

PSYCHOLOGY

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

PROGRAM OF STUDY

Psychology is the study of the mental states and processes that give rise to behavior. It seeks to understand the basic mechanisms and functions of perception, cognition, emotion, and attitudes, their development, and their role in guiding behavior. Although it focuses on the level of the individual, individual behavior depends on the social relationships and structures in which people are embedded and the biological systems of which we are comprised. Thus, psychological study encompasses a broad set of topics that overlap with a number of disciplines across the social and biological sciences. The requirements of the major are designed to acquaint students with the research methods psychologists use and to provide a foundation of core knowledge covering the major areas of psychology. This broad foundation allows students to pursue a more advanced understanding of subfields related to their own particular interests and goals for the major. The program may serve as preparation for graduate work in psychology or related fields (e.g., neuroscience, education), as well as for students interested in careers in social work, public policy, business, or medicine. Students are encouraged to become actively engaged in research in the department and should consult with the director of undergraduate research about their interests as early as possible.

PROGRAM REQUIREMENTS

Although no special application is required for admission to the major, majors are required to subscribe to the Psychology Majors Listhost at lists.uchicago.edu/web/info/psychology-majors (<https://lists.uchicago.edu/web/info/psychology-majors/>). The listhost is the primary means of communication between the program and its majors or students interested in being majors. We use it to notify students of events relevant to psychology majors, such as research opportunities, job postings, fellowship announcements, and any changes in the course schedule, or curriculum updates.

For psychology students, a maximum of three courses can be transferred into the major from outside of the University of Chicago.

NOTE: When planning your course schedule, please consult Class Search at registrar.uchicago.edu/classes (<http://registrar.uchicago.edu/classes/>) and the Courses section of the Psychology Department Undergraduate Program (<https://psychology.uchicago.edu/undergraduate-major/>) website, which lists courses and the quarters they are offered for the current academic year.

Statistics/Methodology Sequence (must be completed by end of third year)

By the end of their third year, psychology majors are required to complete PSYC 20200 Psychological Research Methods and one of the following courses: PSYC 20250 Introduction to Statistical Concepts and Methods or STAT 22000 Statistical Methods and Applications. It is strongly recommended that these courses be taken as early as possible in a student's training as they provide foundational concepts that facilitate understanding of subject area courses. These two courses cover the conceptual and methodological issues (PSYC 20200) and the statistical methods (PSYC 20250, STAT 22000) used in psychological science. PSYC 20200 is typically taught in the Autumn Quarter and PSYC 20250 in the Winter Quarter. We advise students to take PSYC 20200 Psychological Research Methods prior to taking statistics, but either order is acceptable.

Beginning with the Class of 2019, students with AP examination credit for STAT 22000 Statistical Methods and Applications may not count that credit toward the major and should instead replace that requirement with a higher-level statistics course or an additional psychology elective. Students interested in graduate programs in psychology or other empirical sciences are strongly encouraged to take a higher level statistics course.

Breadth Requirement

Students are required to take four of the following five courses, each of which will be offered every year:

PSYC 20300	Biological Psychology	100
PSYC 20400	Cognitive Psychology	100
PSYC 20500	Developmental Psychology	100
PSYC 20600	Social Psychology	100
PSYC 20700	Sensation and Perception	100

Additional Courses

At least six additional courses (for a total of twelve in the major) must be chosen from among the courses offered by the Department of Psychology. Courses without a 20000-level PSYC number must be approved by the Undergraduate Student Affairs and Curriculum Committee; petitions must be submitted to the department's student affairs administrator. Only one independent study course can count toward the twelve courses required of students who are majoring in psychology (PSYC 29200 Undergrad Rdgs: Psychology or PSYC 29700 Undergraduate Research in Psychology). In addition to the six electives, students pursuing honors in psychology must also take the PSYC 29800 Honors Seminar: Psychology. Independent study courses can be taken for P/

F grading, but all other courses must be taken for a quality grade. NOTE: Before registering for an elective, students should confirm that they have met any prerequisites for the course.

Research

Students are strongly encouraged to gain additional research experience by working on a research project under the guidance of a faculty member. For more information on getting involved in research, please see the section on Professional and Academic Development (<https://psychology.uchicago.edu/undergraduate-major/events/>) or contact the director of the Undergraduate Research Initiative in Psychology.

Calculus

Students are required to take two quarters of calculus as part of the College general education requirements.

Summary of Requirements

GENERAL EDUCATION

MATH 13100-13200	Elementary Functions and Calculus I-II (or higher) [†]	200
Total Units		200

MAJOR

PSYC 20200	Psychological Research Methods (by end of third year)	100
One of the following (by end of third year): [*]		100
PSYC 20250	Introduction to Statistical Concepts and Methods	
STAT 22000	Statistical Methods and Applications	
Four of the following:		400
PSYC 20300	Biological Psychology	
PSYC 20400	Cognitive Psychology	
PSYC 20500	Developmental Psychology	
PSYC 20600	Social Psychology	
PSYC 20700	Sensation and Perception	
Six electives ⁺		600
Total Units		1200

- [†] Credit may be granted by examination.
- ^{*} Examination credit for PSYC 20250 Introduction to Statistical Concepts and Methods or STAT 22000 Statistical Methods and Applications will not count toward the requirements for the major. Students with credit for PSYC 20250 or STAT 22000 should replace that requirement with a higher level Statistics course or an additional psychology elective.
- ⁺ Courses without a 20000-level PSYC number must be approved by the Undergraduate Student Affairs and Curriculum Committee; petitions must be submitted to the department's student affairs administrator.

