Psychological & Brain Sciences

As the science concerned with the study of behavior, psychology includes such areas as learning and memory, motivation, sensory processes and perception, biological bases of behavior, social interactions, aging and development, personality, and clinical and abnormal psychology.

Undergraduate study in psychology provides a sound basis for later professional graduate training in the MA or PhD level in psychology. The psychology major may also provide important intellectual tools for those considering careers in management, law, education, social work, public relations, and health-related professions.

Phone: 314-935-7650
Website: http://ucollege.wustl.edu/programs/undergraduate/bachelors-psychology

Degree Requirements

The Major in Psychology

All University College undergraduate students must satisfy the same general-education requirements (http://bulletin.wustl.edu/prior/2016-17/undergrad/ucollege/bachelors/#degreerequirements).

Students majoring in psychology in University College must complete a minimum of 33 units in psychology, including the following:

Introductory Psychology Courses
Psych 100 Introduction to Psychology 3
Psych 300 Introductory Psychological Statistics 3
Psych 3015 Research Methods 3
Total units 9

Psychology Area Courses

Five upper-level (300-400) psychology courses as indicated below:

- **Group A - Social/Personality** (at least one course):
  - Psych 315 Introduction to Social Psychology 3
  - Psych 353 Psychology of Personality 3
  - Psych 381 Cross-Cultural Psychology 3

- **Group B - Abnormal/Affective** (at least one course):
  - Psych 354 Abnormal Psychology: The Major Mental Disorders 3
  - Psych 3195 Abnormal Child Psychology 3

- **Group C - Biological/Neurological** (at least one course):
  - Psych 3604 Cognitive Neuroscience 3
  - Psych 3401 Biological Psychology 3

- **Group D - Behavior & Cognition** (at least one course):
  - Psych 359 Cognitive Psychology 3
  - Psych 365 Learning and Memory 3

- **Group E - Lifespan Development** (at least one course):
  - Psych 322 Developmental Psychology 3
  - Psych 325 Psychology of Adolescence 3
  - Psych 4261 Psychology of Aging 3

Additional Electives

To complete the psychology major, students must complete 3 additional electives in psychology at the 300-400 level. A maximum of 3 units of independent study may apply to the major.

Optional Concentrations in Psychology

University College students who major in psychology may select from three optional concentrations.

**Lifespan Development** — provides an understanding of the cognitive and physiological changes that occur over the lifespan, including childhood, adolescence, and older adulthood. This concentration provides a foundation for work in psychology, social work, education, and other human services.

- **Required Courses** (3 units)
  - Developmental Psychology (Psych 322)
- **Elective Courses** (6 units) — choose two of the following (others with authorization):
  - Psychology of Adolescence (Psych 325)
  - Psychology of Aging (Psych 4261)
  - Psychology of Young Adulthood (new)

**Counseling Foundations** — the application of psychology in the clinical field. This concentration provides a foundation for careers in clinical psychology, social work, counseling, or related fields in mental health services.

- **Required Courses** (6 units)
  - Abnormal Psychology: The Major Mental Disorders (Psych 354)
  - Perspectives on Counseling (Psych 330)
- **Elective Courses** (3 units) — choose one of the following (others with authorization):
  - Abnormal Child Psychology (Psych 3195)
  - Addiction and Treatment (Psych 488)
  - Health Psychology (Psych 358)
Gerontology — social, cognitive, and health aspects of aging. This concentration provides a foundation for careers in all health care and related service areas for an aging population.

- **Required Courses** (3 units)
  Psychology of Aging (Psych 4261)

- **Elective Courses** (6 units) — choose two of the following (others with authorization):
  Memory & Aging (U09 Psych 308)
  Aging & Health Behavior (new)
  Social Gerontology (new)

**Policies for Optional Concentrations**

1. Each optional concentration requires 9 units of course work.
2. A student may pursue only one optional concentration.
3. Courses applied to an optional concentration may not be used to fulfill any other requirement for the major.
4. If two courses completed for an optional concentration fall within the same distribution, then that distribution is satisfied.
5. These optional concentrations are available only to University College students admitted to a Bachelor of Science degree with a major in psychology.

**The Minor in Psychology**

The requirements for the minor are a minimum of 15 units in psychology with at least 9 units in upper-level (300-400) courses; there are no specific course requirements other than Introduction to Psychology (Psych 100). Students interested in a general background might take courses in several areas: social, sensation and perception, physiological, personality, etc. Those who wish to concentrate in a specialized area (e.g., the “helping professions” or counseling) should take such courses as personality, abnormal psychology, developmental psychology, or perspectives on counseling.

**Courses**


**U09 Psych 100 Introduction to Psychology**
This course covers current concepts and theories of learning, motivations, emotion, perception, thought, intelligence, and personality, emphasizing both biological and philosophical aspects. Psych 100 is a prerequisite for all 300-level and above psychology courses.
Credit 3 units.

**U09 Psych 207 Introduction to Aging**
Credit 3 units.

**U09 Psych 214 Introduction to Industrial and Organizational Psychology**
This course explores the application of research findings in psychology and other behavioral sciences to issues and problems in the workplace, including both theory and methodology. Includes motivation, communication, learning, decision making, leadership, power and influence, and personnel selection. Recommended for the Liberal Arts and Business (LAB) Certificate.
Credit 3 units.

