-psychology) (<https://psychology.uchicago.edu/graduate-study/joint-degrees/>). Other programs that have had joint students in Psychology include the Department of Comparative Human Development and the Department of Linguistics.

ADMISSION

Students apply to the Department of Psychology through the Dean of Students Office in the Division of the Social Sciences. Applicants will be considered for admission only if they are currently enrolled in or have completed a bachelor's degree program or its equivalent from an accredited institution. Please read the list of application materials required (<https://psychology.uchicago.edu/graduate-study/doctoral-admissions/how-to-apply/>) for the application to the Psychology doctoral program. For more information about submitting an application and to access the online application, please visit Social Sciences Admissions. (<https://socialsciences.uchicago.edu/admissions/how-to-apply/>) The deadline to apply is in early December to be considered for enrollment in the following autumn.

GENERAL REQUIREMENTS FOR DOCTORAL STUDENTS

The doctoral curriculum includes courses taken to fulfill the common graduate curriculum, research requirements, pedagogical training, and other requirements set by the student's area of specialization. In exceptional cases, a student may design an individual sequence of courses. This sequence must be approved by the curriculum and student affairs committee before the student undertakes it. Completion of these course requirements is a prerequisite for Ph.D. candidacy.

COMMON GRADUATE CURRICULUM

The common curriculum consists of eight courses. Other requirements for doctoral students will be set by the student's area of specialization.

Proseminar

PSYC 48000 Proseminar in Psychology is a one-quarter course in which faculty members in the Department of Psychology give a summary of their ongoing research and students write a research proposal, to be submitted for an NSF graduate fellowship if the student is eligible for this funding. Professional development topics are also covered.

Statistics Requirement: Three courses passed with a grade of B or better

STAT 22000	Statistical Methods and Applications (or BUSN 41000 or equivalent approved by the Graduate Curriculum Committee. More advanced courses, for which these courses are prerequisites, also fulfill this requirement.)	100
PSYC 37300	Experimental Design and Statistical Modeling I	100
PSYC 37900	Experimental Design and Statistical Modeling II	100

TRIAL RESEARCH SEMINAR

All doctoral students are required to take PSYC 42100 Trial Research Seminar in the spring quarter of their first year. The primary aim of this seminar is to guide students in formulating and completing their trial research projects.

BREADTH REQUIREMENT

Students are required to take a minimum of three doctoral level courses in Psychology, extending across different areas of psychological science. Statistics courses and laboratory meetings may not be used to fulfill this requirement. These courses should be chosen in consultation with the student's advisor and program area. These courses must be passed with a grade of B or better.

DEPARTMENT OF PSYCHOLOGY RESEARCH REQUIREMENTS

TRIAL RESEARCH PROJECT

Each student must complete and defend an original Trial Research Project under the guidance of a faculty advisor or advisors and an advisory committee by the end of the Spring quarter of the second year. The Trial Research Project is a major milestone in the doctoral program and is intended to assess students' ability to develop, execute, and communicate independent research at the level expected for continued progress toward the PhD. Following the defense, the advisory committee evaluates both the quality of the project and the student's broader readiness to continue toward dissertation-level research. Successful completion of the Trial Research Project is required for continued progress in the doctoral program and is a prerequisite for advancement to PhD candidacy.

1. **Formation of the Advisory Committee:** At the end of the first year, students are required to form an advisory committee consisting of three faculty members. Typically, the chair of the committee is the student's primary research advisor and must be a faculty or emeritus faculty member in the Psychology Department. At least one other member of the committee must be a faculty, emeritus faculty or affiliated faculty member in the Psychology Department. The third member of the committee may be from outside of the Psychology Department, provided that the chair of the trial research committee gives his or her approval. The advisory committee will serve as a resource to aid each student with their trial research project, provide advice, and evaluate the trial research defense.
2. **Initiating the Trial Research Project:** The student should initiate discussion of their trial research project with their advisory committee members as soon as possible, but ideally by the start of Autumn quarter of their second year. By the end of the Autumn quarter in their second year, students are expected to meet with members of their advisory committee to update them on their trial research project proposal. At a minimum, this meeting consists of a student presentation of the proposed work and discussion of the plan with the members of the committee. Each student should discuss the expectations for the trial research project and defense with their advisor before beginning the process.
3. **Trial Research Paper Submission and Defense.** Students must submit their trial research paper and defend their project at a hearing with their committee before the end of the Spring quarter of their second year. At this hearing, the committee will also assess the student's breadth and depth of knowledge regarding their research problem.

DISSERTATION

1. **Advisory Committee Role:** Similar to the trial research process, each student's three-member advisory committee will support the dissertation process, offering guidance, advice, and evaluation of both the dissertation proposal and the final dissertation. Typically, the chair of this committee is the student's primary research advisor and must be a faculty or emeritus faculty member in the Psychology Department. At least one other member of the committee must also be a faculty, emeritus faculty, or affiliated faculty member in the Psychology Department. The third member can be a faculty member from any department at the University of Chicago, subject to approval by the committee chair.
2. **Dissertation Proposal Process:** Each student must prepare and defend a written dissertation proposal that defines a coherent, feasible, and theoretically significant program of independent research. The proposal should clearly articulate the research question or questions, situate them within the relevant literature, and describe the planned methods, analyses, anticipated contributions, and a realistic timeline for completion. Once the advisor approves the written proposal, the student may schedule an oral defense with the advisory committee. Successful approval of the dissertation proposal, including completion of any required revisions, is required for advancement to PhD candidacy. Each student should discuss the expectations for the dissertation proposal process with their advisor before beginning the process.
3. **Admission to PhD Candidacy:** To be admitted to PhD candidacy, a student must have successfully completed the following: (a) the *Common Graduate Curriculum* (completion of the core coursework); (b) *Area Course Requirements* (fulfillment of course requirements specified by their program or an individual course of study, approved by the GSAC); (c) *Trial Research Project* (successful completion of a trial research project); (d) *Dissertation Proposal* (approval of the dissertation proposal by all members of the student's dissertation committee following the oral defense).
4. **Dissertation Submission and Defense:** Following approval by the advisor, the completed dissertation must be submitted to the two additional advisory committee members plus an 'outside reader' for review.

The outside reader may be a faculty member at the University of Chicago, or a scientist at another institution (with a PhD) and must be approved by the student's advisor. Once the advisor consents, the student may schedule an oral defense of the dissertation. This oral exam is conducted by the three advisory committee members and the outside reader. If, after the oral defense, all committee members approve the dissertation document and defense, the student has met the Psychology Department's requirements for the PhD degree.

The completed dissertation must be formatted and submitted to the dissertation office by the quarterly deadline for graduation established by the dissertation office. For information about formatting the dissertation and submission deadlines, please visit the dissertation office's website (<https://www.lib.uchicago.edu/research/scholar/phd/>).

DOCTORAL PROGRAM TEACHING REQUIREMENTS

Students Enrolling Autumn 2025 and Later

All students must meet the divisional teaching requirement (<https://socialsciences.uchicago.edu/academic-development/phd-teaching/>) as a condition for graduation.

Students Enrolling Autumn 2024 and Earlier

Beginning as early as the second year of graduate school, students may start fulfilling their five required teaching assignments, but the general expectation is that students will start completing these in Year 3, after having completed most of their coursework.

