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:

1. 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.
2. 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.
3. 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.
4. Students are required to present their findings in Spring Quarter of their fourth year at an honors day celebration.
5. 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/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 Terms Offered: Autumn

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.
Equivalent Course(s): ENST 20250

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): S. London, 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): 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, Winter; M. Fulcher, Spring Terms Offered: Spring Winter
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): 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: Winter
Note(s): Required Course for Comparative Human Development Majors
Equivalent Course(s): HLTH 20100, SOCI 20549, EDSO 20100, CHDV 20100

PSYC 21109. Concepts and Categories. 100 Units.
Despite how central categories and concepts are in theories of cognition, there is a lack of consensus within the scientific community as to the nature of concepts and categories. This course serves to introduce students to this ever-growing dialogue regarding concepts and categories. During the course we will analyze both classical and current theories of categorization. We will also briefly focus on how the process of categorization may change from infancy to adulthood. From this we will go on to discuss topics regarding the function and use of concepts and categories, as well as how concepts and categories may be acquired and maintained.
Instructor(s): S. Heald Terms Offered: Spring

PSYC 21150. Psychology of Race and 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
Equivalent Course(s): PSYC 31150, RDIN 31150, RDIN 21150

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): K.Ledoux 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: Spring

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, NSCI 21400, BIOS 24248

PSYC 22220. Understanding Inequality as a Psychologist. 100 Units.
Inequality within and across social groups has risen sharply in the past few decades. What are the early traces and psychological mechanisms of this pervasive phenomenon? In this seminar, we will discuss these questions from multiple angles, integrating developmental, social and cognitive psychology. Specifically, this course will cover topics in early social cognition, including social categorization, essentialism, structural reasoning, normative reasoning, stereotypes and prejudice, etc. Students will evaluate past studies throughout the course and propose original research at the end.
Instructor(s): L. Bian Terms Offered: Autumn
Prerequisite(s): Undergraduates must have completed PSYC 20500 Developmental Psychology or gain the consent of the instructor.
Equivalent Course(s): EDSO 32220, PSYC 32220, EDSO 22220

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): BIOS 24137, ECON 21830, HLTH 22350, CHDV 22350

PSYC 22555. Topics in 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: Winter
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): CHDV 22580, EDSO 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 22950. Emergence and Development of Mathematics and Language. 100 Units.
We will discuss the emergence and development of mathematics and language in humans. Among the topics we will discuss are the universality and variation of the development of these systems as well as their resilience in the face of biological and input variations.
Instructor(s): S. Goldin-Meadow, S. Levine Terms Offered: Autumn
Prerequisite(s): Undergraduates must have completed PSYC 20500 or gain the consent of instructor.
Equivalent Course(s): CHDV 32950, EDSO 32950, CHDV 22950, EDSO 22950, PSYC 32950

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): CHDV 21000, CHDV 31000, KNOW 31000, ANTH 24320, ANTH 35110, AMER 33000, CRES 21100, GNSE 21001, PSYC 33000, GNSE 31000

PSYC 23165. Multidisciplinary Perspectives on Morality. 100 Units.
Morality is essential for societal functioning and central to human flourishing. People across all cultures seem to have the same sense about morality. They simply know what morality is, often without being able to concretely define what exactly it means to label something as a moral kind. But when one tries to more precisely and scientifically define what morality is, things become less clear and more complex. As we'll see in the class, the field of morality is incredibly dynamic and characterized more by competing theories and perspectives than by scientific consensus. The past decades have seen an explosion of theoretical and empirical research in the study of morality. Amongst the most exciting and novel findings and theories, evolutionary biologists and anthropologists have shown that morality has evolved to facilitate cooperation and social interactions. Developmental psychologists came up with ingenious paradigms, demonstrating that some elements underpinning morality are in place much earlier than we thought in preverbal infants. Social psychologists and behavioral economists examine the relative roles of emotion and reasoning, as well as how social situations affect moral or amoral behavior. Social neuroscientists are mapping neural and hormonal mechanisms implicated in moral decision-making. The lesson from all this new knowledge is clear: moral cognition and behavior cannot be separated from biology, human development, culture, and social context.
Instructor(s): J. Decety Terms Offered: Spring
Equivalent Course(s): KNOW 33165, PSYC 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): LING 21600, CHDV 23900, 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): BIOS 23249, CHDV 23249

