PSY - Psychology

Psychology: PSY

Lower-Division Courses

PSY 301 (TCCN: PSYC 2301). Introduction to Psychology.
Basic problems and principles of human experience and behavior. Three lecture hours a week for one semester, or the equivalent in independent study.

PSY 304 (TCCN: PSYC 2308). Introduction to Child Psychology.
General introduction to physical, social, and cognitive development from conception onward. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 304, 333D, Women’s and Gender Studies 333D, 345 (Topic 6). Prerequisite: Psychology 301 with a grade of at least C.

PSY 305. Introduction to Cognitive Psychology.
Introduction to the study of how people perceive, act, communicate, and reason. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

Introduction to the science of sex and mating. Provides an overview of the psychological, biological, and social factors that contribute to sexual well-being and human sexual attraction. Three lecture hours a week for one semester. Psychology 306 and 346K may not both be counted.

PSY 308 (TCCN: PSYC 2330). Biopsychology.
Introduction to the biological bases of psychological processes and behavior. Overview of the physiology and anatomy of the nervous system, followed by a survey of brain mechanisms of perception, cognition, learning, and emotion; biological perspectives on drug action and mental disease. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

PSY 309 (TCCN: PSYC 2316). Personality.
Research and theory concerning personality structure, dynamics, development, and assessment. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

Recommended for majors who plan to do graduate work in psychology or related fields. Measures of central tendency and variability; statistical inference; correlation and regression. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

Explore the R programming language, data visualization, data wrangling, descriptive statistics (measures of central tendency and variation), measures of association (correlation, regression). Examine inferential statistics including parametric tests (such as t-tests and ANOVA) and non-parametric tests (such as Kruskal-Wallis and chi-squared tests). Three lecture hours a week for one semester. Psychology 317L and 120R may not both be counted.

Theory and research on the analysis of human conduct in social settings. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Psychology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

Upper-Division Courses

PSY 420M. Psychological Methods and Statistics.
Restricted to psychology majors. Explore the basic and intermediate scientific methods and statistical techniques commonly employed in psychological research. Three lecture hours and two discussion hours a week for one semester. Psychology 418 and 420M may not both be counted. Prerequisite: Thirty semester hours of college coursework including Psychology 301 with a grade of at least C and Psychology 317L or 120R with a grade of at least C.

PSY 120R. R Programming for Behavioral Sciences.
Restricted to psychology majors. Introduction to the R programming language. One lecture hour a week for one semester. Psychology 317L and 120R may not both be counted. Prerequisite: Thirty semester hours of college coursework including Psychology 301 with a grade of at least C and credit for one of the following: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Civil Engineering 311S, Chemical Engineering 253K, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Psychology 317, Public Relations 309, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 328M.

PSY 323. Perception.
Theory and research in the ways we extract information from the environment. Three lecture hours a week for one semester. Prerequisite: Psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 253K, Civil Engineering 311S, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

An introduction to perceptual systems, with an emphasis on perception in human and nonhuman primates. Subjects include the physics of perceptual stimuli, the neural processing of perceptual information, the performance of human and other primates in perceptual tasks, and the evolution of perceptual systems. Three lecture hours a week for one semester. Psychology 323P and 341K (Topic: Perceptual Systems: Neurons/Behavior/Evolution) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.
and 418 or 420M with a grade of at least C in each; for others, upper-
division standing. Psychology 301 with a grade of at least C, and one of
the following with a grade of at least C: Advertising 309R, African and
African Diaspora Studies 302M, Biomedical Engineering 335, Chemical
Engineering 253K, Civil Engineering 311S, Economics 329, Educational
Psychology 308, 371, Electrical Engineering 351K, Government 350K,
Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317,
301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306,
318, 320E, 321, 325H, 328M.

**PSY 323S. Sex Differences in Cognition and Perception.**
Examination of facts, theories, and implications of sex differences
in human cognition and perception. Subjects include genetic and
hormonal origins of sex differences, structural differences in the body
and brain, verbal abilities, spatial abilities, learning, memory, sensory-
motor abilities, and the auditory, olfactory, visual, and other sensory
systems. Three lecture hours a week for one semester. Psychology
323S and 341K (Topic: Sex Differences in Cognition and Perception)
may not both be counted. Prerequisite: For psychology majors, upper-
division standing and Psychology 301 and 418 or 420M with a grade
of at least C in each; for others, upper-division standing. Psychology
301 with a grade of at least C, and one of the following with a grade
of at least C: Advertising 309R, African and African Diaspora Studies
302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil
Engineering 311S, Economics 329, Educational Psychology 308, 371,
Electrical Engineering 351K, Government 350K, Mathematics 316, 362K,
Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309,
Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data
Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 323V. Seeing and Acting in a Virtual World.**
Methods of experimentation and discovery for examining one’s own
perceptions and actions in ordinary life. Three lecture hours a week
for one semester. Prerequisite: For psychology majors, upper-division
standing and Psychology 301 and 418 or 420M with a grade of at
least C in each; for others, upper-division standing. Psychology 301
with a grade of at least C, and one of the following with a grade of
at least C: Advertising 309R, African and African Diaspora Studies
302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil
Engineering 311S, Economics 329, Educational Psychology 308, 371,
Electrical Engineering 351K, Government 350K, Mathematics 316, 362K,

**PSY 325K. Advanced Statistics.**
Advanced statistical theory and methods for analysis of behavioral
sciences data; subjects include analysis of variance and covariance,
regression, and nonparametric techniques. Three lecture hours a
week for one semester. Prerequisite: For psychology majors, upper-
division standing and Psychology 301 and 418 or 420M with a grade
of at least C in each; for others, upper-division standing. Psychology
301 with a grade of at least C, and one of the following with a grade
of at least C: Advertising 309R, African and African Diaspora Studies
302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil
Engineering 311S, Economics 329, Educational Psychology 308, 371,
Electrical Engineering 351K, Government 350K, Mathematics 316, 362K,
Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309,
Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data
Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 326K. Principles of Conditioning and Learning.**
Laws of animal and human learning, and the underlying mechanisms.
Three lecture hours a week for one semester. Prerequisite: For
psychology majors, upper-division standing and Psychology 301 and
418 or 420M with a grade of at least C in each; for others, upper-division
standing. Psychology 301 with a grade of at least C, and one of the

This course is used to record credit the student earns while enrolled at
another institution in a program administered by the University's Study
Abroad Office. Credit is recorded as assigned by the study abroad adviser
in the Department of Psychology. University credit is awarded for work
in an exchange program; it may be counted as coursework taken in
residence. Transfer credit is awarded for work in an affiliated studies
program. May be repeated for credit when the topics vary.