Additional Teaching Assignments: Students interested in accepting teaching assignments beyond the five required by the Psychology Department or those not counting towards the department's teaching requirements should follow these steps:

1. **Advisor Approval:** Discuss the additional teaching opportunity with your advisor(s) and obtain their approval.
2. **Department Notification:** Email Kristi Schonwald at kschonwa@uchicago.edu with details of the teaching opportunity. Ensure that the email confirms you have received your advisor's approval.
3. **Department Review:** The department will verify that you are in good academic standing and have met all program milestones appropriate for your stage before forwarding your request to the Dean of Students for further review.

Approval Limits and Exceptions: The Department of Psychology and the Dean of Students will approve up to three additional teaching assignments per year that do not fulfill academic and funding requirements. For non-standard teaching opportunities, such as a single-weekend workshop, students may petition the Dean of Students for exceptions to this three-assignment limit.

PSYCHOLOGY HANDBOOK

The department publishes a Handbook each year that outlines the timing of the expected milestones of students in the program, and provides a description of the role of the Faculty Advisor, Advisory Committees, Area Chairs, the Director of Graduate Studies (DGS), and the Chair of the Department in mentoring graduate students during their PhD program.

Graduate students are expected to meet the academic standards and degree milestones outlined in the Department of Psychology Handbook. If at any point a student fails to meet these expectations, the department may determine that the student is not in good academic standing. Depending on the nature of the unmet requirements, the program may place the student on academic probation or, in more severe cases, dismiss the student from the program.

If a student is placed on academic probation, they will receive a written notification detailing the specific expectations required to regain good academic standing. This notification will include clear goals, required accomplishments, and a timeline for completion. Failure to meet the terms of the probation may result in dismissal from the University.

Those with questions or concerns about academic probation or dismissal are encouraged to consult with the DGS or the Dean of Students for additional guidance.

AREAS OF SPECIALIZATION

The Department of Psychology is organized into five areas of specialization: Cognition, Computational Cognitive Neuroscience, Developmental Psychology, Integrative Neuroscience, and Social Psychology.

COGNITION

The goal of the doctoral program in Cognition is to train graduate students to be well-rounded researchers and scholars. Our unique approach fosters integrative thinking that crosses disciplinary boundaries, and focuses on research questions that have both theoretical and practical significance. Faculty, students, and post docs collaborate on projects spanning a variety of cognitive domains, such as human memory, language and

communication, perception, attention and action, and conflict resolution and negotiation. Not only do we focus on fundamentally cognitive questions, but we also situate these questions within a broader context, including the biological bases and the social manifestations of cognitive phenomena. Our integrative approach allows graduate students to benefit from the university as a whole, by interacting with faculty from the Biological Sciences, the Humanities and the Social Sciences.

Curriculum

There are three elements in the graduate curriculum of the Cognition Program.

1. Students must complete the departmental common graduate curriculum including courses, research requirements, and required teaching.

2. Three area-specific courses. The purpose of this requirement is to develop a deeper understanding of the theories and methods used to scientifically study cognition, and of how these approaches are central to many areas of psychological inquiry. Please consult the doctoral curriculum on the Psychology website (<https://psychology.uchicago.edu/graduate-study/doctoral-curriculum/>) for a list of pre-approved courses.

3. Students are strongly encouraged to attend departmental colloquia (<https://psychology.uchicago.edu/events-page/>) and weekly workshops in their area of interest. The workshop method is one of the unique aspects of a UChicago education, allowing faculty and students the opportunity to explore and challenge new ideas. The Cognition area workshop is Cognition Workshop (<https://voices.uchicago.edu/cognition/>). Students are also encouraged to attend seminars and workshops from outside their specific area. Relevant talks may include the Neuroscience Institute Seminar Series (<https://neuroscience.uchicago.edu/neuroscience-seminar-series/>), Social Talk Series, Developmental Brown Bag, Institute for Mind and Biology Proseminar (<https://imb.uchicago.edu/events/>), and talks hosted by the Roman Family Center for Decision Research (<https://www.chicagobooth.edu/research/roman/events/>).

COMPUTATIONAL COGNITIVE NEUROSCIENCE

The brain, and particularly the human/primate brain, is arguably one of the most complex systems in the known universe. Huge progress has been made in the fields of Psychology and Neuroscience to understand the workings of the brain and its relationship to behavior. With the advent of new imaging technologies to record non-invasively and at much lower cost, datasets at huge scales are available to researchers across the world. At the same time, behavioral data from social media, cellphone, and credit cards are accessible at unprecedented temporal and spatial scales with millions and even billions of datapoints. Coupled with these enormous and complex datasets, the analysis tools to analyze these data have also become more complex, such as deep neural networks, Bayesian networks and Boltzmann machines. The Computational Cognitive Neuroscience program provides the requisite skills to become proficient at handling these large and complex data, along with the complex computational analysis tools needed to make progress in our understanding of brain and behavior. The Computational Cognitive Neuroscience graduate program at the University of Chicago is designed to provide the training and research opportunities for the next generation of computational cognitive neuroscientists. The program will provide students with training in basic neuroscience, cognition and computational techniques to tackle the incredible and daunting challenge in trying to understand such a complex system and complex multidimensional behavior

Curriculum

1. Students must complete the departmental common graduate curriculum including courses, research requirements, and required teaching.

2. Students must take PSYC 43030 Introduction to Python Programming in the Behavioral Sciences; this requirement will be waived if student has sufficient programming experience.

3. Two Core Neuroscience courses. Please consult the doctoral curriculum on the Psychology website (<https://psychology.uchicago.edu/graduate-study/doctoral-curriculum/>) for a list of pre-approved courses.

4. Three advanced courses, one of which will be required to be a breadth course outside of the student's main discipline. These courses will also fulfill the breadth courses required as part of the common graduate curriculum. Eligible courses will include all graduate level seminars taught by faculty in the Psychology Department, as well as a list of courses in other departments that are deemed relevant for the computational cognitive neuroscience curriculum. These outside courses will provide additional opportunities for computational and analytic training. Please consult the doctoral curriculum on the Psychology website (<https://psychology.uchicago.edu/graduate-study/doctoral-curriculum/>) for a list of pre-approved courses.

DEVELOPMENTAL PSYCHOLOGY

The Developmental Program provides a rich environment for scientific inquiry, mentorship, and training. Our faculty pursue a wide range of topics that span cognitive, emotional and social development. In cognitive development, our work focuses on infants' and children's mathematical, spatial, and language development along with interventions to improve educational outcomes. In terms of social and emotional development, we examine infants' and children's affective, intentional, and moral understanding. Other research examines how interacting with their environment affects children's cognition and social behavior, and how their bodies

can shape learning and thinking. Not only do our faculty, post-docs, and students investigate multiple exciting questions with behavioral methods, but they also supplement this approach with other methods including behavioral economics, gestural analyses, functional MRI, eye tracking, and EEG/ERPs. Moreover, the faculty interact with faculty from other disciplines, bringing rich interdisciplinary expertise to bear on their research questions. The faculty are also involved with the Center for Gesture Sign and Language (<https://gslcenter.uchicago.edu>) and the Committee on Education (<https://coe.uchicago.edu>). These diverse perspectives and methodologies provide a comprehensive picture of how the mind works and is shaped throughout development.

Curriculum

1. Students must complete the departmental common graduate curriculum including courses, research requirements, and required teaching.

2. Students must take an advanced course in the three areas of Developmental Psychology listed below. Certain seminars may also fulfill these requirements. Below are a few examples of courses that will fulfill these requirements. Students may petition the developmental area chair to count courses not included on this list.

a) Cognitive/Intellectual Development:

PSYC 42550 Cognitive Development; PSYC 32450 Seminar on Mathematical Development; PSYC 33600 Cognition in Infancy

b) Language Development:

PSYC 43200 Seminar in Language Development; PSYC 43680 Topics in Language and Gesture

c) Social/Emotional Development:

PSYC 41115 Social Cognitive Development; PSYC 33165 Interdisciplinary Perspectives on Morality; PSYC 32220 Understanding Inequality as a Psychologist

3. Students are expected to attend the weekly developmental brown bag seminar (Topics in Developmental Psychology) each quarter.

