PSY 1-01 & 1-02 Introduction to Psychology

This course will survey current knowledge of human behavior. It will cover the entire spectrum of behavioral functions and examine the biological, cognitive and social processes that underlie these behaviors. Topics will include the brain and functioning of the nervous system, perception, thinking, learning and memory; conscious and unconscious motivations and emotion; language, intelligence, cognitive, social, and personality development; social perceptions, attitudes and social influence; psychological disorders and their treatment; and mental health. The focus of the course will be on understanding the major theories of human behavior and on understanding the practical and theoretical implications of these positions.

PSY 12 Abnormal Psychology

This course begins with an examination of concepts underlying definitions of abnormality, and includes a consideration of cultural factors. This is followed by an introduction to the adult major psychological and psychiatric disorders. The clinical presentation of personality, schizophrenic, affective, somatoform, substance abuse, sexual and anxiety disorders will be discussed. Relevant research and theory as to causality and treatment will be addressed. There is a strong emphasis on how the clinical psychologist experiences and manages clients with these disorders.

Prerequisites: Psychology 1 or junior or senior standing or consent.

PSY 13 Social Psychology

Social psychology is the scientific study of the way people think, feel, and behave in social situations. It involves understanding how we influence, and are influenced by, other people and the social contexts around us. A primary goal of this course is to introduce you to the theoretical implications of these positions.

Prerequisites: Psychology 1 or junior or senior standing or consent.

PSY 17 Industrial and Organizational Psychology

This course examines how psychology impacts businesses, companies, and non-profit organizations. Topics will include motivation of employees, classical and contemporary approaches to management, what it means to be an effective manager, group dynamics and consumer psychology. Emphasis will be placed on preparing students for the “working world” through the foundations of psychology. As part of the final project, all students will select a current issue in the field of Industrial/Organizational Psychology, present an overview to the class and submit a research paper on the topic.

Prerequisites: Junior or senior standing.

PSY 25 Physiological Psychology

This course will serve as an introduction to the role of the brain in behavior. The course will begin by providing a basic understanding of the way the nervous system works. With this knowledge in hand, the physiological basis of behaviors such as hunger, thirst, sex, aggression, sleep, learning and memory will be explored. Special attention will be paid to recent advances in research in the growing area of biological contributions to mental disorders. This course is not meant for biology, biopsychology majors or for pre-medical students. Those students should take Psychology 103.

Prerequisite: Psychology 1.

PSY 26 Animal Learning and Cognition

This course is an introduction to the study of cognition in animals. Through lectures and classroom discussions, question such as the following will be examined. Do animals think? If so, how do they think without language? How similar are our thoughts in comparison to those of apes or other animals? Do rats use cognitive “maps” to get around their spatial environment? How do bees learn and remember where rich sources of food are located? How do animals communicate information to one another? Why do different species of animals differ so much in their behavior? The course will survey the fundamental principles and theories or information processing and learning in animals. Topic to be examined across different animals include perception, stimulus selection and control, learning and memory processes, orientation in space and time, counting, communication behavior, and self-awareness. This course fulfills the 20-level requirement in the major and the option II requirement in the Cognitive and Brain Science major. It is also the prerequisite for the advanced laboratory course, Psy 46 Animal Learning Lab, which typically is offered in the Spring.

Prerequisite: Psychology 1.

PSY 27 Perception

This course will provide an introduction to the processes that transform physical energies (e.g., light, sound, vibration) into psychological experiences (e.g., seeing objects, hearing noises, feeling textures). These processes are crucial for the basic survival of virtually all animal species and they are also prerequisite to the functioning of "higher" psychological processes such as thinking, socializing, playing games, and appreciating art and music. This semester’s version of the course will focus on visual perception, tactile perception (touch), their relationship to one another and to an observer’s movements and actions (reaching, locomoting, catching balls). Special issues such as the development of perceptual abilities in infants, perceptual systems in animals, pathologies of perception, and perception's role in art and sports will also be incorporated. Class sessions will generally follow a lecture format. However, questions and discussion are encouraged, and demonstrations and guided observations will frequently be utilized. Course work will include reading textbook, web-based, and primary source materials; taking 3 exams; and doing a brief class presentation.