GRADING

All courses in the major must be taken for quality grades except for the independent study course, which is available for either a quality grade or for P/F grading.

HONORS

To qualify for honors, students must meet the following requirements:

- Students must have a GPA of at least 3.0 overall, and a GPA of at least 3.5 in the major by the beginning of the quarter in which they intend to graduate.
- Students should arrange to carry out a research project with a faculty advisor from the Department of Psychology and submit a scientific report of this research for an honors thesis. Papers must represent a more substantial treatment of the research topic than the average term paper and should be designed to contribute to scholarship in the field. Honors theses must be approved by the faculty advisor and a reader. Readers must have a PhD and should be jointly agreed upon by the student and faculty advisor.
- Students are required to take PSYC 29800 Honors Seminar: Psychology in Winter Quarter of their third or fourth year. This is in addition to the twelve required courses for the major. It is expected that students will be actively working on the thesis project during the quarter they are taking the honors research seminar.
- Students are required to present their findings in Spring Quarter of their fourth year at an honors day celebration.
- For deadlines related to graduating with honors, visit psychology.uchicago.edu/undergraduate-major/requirements/honors (<https://psychology.uchicago.edu/undergraduate-major/requirements/honors/>).

Students pursuing honors in more than one major should note that:

1. The student's thesis adviser for psychology cannot be the same person as the student's thesis adviser for the second major.
2. The student must meet all the requirements listed in the preceding Honors section, including taking the Honors Seminar and presenting at an honors day celebration.

PROFESSIONAL AND ACADEMIC DEVELOPMENT

The undergraduate studies program runs a series of co-curricular events throughout the year to foster students' professional and academic development. Programming takes many forms, including informational meetings regarding the undergraduate program, guest speaker career panels, specialized workshops, conference field trips, and informal receptions. For a list of events currently planned, please visit psychology.uchicago.edu/undergraduate-major/events (<https://psychology.uchicago.edu/content/professional-academic-development-events/>)

SPECIALIZED COURSES OF STUDY

Faculty members and the director of undergraduate studies are available to help individual students design a specialized course of study within psychology. For example, particular course sequences within and outside of psychology may be designed for students who wish to pursue specializations in particular areas. These areas include, but are not limited to, cognitive neuroscience, language and communication, computational psychology, behavioral neuroscience and endocrinology, sensation and perception, and cultural psychology.

EARL R. FRANKLIN RESEARCH FELLOWSHIP

The Earl R. Franklin Research Fellowship is awarded to select third-year students who are majoring in psychology. It provides financial support during the summer before their fourth year to carry out psychological research that will be continued as a senior honors project. Applications, which are submitted at the beginning of Spring Quarter, include a research proposal, personal statement, transcript, and letter of recommendation.

PSYCHOLOGY COURSES

PSYC 20200. Psychological Research Methods. 100 Units.

This course introduces concepts and methods used in behavioral research. Topics include the nature of behavioral research, testing of research ideas, quantitative and qualitative techniques of data collection, artifacts in behavioral research, analyzing and interpreting research data, and ethical considerations in research.

Instructor(s): A. Light, L. Ho, Autumn; L. Ho, Spring Terms Offered: Autumn Spring

PSYC 20250. Introduction to Statistical Concepts and Methods. 100 Units.

Statistical techniques offer psychologists a way to build scientific theories from observations we make in the laboratory or in the world at large. As such, the ability to apply and interpret statistics in psychological research represents a foundational and necessary skill. This course will survey statistical techniques commonly used in psychological research. Attention will be given to both descriptive and inferential statistical methodology.

Instructor(s): Heald, S. Terms Offered: Winter

Prerequisite(s): It is recommended that students complete MATH 13100 and MATH 13200 (or higher) before taking this course.

PSYC 20300. Biological Psychology. 100 Units.

What are the relations between mind and brain? How do brains regulate mental, behavioral, and hormonal processes; and how do these influence brain organization and activity? This course introduces the anatomy, physiology, and chemistry of the brain; their changes in response to the experiential and sociocultural environment; and their relation to perception, attention, behavioral action, motivation, and emotion.

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

Prerequisite(s): Some background in biology and psychology.

Equivalent Course(s): CHDV 20300, NSCI 21015

PSYC 20400. Cognitive Psychology. 100 Units.

Viewing the brain globally as an information processing or computational system has revolutionized the study and understanding of intelligence. This course introduces the theory, methods, and empirical results that underlie this approach to psychology. Topics include categorization, attention, memory, knowledge, language, and thought.

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

Equivalent Course(s): EDSO 20400, NSCI 22015

PSYC 20500. Developmental Psychology. 100 Units.

This is an introductory course in developmental psychology, with a focus on cognitive and social development in infancy through early childhood. Example topics include children's early thinking about number, morality, and social relationships, as well as how early environments inform children's social and cognitive development. Where appropriate, we make links to both philosophical inquiries into the nature of the human mind, and to practical inquiries concerning education and public policy.