**PSY 332. Behavioral Neuroscience.**
Neuroscientific study of behavioral functions: fundamental structure and
function of the human nervous system, sensory systems and perception,
motor systems and behavior, motivation and learning, brain disorders
and maladaptive behavior. Three lecture hours a week for one semester.
Prerequisite: For psychology majors, upper-division standing and
Psychology 301 and 418 or 420M with a grade of at least C in each; for
others, upper-division standing. Psychology 301 with a grade of at least
C, and one of the following with a grade of at least C: Advertising 309R,
African and African Diaspora Studies 302M, Biomedical Engineering
335, Chemical Engineering 253K, Civil Engineering 311S, Economics
329, Educational Psychology 308, 371, Electrical Engineering 351K,
Government 350K, Mathematics 316, 362K, Mechanical Engineering 335,
Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work
318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303,
304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332C. Hormones and Behavior.**
Neuroscientific study of hormones and behavior in animals and
humans. Includes sexual behavior, sexual differentiation, parental
behavior, aggressive behavior, feeding and drinking, stress, learning,
and memory. Three lecture hours a week for one semester. Prerequisite:
For psychology majors, upper-division standing and Psychology 301
and 418 or 420M with a grade of at least C in each; for others, upper-
division standing, Psychology 301 with a grade of at least C, and one of

**PSY 332D. Human Brain Imaging in Psychology.**
Study of human brain imaging technologies such as fMRI and
electrophysiology. Three lecture hours a week for one semester.
Prerequisite: For psychology majors, upper-division standing and
Psychology 301 and 418 or 420M with a grade of at least C in each; for
others, upper-division standing. Psychology 301 with a grade of at least
C, and one of the following with a grade of at least C: Advertising 309R,
African and African Diaspora Studies 302M, Biomedical Engineering
335, Chemical Engineering 253K, Civil Engineering 311S, Economics

**PSY 332E. Ethics, Genetics, and the Brain.**
Discuss the ethical, legal, and societal implications of advances in the understanding of neuroscience and genetics. Three lecture hours a week for one semester. Psychology 332E and 341K (Topic: Ethics, Genetics/ the Brain) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332J. The Developing Brain.**
Explore the process of brain development from prior to fertilization through to old age with focus on the molecular, cellular, neurobiological, and behavioral changes that occur. Three lecture hours a week for one semester. Psychology 332J and 341K (Topic: The Developing Brain) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332M. The Neuroscience of Motivation and Reward.**
Examination of mechanisms of the brain that control behaviors such as incentive motivation, reward, aversion, and addiction. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332P. Neural Plasticity And Behavior.**
Examine basic concepts and current research directions in brain plasticity. Includes theory and research on how animals learn and remember, how brain areas and neurons adapt to life experiences, trauma, injury, and aging and new treatment directions based on neural plasticity principles. Three lecture hours a week for one semester. Psychology 332P and 341K (Topic: Neural Plasticity And Behavior) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332S. Psychology and Neuroscience of Sleep.**
Discuss the scientific literature on neuroscience underlying sleep, psychological influences on sleep, and sleep habits and interventions. Three lecture hours a week for one semester. Psychology 332S and 341K (Topic: Psy and Neuroscience of Sleep) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332T. Biological Clocks and Behavior.**
Explore the role of biological clocks in health and disease. Three lecture hours a week for one semester. Psychology 332T and 341K (Topic: Biological Clocks/Behavior) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332U. Diversity in Cognitive Aging.**
Discuss biological, sociocultural, and environmental factors underlying cognitive aging. Explore how each of these factors dynamically shapes cognitive functioning, brain health, and late-life dementia risk from a life course perspective. Three lecture hours a week for one semester. Psychology 332U and 341K (Topic: Diversity in Cognitive Aging) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 332W. Vision and Action.**
Three lecture hours a week for one semester. Psychology 332W and 341K (Topic: Vision and Action) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-

**PSY 333C. Controversial Issues in Development.**

An exploration of questions in developmental psychology that are currently in dispute. Subjects may include stem cell research, treatment of juveniles in the legal system, physician-assisted suicide, and methods of sex education. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 333D. Introduction to Developmental Psychology.**

Same as Women's and Gender Studies 333D. Physical, social, and cognitive development in humans. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 304, 333D, Women's and Gender Studies 333D, 345 (Topic 6). Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 333E. Identity Formation.**

An introduction to historical theories of and current research on identity, with particular focus on identity development in the domains of occupation, religion, politics and morality, gender, ethnicity, and adoption. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 333F. Fantasy and Reality.**

Examination of how children and adults decide what is real and what is not. Subjects include the fantasy-reality distinction, magical thinking, and religious cognition. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 333G. The Development of Attachment Relationship.**


**PSY 333M. Infant Development.**

Examination of genetic and environmental determinants of social, perceptual, and cognitive development in infants from theoretical and research perspectives. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 333N. Cognitive Development.**

Overview of the development of thinking from infancy through childhood. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 333P. Child Language.**