4. Students are encouraged to take additional coursework in areas of interest and in statistics or methods as needed.

5. In their third year, students will present their trial research findings in the developmental brown bag seminar.

6. By the spring of the third year students must write and submit a theoretical review paper to their adviser and a reader. Ideally, this review could be a publishable article, suitable for a journal such as *Psychological Bulletin* or *Developmental Review* and will help in formulating the dissertation. Students will do a presentation of the theoretical review paper in the developmental brown bag seminar by the end of their fourth year.

INTEGRATIVE NEUROSCIENCE

The notion that 100 billion neurons give rise to human behavior proved daunting up through the 20th Century because neuroscientists were limited by existing technologies to studying the properties of single neurons or small groups of neurons. Characterizing simple neural circuits has led to an understanding of a variety of sensory processes, such as the initial steps in vision, and motor processes, such as the generation of locomotion patterns. However, unraveling the neural substrates of more complex behaviors, such as the ability to pay attention to relevant events in its surroundings or the ability to understand the likely events going through the mind of another, remains one of the major challenges for the neurosciences in the twenty-first century. In contrast to simple behaviors, these complex behaviors depend on interactions within a network of different brain structures. Studying the neural bases of complex behaviors, thus, requires an integrative neuroscience approach.

The Integrative Neuroscience graduate program at the University of Chicago is designed to provide the training and research opportunities for the next generation of behavioral, cognitive, and social neuroscientists. Behavioral, cognitive, and social neuroscience represent three complementary and partially overlapping aspects of this integrative neuroscience of mind and behavior. Behavioral neuroscience places an emphasis on the biological mechanisms underlying basic behavioral processes; cognitive neuroscience places an emphasis on the biological mechanisms underlying cognition, with a specific focus on the neural substrates of mental processes and their behavioral manifestations; and social neuroscience places an emphasis on the biological mechanisms underlying social processes and behavior, including the ability to perceive and communicate mental states including the beliefs and desires of others and to form and maintain interpersonal and group relationships. The University of Chicago is optimally positioned to meet this challenge because its unique academic structure facilitates interactions across disciplinary perspectives.

Curriculum

1. Students must complete the departmental common graduate curriculum including courses, research requirements, and required teaching.

2. As part of this curriculum and with one additional course, IN students complete:

TWO PSYCHOLOGY DEPARTMENT BREADTH COURSES

IN students will take two advanced courses within the Department of Psychology.

TWO OF THREE CORE NEUROSCIENCE COURSES

Please consult the doctoral curriculum on the Psychology website (<https://psychology.uchicago.edu/graduate-study/doctoral-curriculum/>) for a list of pre-approved courses.

3. IN students are encouraged to take additional advanced courses.

SOCIAL PSYCHOLOGY

Social psychology is the scientific study of how social environments shape our thinking, feeling, and behavior on one hand, and how our thinking, feeling, and behavior shape our social environments on the other hand. It is the scientific study of how the social world and psyche make each other up.

At the University of Chicago, the faculty and students are committed to making scientific and practical contributions to society. The primary goal of the UChicago social psychology program is to address pressing societal issues using social psychological theorizing and methods. This makes the UChicago social psychology program distinct. Our inquiry is inspired by the real world. Our findings will inspire the solutions to real-world problems and enhance the well-being of the individual and society. The faculty and students will investigate a variety of topics including racism, police violence, mass incarceration, income inequality, achievement gaps, interpersonal and intergroup conflicts, self-regulation, social support, happiness, meaning in life, prosocial behavior, politics, morality, religion, globalization, immigration, climate changes, natural disasters, culture, and evolution. We are diverse in terms of personal and cultural backgrounds, theoretical orientations, and preferred methodologies, but united in our commitment to and belief in the benefits of social psychological research for the individual and society. The Chicago School of Social Psychology is the social psychology that matters!

CURRICULUM

1. Students must complete the departmental common graduate curriculum including courses, research requirements, and required teaching.
2. Students must take PSYC 40600 Advanced Seminar in Social Psychology or Foundations of Social Psychology (Instructor: Nick Epley) at Booth Graduate School of Business.
3. Students must attend the weekly social psychology talk series (PSYC 44600) each quarter.
4. At least three seminars (in addition to PSYC 40600) in social psychology.
5. Students must present their trial research findings in the social psychology talk series.
6. A comprehensive exam or theoretical review paper before the beginning of the third year. The choice of whether to do the comprehensive exam or the theoretical paper should be made with the student's advisor. Students must notify the faculty by the start of spring quarter of their second year which option they will pursue.
 - If you choose the comprehensive exam, you will be provided a reading list by the end of your second year. You will take the exam in August or September of the end of the second year.
 - If you choose the theoretical review paper option, you must write and submit to your adviser and a reader a theoretical review paper. This review should be a publishable article, suitable for a journal such as *Psychological Bulletin* or *Personality and Social Psychology Review* and will help in formulating the dissertation. Students will do a presentation of the theoretical review paper in the social psychology talk series by the end of their third year.

PSYCHOLOGY COURSES

PSYC 30289. Intermediate Regression and Data Science. 100 Units.

This course is designed to provide intermediate-level training in research methods that would pick up immediately after traditionally introductory-level classes that end with multiple regression. This course is designed to be a standalone package of training that will provide tools of immediate use in students' own research or to make them more capable RAs in larger projects. I expect the course will provide the most utility to advanced BA and MA students that will not have time to complete many advanced, specialized courses. However, it would also serve as a useful bridge to more advanced statistical coursework. Students will also learn how to present findings in competent and accessible ways suitable for poster or conference presentations.

Instructor(s): M. Jean Terms Offered: Spring Winter

Prerequisite(s): Applied statistics at the level of multiple regression

Note(s): Students are encouraged to bring a laptop to this class to follow along with certain lessons. This class includes a lab on Fridays, to be scheduled based on TA availability.

Equivalent Course(s): MAPS 30289, SOCI 30289, EDSO 23089, SOCI 20289, EDSO 30289

PSYC 30401. Psycholinguistics: Language Processing. 100 Units.

This is an advanced introduction to the field of psycholinguistics. We will do an in-depth overview of both the empirical findings and the methodologies used on various topics in language comprehension/production,

including areas of speech perception, lexical processing, syntactic parsing, and semantic/pragmatic processing. Models at both the computational and the mechanistic levels will also be examined.

Instructor(s): Ming Xiang Terms Offered: Autumn

Equivalent Course(s): LING 30401

PSYC 30510. Computing for the Social Sciences. 100 Units.

This is an applied course for social scientists with little-to-no programming experience who wish to harness growing digital and computational resources. The focus is on learning the basics of programming in R and generating reproducible research. Topics include coding concepts (e.g., data structures, control structures, etc.), data visualization, data wrangling, web-scraping, version control software, exploratory data analysis, and more. Students will leave the course with basic programming skills for the social sciences and the ability to adapt and expand these skills as they encounter new questions, methods, and data beyond the course. Requirements: No prior experience with R is required, though it's helpful to have completed a course involving a programming language (e.g., Python, Stata, SPSS, or others) in some capacity. If you're unsure or have had informal exposure to programming, please email the instructor to see if the course is a good fit.