Instructor(s): K. O'Doherty Terms Offered: Spring

Note(s): CHDV Distribution, B

Equivalent Course(s): EDSO 20500, CHDV 25900

PSYC 20600. Social Psychology. 100 Units.

This course introduces students to the field of social psychology - the scientific study of how people think about, feel about, interact with, influence, and relate to one another. Topics covered include self and social perception, social influence, beliefs and attitudes, altruism, and intergroup processes. Where relevant, we will discuss if and how findings in social psychology can be applied in real-world contexts such as health, work, and relationships. Instructor(s): S. Oishi, Autumn; A. Light, Spring Terms Offered: Autumn Spring Equivalent Course(s): CHDV 26000

PSYC 20700. 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): K. Ledoux Terms Offered: Winter

Equivalent Course(s): PSYC 30700, NSCI 20140

PSYC 20850. Introduction to Human Development. 100 Units.

This course introduces the study of lives in context. The nature of human development from infancy through old age is explored through theory and empirical findings from various disciplines. Readings and discussions emphasize the interrelations of biological, psychological, and sociocultural forces at different points of the life cycle.

Instructor(s): S. Numanbayraktaroglu Terms Offered: Autumn

Prerequisite(s): CHDV majors or intended majors.

Note(s): Required Course for Comparative Human Development Majors. All students must sign up for a discussion section.

Equivalent Course(s): HLTH 20000, CHDV 20000

PSYC 21100. Human Development Research Design. 100 Units.

The purpose of this course is to expose CHD majors in college to a broad range of methods in social sciences with a focus on human development research. The faculty in Comparative Human Development is engaged in interdisciplinary research encompassing anthropology, biology, psychology, sociology, and applied statistics. The types of data and methods used by faculty span the gamut of possible methodologies for addressing novel and important research questions. In this course, students will study how appropriate research methods are chosen and employed in influential research and will gain hands-on experience with data collection and data analysis. In general, the class will meet as a whole on Mondays and will have lab/discussion sections on Wednesdays. The lab/discussion sections are designed to review the key concepts, practice through applying some of the methods, and prepare students for the assignments. Students in each section will be assigned to small groups. Some of the assignments are group-based while others are individual-based.

Instructor(s): C. Galli Terms Offered: Spring

Note(s): Required Course for Comparative Human Development Majors

Equivalent Course(s): EDSO 20100, SOCI 20549, HLTH 20100, CHDV 20100

PSYC 21116. The Development of Social Cognition. 100 Units.

Our species is notably social, with both positive and negative consequences: we thrive in groups, yet we often discriminate against those who are not like us. This course focuses on social cognitive development in childhood, with the goal of understanding the foundations of human nature in a social context. Topics include theories of mind, social learning, motivation and achievement, moral development, social categorization and the origins and development of our tendency to divide the world into "us" versus "them."

Instructor(s): K. Kinzler Terms Offered: Winter

Equivalent Course(s): PSYC 31116

PSYC 21150. 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: Winter

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

PSYC 21260. Psychology Research Incubator. 100 Units.

This course is designed for anyone interested in carrying out psychological research; it is strongly advised for students considering Honors in Psychology. Answering questions about how minds work, how choices are made, or about the forces that shape behavior depends on understanding how to carry out research. This course guides you through the process of developing an original research project of your own design. Whether your questions come from research you are already working on in a lab or reflect independent interests of your own, this course

will lead you through the process of designing an empirical study to address an issue that interests you. From the first stages of turning an idea into a study, you will work either individually or with a group to develop your research questions scientifically to address issues that can contribute new knowledge to psychological science. In this course you will learn to: (1) generate testable hypotheses that are informed by prior research, (2) design and implement methods for testing these hypotheses, and (3) write an IRB protocol in order to collect data. The course culminates with drafting a research grant proposal so you will be well positioned to take advantage of the increased funding opportunities available for undergraduate research within the university and beyond.

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

Prerequisite(s): PQ: PSYC 20200 Psychological Research Methods or approval of the instructor.

PSYC 21690. Media and Psychology: Causes and consequences of media use across the lifespan. 100 Units.

This course will examine the influence of media on individuals and groups from both a developmental and socio-cultural perspective. Topics will include young children's academic and social-emotional skill learning from television, video and tablets; adolescents' social media identities and experiences including cyber-bullying; media influences on adults' health behaviors, aggression, prejudice, and more. Students will engage in both qualitative and quantitative research on media and psychology as part of this course.

Instructor(s): K. O'Doherty Terms Offered: Winter

PSYC 21750. Biological Clocks and Behavior. 100 Units.

This course will address physiological and molecular biological aspects of circadian and seasonal rhythms in biology and behavior. The course will primarily emphasize biological and molecular mechanisms of CNS function, and will be taught at a molecular level of analysis from the beginning of the quarter. Those students without a strong biology background are unlikely to resonate with the course material.

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

Prerequisite(s): A quality grade in PSYC 20300 Introduction to Biological Psychology. Additional biology courses are desirable. Completion of Core biology will not suffice as a prerequisite.