Examination of theory and research concerning the development of language in the child. Three lecture hours a week for one semester. Linguistics 373 (Topic 1) and Psychology 333P may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for
PSY 333R. Social Development in Children.
Same as Women's and Gender Studies 333R. Development of social behavior (for example, sex typing and aggression) and social relationships. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 333R, Women's and Gender Studies 333R, 345 (Topic 19). Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 333S. Developmental Science of Adolescence.
An in-depth exploration of what it means to be an adolescent - how the brain, hormones and cognitive development change motivation and behavior, and how institutions (schools, governments, police) help or hinder young people's development. Three lecture hours a week for one semester. Psychology 333S and 341K (Topic: Devel Sci of Adolescence) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 333T. Adolescent Development.
Physical, cognitive, social, and personality development during adolescence. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 333W. Moral Development.
An introduction to theory and research on morality. Subjects include culture and morality, Freudian and social learning perspectives on moral development, Kohlberg's theory of morality, challenge to Kohlberg's theory, and cognitive, familial, and emotional influence on morality. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.
a week for one semester. Psychology 337P and 341K (Topic: Language Processing) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 338K. Psychology of Reading.
Theory and research on the reading process and its acquisition. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

Adjustment difficulties during childhood and adolescence: causation and treatment. Three lecture hours a week for one semester. Psychology 339 and Human Development and Family Sciences 342 may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 340M. Industrial Psychology.
A general introduction to organizational behavior and issues in industrial/organizational psychology. Subjects include organizational structure, selection and placement, leadership, job satisfaction, training, and change. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 341K. Selected Topics in Psychology.
Topics of contemporary interest that may vary from semester to semester. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

Topic 4: Health Psychology.
Topic 7: Epidemiology.
Topic 8: Learning and the Brain.
Topic 12: Personality Assessment. Theoretical and methodological issues involved in trying to understand and measure personality.
Topic 14: Robot Cognition.
Topic 15: History of Modern Psychology. A survey of the diverse roots of modern psychology, the competing schools that influenced psychology's development, and the perspectives that guide scholarship in present-day psychology. Psychology 341K (Topic 15) and 341K (Topic: History and Systems of Psychology) may not both be counted.
Topic 16: Psychology of Fundamentalism. Psychological research and theory on religious fundamentalism. Considers the nature of different forms of religious fundamentalism, and possible psychological mechanisms that motivate fundamentalism. Includes topics such as the development of fundamentalism, the movement from fundamentalism to terrorism, and fundamentalism and the family.
Topic 17: Psychology and Religion. An exploration of the psychological processes involved in religion. Discusses seminal psychological theories of religion, such as the work of James, Freud, Jung, and Maslow. Discussion of empirical work includes topics such as the development of religion across the life span, religious experience, conversion, and the effects of religion on mental and physical health.
Topic 18: Language and Thought.
Topic 19: Psychology of Literature. Delves into the relation between literature and psychological research. Addresses this relation in terms of character development, plot devices, and historical influences. Broadly explore why people are interested in reading literature that might be subjective or wholly fictional in nature. Explore the extent to which authors create characters that ‘ring true’ to what psychological science has learned about human nature and how this affects the reader’s enjoyment of the literature. Psychology 341K (Topic: Psychology of Literature) and 341K (Topic 19) may not both be counted.

PSY 343K. Substance Abuse.
Causes of substance abuse: the evolutionary perspective, sex differences, predisposition, biological and cognitive theories; emphasis on food and alcohol. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.
PSY 345. Individual Differences.
Study of person-to-person variation in intelligence, personality, and interests, with an emphasis on genetic and environmental determinants, developmental processes, and their relation to real-world outcomes. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 346K. Psychology of Sex.
Development of sex from genes to human behavior. Three lecture hours a week for one semester. Psychology 306 and 346K may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 350. Motivation.
Theory and research on motivation; biological and social determinants. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 352P. Psychopathology.
Explore biological and social factors in the development and treatment of psychopathology. Three lecture hours a week for one semester. Psychology 352 and 352P may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 353K. Psychopharmacology.
The pharmacology and the neurochemical, neurophysiological, and psychological effects of psychoactive drugs, with regard to their use as therapeutic and behavioral research tools. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M. Psychology 308 or three hours of college coursework in biology is recommended.

Theoretical and critical analysis of the development, nature, and function of the thought process. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 355C. Development of Categories and Concepts.
Study of the historical and contemporary knowledge about the ways that people learn about concepts. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 355D. Animal Cognition.
An introduction to animal intelligence and the evolution of mind. Examines what is known about intelligence in other animals, how intelligence is revealed in social and problem-solving behavior, and the ways in which human intelligence is structured by its evolutionary past. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.
PSY 355E. Psychology of Consciousness.

Introduction to the scientific study of consciousness from the perspective of psychology and neuroscience. Three lecture hours a week for one semester. Psychology 341K (Topic: Psy of Consciousness: Cogneuro) and 355E may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 253K, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.


Cognitive foundations of music in terms of physics of sound, the psychophysics of musical experience, perceptual organization of musical scenes, the perception of time through rhythm, and the ways in which music reflects natural form. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 355N. Cognitive Neuroscience.

Exploration of the link between the brain, mind, and behavior and cognitive neuroscience techniques. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.


Explore cognitive and evolutionary approaches to understanding religion. Examine cutting-edge research on the cognitive science of religion from disciplines including anthropology, psychology, philosophy, and religious studies. Three lecture hours a week for one semester. Psychology 341K (Topic: Cognitive Sci of Relign) and 355Q may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 355R. Reasoning and Decision Making.

Survey of psychological research on how people reason and make decisions. Subjects include mental models, causality, analogy, heuristics, emotion, motivation, culture, and decision making. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 355S. Social Cognition.

Examine major theories and research findings in social cognition. Three lecture hours a week for one semester. Psychology 341K (Topic: Social Cognition) and 355S may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 357. Undergraduate Research.

Supervised research experience. Individual instruction. May not be counted toward a major in psychology. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: At least thirty semester hours of college coursework, Psychology 301 with a grade of at least C, and consent of instructor.

PSY 458. Experimental Psychology.

Techniques of psychological research illustrated in a series of laboratory experiments. Two lecture hours and four laboratory hours a week for one semester. Prerequisite: Upper-division standing, Psychology 301 and 418 or 420M and with a grade of at least C in each, and a University grade point average of at least 3.25.