PSYC 23370. Bright and Dark Sides of Empathy. 100 Units.
The experience of empathy is a powerful phenomenon. It motivates prosocial behavior, especially parental care, and facilitates cooperation and group living. As an important aspect of the patient-doctor relationship, empathy is associated with better health outcomes. Yet, empathy is limited and fragile. It is susceptible to many biases and can lead to poor moral decisions. This course invites students to critically explore the science of empathy by examining its scope and its limits. It delves into cutting-edge, interdisciplinary research from the social sciences and the biological sciences to understand the mechanisms and functions of empathy. The topics examined in this course include: The evolution of empathy; The neural and neuro-endocrinological mechanisms; How empathy develops in young children; The impact of biases and implicit attitudes on empathy; The social situations and group dynamics that influence empathy; The lack of empathy in psychopathy and narcissistic personalities; Why and how empathy improves health outcomes in medicine.
Instructor(s): J. Decety Terms Offered: Autumn
Equivalent Course(s): CHDV 23370

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

PSYC 23720. 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
Note(s): satisfies UG category: B and Grad categories: 2, M
Equivalent Course(s): LING 33700, LING 23701, COGS 22009, CHDV 23700, CHDV 33700, PSYC 33720

PSYC 23800. Introduction to Learning and Memory. 100 Units.
This course examines basic questions in learning and memory. We discuss the historical separation and division of these two areas as well as the paradigmatic differences in studying learning and memory. We also discuss basic research methods for investigating learning and memory and survey established and recent research findings, as well as consider several different kinds of models and theories of learning and memory. Topics include skill acquisition, perceptual learning, statistical learning, working memory, implicit memory, semantic vs. episodic memory, and memory disorders.
Instructor(s): A. Bakkour Terms Offered: Spring
Equivalent Course(s): EDSO 23800, NSCI 22415

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, E. Awh Terms Offered: Winter
Prerequisite(s): PQ: NSCI 20101 (Foundations of Neuroscience) is required for Neuroscience majors only.
Equivalent Course(s): PSYC 33830, NSCI 21600

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: Spring

PSYC 23910. 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 33910

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 including philosophy, classics, history, psychology, behavioral economics, medicine, and public policy. 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: Spring
Prerequisite(s): Third- or fourth-year standing.
Equivalent Course(s): RLST 24055, PSYC 34060, CHDV 24050, BPRO 24050

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 24001, LING 24001

PSYC 24133. Neuroscience of Seeing. 100 Units.
This course focuses on the neural basis of vision, in the context of the following two questions: 1. How does the brain transform visual stimuli into neuronal responses? 2. How does the brain use visual information to guide behavior? The course covers signal transformation throughout the visual pathway, from retina to thalamus to cortex, and includes biophysical, anatomical, and computational studies of the visual system, psychophysics, and quantitative models of visual processing. This course is designed as an advanced neuroscience course for undergraduate and graduate students. The students are expected to have a general background in neurophysiology and neuroanatomy.
Instructor(s): W. Wei, J. Maunsell, M. Sherman, S. Shevell Terms Offered: Autumn
Prerequisite(s): NSCI 20101 and NSCI 20111, or consent of instructor

Equivalent Course(s): CPNS 34133, NURB 34133, NSCI 22400, BIOS 24133, PSYC 34133

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: Spring
Prerequisite(s): For Neuroscience Majors: NSCI 20130, BIOS 26210 and BIOS 26211 which must be taken concurrently, or consent of instructor.
Note(s): CB.
Equivalent Course(s): CPNS 34231, BIOS 24231, 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. Sheffield Terms Offered: Autumn
Equivalent Course(s): NSCI 20101, BIOS 24101