Instructor(s): Jean Clipperton, Sabrina Nardin Terms Offered: Autumn Summer

Equivalent Course(s): SOCI 20278, SOSOC 26032, CHDV 30511, MAPS 30500, MACS 20500, SOCI 40176, MACS 30500

PSYC 30650. MA Psychological Research. 100 Units.

Student-initiated experimental research done under the supervision of principal investigator in a laboratory or research setting. Includes the practical application of knowledge and skills in research design, statistical and experimental methods, and data analysis.

Instructor(s): M. Berman Terms Offered: Autumn Spring Winter

Equivalent Course(s): MAPS 30650

PSYC 30700. Sensation and Perception. 100 Units.

What we see and hear depends on energy that enters the eyes and ears, but what we actually experience-perception-follows from human neural responses. This course focuses on visual and auditory phenomena, including basic percepts (for example, acuity, brightness, color, loudness, pitch) and also more complex percepts such as movement and object recognition. Biological underpinnings of perception are an integral part of the course.

Instructor(s): I. Utochkin Terms Offered: Winter

Equivalent Course(s): PSYC 20700

PSYC 31150. Psychology of Racism. 100 Units.

This upper-level seminar will focus on the psychology of race and racism. We will discuss both structural and individual level factors that create and maintain racism in the U.S. context. While this course will focus on social psychology, we will also draw from other areas of psychology. We will discuss social structures and institutions that perpetuate racism, policies that shape societal attitudes and behaviors, and psychological frameworks for understanding racism. We will begin the course with a discussion of the origins of race and racism. We will then transition to contemporary expressions of racism. The goals of this course are to analyze structural contexts influencing racist attitudes and behaviors, evaluate the impact of racism on racially minoritized groups, and to examine strategies and interventions to address racism.

Instructor(s): K. Henderson Terms Offered: Spring. In 2026-27, a graduate level section of the course will not be offered.

Equivalent Course(s): RDIN 31150, PSYC 21150, RDIN 21150

PSYC 31551. Darwinian Health. 100 Units.

This course will use an evolutionary, rather than clinical, approach to understanding why we get sick. In particular, we will consider how health issues such as menstruation, senescence, pregnancy sickness, menopause, and diseases can be considered adaptations rather than pathologies. We will also discuss how our rapidly changing environments can reduce the benefits of these adaptations.

Instructor(s): J. Mateo Terms Offered: Winter

Prerequisite(s): Prerequisite(s): BIOS Majors: Three quarters of a Biological Sciences Fundamentals Sequence. All other majors: recent biology course(s) with consent of instructor.

Note(s): CHDV Distribution - Undergrad: A; Grad: 1

Equivalent Course(s): BIOS 23405, HLTH 21500, HIPS 22401, CHDV 21500, GNSE 21500, CHDV 31500

PSYC 31705. Reward and Motivation. 100 Units.

Why do we crave social media likes, persist in pursuing ambitious goals, or struggle with motivation during challenging times? Drawing on findings from psychology and neuroscience, this course will provide a comprehensive overview of the brain's reward system. Students will become familiar with historical and current theoretical constructs of reward, including facets of motivation, anticipation, and pleasure, as well as their underlying neurobiology. We will understand the diverse experimental approaches that can be used to study reward function, including animal models, task-based neuroimaging (fMRI), computerized behavioral tasks, and clinical questionnaires. We will also discuss how the reward system is differentially affected in mental health conditions such as depression and substance use disorders, and the emerging interest in using reward as a biomarker and treatment target. Finally, we will explore the real-world applications of these findings, including on productivity, social media usage, education, and public policy.

Instructor(s): Ceniti, Amanda Terms Offered: Spring
Equivalent Course(s): EDSO 31705, MAPS 31705, CHDV 31705

PSYC 31900. The Neuroscience of Narratives. 100 Units.

This seminar examines computational neuroscience approaches to understanding narrative cognition in the brain. We will focus on recent research using text embeddings and other natural language processing methods to build encoding and decoding models of neural activity measured while people listen to stories, watch movies, and engage in spontaneous thought. Students are expected to be comfortable reading primary literature in computational cognitive neuroscience. This class is designed as a graduate seminar; however, advanced undergraduate students may register. Instructor consent is required for all students.

Instructor(s): Y.C. Leong Terms Offered: Autumn

PSYC 33000. Cultural Psychology. 100 Units.

There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning.

Instructor(s): R. Shweder Terms Offered: Autumn

Note(s): CHDV Distribution: B, C

Equivalent Course(s): ANTH 35110, PSYC 23000, KNOW 31000, AMER 33000, CHDV 21000, ANTH 24320, GNSE 31000, CHDV 31000, GNSE 21001

PSYC 33662. The Disordered Mind. 100 Units.

What are disorders of the mind? What are some of the theoretical and practical issues surrounding the identification, classification, and treatment of such disorders? What do mental disorders have to teach us about the typically-functioning mind? This seminar course will address these and other questions within biological, psychological, and sociocultural perspectives to attempt to understand the current and historical paradigms that have influenced our perception of what it means for the mind to be "disordered." Included will be discussion of behavioral, emotional, cognitive, and developmental disorders.

Instructor(s): K. Ledoux Terms Offered: Autumn

Equivalent Course(s): PSYC 23660

PSYC 33720. Crosslinguistic Perspectives on Language Development. 100 Units.

This discussion-based course covers cross-linguistic evidence concerning similarities and dissimilarities in how children learn language across diverse language communities. Each year will revolve around a central topic. This year we will focus on the acquisition of phonology.

Instructor(s): M. Tice Terms Offered: Autumn

Equivalent Course(s): CHDV 23700, LING 23701, COGS 22009, PSYC 23720, LING 33700, CHDV 33700

PSYC 33830. Attention and Working Memory in the Mind and Brain. 100 Units.

This course will provide a broad overview of current work in psychology and neuroscience related to attention and working memory. We will discuss evidence for sharp capacity limits in an individual's ability to actively monitor and maintain information in an "online" mental state. Readings will be primarily based on original source articles from peer-reviewed journals, with a focus on behavioral and neural approaches for measuring and understanding these basic cognitive processes.

Instructor(s): E. Awh and E. Vogel Terms Offered: Winter

Prerequisite(s): PQ: NSCI 20101 (Foundations of Neuroscience) is required for Neuroscience majors only.

Equivalent Course(s): NSCI 21600, PSYC 23820

PSYC 33910. Hormones, Brains, and Behavior. 100 Units.

This is an advanced course in behavioral neuroscience, with the goal of understanding the complex interactions among the brain, the endocrine system, and behavior (Behavioral Endocrinology). Reproductive hormones, stress hormones and hormone-brain interactions over development will be emphasized. The class will cover multiple levels of analysis/explanation from molecular, to organismal, to evolutionary, and the material will be primary research articles drawn from studies in a broad range of organisms, including humans. The course format will consist of weekly lectures and student-led discussions. Prior coursework in neuroscience (at or beyond the level of PSYC 20300) and a strong background in biology are prerequisites.

Instructor(s): B. Prendergast Terms Offered: Spring

Prerequisite(s): Undergraduates may register with consent of instructor. Prerequisite of PSYC 20300 Biological Psychology, or equivalent.

Equivalent Course(s): PSYC 23910

PSYC 34040. Aroma and Flavor: Perspectives from social and biological sciences. 100 Units.