Equivalent Course(s): HLTH 21750, BIOS 24248, NSCI 21400

PSYC 22002. Cognitive Models. 100 Units.

A foundational principle of cognitive science is that the workings of cognitive systems--whether biological, mechanical, or digital--can be productively represented by the operation of formal computational models. This course provides a survey of popular modeling frameworks (such as Bayesian rational agents, connectionist networks, dynamical systems, etc.), as well as the cognitive phenomena that these models have been used to simulate. We will discuss the theoretical commitments of these models, assess strengths and weaknesses of each framework for addressing different types of cognitive questions, and analyze the implications of these models' successes and failures for our understanding of the mind.

Instructor(s): Yu Ji, Eugene Terms Offered: Spring

Equivalent Course(s): LING 20002, COGS 20002, DATA 20002, LING 30002

PSYC 22350. Social Neuroscience. 100 Units.

Humans are intensely social animals. Our lives are intertwined with other people, and our well-being depends on others. Social neuroscience examines how the brain mediates social cognition and behavior. It spans diverse species, disciplines (evolutionary biology, neuroscience, anthropology, psychology, behavioral economics, sociology, and political science), and levels of analysis across the biological organization. Social neuroscience provides an overarching paradigm to investigate social cognition and behavior and to determine where we as a species fit within a broader biological context. A wide range of topics will be examined, including social connections and friendship, sex, mating and aggression, cooperation and social preferences, social and environmental influences on decision-making and behavior, empathy, social contagion, and group coalitions. Interdisciplinary analyses, by integrating approaches from social sciences and biological sciences, significantly expand our knowledge and have the potential to improve our social and living conditions.

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

Equivalent Course(s): ECON 21830, CHDV 22350, BIOS 24137, HLTH 22350

PSYC 22555. Cognitive Development. 100 Units.

In the first years of life, children's cognition undergoes dramatic qualitative and quantitative change. For nearly a century, experimental psychologists have sought to understand the nature and causes of these developmental changes. This course surveys classic and current approaches to the study of cognitive development in infants and children.

Instructor(s): S. Levine, A. Shaw Terms Offered: Spring

Prerequisite(s): Undergraduates should have taken at least one course in developmental psychology, such as PSYC 20500.

Equivalent Course(s): PSYC 42550

PSYC 22580. Child Development in the Classroom. 100 Units.

This discussion-based, advanced seminar is designed to investigate how preschool and elementary students think, act, and learn, as well as examine developmentally appropriate practices and culturally responsive teaching in the classroom. This course emphasizes the application of theory and research from the field of psychology to the realm of teaching and learning in contemporary classrooms. Course concepts will be grounded in empirical research and activities geared towards understanding the nuances and complexities of topics such as

cognitive development (memory, attention, language), early assessment systems, standardized testing, "mindset", "grit", exercise/nutrition, emotion regulation, and more.

Instructor(s): Kate O'Doherty Terms Offered: Autumn

Equivalent Course(s): EDSO 22580, CHDV 22580

PSYC 22620. Cognition and Overcoming its Limits. 100 Units.

The brains of humans and animals are remarkably flexible. We can juggle many tasks, sort through a barrage of information vying for our attention, become an expert in a vocation or hobby of choice, and remember a large amount of information while responsibly forgetting that which is unimportant. But cognition also has limited capacity, and humans expend a lot of effort trying to enhance that capacity in health and disease. This course will examine the neural mechanisms that enable and limit cognitive processes like learning, memory and decision making. We will also study behavioral and clinical efforts to enhance cognition in health and disease. These topics are very active areas of research, with new discoveries published every week. We will therefore focus on the primary literature. Each class will contain a discussion of an original research article, a wider ranging conversation about related issues and findings, and an overview of the next topics. We will focus on studies that use animal models to relate the activity of neurons to cognition and on behavioral and imaging work in humans. Students will gain experience reading and critiquing original research, presenting research findings to their peers, relating current research to a body of knowledge, and, through a culminating project, using writing or another medium to communicate neuroscience findings to a broad audience.

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

Prerequisite(s): NSCI 20101-NSCI 20130, or consent of instructor

Equivalent Course(s): NSCI 22600

PSYC 23000. 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: Winter

Prerequisite(s): Undergraduates must be in third or fourth year.

Note(s): CHDV Distribution: B, C

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

PSYC 23030. Introduction to Python Programming in the Behavioral Sciences. 100 Units.

This course introduces you to basic computer programming principles and their application to common problems in Psychology research such as creating simple experiments, data acquisition, and basic analysis. We will focus on the high-level programming language Python. Over a series of lectures and try-it-yourself sessions, you will learn to use Python to display stimuli and record responses, process, analyze, and plot data. The course is designed for students with little to no background in computer programming but wish to take advantage of the power it affords to ask research questions in the behavioral and biological sciences.

Instructor(s): A. Bakkour, J. Yu Terms Offered: Autumn. In 2025-26, an undergraduate section will not be offered.

Prerequisite(s): Consent required for all but Psychology PhD students.

Equivalent Course(s): NSCI 23355, PSYC 43030

PSYC 23165. Interdisciplinary Perspectives on Morality. 100 Units.

