Psychological & Brain Sciences

As the science concerned with the study of behavior, Psychological & Brain Sciences 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 Psychological & Brain Sciences provides a sound basis for later professional graduate training at the master's or PhD level in Psychological & Brain Sciences. The psychological and brain sciences major may also provide important intellectual tools for those considering careers in management, law, education, social work, public relations and health-related professions. We also offer a psychological and brain sciences minor for students who are interested in psychological and brain sciences but are pursuing other subjects.

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Website: http://ucollege.wustl.edu/programs/undergraduate/bachelors-psychology

Degree Requirements

Bachelor of Science in Psychological & Brain Sciences

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

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

Introductory Psychology Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Psych 100</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Psych 300</td>
<td>Introductory Psychological Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Psych 3015</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9</td>
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Psychology Area Courses

Five upper-level (300-400) psychological and brain sciences courses as indicated below:

• Group A - Social/Personality (at least one course):
<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>Psych 315</td>
<td>Introduction to Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Psych 353</td>
<td>Psychology of Personality</td>
<td>3</td>
</tr>
<tr>
<td>Psych 381</td>
<td>Cross-Cultural Psychology</td>
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• Group B - Abnormal/Affective (at least one course):
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>Psych 354</td>
<td>Abnormal Psychology: The Major Mental Disorders</td>
<td>3</td>
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<tr>
<td>Psych 3195</td>
<td>Abnormal Child Psychology</td>
<td>3</td>
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<tr>
<td>Psych 488</td>
<td>Addiction and Treatment</td>
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• Group C - Biological/Neurological (at least one course):
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>U09 Psych 3604</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>Psych 3401</td>
<td>Biological Psychology</td>
<td>3</td>
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• Group D - Behavior & Cognition (at least one course):
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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Psych 359</td>
<td>Cognitive Psychology</td>
<td>3</td>
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<tr>
<td>Psych 365</td>
<td>Learning and Memory</td>
<td>3</td>
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• Group E - Lifespan Development (at least one course):
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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Psych 308</td>
<td>Social Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>Psych 322</td>
<td>Developmental Psychology</td>
<td>3</td>
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<tr>
<td>Psych 325</td>
<td>Psychology of Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>Psych 3261</td>
<td>Psychology of Aging</td>
<td>3</td>
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Optional Concentrations in Psychological & Brain Sciences

University College students who major in psychological and brain sciences may select from three optional concentrations.

Lifespan Development — This concentration provides an understanding of the cognitive and physiological changes that occur over the lifespan, including childhood, adolescence and older adulthood. It 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 3261)
Social Gerontology (Psych 308)
Counseling Foundations — This concentration involves the application of psychology in the clinical field. It provides a foundation for careers in clinical psychology, social work, counseling and 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)

**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 psychological and brain sciences.

**The Minor in Psychological & Brain Sciences**

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, including social, sensation and perception, physiological and personality. 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 and perspectives on counseling.

**Courses**


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**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. UColl: OLI

**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.

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, Erickson, 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.

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**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 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 308 Social Gerontology
This course provides an introduction to aging and growing old, from an interdisciplinary perspective. Specific attention is paid to demographics, physical health and illness, mental health, interpersonal relations, work issues, living arrangements, ethics, and death and dying. Prerequisite: U09 Psych 100. This course satisfies the Lifespan Development (Area E) requirement for the University College Bachelor of Science in Psychological and Brain Sciences degree. 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. UColl: OLI

U09 Psych 311 History and Modern Systems of Psychology
An introduction to the history of psychology. This course begins with a brief consideration of forces leading to development of psychology in the mid-1800s. It then examines the birth of modern psychology in Germany, and the schools of psychology that emerged early in the 20th century. Newer orientations and ideas are considered in the final segment of the course. We also consider the impact of psychology on American public life during the 20th century. Prerequisite: U09 100. 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.