Smell is considered less important than other senses, but our annual expenditures on fragrances (over \$60 billion worldwide) say otherwise. Many of us found during the COVID-19 pandemic that loss of smell can be devastating. Research increasingly shows that the olfactory system and nasal breathing are crucial for cognition

and cognitive health. This class will introduce students to the fascinating world of smell and flavor in texts and discussions grounded in psychology and neuroscience plus connections to philosophy, history and sociology. In addition to these topics, we will spend time on perfume, cuisine, attraction and repulsion. Texts will include scientific papers and textbook chapters, plus a selection of historical texts and classic literature. Format is discussion + occasional lectures and laboratory exercises.

Instructor(s): L. Kay Terms Offered: Spring

PSYC 34060. Understanding Practical Wisdom. 100 Units.

Thinking about the nature of wisdom goes back to the Greek philosophers and the classical religious sages, but the concept of wisdom has changed in many ways over the history of thought. While wisdom has received less scholarly attention in modern times, it has recently re-emerged in popular discourse with a growing recognition of its potential importance for addressing complex issues in many domains. But what is wisdom? It's often used with a meaning more akin to "smart" or "clever." Is it just vast knowledge? This course will examine the nature of wisdom-how it has been defined in philosophy and psychological science, how its meaning has changed, and what its essential components might be. We will discuss how current philosophical and psychological theories conceptualize wisdom and consider whether, and how, wisdom can be studied scientifically; that is, can wisdom be measured and experimentally manipulated to illuminate its underlying mechanisms and understand its functions? Finally, we will explore how concepts of wisdom can be applied in business, education, medicine, the law, and in the course of our everyday lives. Readings will be drawn from a wide array of disciplines. The course will include lectures by philosophers and psychologists. This course is offered in association with the Chicago Moral Philosophy Project and the Good Life program (the Hyde Park Institute).

Instructor(s): A. Henly; H. Nusbaum Terms Offered: May be offered in 2026-2027

Prerequisite(s): Third- or fourth-year standing.

Equivalent Course(s): BPRO 24050, CHDV 24050, PSYC 24060, RLST 24055

PSYC 35201. Communication in humans and non-humans. 100 Units.

This seminar will compare communication in humans and non-humans. Topics to be covered include the reliance of communication on more general cognitive processes, the learnability of communicative systems, referential intent, honest signaling, and deception. These issues will be explored through readings that cover recent work at the intersection of human and animal communication.

Instructor(s): J. Mateo

Note(s): Not offered in 2023-2024

Equivalent Course(s): CHDV 35201

PSYC 36008. Principles and Methods of Measurement. 100 Units.

Accurate measurement of key theoretical constructs with known and consistent psychometric properties is one of the essential steps in quantitative social and behavioral research. However, measurement of phenomena that are not directly observable (such as psychological attributes, perceptions of organizational climate, or quality of services) is difficult. Much of the research in psychometrics has been developed in an attempt to properly define and quantify such phenomena. This course is designed to introduce students to the relevant concepts, principles, and methods underlying the construction and interpretation of tests or measures. It provides in-depth coverage of test reliability and validity, topics in test theory, and statistical procedures applicable to psychometric methods. Such understanding is essential for rigorous practice in measurement as well as for proper interpretation of research. The course is highly recommended for students who plan to pursue careers in academic research or applied practice involving the use or development of tests or measures in the social and behavioral sciences.

Instructor(s): Yanyan Sheng Terms Offered: Spring

Prerequisite(s): Course work or background experience in statistics through inferential statistics and linear regression.

Equivalent Course(s): EDSO 36008, QMSA 36008, EDSO 26008, MAPS 36008, CHDV 36008, PSYC 28962, QMSA 26008, CHDV 26008

PSYC 36036. Survey Research Methods in Psychology. 100 Units.

How do we distill complex constructs of human behavior like personality and resilience into brief survey measures? How do the questions we ask shape the responses we receive? Drawing on examples from psychology and health research, this course will examine the nuanced process of developing and validating high-quality survey measures. Specific attention will be paid to validity, question order effects and wording, cross-cultural considerations, sampling methods, and psychological and social phenomena that may influence participant responses. We will discuss common issues in psychology survey design and data collection, as well as strategies to mitigate bias, error, and missing data. Through practical workshops using electronic data capture tools, students will also gain hands-on experience building surveys and collecting, analyzing, and interpreting their own data.

Instructor(s): Amanda Ceniti Terms Offered: Winter

Equivalent Course(s): CHDV 36036, MAPS 36036

PSYC 36200. Deep Learning Models as Model Systems for Cognitive Neuroscience. 100 Units.

Recent advances in artificial neural networks have produced systems that exhibit competencies approaching those of humans across a range of perceptual and cognitive tasks. Just as the biological sciences have long relied on animal model systems, psychology and cognitive neuroscience may increasingly look to deep learning models as experimentally tractable analogues of the mind and brain. This course examines the promise and limitations

of using deep neural networks as model systems in cognitive neuroscience, with a focus on contemporary vision and language models. Students should have a background in either cognitive neuroscience or with machine learning and statistical methods. Those unsure whether their background is appropriate are encouraged to contact the instructor. This class is designed as a graduate seminar; however, advanced undergraduate students can register. Instructor consent required.

Instructor(s): Y. Leong Terms Offered: Winter

PSYC 36210-36211. Mathematical Methods for Biological Sciences I-II.

PSYC 36210. Mathematical Methods for Biological Sciences I. 100 Units.

This course builds on the introduction to modeling course biology students take in the first year (BIOS 20151 or 152). It begins with a review of one-variable ordinary differential equations as models for biological processes changing with time, and proceeds to develop basic dynamical systems theory. Analytic skills include stability analysis, phase portraits, limit cycles, and bifurcations. Linear algebra concepts are introduced and developed, and Fourier methods are applied to data analysis. The methods are applied to diverse areas of biology, such as ecology, neuroscience, regulatory networks, and molecular structure. The students learn to implement the models using Python in the Jupyter notebook platform.

Instructor(s): D. Kondrashov Terms Offered: Autumn. L.

Prerequisite(s): BIOS 20151 or equivalent quantitative experience by consent of instructor, and three courses of a Biological Sciences Fundamentals Sequence or consent of the instructor.

Equivalent Course(s): BIOS 26210, CPNS 31000

PSYC 36211. Mathematical Methods for Biological Sciences II. 100 Units.

This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g., Markov Chain, Monte Carlo, and Gillespie algorithm. Students complete an independent project on a topic of their interest.

Instructor(s): D. Kondrashov Terms Offered: Winter. L.

Prerequisite(s): BIOS 26210 or equivalent.

Note(s): CB.

Equivalent Course(s): BIOS 26211, CPNS 31100

PSYC 36405. More than Mood: Biopsychosocial Approaches to Depression. 100 Units.

Depression is a common mental health condition that is a leading cause of disability worldwide. Using a biopsychosocial lens, this course will discuss the etiology, presentation, and treatment of this condition with a focus on clinical research principles and experimental design. Students will become familiar with relevant neurotransmitter systems and brain structure/function; psychological and cognitive correlates; and social and cultural contributors. We will discuss the substantial heterogeneity of depression, as well as recent efforts in precision psychiatry to identify more homogenous subtypes using 'big data'. Finally, students will become familiar with current and emerging treatment strategies, including pharmacotherapy, psychotherapy, neurostimulation, and social interventions. By using depression as a case study, students will deepen their ability to critically read and evaluate scientific articles, craft novel research questions, and apply a biopsychosocial lens to other constructs.

Instructor(s): Amanda Ceniti Terms Offered: Winter

Equivalent Course(s): CHDV 36405, MAPS 36405

PSYC 36455. Relationships and Health: The Need to Belong. 100 Units.