Prerequisites: Psychology 1 or junior or senior standing.

PSY 28 Cognitive Psychology

This survey class examining human information processing systems will take a hands-on approach to exploring questions of how humans process information. In particular, through a combination of lecture and projects, the class will explore how stimulus information is transformed, stored, retrieved, and used. The course explores theoretical models of cognition, considering them in the context of both empirical research and everyday experience. Topics include object recognition, attention, memory, reasoning, wayfinding, language processes, decision making, and problem solving.

Prerequisite: Psychology 1.
PSY 31 Statistics for the Behavioral Sciences

From the behavioral scientist's perspective, statistics are tools that can be used to detect systematic patterns in sets of data, and guide decision-making. In this course you will learn about statistics that allow a researcher to describe and summarize data and distinguish between chance and systematic effects in typical experimental contexts. To facilitate learning through hands-on experience, each student is required to enroll in one of four laboratory sections. Labs will involve application of the concepts and procedures discussed in class that week, and many will involve use of the SPSS statistical package.

Prerequisite: Psychology 1.

PSY 32 Experimental Psychology

This is the basic laboratory course on psychological research methods which serves as the prerequisite for the advanced labs. Students will design, execute, and analyze individual and group experiments designed to familiarize them with the research methods used in psychological investigations. Paper assignments will provide experience with scientific writing in APA format. There are two lectures plus a 2.5-hour laboratory each week. Enrolling in PSY 32A, PSY 32B, or PSY 32C registers you for both the lecture and laboratory components of the course.

Prerequisite: Psychology 31.

PSY 36 Experimental Social Psychology

This course focuses on the process of designing, conducting, interpreting, and presenting empirical research in social psychology. Students will be exposed to several different methods used in social psychological research, with an emphasis on true experiments. The use of these methods will be illustrated through readings and discussions of classic and contemporary research in social psychology. Class projects will provide students with hands-on experience in implementing these techniques. In the main part of the course, students will form research teams with the task of conducting empirical research on a topic of their choice.

Prerequisites: Psychology 13, 31 and 32.

PSY 38 Research Methods in Clinical Psychology

This course will teach the methods of clinical research as well as provide the experience of analyzing data. We will cover topics such as experimental design, diagnostic reliability, epidemiologic methods, research ethics, data analysis using SPSS, and the preparation of research reports.

Prerequisites: Psychology 12 or 15, 31, 32 or 71.

PSY 40 Lab in Physiological Psychology

This laboratory course is designed to introduce students to many of the research techniques employed in physiological psychology. Particular emphasis is placed on the examination of the anatomy and functional dynamics of the central nervous system with respect to behavior. Experiments investigating the physiological basis of feeding behavior, pain sensitivity, learning and memory will be conducted. Techniques to be learned will include stereotaxic surgery, neurohistology, and neurochemical assays. The course will have one lecture meeting per week. Additional laboratory participation is required.

Prerequisites: Psy 25 or 103.

PSY 41 Perception and Cognition Laboratory

This course will examine mental processing using experimental techniques. It will focus on how our minds work when we think, reason, remember, learn, solve problems, perceive objects and understand language. The course will provide an opportunity for participants to learn and use state-of-the-art experimental techniques for studying each of these processes. This experimental work will test current theories of cognitive processing in humans, with particular emphasis on examination of theories and models derived from the fields of cognitive psychology, psycholinguistics, artificial intelligence, and philosophy.

Prerequisite: Psychology 32 and one of the following: 26, 27, 28 or 29.