**U09 Psych 230 Human Growth and Development**
This course provides an overview of emotional, psychological, physical, and social development through the life span. We will emphasize the developmental tasks, characteristics, and typical behaviors of each developmental era (infancy, childhood, adolescence, adulthood, later life). We will study major developmental theorists including Freud, Erikson, Piaget, Millet, Gilligan, and Kohlberg. Prerequisite: U09-100. Open only to University College students.
Credit 3 units.

**U09 Psych 235 Life Stories: Personal Approaches to Adult Development, Learning, and Life Planning**
This course examines adult development and adult learning as points of reference for analyzing the major decisions, changes, and opportunities that influence our own lives — at work, at school, at home, and in the larger community. We will also examine the sustaining role of liberal education in our personal and professional growth. We will read a combination of personal memoir, autobiography, and other nonfiction to illustrate how other people have responded to life’s challenges and transitions, and to help us construct our own life stories, educational and professional plans. Selected readings from psychology, education, literature, anthropology, sociology, leadership and career development, include Composing a Life, Tuesdays with Morrie, Habits of the Heart, The Leadership Challenge, Journey in the Middle of the Road, and A River Runs Through It. Cannot count toward requirements for the psychological and brain sciences major or minor for day students. Prerequisite: Psych 100.
Credit 3 units.

**U09 Psych 240 Internship in Psychology**
Participation under supervision in an applied, non-academic community agency for course credit. Prerequisites, procedures for enrollment, and course requirements are described in an Internship Guide available in the University College office. Approval of the petition to enroll required prior to enrollment. Open only to University College psychology majors.
Credit 3 units.

**U09 Psych 250 Introduction to Animal Behavior**
The basics of animal behavior, both instinctive and learned. Covers interactive behavior including communication, dominance, and predator-prey, with particular attention to complex interactive behaviors such as mating, parenting, and socializing.
Same as U29 Bio 250
Credit 3 units.
U09 Psych 2501 Introduction to Animal Behavior
The basics of animal behavior, both instinctive and learned. Covers interactive behavior including communication, dominance, and predator-prey, with particular attention to complex interactive behaviors such as mating, parenting, and socializing. Same as U29 Bio 250
Credit 3 units.

U09 Psych 300 Introductory Psychological Statistics
Descriptive statistics including correlation and regression. Inferential statistics including nonparametric and parametric tests of significance through two-way analysis of variance. Course emphasizes underlying logic and is not primarily mathematical, although knowledge of elementary algebra is essential.
Credit 3 units.

U09 Psych 3011 Experimental Psychology
Psych 3011 is limited to students who have not taken Psych 300 and want to enroll in Psych 300 and Experimental Psychology concurrently. Therefore, students who enroll in Psych 3011 must also register for Psych 300. Psych 3011 fulfills the Psych 301 requirement for the major. Topics in the two courses (i.e., Psych 300 and Psych 3011) will be coordinated in order to integrate the concepts from Statistics with those from Experimental Psychology. Experimental Psychology provides training in the logic and techniques of psychological research so as to provide students with experience in the design of psychology experiments and interpretation of results. Topics include experimental design and control, library research, quantitative treatment of data, graphical presentation of results, and clarity of scientific writing. Lectures focus on general principles of experimentation while the laboratory component provides an introduction to a range of psychological phenomena through hands-on experience in experimentation. Each student also completes an independent research project of his or her own design under supervision of a faculty member. Enrollment limited to 15 students. Prerequisites: Psych 100B and concurrent enrollment in Psych 300.
Same as L33 Psych 3011
Credit 4 units. A&S: NS A&S IQ: NSM BU: BA

U09 Psych 3015 Research Methods
This course provides training in the logic and techniques of psychological research so as to provide students with experience in the design of psychology experiments and interpretation of results. Topics include experimental design and control, library research, quantitative treatment of data, graphical presentation of results, and clarity of scientific writing. Not open to day students. Prerequisites: U09-100, U09-300.
Credit 3 units.

U09 Psych 307 Aging in Cultural Context
This course will explore cultural diversity in later life, the experience and meaning of growing older within various cultural contexts both within the United States and in other countries. We will examine the impact of culture on a number of areas including: longevity and the demographic of global aging; conceptualizations of the life course and late life; processes of human development as reflected in life histories of persons from diverse cultures; variations in self-concept in late life; attitudes toward older adults and definitions of "successful aging"; health beliefs and perceptions of health and frailty; social roles, status, and power in old age; family and intergenerational relationships; gender differences; self-care strategies and health care systems; living arrangements and care of the elderly; quality of life (and its measurement) in late adulthood; immigration and the aged; perceptions and treatment of late life cognitive decline; personality changes in late life; and end-of-life issues. Prerequisite: U09-100.
Credit 3 units.