This seminar will explore the theory that the need to belong is a fundamental human motivation. In our discussions of relevant psychology journal articles, we will examine the connections between relationships and health, how the need to belong is related to empathy, reactions to rejection, and substitutes for belonging.

Instructor(s): Hamilton, Hannah Terms Offered: Autumn Spring Winter

Note(s): Undergraduate Consent Required

Equivalent Course(s): MAPS 36455, MAPS 26455, CHDV 36455

PSYC 36520. Mind, Brain and Meaning. 100 Units.

What is the relationship between physical processes in the brain and body and the processes of thought and consciousness that constitute our mental life? Philosophers and others have puzzled over this question for millennia. Many have concluded it to be intractable. In recent decades, the field of cognitive science--encompassing philosophy, psychology, neuroscience, computer science, linguistics, and other disciplines--has proposed a new form of answer. The driving idea is that the interaction of the mental and the physical may be understood via a third level of analysis: that of the computational. This course offers a critical introduction to the elements of this approach, and surveys some of the alternative models and theories that fall within it. Readings are drawn from a range of historical and contemporary sources in philosophy, psychology, linguistics, and computer science. (B) (II)

Instructor(s): Melinh Lai; Zach Lebowski Terms Offered: Autumn Winter

Equivalent Course(s): PHIL 26520, LING 36520, PSYC 26520, EDSO 20001, LING 26520, EDSO 30001, SIGN 26520, COGS 20001, PHIL 36520, COGS 30001

PSYC 37400. Long Term Memory. 100 Units.

This course surveys the scientific study of human memory, emphasizing both theory and applications. Lectures will cover current research and methods in cognitive psychology and cognitive neuroscience, as well as historical precursors and classic studies. Topics include consciousness and nonconscious processes, corresponding neural systems, and various phenomena such as amnesia, memory distortion, mnemonics, and metacognition.

Instructor(s): D. Gallo Terms Offered: Autumn

PSYC 37950. Evolution and Economics of Human Behavior. 100 Units.

This course explores how evolutionary biology and behavioral economics explain many different aspects of human behavior. Specific topics include evolutionary theory, natural and sexual selection, game theory, cost-benefit analyses of behavior from an evolutionary and a behavioral economics perspective, aggression, power and dominance, cooperation and competition, biological markets, parental investment, life history and risk-taking, love and mating, physical attractiveness and the market, emotion and motivation, sex and consumer behavior, cognitive biases in decision-making, and personality and psychopathology.

Instructor(s): D. Maestriperi Terms Offered: Autumn

Note(s): CHDV Distribution: Undergraduate subject area: A, Graduate distribution: 1

Equivalent Course(s): CHDV 37950, ECON 14810, CHDV 27950, PSYC 27950

PSYC 38520. Thinking like a Computational Social Scientist. 100 Units.

The movement of much of our social lives online has created exciting new opportunities for social science research. This course provides a broad survey of computational methods used to make sense of this data. Students will learn how to collect online data and analyze this data using contemporary techniques from natural language processing, supervised/unsupervised machine learning, and generative AI. Students will also cultivate analytical skills through formal paper presentations, oral exams, and an original research project. The course will be taught in Python. This is an intuitive introduction without prerequisites, although previous experience with probability, statistics, and/or programming will be helpful. This course has a shared lecture on Thursdays and a separate graduate and undergraduate sections on Tuesdays(required).

Instructor(s): B. Koch Terms Offered: Winter

Equivalent Course(s): DATA 20602, SOCI 40267, HIST 49307, SOCI 20602, MACS 30267, PSYC 28520, MACS 20267

PSYC 38780. Adolescent Development in Context. 100 Units.

This course focuses on developmental pathways from middle childhood through adolescence within the context of school, family, community, and culture. Because human development is an applied field, we will be paying special attention to how sociocultural and historical influences affect academic, socioemotional, and identity development in the context of real-world challenges and opportunities faced by adolescents. In addition to learning about developmental and sociocultural theories, students will apply research to policy and practice by creating resources geared toward youth, parents, or those who work with youth. By the end of this course sequence, students should be able to: 1. Describe and apply key theories of middle childhood and adolescent development; 2. Identify developmental opportunities and challenges during middle childhood and adolescence; 3. Discuss the role of identity development in constructing or authoring one's life story; 4. Reframe adolescent risk-taking as a form of creativity and individual expression; 5. Understand how relationships can influence positive youth development; and 6. Translate theory and research into developmentally appropriate and culturally sensitive resources for youth, families, and those who work with youth.

Terms Offered: TBD

Equivalent Course(s): EDSO 68700, EDSO 28700, RDIN 68700, CHDV 48700, SSAD 68700, SSAD 28700

PSYC 38810. Critical Argument in Psychology. 100 Units.

This seminar focuses on the core skills of critical reading and argumentation in psychological research. Students will analyze contemporary psychology literature to understand how effective arguments are structured and supported and practice applying these strategies of evidence-based argument to their own academic writing. The course provides opportunities to workshop literature reviews, proposals, and theses in a collaborative setting, with an emphasis on logical structure and persuasive reasoning. Ideal for students looking to strengthen their analytical and writing skills with the goal of conducting independent research in psychology.

Instructor(s): Natalie Dowling Terms Offered: Winter

Note(s): This course fulfills the MAPSS method requirement.

Equivalent Course(s): MAPS 30655

PSYC 38825. Foundations of Statistical Methods for Psychological Science. 100 Units.

This course will introduce students to statistical analyses commonly used in psychology. Students will learn about the logic of hypothesis testing, how to conduct statistical analyses, and how to read and write about statistical results and the conclusions they support. Students will learn when it is appropriate to use each statistical analysis, review the mathematical formulas behind the analyses and how to calculate relevant statistics by hand, how to conduct analyses using R, how to interpret statistical results, and how to report results in APA format.

Instructor(s): Hannah Hamilton Terms Offered: Autumn

Equivalent Course(s): MAPS 30125

PSYC 38960. The Development of Communicative Competence. 100 Units.

This course examines the emergence of communicative skills in humans. We will focus on how children glean information about language structure and language use from their home environments. We will also discuss the proposed cognitive and evolutionary roots of communicative behaviors, with a focus on current gaps in our knowledge and possible pathways forward. The course will consider these issues from multiple perspectives including linguistics, psychology, and linguistic anthropology. We will also briefly cover a range of methods associated with these different areas of study. It is expected that, by the end of the course, you should be able to think and write critically about how human communication and human language are intertwined in both adults and children.

Instructor(s): M. Casillas Terms Offered: Spring

Note(s): Subject area: UG: B, C; Grad: 2

Equivalent Course(s): LING 38951, CHDV 38950, EDSO 38950

PSYC 40301. Topics in Psychology. 100 Units.

Current research in psychology.

Instructor(s): Staff Terms Offered: Autumn Spring Winter

PSYC 40450-40451-40452. Topics in Cognition I-II-III.

Broadly speaking, this workshop will address fundamental topics in cognitive psychology such as attention, memory, learning, problem solving, and language. One unique aspect of this workshop is that we will not only explore topics central to the study of cognition, but we will also explore how the study of cognitive psychology can be used to enhance human potential and performance in a variety of contexts. These contexts range from an exploration of optimal teaching practices to enhance the acquisition of mathematical knowledge in the classroom, to issues regarding how individuals communicate best to foster the optimal exchange of information in, for instance, medical settings, to the optimal strategies older adults can use to help stave off the deleterious effects of aging on cognitive functioning and the performance of everyday activities.

PSYC 40450. Topics in Cognition I. 100 Units.