PSY 53 Engineering Psychology (Co-listed with ENP 53 ME)

This class is an introduction to the principles of Engineering Psychology as they apply to the analysis of human-machine interfaces. Some topics discussed include: the relationships between perception and cognition, design of displays and controls, information theory, and human error. Practical examples are drawn in order to illustrate the application of course material from transportation, organizational behavior, and product design. There is a mid-term, final exam, project presentation and final paper, all of which require the ability to apply class discussions and reading material to answer true/false, multiple choice, and identification/essay exam questions. This course is only offered during the Fall semester.

Prerequisite: Psychology 1 or consent

PSY 58 Psychology of Sports

The purpose of this course is to provide students with an introduction to the application of general psychological theories to sports, and to sensitize students to the special needs and issues of athletes. An equal emphasis will be placed upon theory, research, and applied sports psychology.

Prerequisite: Psychology 1 or junior or senior standing.

PSY 60 Psychology of Leadership

The role of the person, the situation, and their interaction in leadership; characteristics of successful and failed leaders; why intelligent and educated people often fail in leadership; applying principles of leadership to everyday situations; leadership as a decision; the roles of intelligence, creativity, and wisdom in leadership; the roles of skills and attitudes in leadership.

PSY 64 Introduction to Linguistics

The contemporary science of linguistics is concerned with how humans encode their language in their brains, so that they can produce and understand an unlimited variety of utterances in context. This course will begin with a discussion of general properties of language: its cultural and political context and how it contrasts with other forms of communication. It then will turn to the problem of how children learn language and the possibility of a biological basis for the ability to learn language, often termed Universal Grammar. From this background, the course will work out some aspects of the structure of language: morphology (word structure), syntax (sentence structure), phonology (sound structure), and semantics (meaning), making use of problem sets involving English and other languages of the world.

Note: Co-listed w/ Phil 15, Phil 195-02, CD 143-07.
PSY 71 Clinical Methods

This course focuses on the clinical skills and approaches that are required for work with patients with a wide range of psychiatric disorders and psychological problems. Students will learn how to conduct structured clinical interviews and simple mental state examinations. They will also learn how to structure this information to aid in the diagnosis, formulation (in terms of predisposing, precipitating and maintaining causes) and construction of clinical management plans for individual patients/clients. Diagnosis, formulation and management will each be considered in terms of biological, psychological and social factors that can contribute to these disorders. Videos, role play and case histories will be used as teaching aids throughout the course.

Prerequisites: Psychology 12, declaration of major in clinical psychology.

NB. This course is a prerequisite for Psychology 181A&B (Supervised Seminar in Field Work in Psychology). If you intend to do a year-long clinical psychology internship in your senior year, the course must be taken prior to it.

PSY 91 Research in Psychology

Designed for students who wish to participate in an ongoing program of research. The student is expected to do background reading relevant to the research and to participate in as many phases of the research as possible.

Prerequisites: Permission of Instructor.

PSY 97 Readings in Psychology

Students choose a topic of mutual interest to themselves and a professor. The aim is to gain expertise on a selected, important psychological subject. A written document is usually expected. Students must get prior consent of the cooperating professor.

Prerequisites: Permission of Instructor.

PSY 99 Internship in Psychology

Students may obtain psychology department credit for internships at various off campus settings such as laboratories, hospitals, clinics, and schools. Of course, to receive credit in this course the work at the internship must be primarily psychological. (Credit may be obtained through All College 99 if the internship is not primarily psychological but is otherwise academically sound.) Course work relevant to the internship should precede it. Each participant in Psychology 99 must be sponsored by a faculty member in the psychology department who will judge the appropriateness of the internship for psychology credit. A minimum of 12 hours per week for the internship, as well as some written work, is required. The course must be taken Pass/Fail but still may be used as an elective in fulfilling the psychology concentration.

Prerequisites: Permission of Instructor; pass/fail only.