Morality is essential for societal functioning and central to human flourishing. It has evolved to facilitate group living, regulate social interactions, minimize aggression, and promote cooperation beyond kinship. We are motivated by morality because it is advantageous at the individual level - a non-zero-sum game. These moral concerns are not located in an abstract world characterized by ivory tower speculations. We are inherently and deeply social animals, and nearly all manifestations of morality involve, build upon, influence, and often govern our relationships with others. The ability to think and act in accordance with moral norms is a hallmark of our species. The course is organized into 9 weeks, covering specific topics in morality from a multidisciplinary perspective, including evolutionary anthropology, psychology (developmental, cognitive & social), cognitive neuroscience, and behavioral economics.

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

Equivalent Course(s): PSYC 33165, KNOW 33165

PSYC 23200. Introduction to Language Acquisition. 100 Units.

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 23900, LING 21600, EDSO 23200

PSYC 23249. Animal Behavior. 100 Units.

This course introduces the mechanism, ecology, and evolution of behavior, primarily in nonhuman species, at the individual and group level. Topics include the genetic basis of behavior, developmental pathways, communication, physiology and behavior, foraging behavior, kin selection, mating systems and sexual selection, and the ecological and social context of behavior. A major emphasis is placed on understanding and evaluating scientific studies and their field and lab techniques.

Instructor(s): J. Mateo Terms Offered: Winter, odd years

Prerequisite(s): Three quarters of a Biological Sciences Fundamentals Sequence.

Note(s): CHDV Distribution: A E.

Equivalent Course(s): CHDV 23249, BIOS 23249

PSYC 23360. Methods in Gesture and Sign Language Research. 100 Units.

In this course we will explore methods of research used in the disciplines of linguistics and psychology to investigate sign language and gesture. We will choose a set of canonical topics from the gesture and sign literature such as pointing, use of the body in quotation, and the use of non-manuals, in order to understand the value of various effective methods in current use and the types of research questions they are best equipped to handle.

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

Equivalent Course(s): CHDV 33360, PSYC 33360, LING 23360, CHDV 23360, LING 33360

PSYC 23580. What is a good life? A psychological perspective. 100 Units.

What is a good life?

Instructor(s): S. Oishi Terms Offered: Autumn

Equivalent Course(s): PSYC 33580

PSYC 23660. 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 33662

PSYC 23820. 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. Vogel Terms Offered: Winter

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

Equivalent Course(s): NSCI 21600, PSYC 33830

PSYC 23860. Beyond Good and Evil: The Psychology of Morality. 100 Units.

Morality is a mysterious and possibly uniquely human capacity that influences how we make decisions in a number of domains. In this course we will explore how and why human beings have the moral intuitions that they do and also where these intuitions come from-what about our moral intuitions are built in and how are these intuitions shaped by experience? To achieve these goals, we will discuss literature from developmental, social, and evolutionary psychology, as well as some literature from behavioral economics and experimental philosophy. We will briefly review the history of moral psychology, but spend the bulk of our time discussing contemporary debates and findings from research on moral psychology.

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

PSYC 24010. Systems Neuroscience. 100 Units.

This course covers vertebrate and invertebrate systems neuroscience with a focus on the anatomy, physiology, and development of sensory and motor control systems. The neural bases of form and motion perception, locomotion, memory, and other forms of neural plasticity are examined in detail. We also discuss clinical aspects of neurological disorders.

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

Prerequisite(s): NSCI 20101, NSCI 20111 or consent of instructors

Equivalent Course(s): NSCI 20130, BIOS 24130

PSYC 24060. 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). This course is cross-listed with the McKeon Center in the UChicago College.

Instructor(s): A. Henly; H. Nusbaum Terms Offered: May be offered 2025-2026

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

Equivalent Course(s): KNOW 24050, BPRO 24050, PSYC 34060, CHDV 24050, RLST 24055

PSYC 24090. Prediction in Language Comprehension. 100 Units.

Language tends to follow predictable patterns, from what sounds and words are about to be uttered, to what grammatical structures are likely, to be used to what broader implications are about to be suggested, and more. One prevailing hypothesis is that the human mind can take advantage of this predictability to help maintain the rapid pace of language comprehension. This course will explore critical questions surrounding the nature of prediction processes during language comprehension. What do people predict? How are their predictions constrained? How can we study the inherently internal process(es) of prediction? What are the consequences of prediction? Perhaps most importantly, what do the answers to these questions suggest about the mechanisms and computations of prediction? Readings will primarily consist of contemporary articles from peer-reviewed journals, and class meetings will be a mix of lectures and student-led discussions.

Instructor(s): Melinh Lai Terms Offered: Spring

Equivalent Course(s): COGS 34001, COGS 24001, EDSO 24001, LING 24001

PSYC 24231. Methods in Computational Neuroscience. 100 Units.

Topics include (but are not limited to): relating neural data to behavior, Signal Detection theory, models of vision and artificial neural networks, Information Theory, Generalized Linear Models, dimensionality reduction, classification, and clustering.

Instructor(s): M. Kaufman Terms Offered: Winter

Prerequisite(s): For Neuroscience Majors: NSCI 20130, BIOS 26210 and BIOS 26211 which must be taken concurrently, or consent of instructor.