U09 Psych 309 Evolutionary Psychology
This course will explore the extent to which an understanding of biological evolution is relevant to an understanding of human psychology. Fundamental evolutionary principles will be introduced and their application to psychological theory and research carefully evaluated. Individual topics include romantic relationships, family dynamics, cooperation, clinical pathology, judgment and decision-making, religious belief, and more. Prerequisite: U09-100.
Credit 3 units.

U09 Psych 312 Sport Psychology
Overview of theoretical and applied principles of sport and exercise psychology. Special emphasis on psychological factors that affect sport performance, including personality, motivation, attention, anxiety, self-regulation of arousal, group dynamics, leaderships, causal attributions, and performance enhancement. Prerequisite: Psych 100.
Credit 3 units.

U09 Psych 313 Human Behavior in Extreme Situations
This course will familiarize students with psychological theory and research that attempts to answer the question: What are the protective factors that help people who find themselves in an extreme situation respond constructively to the stress they must cope with? Extreme situations are characterized by conditions that force individuals and groups to adapt themselves involuntarily, entirely and with the greatest of speed. Readings are drawn from two sources: literature that describes extreme situations and human response to the trauma they cause (e.g., prisoner behavior in Nazi concentration camps, brainwashing of American soldiers during the Korean War, and the response to a natural disaster and an airliner crash); and research on potentially protective psychological variables such as coping and resilience. Prerequisite: 6 units of course work in Psychology. Cannot count toward the requirements for the psychological and brain sciences major or minor for day students.
Credit 3 units.

U09 Psych 314 Industrial and Organizational Psychology
Interactions of individuals and organizations in measures of human performance, motivation, leadership, job satisfaction, training, ability testing, and stress. Skill-building in the techniques of psychology that are applied to the solution of business and industrial problems. Prerequisites: U09-214 and 300, or permission of instructor.
Credit 3 units.

U09 Psych 315 Introduction to Social Psychology
Interaction of biological, cultural, situational, and technological factors on who we are and how we interact with others: person perception, motivation, attitudes, and communication. Credit 3 units.
U09 Psych 317 Psychology of War, Terrorism, and Peace
This course will promote understanding and critical thinking on war, terrorism, and peace from a psychosocial perspective. Intrapersonal, interpersonal and sociocultural sources of geopolitical conflict will be examined in both historical and contemporary contexts. Emphasis will be placed on understanding the psychosocial dimensions involved in a multidisciplined approach for the integration of political, economic, religious, and military interventions in resolving conflict and pursuing peace. Prerequisite: U09-100. Introduction to Social Psychology (U09-315) is also recommended. Credit 3 units.

U09 Psych 3195 Abnormal Child Psychology
This course will familiarize students with current perspectives on the nature, causes, assessment, treatment, and prevention of child psychiatric disorders and related family dysfunction. Theoretical perspectives and research findings will be discussed pertaining to anxiety, depression, conduct disorder, attention-deficit/hyperactivity disorder, autism, learning impairments, and parent-child conflict. Credit 3 units.

U09 Psych 320 Topics in Psychology: Self Definition in Film: A Social Psychological Perspective
Self-definition is the process by which we explore our talents and interests and come to consider them as defining features of who we are. This course focuses on self-definition from a social-psychological perspective as demonstrated by characters in popular film. The primary purpose of the course is to apply research and theory from perspectives on self-definition in evaluating the actions of characters in popular film. The course explores self-definition as a function of age (films: Stand By Me; The Breakfast Club; American Beauty; Cocoon), relationships (films: He Said, She Said; Parenthood; Bye, Bye Love), and group association (films: A Bronx Tale; American History X; 12 Angry Men). The class meets for one 3.5 hour session weekly; most sessions will consist of a film screening, followed by a discussion of readings and the film. Credit 3 units.

U09 Psych 3200 Child Health Psychology
This course examines the field of child health psychology, which focuses on the impact of health and illness on the physical and psychological development of children and adolescents. We will explore the relations among psychological and physical health and the welfare of children within a developmental perspective, considered within the contexts of families, health care systems, schools, peers, and community. Topics such as chronic illness (e.g., cystic fibrosis, sickle cell disease, organ transplant, asthma), adherence to medically prescribed regimens, and neuropsychological aspects of chronic illness will be addressed. Previous course work in Developmental Psychology (e.g., U09 230, U09 322) would be helpful but not required. Credit 3 units.

U09 Psych 322 Developmental Psychology
In this course we will study behavior in children including developmental methodology, prenatal development, memory, cognition, attention, perception, language, sex roles, morality, emotions, aggression, and intelligence testing. Prerequisite: U09-100. Credit 3 units.

U09 Psych 325 Psychology of Adolescence
Psychology of the period from puberty to adulthood; the major developmental tasks such as identity formation and the influence of differential parental style upon the development of adolescents. Credit 3 units.

U09 Psych 3261 Psychology of Aging
Study of the processes of aging in the individual in terms of their behavioral effects. Age changes in biological functions, sensation, perception, intelligence, learning, memory, and creativity studied to understand the capacities and potential of the mature and older person. Credit 3 units.

U09 Psych 327 The Psychology of Women
The various theories and perspectives of the interaction of sociocultural, biological, and early developmental factors on the behavior of women. Includes the impact of changing social/sexual roles on the psychology of women; psychopathology and women; psychotherapy and women. Special emphasis is placed on the issue of violence toward women in our society. Credit 3 units.