PSY 158H. Honors Research Tutorial.

Individual instruction. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Concurrent registration in Psychology 379H.

PSY 359. Selected Topics: Readings: Tutorial.

Supervised reading in selected topics of significance; area of intensive study is chosen by the student in consultation with the instructor. Individual instruction. May not be counted toward a major in psychology. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing, Psychology 301 with a grade of at least C, and consent of instructor.
PSY 359H. Honors Research I.
Restricted to students in the Psychology Honors Program. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Psychology 301, and 418 or 420M with a grade of at least C in each; six semester hours of upper-division coursework in psychology; a grade point average of at least 3.50 in psychology courses taken at the University; a University grade point average of at least 3.25; and consent of the honors advisor.

PSY 364. Introduction to Clinical Psychology.
Introduction to techniques of assessment and treatment of psychopathology. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 364F. Forensic Psychology.
Examine the study and practice of psychology as it applies to issues relating to the law and legal system, such as: determination of competency and insanity, expert testimony, jury selection and the social psychology of the courtroom, eyewitness testimony, and false confessions. Three lecture hours a week for one semester. Psychology 341K (Topic: Forensic Psychology) and 364F may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 364M. Mental Illness and the Brain.
Introduction to the brain dysfunction and cognitive impairment often associated with mental illness and how its recognition and assessment can be used to help with differential diagnosis, prognosis, and treatment planning. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 364P. Positive Psychology and the Good Life.
Analyze how to live a more satisfying life based on modern psychological science. Survey the emerging field of positive psychology, including assessment and determinants of well-being; human strengths and virtues; the good life considered from evolutionary, economic, sociological, and cross-cultural perspectives; and applications to issues such as social change. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 364S. Human Sexuality.
Human sexuality from a clinical and evolutionary perspective with a focus on the assessment, diagnoses, and treatment of sexual dysfunctions. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 364T. Multicultural Psychotherapy.
Introduction to multicultural approaches to personality assessment and counseling psychotherapy. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 365D. Behavioral Science, Equity, and Inclusion.
Apply the principles of experimental behavioral science to problems of creating an equitable and inclusive society in the twenty-first century. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 365E. Emotion.
Examination of the scientific literature on the psychology of human and animal emotion. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and

PSY 365G. Gender and Racial Attitudes.
Advanced introduction to the psychological study of gender and racial attitudes in children and adults, with emphasis on the causes, consequences, and revision of an individual's gender and racial stereotypes. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 365L. Advanced Social Psychology.
Experimental research in social psychology, social influence, decision making, affiliation, risk taking, stress, and other subjects. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 371. Learning and Memory.
Analysis of theory and research in learning. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 371E. Psychological Data Science Foundations I.
Introduction to foundational concepts and techniques in data science. Three lecture hours a week for one semester. Psychology 341K (Topic: Psychological Data Sci Fndns I) and 371E may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 371M. Introduction to Machine Learning.
Introduction to the fundamental concepts and algorithms that enable computers to uncover the underlying patterns from different types of behavioral data. Three lecture hours a week for one semester. Psychology 341K (Topic: Intro to Machine Learning) and 371M may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 371N. Natural Human Behavior in the Real World.
Design experiments that will be conducted in the real world, use mobile sensing technology to collect behavioral data, and discover behavioral patterns by analyzing fine-grained data. Conduct a behavioral study with the aim to provide research evidence to overcome the challenges that the real world poses. Three lecture hours a week for one semester. Psychology 341K (Topic: Natrl Human Behav n Real World) and 371N may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

PSY 373N. The Neurobiology of Attention.
Examination of behavioral and brain mechanisms of attention in humans and other animals. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 or 420M with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Advertising 309R, African and African Diaspora Studies 302M, Biomedical Engineering 335, Chemical Engineering 253K, Civil Engineering 311S, Economics 329, Educational Psychology 308, 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, 317L, Public Relations 309, Sociology 317L, Social Work 318, Statistics 301, 309, Statistics and Data Sciences 301, 302, 302F, 303, 304, 305, 306, 318, 320E, 321, 325H, 328M.

**PSY 377P, 677P. Undergraduate Practicum.**

Field experience in applied psychology. Students are supervised by faculty members and by practitioners in community agencies. One lecture hour and ten or twenty hours of fieldwork a week for one semester. May not be counted toward a major in psychology. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of the practicum supervisor.

**PSY 379H. Honors Research II.**

Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Psychology 301 and 418 or 420M with a grade of at least C in each, Psychology 458 and 359H, concurrent registration in Psychology 158H, and consent of the honors advisor.

### Graduate Courses

**PSY 380C. Human Neuropsychology.**

Basic issues in normal and abnormal human brain function reviewed with emphasis on disorders of higher cerebral functioning. Three lecture hours a week for one semester. Prerequisite: Graduate standing, and Psychology 383C or consent of instructor.

**PSY 380F. Fundamentals of Evolutionary Psychology.**

Survey of important theories and research in evolutionary psychology, with emphasis on current problems. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

**PSY 380G. Grant Writing.**

Examine grant writing for fellowships and research funds from a variety of different funding sources. Create and workshop drafts for applications for pre-doctoral fellowships (for example, NSF, NRSA), postdoctoral fellowships, dissertation grants, or general research funds. Generate discussion, contribute peer feedback, draft and revise grant components, and participate in a mock study section. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 380G, 381F, 394V (Topic: Gmt Wrt Natl Sci Fndtn). Prerequisite: Graduate standing.

**PSY 380W. Writing Workshop.**

Explore tools to create and maintain a consistent writing practice and meet research goals. Track writing, discuss challenges and progress in a supportive community, and receive feedback on written work. Three lecture hours a week for one semester. Psychology 380W and 394S (Topic: Graduate Writing Workshop) may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of instructor.