Equivalent Course(s): CPNS 34231, NSCI 23700

PSYC 24450. Foundations of Neuroscience. 100 Units.

This course is an introduction to the broad field of neuroscience. This is a lecture-based course that aims to introduce undergraduate students to concepts and principles that explain how the nervous system is built and how it functions. Examples of thematic areas covered in lectures include: (a) cellular anatomy of the nervous system, (b) development and evolution of the nervous system, (c) sensory systems, (d) motor systems, (e) cognition and behavior.

Instructor(s): D. Freedman, P. Kratsios, M. McNulty Terms Offered: Autumn

Equivalent Course(s): BIOS 24101, NSCI 20101

PSYC 24470. Cellular Neurophysiology. 100 Units.

This course describes the cellular and subcellular properties of neurons including passive and active electrophysiological properties and their synaptic interactions. Readings are assigned from a general neuroscience textbook.

Instructor(s): M. Sheffield Terms Offered: Winter

Prerequisite(s): NSCI 20101 AND MATH 13100, MATH 15100, or MATH 16100 or consent of instructor

Equivalent Course(s): BIOS 24111, NSCI 20111

PSYC 25010. Foundations of Neurolinguistics. 100 Units.

This course will explore the cognitive and neural bases underlying language comprehension and production. Class topics will draw on historic and contemporary research invoking a range of neuroimaging techniques to examine how sound, meaning, and structure are processed in the brain. Students will also explore how theories about the computations and representations underlying human language can inform, and be informed by, the biological constraints imposed by the nervous system. Prior knowledge of neuroscience is not required, but familiarity with linguistic and psychological concepts may be beneficial.

Instructor(s): Lai, Melinh Terms Offered: Autumn

Equivalent Course(s): NSCI 23125, COGS 25001, LING 25001

PSYC 25101. The Psychology of Decision Making. 100 Units.

We constantly make decisions, determine our preferences, and choose among alternatives. The importance of our decisions range from ordering a meal at a restaurant to choosing what college to attend. How do we make such decisions? What are the rules that guide us and the biases that shape our decisions? What determines our preferences? What impacts our willingness to take risks? In this course we consider how the way we go about gathering information affects our judgment, and how the way we frame problems affects our perceptions and shapes the solutions to problems. We learn what governs choice and the systematic way it deviates from normative rules. We consider how we think about the future and how we learn from the past. The course focuses

on the psychology behind making decisions with implications for a wide range of areas such as public policy, law, and medicine.

Instructor(s): B. Keysar Terms Offered: Autumn

Prerequisite(s): Third and fourth-year students only.

PSYC 25120. Child 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. This goal will be addressed through an integrated, multidisciplinary approach. The course will emphasize research on the science of early child development from the prenatal period through school entry. The central debate about the role of early experience in development will provide a unifying strand for the course. Students will be introduced to research in neuroscience, psychology, economics, sociology, and public policy as it bears on questions about "what develops?", critical periods in development, the nature vs. nurture debate, and the ways in which environmental contexts (e.g., parents, families, peers, schools, institutions, communities) affect early development and developmental trajectories. The first part of the course will introduce students to the major disciplinary streams in the developmental sciences and the enduring and new debates and perspectives within the field. The second part will examine the multiple contexts of early development to understand which aspects of young children's environments affect their development and how those impacts arise. Throughout the course, 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 critically examine 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): A. Kalil Terms Offered: Autumn

Prerequisite(s): Attendance on the first day of class is required or registration will be dropped.

Equivalent Course(s): EDSO 25120, CHDV 25120, PBPL 25120

PSYC 25280. The Psychology of Close Relationships. 100 Units.

Close relationships are profoundly important to our lives—they can be an essential source of meaning, happiness, and well-being. At the same time, relationships often go wrong. Why is it that some relationships flourish and others flounder? Throughout this course, we will attempt to answer this question, focusing almost exclusively on romantic relationships. We will chart the time-course of a relationship, from the initial spark of attraction to forming a committed relationship to understanding when and why (some) relationships break up. We will end with broader considerations of how relationships have changed for different groups of people and across history.

Instructor(s): L. Emery Terms Offered: Winter

PSYC 25700. The Psychology of Negotiation. 100 Units.

Negotiation is ubiquitous in interpersonal interactions, from making plans for a trip with friends or family, to determining working conditions with an employer, to managing international conflicts. In this course we examine the structure of different negotiations and the psychology that governs the processes and outcomes of a negotiation. For instance, we consider the role of perceptions, expectations, intuitions, and biases. We evaluate the role of information processing, modes of communication, and power in influencing a negotiated outcome. We see how the psychology of trust, reciprocity, fairness, cooperation, and competition can affect our ability to benefit from an exchange or contribute to the escalation of conflict. To better understand the dynamics of the negotiation process, we learn both through engaging in a variety of negotiation role-plays and relating these experiences to research findings. Third- or fourth-year students only. Priority will be given to fourth-year students.

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

Note(s): It is recommended that students take PSYC 25101 The Psychology of Decision Making before this course, as it provides the conceptual foundations.

PSYC 25750. The Psychology and Neurobiology of Stress. 100 Units.