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, W. Wei 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 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): CHDV 25120, EDSO 25120, PBPL 25120

PSYC 25280. The Psychology of Close Relationships. 100 Units.
Humans are an innately social species, and our romantic partners, close friends, and family members are arguably the most central features of our social experience. In this seminar, we dive into the psychology of relationships. We will cover topics related to attraction, love, commitment, relationship satisfaction, and relationship dissolution. We will explore not only the factors that predict the success of a relationship, but

will also delve into the ways that relationship partners can affect the individual's sense of self, success, and general well-being. We will focus primarily on romantic relationships, but will also discuss other influential relationships, including friends, family members, and social networks.
Instructor(s): A. Light Terms Offered: Winter

PSYC 25500. 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: Winter

PSYC 25620. How Children Think. 100 Units.
The goal of this course is to help you understand how children's thinking develops from infancy on. We will discuss the content of children's knowledge across a variety of domains and evaluate the major theories and explanations of intellectual growth. We will review and evaluate both classic findings and state-of-the-art research on cognitive development. We will also apply classroom knowledge to real-world issues that pertain to children's cognitive development.
Instructor(s): L. Bian Terms Offered: Spring
Equivalent Course(s): EDSO 25620

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): CHDV 25750, NSCI 22535

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: Spring
Equivalent Course(s): CRES 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 26410. Stereotypes and Prejudice. 100 Units.
Every interaction we engage in with others, whether it's in educational settings, the workplace, or our social circles, is influenced by stereotypes. This course aims to explore how we develop, transmit and question stereotypes. We will critically examine stereotyping theories by evaluating both classic and cutting-edge studies in developmental and social psychology. The ultimate goal is to enhance students' ability to evaluate and analyze the scientific merit of the research on stereotyping and to apply this research to real world social issues.
Instructor(s): L. Bian Terms Offered: Autumn

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): Jason Bridges; Leslie Kay; Chris Kennedy Terms Offered: Autumn
Equivalent Course(s): PSYC 36520, NSCI 22520, COGS 20001, PHIL 36520, PHIL 26520, LING 36520, LING 26520

PSYC 26750. Socio-ecological Psychology. 100 Units.
This is an advanced seminar in social psychology and explores the ways in which socio-ecological factors such as residential mobility, income inequality, and geography affect individuals' thoughts, feelings, and actions, and the way in which individuals' thoughts, feelings, and actions help create particular socio-ecological conditions.
Instructor(s): S. Oishi Terms Offered: Autumn
Prerequisite(s): Undergraduates should have completed PSYC 20600 Social Psychology or gain the consent of instructor to register.
Equivalent Course(s): PSYC 36750

PSYC 26780. Emotion and Motivation. 100 Units.
What are emotions and how do they motivate us? In this course we will explore the universally experienced concept of emotion and how it is fundamentally inseparable from that of motivation. From shared neurobiological mechanisms and evolutionary theory to psychological impacts on behavior, this course will trace the commonalities between emotion and motivation. Topics will include autonomic correlates of emotion, the motivational utility of positive and negative emotions, and interactions with development, cognition, social behavior, and mental health. Interdisciplinary research will be emphasized, particularly in the critical evaluation of current theories and empirical findings. Prior coursework in psychology and/or neuroscience is recommended.
Instructor(s): F. Rockwood Terms Offered: Spring

PSYC 27010. 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): LING 27010, COGS 22013

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. Maestripieri Terms Offered: Autumn
Note(s): CHDV Distribution: Undergraduate subject area: A, Graduate distribution: 1
Equivalent Course(s): CHDV 27950, ECON 14810, PSYC 37950, CHDV 37950