Discussion of current research in psychology.

Instructor(s): A. Bakkour Terms Offered: Autumn

PSYC 40451. Topics in Cognition II. 100 Units.

Discussion of current research in psychology.

Instructor(s): A. Bakkour Terms Offered: Winter

PSYC 40452. Topics in Cognition III. 100 Units.

Discussion of current research in psychology.

Instructor(s): A. Bakkour Terms Offered: Spring

PSYC 40460. Computation and the Identification of Cultural Patterns. 100 Units.

Culture is increasingly becoming digital, making it more and more necessary for those in both academia and industry to use computational strategies to effectively identify, understand, and (in the case of industry) capitalize on emerging cultural patterns. In this course, students will explore interdisciplinary approaches for defining and mobilizing the concept of "culture" in their computational analyses, drawing on relevant literature from the fields of Anthropology, Psychology and Sociology. Additionally, they will receive hands-on experience applying computational approaches to identify and analyze a wide range of cultural patterns using the Python programming language. For instance, students will learn to identify emerging social movements using social media data, predict the next fashion trends, and even decipher ancient symbols using archaeological databases.

Instructor(s): Jon Clindaniel Terms Offered: Autumn Winter

Prerequisite(s): No previous coding experience required. A Python boot camp will be held at the beginning of the quarter to teach the coding skills necessary to succeed in the course. Open to Advanced Undergraduates with Instructor Permission.

Equivalent Course(s): CHDV 40404, MACS 40400, MAPS 40401, MACS 20400

PSYC 40710. Early Childhood: Human Capital Development and Public Policy. 100 Units.

The goal of this course is to introduce students to the literature on early child development and explore how an understanding of core developmental concepts can inform social policies. Our substantive foci will be on early childhood poverty, the role of parenting and the home environment in shaping children's development, and the evidence base for intervention in early childhood for economically disadvantaged children. The course will cover evidence from neuroscience, psychology, economics, sociology, and public policy as it bears on these questions. In particular, we will explore how the principles of early childhood development can guide the design of policies and practices that enhance the healthy development of young children, particularly for those living in adverse circumstances, and thereby build a strong foundation for promoting equality of opportunity, reducing social class disparities in life outcomes, building human capital, fostering economic prosperity, and generating positive social change. In doing so, we will discuss the evidence on whether the contexts of children's development are amenable to public policy intervention and the costs and benefits of different policy approaches.

Instructor(s): Kalil, A Terms Offered: Winter

Equivalent Course(s): PPHA 40700, CHDV 40770

PSYC 41151-40852-40853. Topics in Developmental Psychology I-II-III.

Brown-bag discussion of current research in psychology.

PSYC 40851. Topics in Developmental Psychology I. 100 Units.

Brown-bag discussion of current research in psychology.

Instructor(s): S. Goldin-Meadow Terms Offered: Autumn

PSYC 40852. Topics in Developmental Psychology II. 100 Units.

Brown-bag discussion of current research in psychology.

Instructor(s): A. Shaw Terms Offered: Winter

PSYC 40853. Topics in Developmental Psychology III. 100 Units.

Brown-bag discussion of current research in psychology.

Instructor(s): S. Levine Terms Offered: Spring

PSYC 41115. Social Cognitive Development. 100 Units.

Human beings inhabit a very complex social world and our mind has structures that enable us to navigate this complexity. Where do these concerns come from? Are we blank slates that passively absorb cues from our environment? If not, what early competencies enable us to learn? How do these competencies interact with our culture? To answer these questions, this class will cover literature from infants, toddlers, children, and adults to give a rich picture of what changes and remains constant across development. We will cover topics such as children's understanding of intentions, theory of mind, communication, ownership, morality, and inter-group attitudes.

Instructor(s): A. Shaw Terms Offered: Winter

PSYC 41400. Evolutionary Cognitive Psychology. 100 Units.

TBD

PSYC 41901. Advanced Topics in Language, Culture and Thought. 100 Units.

This course examines more deeply topics discussed in CHDV 31901, Language, Culture, and Thought. Topical issues include the phylogenetic and ontogenetic emergence of language, the impact of language variation on thought, the influence of language advances in middle childhood (e.g., reported speech, narrative structure, metapragmatics, etc.) on cognitive growth (e.g., formal reasoning, theory of mind, etc.) especially as mediated through institutional structures and ideologies (e.g., education, standard language, etc.). Readings will include a mix of basic theory, contemporary literature reviews, and case studies.

Instructor(s): J. Lucy Terms Offered: Spring

Prerequisite(s): Permission of Instructor

Note(s): CHDV Grad Distribution: 2, 3

Equivalent Course(s): ANTH 47605, CHDV 41900

PSYC 41920. The Evolution of Language. 100 Units.

This course is designed to review critically some of the literature on the phylogenetic emergence of Language, in order to determine which questions have been central to the subject matter, which ones have recurred the most, and to what extent the answers to these are now better informed. The class will also review new questions such as the following: What is the probable time of the emergence of modern language(s)? Should we speak of the emergence of Language or of languages, in the plural?

Instructor(s): Salikoko Mufwene Terms Offered: Winter

Equivalent Course(s): CHDV 41920, COGS 22007, EVOL 41920, CHDV 21920, LING 21920, LING 41920, CHSS 41920, ANTH 47305

PSYC 42100. Trial Research Seminar. 100 Units.

PSYC 42100 is required of first-year Psychology graduate students The purpose of this seminar is to assist students in formulating their trial research project.

Instructor(s): G. Norman Terms Offered: Spring

PSYC 42210. Mathematical Development: Cognitive and Attitudinal Factors. 100 Units.

We will explore the early emergence of mathematical skills in infants and young children, which have been found to predict long term mathematical outcomes. The course will examine the emergence of these skills as well as the role of other cognitive skills and math attitudes in explaining individual differences in mathematical skills. Finally, we will consider how key socializers - parents and teachers - contribute to children's mathematical skills and attitudes.

Instructor(s): S. Levine Terms Offered: Spring

Equivalent Course(s): PSYC 22210

PSYC 43200. Seminar in Language Development. 100 Units.

Undergraduates should register for PSYC 23200. Psychology and Linguistics doctoral students should register for PSYC 43200. This course addresses the major issues involved in first-language acquisition. We deal with the child's production and perception of speech sounds (phonology), the acquisition of the lexicon (semantics), the comprehension and production of structured word combinations (syntax), and the ability to use language to communicate (pragmatics).

Instructor(s): S. Goldin-Meadow Terms Offered: Winter

Equivalent Course(s): CHDV 41601

PSYC 43921. Current Topics in Working Memory. 100 Units.

This seminar will cover a broad range of topics in the literature on working memory.

Instructor(s): E. Awh Terms Offered: Autumn

Prerequisite(s): We strongly advise students without a prior background in these areas to consider auditing our undergraduate course "Attention and working memory in the mind and brain."

PSYC 44000. Moral Psychology and the Anthropology of Morality. 100 Units.

Three types of questions about morality can be distinguished: (1) philosophical, (2) psychological, and (3) epidemiological. The philosophical question asks, whether and in what sense (if any) "goodness" or "rightness" are real or objective properties that particular actions possess in varying degrees. The psychological question asks, what are the mental states and processes associated with the human classification of actions as moral or immoral, ethical or unethical. The epidemiological question asks, what is the actual distribution of moral judgments across time (developmental time and historical time) and across space (for example, across cultures). In this seminar we will read classic and contemporary philosophical, psychological, and anthropological texts that address those questions.