U09 Psych 3281 Feminist Approaches to the Psychology of Women
Same as U92 WGSS 328 Credit 3 units.

U09 Psych 330 Perspectives on Counseling
This is an experiential course teaching skills in the counseling process. We will examine awareness and listening, attending and reflecting, questioning and summarizing, empathy, concreteness, problem definition, probing, and detailing. Role-playing and group work supplement didactic material. Prerequisite: U09-100. Credit 3 units.

U09 Psych 336 Brain and Behavior
This course provides an overview of topics in neuropsychology and physiological psychology, including the structure and function of the nervous system, brain development and brain damage, sensory and motor systems, higher-level brain functions such as memory and language, and the neurological basis of disease states such as Alzheimer’s disease, stroke, and schizophrenia. Prerequisite: U09-100. Note: Accelerated (ACTRAC) option: University College students have the option of taking this class for 4 units. Credit 3 units.

U09 Psych 337 Hearing
Provides the basics of human hearing and the background for further work in perception, auditory science, musical acoustics, environmental and architectural acoustics as well as the digital processing of sounds for speech, music, or virtual reality. Topics range from the detection of sounds to consideration of the dimensions of auditory experience such as pitch, loudness, timbre, and noisiness; effects of noise on hearing; and basics of the perception of speech and music. Prerequisites: Algebra and Trigonometry. Credit 3 units.


U09 Psych 3401 Biological Psychology
An introduction to biological mechanisms underlying behavior. Topics will include the physiology of nerve cells, anatomy of the nervous system, control of sensory and motor activity, arousal and sleep, motivation and higher mental processes. Prerequisite: Psych 100.
Credit 3 units.

U09 Psych 353 Psychology of Personality
This course covers basic theories of personality and complex human behavior. We study related techniques, procedures, and findings of personality assessment and personality research, and examine critical issues in the evaluation of personality theories. Credit 3 units.

U09 Psych 354 Abnormal Psychology: The Major Mental Disorders
Deviant and maladjusted behavior, including neuroses and psychoses. Biological, social, and individual determinants of maladjustment; cultural perspectives on mental health and illness; diagnosis, etiology, and treatment. Credit 3 units.

U09 Psych 358 Health Psychology
This course examines the history of health psychology and its place in general health care. We will examine relevant theory as applied to specific topics including stress, coping, weight loss, chronic illness in general (diabetes in particular), adherence to medically prescribed regimens, Type A personality and cardiac risk factors. Prerequisite: U09-100.
Credit 3 units.

U09 Psych 359 Cognitive Psychology
Thought processing from an information processing approach. Includes pattern recognition, attention, memory, reasoning, language processes, decision making, and problem solving. Credit 3 units. UColl: OLI

U09 Psych 3601 Creativity: Theory and Application
Same as U08 Educ 360
Credit 3 units.

U09 Psych 3604 Cognitive Neuroscience
To understand the mind we need to study the brain; to study the brain we have to understand the mind. This course offers an introduction to how cognitive psychology and neuroscience have met to understand the principles and mechanisms of brain function that give rise to human cognition. The course will present the methods employed by cognitive neuroscience and their application to the study of perception, attention, memory, language, executive control, and emotion. The emphasis will be placed on the multidisciplinary nature of inquiry within cognitive neuroscience.
Credit 3 units.

U09 Psych 365 Learning and Memory
In this course we focus on the major theories of human learning and memory. We review several behavioral-associationist theories, including classical conditioning and behavior modification. The course emphasis is on cognitive-organizational theories, human information processing, current perspectives on knowledge representation, and their implication for understanding and recall.
Credit 3 units. UColl: OLI

U09 Psych 367 Seminar in Positive Psychology
Reviews the relatively recent development in the field known as "Positive Psychology." Topics may include: happiness and life-satisfaction, positive self-esteem, creativity, caring relationships, love — passionate and otherwise, empathy, optimism, ambition, moral character development, attachment, compassion, forgiveness, helping, work ethics, and successful aging. Designed to take a sampling of those aspects of psychology that emphasize the positive side of human nature. Prerequisite: Psych 100B and at least one 300-level course.
Credit 3 units.

U09 Psych 371 Investigative Psychology
This course will expose students to a variety of methods and techniques for identifying and apprehending an unknown criminal suspect. Investigative techniques including effective information collection, detecting deception, and the development of decision support systems will be discussed. Empirically tested models such as multidimensional scaling and social network analysis will be covered with attention given to the psychological processes underlying these decision support tools. This is a fully online course. Only University College students receive credit for fully online courses.
Credit 3 units. UColl: OLI

U09 Psych 372 Contemporary Topics in Social Psychology: Intolerance and Prejudice
The goal of this course is to provide an overview of classic and contemporary approaches to the study of stereotyping and prejudice. Prejudice will be discussed in terms of cognitive and motivational antecedents, situational and personality variables, and differences in political ideology. We will also explore the distinction between conscious and unconscious processes underlying prejudice. Cannot count toward the requirement for the psychological and brain sciences major or minor for day students. Prerequisite: U09 100. U09 315 recommended.
Credit 3 units.