**PSY 381C. Methods of fMRI: From Design to Data Analysis.**

Methods behind all common fMRI data preprocessing steps and data analysis models, including how to properly implement and evaluate their performance. Three lecture hours a week for one semester. Prerequisite: Graduate standing.

**PSY 381D. Advanced Topics in Neuroimaging.**

Addresses the latest developments in the design, analysis, and interpretation of neuroimaging data. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.

**PSY 381E. Introduction to Psychophysiology.**

An overview of the principles, theory, and applications of using physiological measures to study mental processes. Covers the philosophical and theoretical foundations of brain/behavior relations and introduces basic electrical principles and human neurophysiology. A core course option. Three lecture hours a week for one semester. Prerequisite: Graduate standing and consent of instructor.

**PSY 381F. Grant Writing for the National Science Foundation.**

Explore the application and review procedures when requesting funding from the National Science Foundation. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 380G, 381F, 394V (Topic: Gmt Wrt Natl Sci Fndtn). Prerequisite: Graduate standing and consent of instructor.

**PSY 381G. Grant Writing in the Behavioral and Biological Sciences.**

Same as Neuroscience 381G. Introduction to grant writing in the behavioral and biological sciences and development of grant writing skills. Subjects include: finding grant opportunities, planning proposal activities, successful grant writing strategies, and how to talk to grant program officers. Write grant proposals (e.g., proposals to federal agencies such as NSF or NIH) and revise proposals based on peer and instructor feedback. Explore how grant proposals are reviewed by participating in a mock review session. Three lecture hours a week for one semester. Only one of the following may be counted: Neuroscience 381G, 394P (Topic: Grant Writing in the Behavioral and Biological Sciences), Psychology 381G, 394U (Topic: Grant Writing in the Behavioral and Biological Sciences). Prerequisite: Graduate standing and consent of instructor.

**PSY 381H. Professional Development for Careers in Psychological Science.**

Explore professional development issues that arise in academic and non-academic careers for psychological scientists. Three lecture hours a week for one semester. Psychology 381H and 394V (Topic: Proseminar: Professional Development for Academic Psychologist) may not both be counted. Prerequisite: Graduate standing.

**PSY 382E. Area Seminar in Cognitive Science.**

Current issues in cognitive science. Three lecture hours a week for one semester. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing.

**PSY 382F. R Programming in Behavioral Sciences.**

Design reproducible behavioral data analysis using R and RStudio. Emphasis on coding skills to organize, analyze, and visualize data. Three lecture hours a week for one semester. Psychology 382F and 394U (Topic: R Programming Behavioral Sci) may not both be counted. Prerequisite: Graduate Standing.

**PSY 182H. Promoting Wellbeing and Thriving.**

Examine empirically-supported strategies for promoting well-being and thriving through graduate study and beyond. Explore emotions, stress response, coping, gratitude, health behaviors, sleep, resilience, and mindfulness. One lecture hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Graduate standing.
PSY 182K, 282K, 382K. Internship in Clinical Psychology.
Supervised practical experience in clinical assessment and treatment. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester, with practicum hours to be arranged. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Admission to candidacy for the doctoral degree in clinical psychology.

PSY 382V. Neural and Computational Basis of Vision.
Same as Neuroscience 382V. Introduction to the physiology, psychophysics and computational aspects of the visual system. Review linear systems analysis, information theory, Bayesian statistical decision theory, and other relevant mathematical areas. Three lecture hours a week for one semester. Only one of the following may be counted: Neuroscience 380E, 382V, Psychology 380E, 382V. Prerequisite: Graduate standing and consent of instructor.

PSY 383C. Functional Neuroanatomy.
An examination of the anatomy of the brain and spinal cord, emphasizing connections and functions of neural systems. Three lecture hours a week for one semester. Neuroscience 383C and Psychology 383C may not both be counted. Prerequisite: Graduate standing and consent of instructor.

PSY 383E. Area Seminar in Cognitive Neuroscience.
Current issues in cognitive neuroscience. Three lecture hours a week for one semester. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing.

PSY 383M. Fundamentals of Physiological Psychology.
Survey of important theories and research in physiological psychology, with emphasis on current problems. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

PSY 383P. Proseminar: Professional Development.
Explore the hidden curriculum of graduate training and future career prospects. Examine work/life balance, writing skills, grants, and issues to consider while in the job market. Three lecture hours a week for one semester. Prerequisite: Graduate standing and consent of instructor.

PSY 383T. Principles of Sensory and Behavioral Neuroscience.
A proseminar covering the core material on essential topics in sensory and behavioral neuroscience. Three lecture hours a week for one semester. Neuroscience 383T and Psychology 383T may not both be counted. Prerequisite: Graduate standing and consent of instructor.

PSY 384C. Bootstrap Statistics.
Same as Neuroscience 384C. An introduction to modern methods of statistical analysis based on numerical computer simulation. Covers a range of common data analysis situations drawn mainly from the fields of neuroscience and experimental psychology. Techniques include point estimation, two-group and multiple group experiments, regression and curve fitting, and Bayesian analysis. Three lecture hours a week for one semester. Only one of the following may be counted: Neuroscience 384C, 385L (Topic: Bootstrap Statistics), Psychology 384C, 394U (Topic: Bootstrap Statistics). Prerequisite: Graduate standing, an undergraduate statistics course, and consent of instructor.

PSY 384E. Area Seminar in Clinical Psychology.
One lecture hour a week for one semester. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing.

Consideration of problems of analysis and design commonly encountered in psychological research. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 384K, 385J, 394T (Topic: Linear Models: Regression Anova). Prerequisite: Graduate standing, an undergraduate statistics course, and consent of instructor.

Same as Neuroscience 384M. Covers t-test, chi-square, analysis of variance, and nonparametric tests. Three lecture hours a week for one semester. Prerequisite: Graduate standing, an undergraduate statistics course, and consent of instructor.

PSY 384P. Regression Analysis.
Offers thorough coverage of all major aspects of regression. Coverage includes linear model theory and application, polynomial and interaction models, multivariate linear and logistic regression, and all related diagnostics. Three lecture hours a week for one semester. Psychology 384P and 394T (Topic: Regression Analysis) may not both be counted. Prerequisite: Graduate Standing and consent of instructor.