PSY 103 Brain and Behavior

This course, like its companion course, Psychology 25, explores the physiological bases of behavior. It differs from Psychology 25 in assuming that the student has some biology background and would like to go into the neuroanatomical, neurophysiological and neurochemical mechanisms of behavior in more depth. Psychology 103 also focuses on current research in the various areas of Psychobiology and future directions for research and its applications. General topic areas include: the nervous system, vision, neurological disorders, sex, hunger, thirst, sleep, aggression, reward mechanisms and addiction, learning and memory, and psychopathology.

Students who have already taken PSY 25 should not take PSY 103, they should instead select from one of the other advanced courses that focuses on the interaction of physiology and behavior.

Prerequisite: Biology 13 and 14 or equivalent and Psychology 1.

PSY 106 Seminar in Clinical Psychology

Most of this course will focus on the various theories and techniques of psychotherapy through readings and case studies. Other aspects of clinical psychology such as psychological assessment, professional ethics, and pathways towards becoming a psychotherapist will also be considered. Students will be responsible for active participation in a seminar format.

Prerequisites: Psychology 12 and 71, or consent.

PSY 107 Advanced Statistics I

Introduction to probability theory and the logical basis of statistical inference. Binomial and normal models are examined. Elementary signal-detection theory and process-trees are developed. Analysis of variance models are introduced with consideration of their implication in research design.

Prerequisite: Psychology 31, or graduate standing.

PSY 119 Family Dynamics and Therapy

This course examines theories and research relating to family dynamics and treatment. The perspective taken will be that of the family as a system, exploring the forces within the family that lead to, and inhibit, change and conflict. We will examine what makes some families get "stuck" and how various treatment approaches attempt to free them up, and how particular family styles are hypothesized to be associated with particular difficulties (e.g., delinquency, anorexia, schizophrenia).

Prerequisite: Psychology 12 or permission of Instructor.

PSY 126 Origins of Cognition

This seminar-style course will focus on the evolution and development of "uniquely" human cognitive behaviors, such as language, counting, tool-using, imitation, theory of mind, and deliberate deception. How did humans come to have these abilities? When and under what pressures did they evolve? What kinds of evidence can we use to infer these abilities on the part of individuals and species now extinct? In addition to considering their evolution, we will also address the development of the behaviors during infancy and early childhood, as current thinking suggest that evolution and development are intertwined in important ways. Finally, we will consider whether other species may exhibit similar behaviors, as certain animal abilities are often used for reference points in theorizing about human evolution and infant development. Course work will involved reading original course materials, and class sessions will include discussion, debate, videos, and student presentations centered on these materials. The course is appropriate for undergraduate students with come background in at least one of the following: developmental psychology, cognitive psychology, physical anthropology, or animal behavior. The seminar may also be taken for 200-level credit by graduate students with permission.

Prerequisite: One of Psy 9, 11, 26, 28, & Anthro 20, 30, or Bio 130.

PSY 127 Behavioral Endocrinology

The topic for this course is the influence of hormones on behavior and the effect of behavior on hormones. We will consider in detail the interrelationships of hormones and sex, aggression, hunger, thirst, learning, and mood. This will be done both at the level of behavioral analysis and at the level of neuroendocrine mechanisms. The course
will be about half lecture and half seminar in format and the last part of the seminar section will include presentations by the students on topics in Behavioral Endocrinology of their choice.

**Prerequisite:** Psychology 25 or 103, and 32.

### PSY 128 Nutrition and Behavior (Co-listed with Nutrition 128)

This advanced seminar examines the bidirectional effects of food consumption and behavior. Students will develop their knowledge base and critical analysis skills in this course. The seminar begins with the study of nutrition and psychological processes and then delves into more specific topics such as: dietary preferences, obesity, eating disorders, potential role of food in pain and pleasure, potential effects of food additives, and the effects of diet on cognition and sports performance. The format includes lectures, discussions, and student presentations. Readings are taken from textbooks, journal articles and popular press articles. The course is appropriate for juniors, seniors, and graduate students and is cross-listed with Nutrition 128.