U09 Psych 373 Psychology in the Courtroom
This course studies ways in which principles of psychology are used in the courtroom, looking at how the principles influence and are used by lawyers, judges, witnesses, defendants, and jurors. We will consider issues of persuasion and prejudice in influencing jurors' decisions, and the role and tactics of expert witnesses and jury consultants, including the ethical guidelines under which they operate. Finally, the course will discuss the danger of violent behavior inside the courtroom, and how this behavior can be anticipated and prepared for through the development of security profiles.
Credit 3 units.

U09 Psych 375 Human Factors in Engineering
The application of psychology to such areas as systems design, automation, system safety engineering, workplace design, and environmental safety. Concepts drawn from areas including sensory, perceptual, and motor processes; human information processing and decision making.
Credit 3 units.
U09 Psych 376 Introduction to Criminology
A general introduction to the study of crime from an interdisciplinary perspective. Classical and contemporary sociological theories to explain and predict criminal behavior will be studied, as well as psychological theories from the psychoanalytic, behavioral, and cognitive traditions that attempt to account for criminality and the psychosocial development of a criminal personality type. Other topics include the measurement and extent of crime, the role of age, race, gender, social class in the causation of and reaction to crime, and the criminal justice response to crime, as well as recent trends in policing, corrections, and community-based interventions. This is a fully online course. Only University College students receive credit for fully online courses. Credit 3 units.

U09 Psych 377 Introduction to Forensic Psychology
Forensic psychology is the application of scientific psychological knowledge to matters that come before the judge or jury. This course will focus on criminal cases such as homicide and sex offender commitment and on personal injury cases. Topics will include consultation with attorneys, psychological tests used and recommended by forensic psychologists, and sex offender risk assessment. Other topics will include keys to being a dangerous expert on the witness stand. Numerous actual case studies will be presented. Credit 3 units.

U09 Psych 378 Crisis Intervention: The Criminal Justice Response to Chaos, Mayhem, and Disorder
This course explores the nature and psychology of the major types of crises criminal justice professionals confront on a daily basis, including domestic violence, terrorism, riots and post-disaster panic, cults, threatened suicide, and active shooters, among others. Students will explore these topics against the backdrop of actual case examples like hurricane Katrina, the attacks of 9/11, the shooting at Columbine High School, and the Branch Davidian standoff at Waco. Major theories and typology schemes that attempt to account for these behaviors will be explored, as well as the emotional impact of crisis response on police, correctional officers, and other first responders. The course may be used as an elective in the University College psychology major, but will not apply to the distribution areas in the major. This course is fully online. Only University College students can receive credit for fully online courses. Instructor will email registered students with instructions. Credit 3 units.

U09 Psych 379 Correctional Psychology
This course will introduce students to the correctional environment, and the many psychological considerations involved in the detention, rehabilitation, and reintegration of prison inmates. We will focus heavily on the psychological impact of incarceration, as well as the various treatment issues related to inmate rehabilitation. Topics include the dynamics of power and oppression, gang affiliation, inmate management and control, and the problems of sexual assault and suicide among the inmate population. We also will discuss various legal decisions affecting the correctional environment, especially in relation to mental health treatment. Recommended: Abnormal Psychology. Credit 3 units. UColl: OLI

U09 Psych 380 Psychology and Religion
This course offers an examination of the empirical literature on the psychological study of religion. Students will explore whether psychology can offer a scientifically valid examination of religion. We will use psycho-physiology research to examine religious and mystical experiences that are induced by methods ranging from breath control to meditation to use of hallucinogenic drugs. We will then look at social psychology research to investigate the relationship between religion and a host of issues such as fundamentalism, altruism, social and emotional adjustment, physical health, and satisfaction in life. Prerequisite: Introduction to Psychology. Note: Accelerated (ACTRAC) option: University College students have the option of taking this class for 4 units. Credit 3 units.

U09 Psych 381 Cross-Cultural Psychology
An overview of social, developmental, and organizational forces from a cross-cultural perspective with a focus on culture as a variable, and its relationship to attitudes and behavior. A review of historical biases in the discipline of psychology will precede the study of research methodologies best suited to cross-cultural work. Also emphasized is the manner in which social and cultural forces shape the human experience. Prerequisite: Psych 100. Credit 3 units. UColl: NW

U09 Psych 382 Moral Psychology
This course presents an overview of scientific approaches to moral psychology. The issues to be studied include how morality evolved, whether nonhuman animals or human infants have morality, how morality developed through the lifespan and across cultures, the roles of psychological mechanisms in morality, how morality is affected by psychological disorders, and altruism. Credit 3 units.

U09 Psych 389 Psychology of Consumer Behavior
Examination of consumer preferences and purchasing decisions in relation to psychological needs, sociological and multicultural influences, economic considerations, and advertising impact. The roles of attention, perception, emotion, learning, and cognition in attitude formation, change, and ultimately in consumer choices. The marketing concepts of segmentation, product positioning, brand image, and brand loyalty are examined, as well as ethical considerations pertaining to product quality and safety, and to the advertising message. An overview of consumer research methodology, including questionnaire design, sampling and surveys, focus groups, observations, recall and recognition techniques, and physiological measures. Prerequisite: Psych 100. Credit 3 units.