Instructor(s): R. Shweder Terms Offered: Winter

Prerequisite(s): Advanced undergraduates may enroll with permission of instructor

Note(s): CHDV Distribution: B, C; 3

Equivalent Course(s): CHDV 45601

PSYC 44600. Topics in Social Psychology. 100 Units.

Discussion of current topics in Social Psychology.

Instructor(s): K. Henderson, Autumn; X. Bai, Winter; L. Emery, Spring Terms Offered: Autumn Spring Winter

PSYC 45300. When Cultures Collide: The Multicultural Challenge in Liberal Democracies. 100 Units.

Coming to terms with diversity in an increasingly multicultural world has become one of the most pressing public policy projects for liberal democracies in the early 21st century. One way to come to terms with diversity is to try to understand the scope and limits of toleration for variety at different national sites where immigration from foreign lands has complicated the cultural landscape. This seminar examines a series of legal and moral questions about the proper response to norm conflict between mainstream populations and cultural minority groups (including old and new immigrants), with special reference to court cases that have arisen in the recent history of the United States.

Instructor(s): R. Shweder Terms Offered: Winter

Prerequisite(s): Undergraduates students: 4th year standing and instructor consent only

Note(s): Subject area: Grad: 2, 3

Equivalent Course(s): GNSE 45600, KNOW 45699, CHDV 45699, HMRT 35600, ANTH 45600

PSYC 45450. Grappling with Diversity in Psychological Science. 100 Units.

This graduate seminar explores the concept of "diversity science" as a launching point to think deeply about what diversity is, how diversity has been defined and studied in U.S. psychological research, and its implications for doing science that moves us toward a more just and equitable society. Students will grapple with the nuanced language and definitional tools of diversity, the persistence of racism, sexism, and exclusion in diversity-relevant research, and how to take-up critical perspectives and approaches to study human development. The course adopts a historical and interdisciplinary perspective, with the goal of deepening and broadening our understanding of and approach to diversity in human development research.

Instructor(s): Rogers Terms Offered: Winter

Note(s): distribution 2, 3, M

Equivalent Course(s): CHDV 47655

PSYC 45500. Cognitive and Social Neuroscience of Aging. 100 Units.

As the baby boom generation ages, the rising prevalence of aging-related cognitive decline has become a major challenge for individuals, families and society. However, not all cognitive systems are negatively impacted by aging, and aging also causes complex social and emotional changes. How does aging affect our brains and our minds, and are these changes inevitable? This seminar provides an introduction to the scientific literature of the aging mind, focusing on both normal and pathological (e.g., Alzheimer's disease) changes in late adulthood. We will cover contemporary research from cognitive and social neuroscience perspectives. Topics include different psychological domains (e.g., attention, memory, metacognition, affective control) and applied issues (e.g., physical exercise, mental training, stereotype threat).

Instructor(s): D. Gallo Terms Offered: Spring

PSYC 46050. Principles of Data Science and Engineering for Laboratory Research. 100 Units.

The quantity of data gathered from laboratory experiments is constantly increasing. This course will explore the latest concepts, techniques and best-practice to create efficient data analysis pipelines. We will focus on the python ecosystem. By the end of the course, you are expected to be able to apply appropriate tools to streamline your own data analysis.

Instructor(s): J. Yu Terms Offered: Autumn

Prerequisite(s): Familiarity with coding in python.

Equivalent Course(s): NURB 36050, CPNS 36050

PSYC 46662. Advanced Topics in Genes and Behavior. 100 Units.

There are complex interactions between the genome and behavior. This course will examine how behavior can be understood by investigating the sequence and structure of genes, especially those expressed in the brain. It will consider behaviors in several species (including human), and present various molecular, genetic, and genomic approaches used to uncover how genes contribute to behavior and how behavior alters the genome. Seminar format, with student-led sessions based on primary literature readings, with class time to collectively clarify questions, delve deeper into mechanisms, and integrate to consider broader implications.

Instructor(s): S. London Terms Offered: Winter

Prerequisite(s): PQ: Some familiarity with molecular biology and/or genomes is recommended.

Equivalent Course(s): NURB 36660, PSYC 26662

PSYC 47001-47002. Language in Culture I-II.

This two-quarter course presents the major issues in linguistics of anthropological interest. These courses must be taken in sequence.

PSYC 47001. Language In Culture I. 100 Units.

The first quarter of the two-quarter Language in Culture sequence introduces a number of analytic concepts developed out of the study of "language" and its limits. We begin with the study of "interaction order" in its multifunctional complexity, teasing out its constitution through the real-time unfolding of indexical (pragmatic) and reflexive (metapragmatic) signs/functions as coherent "text." We use this attention to the dialectics of indexicality and its various implications to investigate various problematics in the philosophy of language (reference, performativity), linguistics (poetics, grammatical sense, variation, register), and sociocultural anthropology (racialization, relativity, subjectivity/identity, temporality, institutionality).

Instructor(s): Constantine Nakassis

Prerequisite(s): Consent of instructor for Undergrads

Note(s): CHDV Distribution: 5*

Equivalent Course(s): CHDV 37201, LING 31100, ANTH 37201

PSYC 47002. Language in Culture II. 100 Units.

This course is designed for students interested in the intersection of linguistic anthropology, sociocultural anthropology, and social theory. Over the term, we will focus on topics such as: artifice, charisma, media/mediation, receptivity, reflexivity, sense/sensorium, scale, and translation. Our approach will be primarily, if not exclusively, ethnographic, reading several full-length monographs together. This will allow us to discern authors' methodological decisions and sensibilities, including how they empirically build, elaborate and challenge social and semiotic theory

Instructor(s): E. Summerson Carr

Prerequisite(s): Language in Culture I

Equivalent Course(s): CHDV 37202, ANTH 37202, LING 31200

PSYC 48000. Proseminar in Psychology. 100 Units.

Required of first-year Department of Psychology graduate students. Department of Psychology faculty members present and discuss their research. This introduces new students to the range of research areas in the department.

Instructor(s): K. Henderson Terms Offered: Autumn

PSYC 48001-48002-48003. Mind and Biology Proseminar I-II-III.

Seminar series at the Institute for Mind and Biology meets three to four times per quarter. Sign up for three quarters; receive credit at the end of Spring Quarter.

PSYC 48001. Mind and Biology Proseminar I. 000 Units.

Students receive credit in spring quarter after attending 3 quarters of seminars.

Instructor(s): J. Yu Terms Offered: Autumn

PSYC 48002. Mind and Biology Proseminar 2. 000 Units.

Seminar series at the Institute for Mind and Biology meets three to four times per quarter. Sign up for three quarters; receive credit at the end of Spring Quarter.

Instructor(s): J. Yu Terms Offered: Winter

PSYC 48003. Mind and Biology Proseminar 3. 100 Units.

Seminar series at the Institute for Mind and Biology meets three to four times per quarter. Sign up for three quarters; receive credit at the end of Spring Quarter.

Instructor(s): J. Yu Terms Offered: Spring

PSYC 48880. Neural and cognitive studies of goal-driven attention. 100 Units.

We will use weekly readings of original journal articles to support a wide ranging discussion of the varieties of voluntary attentional control. We will highlight both behavioral and neural studies of attention, with an emphasis on how different modes of attention operate a qualitatively different stages of cognitive processing.

Instructor(s): E. Awh Terms Offered: Winter

PSYC 49700. Readings: Psychology. 100 Units.

PSYC 49800. Research: Psychology. 300.00 Units.

PSYC 70000. Advanced Study: Psychology. 300.00 Units.

Advanced Study: Psychology