**Prerequisite:** Psychology 25 or 103, and 31 or 32.

### PSY 129 Cognitive Neuroscience

Psychology 129 will be an in depth exploration of several topic areas concerned with the neuronal basis of human mental processes. These will include: perception, memory, language, attention and consciousness. The class format will combine lecture (background information on a topic) and seminar/discussions.

**Prerequisites:** Psy 9 or Psy 28 or 29.

### PSY 135 Leadership and Group Dynamics

This advanced social psychology seminar familiarizes students with models of leadership and leadership styles, and examines the influence of group processes on effective leadership. Group behaviors such as communication, use of power, performance, decision-making and conflicts are tested in light of changes in organizations and cross-cultural perspectives. Through class exercises, simulations, demonstrations and class presentations students will have the chance to gain perspective on their own leadership skills and improve their interactions in groups.

**Prerequisites:** Psychology 13, or permission of instructor.

### PSY 139 Social Cognition

Psychologists interested in social cognition seek to examine the cognitive processes underlying human thought and interaction. This is an advanced course in social psychology where we will focus on a limited number of topics compared to that typically covered in an introductory social psychology course. The goal of the course is to help you to become more fluent in the issues in social cognition research.

**Prerequisite:** Psy 13, 31, and 32 or permission of instructor.

### PSY 142 Seminar in Affective Neuroscience

Advanced seminar on the systems-level brain bases of emotion. Topics usually include basic theories of emotion, positive and negative affect, hemispheric asymmetries, emotional memory, emotion regulation, and selected topics in common forms of psychopathology such as depression.

**Prerequisite:** Psy 32; Psy 25 or 29; meets concurrently w/Psy 242.

### PSY 148 Cognitive Neuroscience of Learning and Memory

Advanced seminar on the brain basis of human learning and memory. Topics include amnesia, memory encoding and retrieval, conscious and nonconscious learning and memory, neural plasticity, knowledge representation, and spatiotemporal neuroimaging of brain systems for learning and memory.

**Prerequisites:** Psy 32 and one of the following: Psy 25, Psy 27, Psy 29, Psy 103, Psy 124, Psy 129, or Biology 134; or consent.

### PSY 149 Psychology of Language

This course will examine the mental processes and representations involved in language production and comprehension. Drawing from a wide range of methodologies (including psycholinguistic experimentation, neuro-imagining, computational simulation, and evidence from brain damage) we will explore where language is processed in the brain, how concepts and words are organized in long-term memory, and how the mind balances the demands of storage vs. computation. We will also consider how language relates to other areas of cognition by examining the elements of language that are common across modalities (e.g. spelling and sign language), the evidence for an innate language capacity, and the arguments for and against the modularity of the language faculty.

**Prerequisites:** Psy 25, 27, 28, or 29, and 32 or consent.

### PSY 150 Semantics

This course concerns the structure of meaning as it is encoded in human language and processed by the human brain. Topics include: mentalistic theories of sense and reference, word meanings, combining word meanings in phrasal meanings, aspects of meaning not conveyed by words.

**Prerequisites:** Phil 15 or consent. Co-listed w/ Phil 111.

### PSY 181 A and B Supervised Seminar in Field Work

This is a unique opportunity in which senior psychology/clinical majors participate in a year-long internship in psychiatry or psychology clinics and/or mental health/human service facilities in the Boston area. Students spend 12-16 hours per week at their placement for two semesters. Some opportunities for clinical research are also offered. Each week, students meet as a group with their professor. In these seminars, their clinical and clinical research experiences are discussed and analyzed; students present clinical work and case histories of individual clients and patients; all aspects of diagnosis and clinical management (ranging from psychotherapy to medication) are discussed. By the end of this seminar students will gain important insights into clinical work and research in a range of mental health/human service settings. This is an ideal opportunity for students interested in medical school, clinical psychology graduate programs, clinical research and all other careers involving work within the field of mental health and related disciplines.

Cap for each class: 10 - 15 students.

**Prerequisites:** (a) Psychology 12; (b) 71; (c) Psychology 38 or 32 or 106 or permission of instructor, senior clinical psychology majors.