PSY 384Q. Advanced Applied Statistics I.
Coverage of advanced statistical techniques useful in the social sciences and beyond. Specific areas of focus include non-linear regression, robust analysis, mixed-model regression (hierarchical linear models), and principal components/factor analysis. Three lecture hours a week for one semester. Psychology 384Q and 394T (Topic: Advanced Applied Statistics I) may not both be counted. Prerequisite: Graduate standing and consent of instructor.

PSY 184R. Data analysis with R.
Using R for a variety of data analyses following the topics covered in Psychology 384M including: reading data into R, generating graphs, ANOVA, ANCOVA, and regression. One lecture hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Consent of instructor, and registration or credit for Psychology 384M.

PSY 384S. Advanced Applied Statistics II.
Coverage of advanced statistical techniques useful in the social sciences and beyond. Specific areas of focus include semi-parametric regression, categorical data modeling, resampling and permutation techniques, monte carlo simulation, time-to-event analysis, and structural equations modeling. Three lecture hours a week for one semester. Psychology 384S and 394T (Topic: Advanced Applied Statistics II) may not both be counted. Prerequisite: Graduate standing and consent of instructor.

PSY 384T. Structural Equation Modeling.
Introduction to structural equation modeling. Three lecture hours a week for one semester. Psychology 384T and 394T (Topic: Structural Equation Modeling) may not both be counted. Prerequisite: Graduate standing and consent of instructor; and a working understanding of multiple regression analysis.

PSY 185E, 385E. Area Seminar in Developmental Psychology.
Current issues in developmental psychology. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of instructor.

PSY 385J. Linear Models: Regression and ANOVA Methods.
Explores linear modeling from both conceptual and applied perspectives. Focuses on ANOVA, including multi-factor designs, post-hoc testing, and analysis of covariance, as well as on regression, including univariate...
and multivariate regression, polynomial and interaction models, logistic regression, and related diagnostics. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 384K, 385J, 394T (Topic: Linear Models: Regression Anova). Prerequisite: Graduate standing and consent of instructor.

**PSY 385N. Fundamentals of Personality Psychology.**
Survey of important theories and research in personality psychology, with emphasis on current problems. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

**PSY 385P. Fundamentals of Social Psychology.**
Survey of important theories and research in social psychology, with emphasis on current problems. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

**PSY 386D. Multivariate Pattern Analysis.**
Same as Neuroscience 386D. Explores cutting-edge techniques for finding meaningful patterns in large, noisy brain data sets, and how to use these techniques to address a variety of questions in cognitive neuroscience. Three lecture hours a week for one semester. Only one of the following may be counted: Neuroscience 386D, 394P (Topic: fMRI Brain Decoding), Psychology 386D, 387D. Prerequisite: Graduate standing and consent of instructor.

**PSY 386N. Fundamentals of Psycholinguistics.**
Survey of important theories and research in psycholinguistics, with emphasis on current problems. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

**PSY 387C. Human Language Processing.**
An overview of current psycholinguistic research, primarily in the production and comprehension of spoken language by adults. A core course option. Three lecture hours a week for one semester. Psychology 387C and 394U (Topic: Human Language Process) may not both be counted. Prerequisite: Graduate standing and consent of instructor.

**PSY 387E, 387E. Area Seminar in Perception, Brain, and Behavior Psychology.**
Current issues in perception, brain, and behavior psychology. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of instructor.

**PSY 387N. Perceptual Systems.**
Overview of theory and research in visual perception and perceptual information processing. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

**PSY 387S. Principles of Cognitive Neuroscience.**
Introduction of graduate students to the methods, theories, and research of cognitive neuroscience across a broad range of mental domains such as attention, memory, language, and decision making. A core course option. Three lecture hours a week for one semester. Psychology 387R and 387S may not both be counted. Prerequisite: Graduate standing and consent of instructor.

**PSY 388D. Individual Differences Psychology.**
Person-to-person differences in cognitive abilities and personality, with emphases on genetic and environmental influences, developmental processes, and relations to real world outcomes. A core course option. Three lecture hours a week for one semester. Prerequisite: Graduate standing and consent of instructor.

**PSY 188E, 388E. Area Seminar in Social and Personality Psychology.**
Current issues in social and personality psychology. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of instructor.

**PSY 388K. Conference on Special Topics.**
Readings, conferences, and other work on individually selected topics. Conference course. May be repeated for credit. Prerequisite: Graduate standing and twelve semester hours of upper-division coursework in psychology.

**PSY 189E. Area Seminar in Cognition, Brain and Behavior.**
Explore current issues in cognition, brain, and behavior. One lecture hour a week for one semester. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of instructor.

**PSY 389K. Theory and Techniques of Assessment I.**
Introduction to intelligence and personality testing procedures, test interpretation, and ethical issues pertaining to clinical interviewing and testing. Includes instruction and feedback on clinical report writing. Three lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Graduate standing and consent of instructor received prior to registering.

**PSY 389L. Theory and Techniques of Assessment II.**
Clinical interviewing with adults and children. Observation and feedback for test administration and clinical skills. Three lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Graduate standing, Psychology 389K, and consent of instructor.

**PSY 190, 290, 390. Research.**
Individual research. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and twelve semester hours of upper-division coursework in psychology. Students must sign up in the Department of Psychology Graduate Office prior to registering.

**PSY 191E. Area Seminar in Behavioral Neuroscience.**
Explore current issues in behavioral neuroscience. One lecture hour a week for one semester. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of instructor.

**PSY 391N. Learning and Memory.**
Same as Neuroscience 391N. Presentation of contemporary approaches to the study of conditioning and learning at the behavioral level. Focuses on empirical data and theoretical analysis of acquisition and performance in Pavlovian and instrumental conditioning. Includes discussion of habituation, sensitization, stimulus control, and other paradigms for studying cognitive processes in nonverbal organisms. Three lecture hours a week for one semester. Prerequisite: Graduate standing.
Selected topics on the design and analysis of psychological research. Three lecture hours a week for one semester. Prerequisite: Graduate standing and consent of instructor.