This course explores the topic of stress and its influence on behavior and neurobiology. Specifically, the course will discuss how factors such as age, gender, and social context interact to influence how we respond to stressors both physiologically and behaviorally. The course will also explore how stress influences mental and physical health.

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

Equivalent Course(s): NSCI 22535, CHDV 25750

PSYC 25850. Early Adversity and Trauma: The Impact of Childhood Experiences on Psychophysiology and Behavior. 100 Units.

How do adverse childhood experiences shape the way children view the world, process social information, and make decisions? What is trauma, and how does it affect us on both a biological and a psychological level? In this course, we'll explore how social stress and adversity influence development, using principles from psychology and neuroscience. We'll examine how our early environments shape our stress responses and what we can do to foster resilience. This course emphasizes hands-on learning and active discussion. You will engage with primary research and empirical studies, exploring seminal work and cutting-edge findings in the field. We'll focus on how to translate complex scientific information for broader audiences, equipping you with skills to communicate

these important ideas to those outside the scientific community. Topics will cover a range of topics including the neurobiology of stress, how experiences of early-life adversity affect brain development, emotions, and the immune system, and the role of environmental factors such as social relationships and community in shaping stress responses and resilience. By the end of the quarter, you'll have a deeper understanding of these critical issues and their real-world implications. Through discussions, readings, and collaborative projects, you'll leave with both a solid academic foundation and the tools to make a meaningful impact beyond the classroom.

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

PSYC 25880. Social Cognition. 100 Units.

How do people make sense of the social world? The objective of this course is to provide advanced students with the skills to understand, analyze, and build models of how people think and behave in social situations. We cover topics such as social perception, categorization, attitude change, decision making, and collective behavior. The course gives equal attention to classic theories and new computational tools from both social psychology and cognitive science.

Instructor(s): X. Bai Terms Offered: Spring

Prerequisite(s): Prerequisites of PSYC 20400 Cognitive Psychology and PSYC 20600 Social Psychology, or approval of the instructor to register.

PSYC 25950. The Psychology of Stereotyping and Prejudice. 100 Units.

This course introduces concepts and research in the study of stereotyping and prejudice. Topics include the formation of stereotypes and prejudice; the processes that underlie stereotyping and prejudice; stereotyping and prejudice from the target's perspective; and prejudice and stereotype reduction. The course will cover a variety of groups (e.g., race, gender, weight, and sexual orientation) and explore the implications of stereotyping and prejudice across a number of settings (e.g., educational, law, and health).

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

Equivalent Course(s): RDIN 25950

PSYC 26010. Big Data in the Psychological Sciences. 100 Units.

Innovative research in Psychology has been pushing the bounds of traditional experiments through the usage of "Big Data", where experiments are conducted at humungous scales—at the levels of thousands to millions of participants, images, or neurons. With these developments in the field, fluency in these new technologies, methods, and computational skills are becoming increasingly important. In this course, students will develop an understanding of these new directions, and will learn practical plug-and-play tools that will allow them to easily incorporate Big Data in their lives and research. We will also discuss the looming ethical issues and societal implications that come with Big Data. The class will culminate in a final project in which students will be able to collect and analyze their own Big Data.

Instructor(s): W. Bainbridge Terms Offered: Spring

Prerequisite(s): Familiarity with basic statistics and Excel. PSYC 20200 (Research Methods) recommended but not required.

PSYC 26011. Fundamentals of Item Response Theory. 100 Units.

This course offers a deep dive into the theoretical underpinnings and practical applications of contemporary psychometric theory - item response theory (IRT). It will explore how IRT extends classical test theory (CTT) to enhance scaling precision and instrument quality through latent trait modeling. Through a combination of theoretical lectures, hands-on exercises, and software application sessions using R, students will gain a comprehensive understanding of IRT principles and their real-world implications. Major topics include basic theory, models for handling both dichotomous and polytomous response data, estimation of model parameters, information function and standard error of estimation, model-data fit, test construction, differential item functioning, and test equating.

Instructor(s): Yanyan Sheng Terms Offered: Spring. Planned for Spring 2025 and future Spring quarters beyond that.

Prerequisite(s): Course work or background experience in linear and generalized linear regressions; basic understanding of psychometric concepts (e.g., SOSC 36008) is also required or consent of instructor

Equivalent Course(s): SOSC 36011, MAPS 36011, SOSC 26011

PSYC 26100. How to navigate the social world. 100 Units.

How do children navigate the complex and sophisticated social world? This seminar is designed to shed light on this question to help students develop an understanding of the foundations of human nature in social contexts. It will provide an overview of the topics in early social cognition, including psychological reasoning, theories of mind, essentialism, social categorization, moral development, stereotypes and prejudice. It will cover the classic theories and empirical cutting-edge research in social cognitive development, as well as introducing methods, paradigms and research designs in this area.

Instructor(s): L. Bian Terms Offered: Spring. Study abroad in Paris

PSYC 26520. 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 Terms Offered: Autumn

Equivalent Course(s): NSCI 22520, LING 26520, PHIL 26520, PSYC 36520, EDSO 20001, LING 36520, PHIL 36520, COGS 20001, SIGN 26520

PSYC 26580. Adventures in the chemical senses. 100 Units.