U09 Psych 400 Independent Study
Reading or research in a special area of psychology. Approval of a specific plan of reading or research by the supervising faculty member and the departmental coordinator is required prior to registration. Prerequisites: 15 hours of psychology course work, advanced standing, permission of the instructor, and permission of the departmental coordinator. Open only to University College psychology majors with a minimum GPA of 3.00. Petition forms for enrollment are available in January Hall, Room 20. A student may enroll in this course only once. 2-3 units. Credit variable, maximum 3 units.
U09 Psych 401 Psychology and Computer Applications
Psychological issues related to the interaction of people with computers. Topics include human-computer interfacing, structural organization of work, response to graphics, and typical approaches to the development of experimental and next-generation technology. Prerequisites: U09-100 and 359.

U09 Psych 404 Psychological Tests and Measurements
This course is an introduction to psychological tests and measurements. We will cover basic principles of test construction, including reliability, validity, item analysis, and development of normative data. We will examine major types of tests (e.g., intelligence, personality, interests, and attitudes), as well as their application to career counseling, clinical diagnosis, employee selection, performance appraisal, and organizational assessment. Prerequisite: One course in statistics. Credit 3 units.

U09 Psych 406 Verbal Behavior
This course will offer a comprehensive study of language from a behavioral perspective. Structural differences between types of verbal behavior will be examined as will empirical literature demonstrating verbal behavior interventions for individuals with deficits in language. Critiques of the behavioral perspective will be considered in terms of their impact on conceptual advances in the analysis of verbal behavior. Prerequisite: U09-100. Credit 3 units.

U09 Psych 409 Introduction to Behavior Analysis
This course is an introduction to principles of learning and behavior analysis and how they relate to the profession of applied behavior analysis. Topics to be covered include reinforcement, punishment, extinction, discrimination training, generalization, shaping, conditioned reinforcement, and schedules of reinforcement. The primary focus of the course will be on basic principles derived from laboratory research, but we also will examine applications of these principles to areas such as developmental disabilities (e.g., autism), academic skills, and oppositional behaviors. Philosophical and historical antecedents of behaviorism also will be covered. Credit 3 units.

U09 Psych 4109 History and Identity
Same as U08 Educ 4109
Credit 3 units.

U09 Psych 413 Contemporary Topics in Social Psychology: Intolerance and Prejudice
Consideration of selected contemporary topics in social psychology. Prerequisite: U09 100. U09 315 recommended. Cannot count toward the requirements for the psychological and brain sciences major or minor for day students. Credit 3 units.

U09 Psych 415 Human Behavior in Extreme Situations
This course will familiarize students with psychological theory and research that attempts to answer the question: What are the protective factors that help people who find themselves in an extreme situation respond constructively to the stress they must cope with? Extreme situations are characterized by conditions that force individuals and groups to adapt themselves involuntarily, entirely and with the greatest of speed. Readings are drawn from two sources, (a) literature that describes extreme situations and human response to the trauma they cause (e.g., prisoner behavior in Nazi concentration camps, brainwashing of American soldiers during the Korean War, and the response to a natural disaster and an airliner crash), and (b) research on potentially protective psychological variables such as coping and resilience. Prerequisites: junior or senior standing and 9 hours of course work in Psychology. Credit 3 units.

U09 Psych 414 Current Issues in Human Resources Management
This course looks at current challenges and problems of managing people at work to meet individual, organizational, and societal needs. Prerequisites: U09-214 and 314. Credit 3 units.

U09 Psych 4261 Psychology of Aging
The processes of aging in terms of their behavioral effects: age changes in biological functions, sensation, perception, intelligence, learning, memory, and creativity. Credit 3 units.

U09 Psych 430 Psychology and Technology
Study of the impact of computer and telecommunications technology on human behavior, primarily in the workplace. Topics include the effects of monitoring employee performance; human/computer interaction including virtual reality; applicability of multimedia on learning; artificial intelligence; and dissemination of information on organizational structure and decision making. Prerequisite: U09-100 or permission of instructor. Credit 3 units.

U09 Psych 431 Cognitive Engineering
This applied course studies basic human cognitive processes (thinking, learning, remembering, decision-making) and the way in which they integrate and interface with the use of "tools" that extend human abilities (as wide ranging as guiding airliners, searching the internet, or writing term papers). The obvious benefits of such tools will be explored, together with the painful results that can occur when the characteristics of the individual using the tool are not carefully considered, and how such failures can be averted. The course will include the development of projects in which each student studies the cognitive requirements of a simple behavioral situation, develops a design and evaluates it, and analyzes the results. Credit 3 units.

U09 Psych 438 Flash Programming for the Social and Behavioral Sciences
This class consists of a step-by-step guide through the techniques necessary to program sophisticated online surveys and experiments. Techniques covered include coding questions with various types of responses (e.g., multiple-choice options and slider ratings); presenting words and pictures on the screen; randomization; recording responses; timing; and collecting data online. Students will gain a general idea of the principles of programming (i.e., the use of functions, variables, arrays, and conditional statements). A final project will involve each student (or pairs of students) designing and writing a program for their own survey or experiment. Credit 3 units.
U09 Psych 440 Psychology of People and Ordinary Objects
Credit 3 units.