PSY 392N. Fundamentals of Comparative Psychology.
History and current status of comparative psychology, emphasizing several biological disciplines, including behavior genetics, ethology, evolutionary biology, and sociobiology. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

PSY 393. Clinical Practicum I.
Supervised practical experience in the use of clinical techniques. Three lecture hours a week for one semester, with ten to twelve hours of practicum experience to be arranged. Prerequisite: Graduate standing, Psychology 389K, and consent of instructor.

PSY 394I. Neuroinflammation in Health and Pathology.
Same as Neuroscience 394I. Assess cutting-edge pre-clinical and clinical immune research, and interact with professors from across campus in special seminars. Three lecture hours a week for one semester. Only one of the following may be counted: Neuroscience 394I, 394P (Topic: Neuroinflammation in Hlth/Path), Psychology 394I, 394P (Topic: Neuroinflammation in Hlth/Path). Prerequisite: Graduate standing and consent of instructor.

PSY 394K. Fundamentals of Social and Personality Development.
Survey of important theories, issues, and research in social and personality development. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

PSY 394N. Fundamentals of Cognitive Development.
Survey of important theories, issues, and research in the development of perception, language, and cognition. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

PSY 394P. Seminars in Behavioral Neuroscience and Biopsychology.
Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.

Topic 1: Current Topics in Behavioral Neuroscience. Brain-behavior relationships, particularly recent research in behavioral neuroscience, including the anatomical and neurochemical mechanisms of behavioral events, and behavioral influences on the brain. Neuroscience 394P (Topic 1: Current Topics in Behavioral Neuroscience) and Psychology 394P (Topic 1) may not both be counted.

Topic 2: Clinical Psychopharmacology. Recent findings concerning the mechanisms of action and the behavioral effects of psychoactive drugs, particularly those used in psychiatry. Various drug types (such as sedative-hypnotics, hallucinogens, and drugs used to treat depression, schizophrenia, Parkinson's disease, and anxiety) and pathways in the brain are discussed to examine the neurochemical basis of psychiatric disorders and substance abuse. Topic 3: Neurobiology of Learning and Memory. Neuroanatomical systems that are functionally related to basic forms of learning and memory in mammals. Neuroscience 394P (Topic 3: Neurobiology of Learning and Memory) and Psychology 394P (Topic 3) may not both be counted.

Topic 4: Animal Communication.
Topic 7: Advanced Topics in Neuroanatomy. Neuroanatomical systems and functions across species; advanced forms of neuroanatomy in mammals. Neuroscience 394P (Topic 4: Advanced Topics in Neuroanatomy) and Psychology 394P (Topic 7) may not both be counted.

Topic 13: Foundations of Human Neuroimaging. A survey of the foundations for neuroimaging research with a focus on cognitive neuroscience. Describes the physical methods of image acquisition and physiological mechanisms used for functional imaging. Emphasis on magnetic resonance methods for structural and functional imaging. Surveys other imaging modalities, including positron emission tomography (PET), optical, and EEG/MEG electrical source localization. Only one of the following may be counted: Biology 381K (Topic: Foundations of Neuroimaging), Neuroscience 385L (Topic 6), 394P (Topic: Foundations of Magnetic Resonance Imaging Research), Psychology 394P (Topic: Foundations of Magnetic Resonance Imaging Research), 394P (Topic 13).


PSY 194Q, 394Q. Seminars in Clinical Psychology.
One or three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.

Topic 2: Empirically Supported Interventions with Adults.
Topic 4: Advanced Practicum in Clinical Psychology.
Topic 5: Advanced Practicum in Clinical Neuropsychology. Restricted to clinical psychology majors. Additional prerequisite: Graduate standing and consent of instructor.

Topic 6: Empirically Supported Interventions with Children.
Topic 17: Seminar in Positive Psychology. A survey of the emerging field of positive psychology and well-being. Topics include character strengths and virtues, positive emotion, personality influences, motivation and goals, the happiness set point, and the issue of whether happiness can or should be changed.

Topic 18: Research Methods in Clinical Psychology. Advanced training in research methodology as it pertains to the field of clinical psychology.

Topic 19: History and Professional Issues in Clinical Psychology. History and development of clinical psychology as a profession. Includes clinical psychology before World War II, the recognition of stress, the rise of evidence-based practice, professional psychology, and multicultural diversity.
**Topic 20: Diversity Issues in Research and Practice.** Methodological considerations involved in designing research projects, and clinical assessment and treatment concerns that arise when working with diverse populations.

**Topic 21: Neuropsychological Assessment.** Restricted to clinical psychology students. Examine the administration and scoring of a variety of neuropsychological measures, as well as test interpretation, case conceptualization and report writing skills. Includes a variety of neurological syndromes and grand rounds case presentations. Psychology 394Q (Topic: Neuropsychological Assessment) and 394Q (Topic 21) may not both be counted.

**PSY 394S. Seminars in Developmental Psychology.**
Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.

**Topic 2: Children's Racial/Gender Schemata.**

**Topic 3: Literacy Acquisition.**

**Topic 4: Psychological Processes in Family Violence.**

**Topic 5: Language and Conceptual Development.**

**Topic 6: Infant Perception and Cognition.**

**Topic 7: Professional Issues in Academia.**

**PSY 394T. Seminars in Evolutionary Psychology.**
Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.

**PSY 394U. Seminars in Cognitive or Perception Psychology.**
Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.


**Topic 4: Cognition.**

**Topic 6: Memory.**

**Topic 7: Speech Perception.**

**Topic 8: Topics in Vision and Hearing.** Current research in human vision and/or hearing. Neuroscience 385L (Topic 7: Topics in Vision and Hearing) or Psychology 394U (Topic 8) may not both be counted.