Students will learn about the senses of smell and taste in an experiential course. We will combine lectures, reading of primary source materials and field trips to explore Paris through scent and flavor - perfumes, wines and neighborhood walks to experience the unique scents of the city. Laboratory work may include making perfumes, cooking, wine and cheese tasting.

Instructor(s): L. Kay Terms Offered: Spring. Study abroad in Paris

PSYC 27010. Introduction to Psycholinguistics. 100 Units.

This is a survey course in the psychology of language. We will focus on issues related to language comprehension, language production, and language acquisition. The course will also train students on how to read primary literature and conduct original research studies.

Instructor(s): Ming Xiang (Autumn), Monica Do (Spring) Terms Offered: Autumn Spring

Equivalent Course(s): COGS 22013, LING 27010

PSYC 27350. Introduction to Black Psychology. 100 Units.

Psychological research often presents the experiences of Black Americans using a narrow, one-dimensional, and deficit-based lens. Further, many in society overlook or are unaware of the critical contributions Black psychologists have made in shaping federal policies many Americans benefit from today. In response to these concerns, this course will introduce students to relevant psychological scholarship by drawing from both historical and current arguments that center questions of identity development, wellbeing, goodness, and cultural strengths already present within Black communities. The goals of this course are to examine factors that inform the racialized lived experiences of Black Americans across the lifecourse, while also interrogating the structural forces that impede quality of life and other key health-related outcomes overtime.

Equivalent Course(s): CHDV 27500, RDIN 27501, SSAD 27500

PSYC 27950. 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, PSYC 37950, CHDV 27950, ECON 14810

PSYC 28420. Insight and Creativity. 100 Units.

Human problem-solving and creativity are frequently cited as the workhorses of progress across many different fields of science and engineering. This course surveys classic and recent literature exploring the cognitive and neural mechanisms underlying problem solving and creativity. Students taking this class will: (1) develop critical thinking skills in evaluating psychological experiments, arguments, and practices commonly used in research on problem-solving and creativity; (2) develop an appreciation of the complexity of the research on problem-solving and creativity; and (3) be able to articulate the various ways researchers think and model the mechanisms underlying problem-solving and creativity at both a cognitive and neural level.

Instructor(s): S. Heald Terms Offered: Autumn

PSYC 28520. 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.

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

Equivalent Course(s): DATA 20602, SOCI 20602, MACS 20267, PSYC 38520, SOCI 40267, MACS 30267, HIST 49307

PSYC 28791. Behavioral Science and Public Policy. 100 Units.

Many policies are aimed at influencing people's behavior. The most well-intentioned policies can fail, however, if they are not designed to be compatible with the way people actually think and make decisions. This course will draw from the fields of cognitive, social, and environmental psychology to (1) examine the ways in which

human behavior deviates from the standard rational actor model typically assumed by economics, and (2) provide strategies for improving the design, implementation, and evaluation of public-facing policies. The basic premise of this course is that a foundational understanding of human behavior can lead not only to more effective policies, but enhanced decision-making and well-being.

Instructor(s): K. Wolske Terms Offered: Spring

Equivalent Course(s): PBPL 28791

PSYC 28810. From Fossils to Fermi's Paradox: Origin and Evolution of Intelligent Life. 100 Units.

The course approaches Fermi's question, "Are we alone in the universe?," in the light of recent evidence primarily from three fields: the history and evolution of life on Earth (paleontology), the meaning and evolution of complex signaling and intelligence (cognitive science), and the distribution, composition and conditions on planets and exoplanets (astronomy). We also review the history and parameters governing extrasolar detection and signaling. The aim of the course is to assess the interplay between convergence and contingency in evolution, the selective advantage of intelligence, and the existence and nature of life elsewhere in the universe - in order to better understand the meaning of human existence.

Instructor(s): P. Sereno; L. Rogers; S. London Terms Offered: Winter

Prerequisite(s): PQ: Third or fourth-year standing. This course does not meet the requirements of the Biological Sciences major. Prerequisite(s) for BIOS 13142 only: BIOS 10130 or BIOS 10140. For BIOS 13142: NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

Equivalent Course(s): ASTR 18700, BIOS 13142, BPRO 28800

PSYC 28962. 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): PSYC 36008, MAPS 36008, CHDV 26008, SOSC 36008, CHDV 36008, SOSC 26008

PSYC 29200. Undergrad Rdgs: Psychology. 100 Units.

Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading. Only one independent study course may count toward the twelve courses required of students majoring in psychology.

Terms Offered: Autumn Spring Summer Winter

PSYC 29700. Undergraduate Research in Psychology. 100 Units.

Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading. Only one independent study course may count toward the twelve courses required of students majoring in psychology.

Terms Offered: Autumn Spring Summer Winter

PSYC 29800. Honors Seminar: Psychology. 100 Units.

This course is a reading and discussion of general papers on writing and research, and individual students present their own projects to the group. A literature review, data from ongoing or completed empirical projects, or portions of the thesis paper itself can be presented. Students are expected to give thoughtful feedback to others on their presentations and written work.

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

Note(s): Open to third- or fourth-year students who are majoring in psychology and have begun their thesis project.