U09 Psych 443 Contemporary Clinical Psychoanalytic Theory
Psychoanalysis consists of several theories of mind as well as corresponding theories of the psychoanalytic and psychotherapeutic process. The former are referred to as metapsychology, and the latter as clinical psychoanalytic theory. This seminar will examine clinical psychoanalytic theory from contemporary psychoanalytic perspectives. Concepts such as the therapeutic alliance, transference, counter-transference, projective identification, resistance, acting out, insight and varieties of interventions (confrontation, clarification and interpretation) will be considered from the perspectives of ego psychology, developmental theory, object relations theory, self-psychological theory, Lacanian theory, feminist theory, relational theory, and postmodern psychoanalytic theory. Empirical and neuroscientific findings relating to the clinical psychoanalytic process will also be considered. Prerequisite: Psych 353 or instructor permission.
Credit 3 units.

U09 Psych 444 Applied Behavior Analysis I
This course focuses on behavioral principles and procedures as related to the acquisition of new behavior and the modification of existing behavior. Topics to be covered include: reinforcement, punishment, extinction, discrimination training, generalization, shaping, classical conditioning, conditioned reinforcement, and schedules of reinforcement. Although the focus is on basic principles derived from laboratory research, applications of these principles to areas such as developmental disabilities (e.g., autism), academic skills, and oppositional behaviors are discussed. Philosophical and historical antecedents of behaviorism also are explored. This class is part of a sequence of courses that the Behavior Analyst Certification Board, Inc. has approved for eligibility to take the Board Certified Associate Behavior Analyst Examination. Credit 3 units.

U09 Psych 445 Applied Behavior Analysis II: Procedures for Behavior Change
This course focuses on the complex behavioral principles and on issues surrounding their application in the analysis and modification of behavior. In addition, students learn to identify behavior and environment relations that constitute behavioral deficits or excesses. Behavioral change procedures to be explored include: functional analysis, reinforcement, shaping, chaining, discrete trials, contingency contracting, reinforcement, and maintenance of behavior change. Ethical considerations are also addressed. This class is part of a sequence of courses that the Behavior Analyst Certification Board, Inc. has approved for eligibility to take the Board Certified Associate Behavior Analyst Examination. Prerequisite: U09-444.
Credit 3 units.

U09 Psych 446 Applied Behavior Analysis: Research Methods and Evaluation
This course focuses on research design and methodology in behavior analytic research, with a focus on single-subject experimental designs. Various behavior-assessment and behavior-intervention evaluation strategies will be examined. In addition, the course explores techniques for direct observation, and measurement of behavior, as well as methods of summarizing data, data analyses, and the ethics of research. Prerequisite: ABA I: Basic Principles of Behavior.
Credit 3 units.

U09 Psych 449 Applied Behavior Analysis Practicum
This practicum provides experience in applied behavior analysis and is designed for individuals who intend to pursue certification through the Behavior Analysis Certification Board (BCBA) examination at the Associate level (Board Certified Associate Behavior Analyst; BCABA). Students will work in community-based agencies and be supervised by the community agency and the Practicum faculty. Prerequisites: Admission to the Washington University Applied Behavior Analysis Certificate Program, and ABA I: Basic Principles of Behavior and ABA II: Procedures for Behavior Change and permission of instructor.
Credit 2 units.

U09 Psych 455 Introduction to Clinical Psychology
Historical and recent developments in clinical psychology; the roles, training models, functions, and techniques of the clinical psychologist.
Credit 3 units.

U09 Psych 460 Behavioral Medicine
The role of behavior in the prevention and treatment of significant medical problems will be studied. The history of the field of behavioral medicine will be reviewed, with applications to medical problems and its complementary role in preventative medicine in the context of a number of medical disorders and risky behaviors, including obesity, chronic pain, cancer, and smoking. Effective stress management practices to help ameliorate common results of stress such as tension headache and high blood pressure also will be studied. Prerequisite: Psych 100.
Credit 3 units.

U09 Psych 463 Genetics and Human Behavior
An introduction to behavior genetics, its basic concepts, methodologies, and research designs including twin, family, and adoption studies. A comprehensive review of major advances in the genetics of cognitive abilities and disabilities, personality, and psychopathology. Emphasis on interpretation and critical evaluation of behavioral genetic data.
Credit 3 units.

U09 Psych 464 Behavioral Genetics
An introduction to behavior genetics, its basic concepts, methodologies, and research designs including twin, family, and adoption studies. A comprehensive review of major advances in the genetics of cognitive abilities and disabilities, personality, and psychopathology. Emphasis on interpretation and critical evaluation of behavioral genetic data.
Credit 3 units.

U09 Psych 468 Applied Psychology of Learning: Training in Industry
Overview of the foundations of industrial training and the "tools of the trade." Review of learning and memory and recent findings on cognition. Study of methods and techniques used for analysis, design, development, and evaluation of training. Impact
of recent advances in computing and instructional technologies. Prerequisites: U09-100 required and U09-214 or U09-314 recommended. Same as U87-468. Credit 3 units.