**Topic 9: Visual Perception.**

**Topic 12: Knowledge Representation.** Psychological approaches to the ways in which information is stored and processed, focusing on how particular assumptions and mental representation make tasks either easy or difficult to perform.

**Topic 13: Reasoning and Decision Making.** High-level cognitive processes of reasoning and decision making. Explores human rationality, analogical reasoning, causal reasoning, heuristics, and decision making in naturalistic settings.

**Topic 14: Topics in Systems Neuroscience.** Focuses on one or two topics and examines them in depth through group discussions of key scientific manuscripts. Discusses both classical studies and contemporary research. Only one of the following may be counted: Neuroscience 394P (Topic 8: Topics in Systems Neuroscience), Psychology 394U (Topic 14), 394U (Topic: Advanced Topics in Systems Neuroscience).

**Topic 15: Cognitive Neuroscience.** Readings, results, and discussion regarding cutting-edge work in the field. Emphasis on how computational models can be used to bridge brain and behavior. Biology 381K (Topic: Cognitive Neuroscience) and Psychology 394U (Topic 15) may not both be counted.

**Topic 16: Perception and Action.** Current topics in visually guided behavior, including eye movements, attention, and motor control, from behavioral, computational, and neurophysiological approaches. Neuroscience 394P (Topic 9: Perception and Action) and Psychology 394U (Topic 16) may not both be counted.

**Topic 17: Models of Cognition.** Formal models of cognition and related analysis, such as model selection statistics and Bayesian hierarchical parameter fitting.

**Topic 18: Advanced Topics in Perceptual Systems.** Readings, talks, and discussions on perceptual systems.

**Topic 19: Statistical Methods in Computational Neuroscience.** Same as Neuroscience 394P (Topic 10: Statistical Methods in Computational Neuroscience). Introduction to statistical and computational methods for understanding information processing in the nervous system, with emphasis on neural coding and statistical modeling of neural responses. Prerequisite: Graduate standing and consent of instructor.

**Topic 20: Methods for fMRI.** Covers preprocessing and statistical analysis methods of fMRI data with tutorials and laboratory exercises. Psychology 394U (Topic: Methods for fMRI) and 394U (Topic 20) may not both be counted.

**PSY 394V. Seminars in Social and Personality Psychology.**
Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and consent of instructor.

**Topic 6: The Self.**

**Topic 7: Social Stereotypes.**

**Topic 8: Psychosomatic Processes.** Survey of theories and findings concerning the links between psychological states and health. Includes emotion, stress, coping, psychoneuroimmunology, disclosure, and the social correlates of health and illness.

**Topic 9: Language and Personality.** An exploration into computer-based methods used to study the links between word use and basic social and personality processes.

**Topic 10: Close Relationships.** Social psychological theory and research on the topic of close relationships.

**Topic 11: Social Neuroscience.** Introduction to psychological and neural foundational concepts in social neuroscience. Surveys current work in the field to examine how it may or may not contribute to the study of social psychology.

**Topic 12: Self and Identity.** Broad overview of self-related theory and research, with an emphasis on recent developments in the field. Includes the nature and structure of the self and forms of self-knowledge. Also explores the relationship between the self and group processes, close relationships, and gender. Three lecture hours a week for one semester. Psychology 394V (Topic: Self and Identity) and 394V (Topic 12) may not both be counted.

**Topic 13: Theory and Explanation in Social Psychology.** Examine different theoretical approaches in social psychology and the ability to critically evaluate the range and the limits of social psychological explanations from a meta-theoretical perspective. Address meta-theoretical principles in the construction and evaluation of social psychological theories, classic and contemporary approaches to understanding social psychological phenomena, and current directions in social psychological theorizing. Three lecture hours a week for one semester. Psychology 394V (Topic: Theory and Explanation in Social Psychology) and 394V (Topic 13) may not both be counted.
PSY 394W. Foundations of Social Psychology.
Examine key theories and research in social psychology, from classic to current approaches. Three lecture hours a week for one semester. Psychology 394V (Topic: Foundations of Social Psychology) and 394W may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Graduate standing and consent of graduate adviser.

PSY 395S. Fundamentals of Developmental Psychology.
Emphasizes understanding the major theoretical approaches to the field, with an introduction to empirical work inspired by these theoretical perspectives. Three lecture hours a week for one semester. Psychology 394S (Topic: Fundamentals of Developmental Psychology) and 395S may not both be counted. Prerequisite: Graduate standing and consent of instructor.

PSY 396. Advanced Behavior Pathology.
Evaluation of the experimental and theoretical literature concerning major behavioral disorders. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

PSY 396C. Child and Adolescent Psychopathology.
The epidemiology, etiology, associated features, developmental course, and prognosis of childhood and adolescent behavior disorders. Three lecture hours a week for one semester. A core course option. Prerequisite: Graduate standing and consent of instructor.

PSY 396D. Clinical Psychopharmacology.
Same as Neuroscience 396D. Recent findings concerning the mechanisms of action and the behavioral effects of psychoactive drugs, particularly those used in psychiatry. Three lecture hours a week for one semester. Prerequisite: Graduate standing and consent of instructor.

PSY 698. Thesis.
The equivalent of three lecture hours a week for two semesters. Offered on the credit/no credit basis only. Prerequisite: For 698A, graduate standing in psychology, twelve semester hours of upper-division or graduate coursework in psychology, and consent of the graduate adviser; for 698B, Psychology 698A.

PSY 398T. Supervised Teaching in Psychology.
Introduction to the teaching of psychology, including basic principles of adequate preparation, clear organization, student-teacher rapport, effective use of class time, clear and engaging communication of course content, fair and effective evaluation of students’ understanding of subject matter, and ethical behavior. Also addresses issues concerning the relations of individual courses to other college courses, specific types of instruction (e.g., writing instruction), and the broad goals of colleges and universities. Three lecture hours a week for one semester. Prerequisite: Graduate standing.

May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Admission to candidacy for the doctoral degree

Professional Courses