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/content/undergrad-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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter</th>
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</thead>
<tbody>
<tr>
<td>PSYC 20300</td>
<td>Biological Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20400</td>
<td>Cognitive Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20500</td>
<td>Developmental Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20600</td>
<td>Social Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20700</td>
<td>Sensation and Perception</td>
<td>100</td>
</tr>
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</table>

**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 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**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (or higher)†</td>
<td>200</td>
</tr>
</tbody>
</table>

**Total Units**

200

**MAJOR**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 20200</td>
<td>Psychological Research Methods (by end of third year)</td>
<td>100</td>
</tr>
<tr>
<td>One of the following (by end of third year):</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20250</td>
<td>Introduction to Statistical Concepts and Methods</td>
<td></td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications</td>
<td></td>
</tr>
</tbody>
</table>

**Four of the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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<tr>
<td>PSYC 20300</td>
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<td>PSYC 20700</td>
<td>Sensation and Perception</td>
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<table>
<thead>
<tr>
<th>SIX ELECTIVES +</th>
<th></th>
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</table>

**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 more guidance on honors projects, visit psychology.uchicago.edu/content/honors (https://psychology.uchicago.edu/content/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/content/professional-academic-development-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 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): M. Rosenberg 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 20550. From Data to Manuscript in R. 100 Units.
This course tackles the basic skills needed to build an integrated research report with the R programming language. We will cover every step from data to manuscript including: Using R’s libraries to clean up and reformat messy datasets, preparing data sets for analysis, running statistical tools, generating clear and attractive figures and tables, and knitting those bits of code together with your manuscript writing. The result will be a reproducible, open-science friendly report that you can easily update after finishing data collection or receiving comments from readers. Never copy-paste your way through a table again! The R universe is large, so this course will focus specifically on: The core R libraries, the tidyverse library, and R Markdown. Students will also learn about the use of GitHub for version control.
Instructor(s): N. Dowling Terms Offered: Winter
Prerequisite(s): This is a project-based course. Students must already be in possession of a (partial or whole) dataset for which they would like to create a preliminary research report (e.g., for thesis submission, publication, or similar). No prior programming experience necessary.
Equivalent Course(s): PSYC 30550, MACS 30550, CHDV 20550, CHDV 30550, MAPS 30550

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): Y.C. Leong Terms Offered: Autumn
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, R. Lange, Autumn; R. Lange, Winter. Terms Offered: Autumn 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): R. Shweder Terms Offered: Autumn
Prerequisite(s): CHDV majors or intended majors.
Note(s): Required Course for Comparative Human Development Majors
Equivalent Course(s): HLTH 20000, CHDV 20000

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: Autumn

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: Spring

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): FQ: 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: Winter  
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): NSCI 21400, HLTH 21750, 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: Spring  
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.**  
Human beings are intensely social creatures. Our health and well-being depend on others. 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. The course examines how the brain mediates social cognition and behavior. It spans diverse species and disciplines (evolution, neuroscience, psychology, behavioral economics, political science). A wide range of topics is examined, including behavioral synchrony, friendship, cooperation, social decision-making, social status and hierarchies, empathy, group affiliation and identity, social influence, etc. 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, NSCI 21000

**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 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
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, CHDV 31600, EDSO 23200, PSYC 33200, LING 31600

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 (odd years) Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals Sequence.
Note(s): CHDV Distribution: A E.
Equivalent Course(s): BIOS 23249, CHDV 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, LING 23360, PSYC 33360, CHDV 23360, LING 33360

**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 23510. Blooming, Buzzing Confusion. 100 Units.**
This course examines the social and cognitive mechanisms that drive language learning in the first few years of life. Nearly all children learn the language(s) of their community, despite the fact that human languages and caregiving practices offer immense diversity around the globe. What enables the learning system to adapt so robustly to the environment it finds itself in? We discuss the evidence for and against multiple factors that have been proposed to support language development across the world’s communities. We also critically examine how these ideas intersect with current deficit models of language learning. It is expected that, by the end of the course, students will grasp the basic mechanisms proposed to underlie early language learning.