**Note:** Students needing a senior internship must attend a meeting that will be held in April.
PSY 191 Individual Research in Psychology

Advanced students have the opportunity to work out the design and execution of a research study. Students generally produce a written document describing their work; often this is a published article. Students must get prior consent of the supervising professor.

Prerequisite: Permission of Instructor.

PSY 195 Senior Seminar in Cognitive & Brain Science/Sr Honors Thesis

Year-long weekly research meeting of seniors in Cognitive and Brain Science major and others involved in a senior honors thesis. Provides a forum for discussion, presentation and planning of senior research projects, as well as exposing students to the range of faculty and graduate student research.

Prerequisite: It is primarily for the Cognitive & Brain Science majors (all seniors in this major have to take it) all students enrolled in Psy 199 (Senior Honors Thesis) also have to enroll in Psy 195.

PSY 197 Supervised Readings in Special Topics

This course requires that the student make arrangements with a professor to supervise the semester's work.

Prerequisites: Permission of Instructor.

PSY 199 Senior Honors Thesis

If you plan to do an honors thesis, you must sign up for Psychology 199 both Fall and Spring of your senior year. Discuss this with a faculty sponsor.

Prerequisite: It is primarily for the Cognitive & Brain Science majors (all seniors in this major have to take it) all students enrolled in Psy 199 (Senior Honors Thesis) also have to enroll in Psy 195.

GRADUATE COURSES

PSY 212 Graduate Core in Psychopathology

This course will explore in depth the current research regarding the phenomenology, classification, biology, and treatment of major psychiatric disorders. The use of cognitive and neuroscience methods to study patients with psychiatric disorders will be emphasized.

Prerequisites: Graduate standing.

PSY 242 Seminar in Affective Neuroscience

Advanced seminar on the systems-level brain bases of emotion. Topics usually include basic theories of emotion, positive and negative affect, hemispheric asymmetries, emotional memory, emotion regulation, and selected topics in common forms of psychopathology such as depression.

Prerequisite: Graduate standing/meets concurrently with Psy 142.

PSY 248 Cognitive Neuroscience of Learning and Memory

Graduate seminar on the brain basis of human learning and memory. Topics include amnesia, memory encoding and retrieval, conscious and nonconscious learning and memory, neural plasticity, knowledge representation, and spatiotemporal neuroimaging of brain systems for learning and memory.

Prerequisite: Graduate student standing or consent.

PSY 261 Seminar on Research/Teaching in Psychology

Emphasizes skills and tasks that are not the primary focus of other graduate courses, in particular, grant writing and the use of computers in experimental psychology. Each student will write and submit a grant application to a funding organization and will complete a computer project related to their area of research.

PSY 291 Individual Graduate Research

PSY 295 Masters Thesis

PSY 297 Ph.D. Dissertation

PSY 401 PT Masters Degree Cont.

PSY 402 FT Masters Degree Cont.

PSY 501 PT Doctoral Degree Cont.

PSY 502 FT Doctoral Degree Cont.

THE STUDENT’S GUIDE TO WRITING WORKSHOP COURSES

Writing Workshop courses or sections meet an extra fifty minutes each week, allowing students to gain a more thorough understanding of course material and to improve their writing.

Writing Workshop courses generally require no additional formal written assignments. Instead, students do more informal, un-graded writing in order to develop questions about course material, examine and refine their thinking, and share their ideas with the instructor and fellow students. When appropriate, instructors may also concentrate upon the more formal aspects of writing and public speaking.

In addition, Writing Workshop courses and sections provide

- Opportunities to meet with the course instructor and other students in a small group to discuss issues that are particularly interesting or confusing.
- Opportunities to get to know the instructor and fellow students.
- Opportunities to become better prepared for the working world by developing critical thinking, writing, and speaking skills.

Writing Workshop courses are recorded on student transcripts, although students do not receive extra credit for participation.