U09 Psych 470 Compensation Management
The methods of rewards for employee availability, capability, and performance: measures of performance, employment market issues, skill-building, and design of compensation packages of money and benefits to improve employees' work quality and productivity. Credit 3 units.

U09 Psych 471 History and Modern Systems of Psychology
The historical development of specific areas of experimental psychology (e.g., sensation and perception, motivation, emotion, human learning and memory, cognitive science, and behavior; physiological, developmental, and social psychology). Historical backgrounds, systematic roots, major theories; and the current status of the areas. Credit 3 units.

U09 Psych 476 I/O Psychology from a Behaviorist Perspective
The material in this course is intended to provide an initial overview of the field of organizational behavior management (OBM). OBM involves the application of principles of behavior in order to improve individual or group performance within an organizational setting such as a business or human service setting. Some of the pioneers in the field will be reviewed along with applications to different types of issues that both large and small organizations face on a daily basis. The role of OBM in the prevention of significant organizational problems, its role in building better management practices as well as service delivery issues will be presented. Credit 3 units.

U09 Psych 478 Psychopathology of Childhood
This course will cover emotional problems specific to children with emphasis on developmental context of psychopathology. We will also examine family systems in relation to problems of childhood. Prerequisites: U09-100, plus U09-322 or U09-354 or permission of instructor. Credit 3 units.

U09 Psych 479 Psychology and Psychopathology of the Family
Psychological development and psychopathology from a family systems perspective. Emphasis on the family as an interactive network of relationships where psychopathology is viewed in the context of a larger system of relationships rather than within a given individual. Discussion of theories and treatment strategies from the family therapy field. Credit 3 units.

U09 Psych 480 Introduction to Group Dynamics
Various aspects of group process including group decision making and problem solving, group influence processes, communication, power, and leadership. Small group behavior and its application to organizations. Prerequisites: U09 214 or 315 or permission of the instructor. Credit 3 units.

U09 Psych 488 Addiction and Treatment
This course will investigate the etiology and treatment of various chemical, substance, and behavioral addictions. Students will become familiar with the most prevalent theories of addiction as well as various treatment models. Emphasis will be placed on work within the field of Behavior Analysis and other related disciplines in an effort to supplement a comprehensive evaluation and understanding of addiction. Prerequisite: U09-100. Credit 3 units.

U09 Psych 489 Study for Honors
Acceptance into the Honors Program is based on superior performance as evidenced by the student's record in undergraduate course work and the written agreement (Petition for Permission to Enroll) of a member of the faculty of the department (or other approved supervisor) to supervise an Honors project. The student must complete 6 units of Honors work (3 units of Psych 498 and 3 units of Psych 499), submit an acceptable written thesis, and be recommended by the department. Recommendation for an Honors degree will be based on the evaluation of the written thesis and the student's overall performance as an undergraduate. Students in the Honors Program meet regularly in the Honors Seminar to discuss their research and become acquainted with the work of the other students. Psych 498 is a writing-intensive course. Permission of instructor is required for this course. Prerequisite: Psych 301 or 3011. Same as L33 Psych 498 Credit 3 units. A&S: SS, WI A&S IQ: SSC, WI Art: SSC

U09 Psych 492 Research in Psychology
The planning, execution, and written reporting of an original empirical research work within the area of psychology. Approval of the project or experiment by a supervising faculty member and the departmental coordinator required prior to registration. Prerequisites: advanced standing, 12 hours of psychology course work including U09-300 and 301, permission of the instructor, and permission of the departmental coordinator. Open only to University College psychology majors. Petition forms for enrollment are available in January Hall, Room 20. Petition must include the formal written research proposal. A student may enroll in this course only once. Credit 3 units.

U09 Psych 495 Directed Readings in Psychology
Prescribed readings in a special area of psychology. Approval of a specific reading list by the supervising faculty member and the departmental coordinator is required prior to registration. Prerequisite: 12 hours of psychology course work, advanced standing, permission of the instructor, and permission of the departmental coordinator. Open only to University College psychology majors. Petition forms for enrollment are available in January Hall, Room 20. A student may enroll in this course only once. Credit 3 units.

U09 Psych 497 Supervised Field Study
An opportunity for participation, with supervision, in a nonacademic activity in a community mental health agency for course credit. Students may choose from a list of community programs approved by the psychological and brain sciences department or may propose to structure their own program.
Criteria for approval and credit are: 1) the community program is an organized mental health program, 2) the student devotes a minimum of three hours per week to supervised work in the program, and 3) the student's work is directly supervised by a licensed psychologist. A student may not select for field study a program in which he/she has worked or volunteered during the past 12 months. The listing of approved programs and the petition forms to enroll in field study are available in January Hall, Room 20. Approval of the petition by the psychological and brain sciences department coordinator is required prior to enrollment. Open only to University College psychology majors. Prerequisite: advanced standing, completion of at least 12 units of psychology, and approval of the field study petition. A student may enroll in this course only once. Must be taken Credit/No Credit. Credit 3 units.