Instructor(s): M. Casillas Terms Offered: Winter
Note(s): Distribution: B, M
Equivalent Course(s): EDSO 23510, CHDV 23010

**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: Spring

**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 21600, PSYC 33830
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): PSYC 34060, BPRO 24050, RLST 24055, CHDV 24050

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): PSYC 34133, CPNS 34133, NSCI 22400, BIOS 24133, NURB 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): NSCI 23700, CPNS 34231, BIOS 24231

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): 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, W. Wei Terms Offered: Winter
Prerequisite(s): NSCI 20101, and MATH 13100, or MATH 15100, or MATH 16100. Or consent of instructor
Equivalent Course(s): BIOS 24111, NSCI 20111

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: Spring
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 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: Autumn
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: Winter
Equivalent Course(s): CRES 25950

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—comprising 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): J. Bridges; L. Kay; C. Kennedy Terms Offered: Autumn
Equivalent Course(s): PHIL 36520, PSYC 36520, PHIL 26520, LING 26520, NSCI 22520, LING 36520, COGS 20001

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: Winter

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

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): PSYC 37950, CHDV 37950, CHDV 27950, BIOS 29265, ECON 14810
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PSYC 28420. Problem Solving, 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): Yanyan Sheng Terms Offered: Spring
Equivalent Course(s): CHDV 26008, SOSC 26008, CHDV 36008, SOSC 36008

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): Third or fourth-year standing. This course does not meet the requirements of the Biological Sciences major.
Equivalent Course(s): BPRO 28800, BIOS 13142, ASTR 18700

PSYC 28850. The Biological Nature of Psychological Problems. 100 Units.
This course is based on the strong assumption that psychology is a biological science, albeit with elements of the social sciences. The course uses a combination of lectures and classroom discussion of primary and secondary source readings assigned for each class meeting. It presents a strong biological science perspective on individual differences in emotions, motivations, and cognitions that cause distress or interfere with adaptive life functioning, but does so in a non-stigmatizing manner. The course begins with a description and discussion of the nature of psychological problems. The course will survey what is known about the genetic, environmental, and epigenetic bases of such problems and the methods used to study genetic influences and gene-environment interactions. Next, students will review what is currently known about the neural and other biological mechanisms involved in maladaptive individual difference in emotion, motivation, and cognitive processes, with discussion of the methods of studying such mechanisms in humans and nonhumans. The pros and cons of the medical model of ‘mental illness’ will be discussed as the major contrast with the natural science view advocated by the instructor.
Instructor(s): B. Lahey Terms Offered: Spring
Prerequisite(s): BIOS 10130 or BIOS 10140. NO BIOLOGICAL SCIENCES MAJORS OR NON-MAJOR PRE-MED STUDENTS, except by petition.
Equivalent Course(s): BIOS 16120

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): CHDV 26008, SOSC 26008, CHDV 36008, SOSC 36008
PSYC 28990. Constructing consciousness: How do we go from matter to mind? 100 Units.
How does consciousness happen? How can we scientifically study the links between the external world, the activity of our nervous systems, and our experiences? How do our percepts correlate with their physical causes? This reading- and discussion-focused course will engage with these and other big questions by examining the neural substrates and historical studies of perception. You must have taken at least one of the following four classes to register for this course: PSYC 20300 Biological Psychology; PSYC 20700 Sensation & Perception; NSCI 20111 Cellular Neurophysiology; or NSCI 20130 Systems Neuroscience. Requirements for a passing grade will include reading and posting written responses to several papers each week, participating in in-class discussions and peer-led discussions (one of which you will help lead), and writing a roughly three- to seven-page final paper.
Instructor(s): R. Lange Terms Offered: Spring
Prerequisite(s): You must have taken at least one of the following four classes to register for this course: PSYC 20300 Biological Psychology; PSYC 20700 Sensation & Perception; NSCI 20111 Cellular Neurophysiology; or NSCI 20130 Systems Neuroscience.

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.