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 28855. Baby Talk: Communication before Language. 100 Units.
What was your first word? Infancy is a period of life defined (functionally and etymologically) by the inability to speak, and the first-word is a significant milestone for caregivers and scientists alike. But how did you get there? Infants typically say their first words around the first birthday; however, infants start communicating long before that through their actions, gestures, and early vocalizations. In this class, we will focus on experimental and quasi-naturalistic research examining infant communicative behavior and expectations-- reaching, pointing, babbling, and more. Running experiments with preverbal infants presents unique methodological challenges, and students in this class will learn about the various methods for doing this research. We might not discover what your first act of communication was, but students in this class will discover the surprising social-communicative competencies of infants. Prerequisites: PSYC 20500 Developmental Psychology, or consent of instructor.
Instructor(s): B. Morris Terms Offered: Winter

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, CHDV 36008, CHDV 26008, SOSC 36008, SOSC 26008

PSYC 28990. Constructing consciousness: How do we go from matter to mind? 100 Units.
How does conscious awareness happen? How does it develop within our lifespans and evolve across them? What other organisms might be conscious, and what might their consciousness be like? How do the qualities of our percepts correlate with their physical causes and our mental states? In this mixed lecture and discussion course we will attempt to answer these questions by studying the neural and psychological processes involved in conscious (and unconscious!) sensory perception, along with several prominent models of the neural basis of consciousness. Requirements will include submitting weekly written responses to readings, actively participating in weekly discussions, and writing a roughly four- to seven-page final paper.
Instructor(s): R. Lange Terms Offered: Autumn
Prerequisite(s): PQ: One of the following courses: PSYC 20300 Biological Psychology; PSYC 20700 Sensation & Perception; NSCI 20111 Cellular Neurophysiology; or NSCI 20130 Systems Neuroscience, or by instructor consent.
Equivalent Course(s): NSCI 21825

PSYC 29120. Human Communication. 100 Units.
Whenever humans get together, communication is bound to emerge. However, we don't call all of these forms of communication (e.g., drawing, pantomime, pointing, etc.) "language". In this course, we will examine historical, academic, and personal notions of what counts as language, exploring the diverse ways humans communicate, and consider how these different how these different forms of conveying meaning might contribute to language. Throughout this quarter we will draw on research from a wide variety of established spoken and signed languages, gestural systems, artificial languages in the laboratory, and newly emerging languages in the world to build a framework of how humans create and use symbols to make meaning. Later in the course we will consider how these different symbols and forms of conveying meaning interact when getting language off the ground, in three different contexts: (1) at the level of the individual acquiring a language, (2) at the level of an individual or group creating language or language-like systems from scratch, and (3) at the level of a community, using and changing a language over generations.
Instructor(s): C. Ferrara Terms Offered: Winter

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 29420. Mate Choice: From Neurons to Evolution. 100 Units.
Mate choice is a complex set of behaviors. It is also a central agent of the evolutionary theory of sexual selection. While natural selection primarily entails adaptations arising from environmental pressures that affect survival, sexual selection occurs through pressures imposed by conspecifics affecting reproductive fitness, such as willingness to socially interact and individual preferences for ornaments and courtship displays. This can give rise to extreme sexual dimorphism and highly sophisticated courtship behaviors, accompanied by complex

mechanisms of multivariate preference formation and evaluative neural processes. This course will explore the psychological and neurobiological processes involved in mate choice and sexual selection, including the factors that influence mating preferences and decisions, the role of sensory systems and cognition in mate selection, and the importance of aesthetics and beauty. This course will also examine the dynamic nature of mate choice, including the role of social and environmental factors, genetic and epigenetic influences, and the impact of early learning and development on mate preferences. We will discuss a wide variety of species, including humans, but with a special emphasis on songbirds.
Instructor(s): A. Savoy Terms Offered: Spring
Prerequisite(s): PSYC 20300 Biological Psychology, or similar course, is suggested but not required.

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.