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. UColl: OLI

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. Arch: SSC Art: SSC BU: BA EN: S

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. Prerequisite: U09-100. Credit 3 units.

U09 Psych 3251 Juvenile Delinquency
This course explores the nature of juvenile delinquency, including its root causes and influences, as well as the various strategies currently being employed to reduce and prevent delinquent behavior. The course discusses how delinquency begins, persists, and is overcome. Delinquency will be looked at from both a sociological and developmental-psychological perspective. We will discuss the criminal justice response to delinquency and evaluate programs and models that have met with varying degrees of success, as well as those that have had the opposite effect on reducing delinquent behavior. Credit 3 units. UColl: OLI
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. UColl: OLI

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 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. UColl: OLI

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. UColl: OLI

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 3604 Cognitive Neuroscience
This course provides a general introduction to the underlying principles and mechanisms of brain function that give rise to complex human cognitive behavior. Emphasis will be placed on how emerging methods and approaches from both neuroscience and cognitive psychology have been integrated to yield new insights into the organization and structure of higher mental processes. Topics include perception, attention, memory, language, and executive control. Prerequisite: Psych 100B. Same as L33 Psych 3604.
Credit 3 units. A&S IQ: NSM Arch: NSM Art: NSM BU: SCI

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 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.
Credit 3 units. UColl: OLI

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. UColl: OLI

U09 Psych 374 Psychology of Policing
This course will expose students to the discipline of police psychology, which is broadly defined as the application of psychological principles and methods to law enforcement. Subjects addressed will include the screening and hiring of police officers; conducting screening for special squads (e.g., SWAT); fitness-for-duty evaluations; training and consultation; stress counseling, among others. The course examines the evolution of police psychology and early influences on the profession such as the experimental investigation of psychological testing on police attitude and performance. Influential figures in the field of police psychology are discussed, including the work of Dr. Martin Reiser of the Los Angeles Police Department, the nation's first full-time police psychologist. This course is fully online. Only University College students receive credit for online courses.
Credit 3 units. UColl: OLI

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

U09 Psych 377 Psychology of Risk
Risk factors. Prerequisite: U09-100.
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.

Credit 3 units. UColl: OLI

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. UColl: OLI

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 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 (ACCTAC) 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: CD

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 383 Correctional Theory & Practice
In this course we will explore every aspect of correctional theory and practice in America. We will look at the structure of the correctional system, both jails and prisons, the demographics of the inmate population, and the experience of those working in a correctional setting, especially correctional officers. We will look at inmate psychology, and the personality changes (prisonization) that often take place in an inmate during their period of incarceration. We will look at the special problems that must be addressed by correctional systems relating to juvenile, female, mentally ill, and aged inmates. Finally, we will discuss the death penalty and the ongoing debate in America about this type of punishment.

Credit 3 units. UColl: OLI

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. Credit variable, maximum 3 units.

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. UColl: OLI

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 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. UColl: OLI

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). 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 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 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.
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 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 examines the motivation and behavior patterns of the drug/alcohol user. This examination takes place in the wider context of deviance. A portion of the course is devoted to a survey and evaluation of the services and programs available to the drug/alcohol user from the point of view of the user, the user's family, and society. Topics include: the history of psychotropic substances and their purpose and use in human society to the present; the history and philosophy of counseling interventions for psychotropic substance abuse and dependence; the ethnic, environmental, and socioeconomic factors affecting which substances are used, receptivity to treatment, and attitudes toward intervention; various treatment modalities such as 12-step groups, therapy groups, and in-patient treatment for both self-referred and court ordered clients. Prerequisite: U09-100.
Credit 3 units.

U09 Psych 491 Study for Honors in Psychology
Part 2 of Honors Thesis work in Psychology for students admitted to the Honors Program. Requires signed proposal and permission from psychology coordinator and dean in University College.
Credit 3 units.

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 online (http://ucollege.wustl.edu/forms). A student may enroll in this course only once.
Credit 3 units.