PSYCHOLOGY (BA OR BS)

Chair: Charles Goodsell, PhD (goodselc@canisius.edu)

Introduction
The Department of Psychological Sciences at Canisius College offers two separate degrees; a Bachelor of Arts (BA) in Psychology and a Bachelor of Science (BS) in Psychology. While there are some similarities between these degrees, the differences between the two degrees are primarily related to what you want to do with the degree and the coursework aligned within each program.

The most noteworthy difference between the two degrees is the level of science/research courses that must be completed. In addition to the acquisition of discipline-specific knowledge obtained through the 10 courses aligned within the BA program, there are three additional statistical/research based courses that must be completed for the B.S. degree. In the Bachelor of Science degree program, student majors will be given the opportunity to complete scientifically rigorous coursework and to be immersed in research based experiential activities. Courses aligned with the degree are specifically designed to increase student knowledge and understanding of advanced statistical methods, and to help students develop the mastery of a skillset useful in attaining postgraduate and/or career objectives that utilize these methods of scientific inquiry.

The Department of Psychology maintains two useful websites; a Departmental website (https://www.canisius.edu/academics/programs/psychology/) that provides a description of the program, faculty, facilities, academic and co-curricular opportunities, and the Psycholoopleedia (http://psycholoopleedia.net/) that includes information on upcoming courses and events, psychology relevant student organizations, and a guide for students interested in applying to graduate school.

Qualifications
Students must maintain a 2.0 GPA in the major and a 2.0 overall average to graduate with a degree in Psychology.

Advisement
All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors
Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student’s first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional coursework may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines
Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

BA Curriculum
An Ignatian Foundation
All undergraduate students must complete either the Canisius Core Curriculum (http://catalog.canisius.edu/undergraduate/academics/core-curriculum/index.html) or the All-College Honors Curriculum (http://catalog.canisius.edu/undergraduate/academics/core-curriculum/index.html). Many schools refer to their college-wide undergraduate requirements as “general education” requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives
Students may graduate with a bachelor’s degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor’s degree may vary depending on the student’s major(s) and minor(s).

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Introduction to Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 201</td>
<td>Basic Statistics for Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PSY 202</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
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Area I: Neuroscience & Cognition
Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>PSY 324</td>
<td>Cognitive Psychology</td>
</tr>
<tr>
<td>PSY 326</td>
<td>Psychology of Memory</td>
</tr>
<tr>
<td>PSY 391</td>
<td>Biopsychology of Stress</td>
</tr>
<tr>
<td>PSY 397</td>
<td>Neurobiology of Mental Disorders</td>
</tr>
<tr>
<td>PSY 398</td>
<td>Neurobiology of Childhood Mental Disorders</td>
</tr>
<tr>
<td>PSY 410</td>
<td>Fundamentals of Human Neuropsychology</td>
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<tr>
<td>PSY 431</td>
<td>Sensation and Perception</td>
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Area II: Developmental & Psychosocial
Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>PSY 203</td>
<td>Lifespan Developmental Psychology</td>
</tr>
<tr>
<td>PSY 302</td>
<td>Personality Psychology</td>
</tr>
<tr>
<td>PSY 303</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>PSY 318</td>
<td>Social Psychology</td>
</tr>
</tbody>
</table>
Area III: Outcomes & Applications
Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>PSY 229</td>
<td>Industrial/Organizational Psychology</td>
</tr>
<tr>
<td>PSY 329</td>
<td>Leadership and Motivation</td>
</tr>
<tr>
<td>PSY 334</td>
<td>Child, Family and Community Psychology</td>
</tr>
<tr>
<td>PSY 373</td>
<td>Behavior Modification</td>
</tr>
<tr>
<td>PSY 395</td>
<td>Assessment in the Behavioral Sciences</td>
</tr>
<tr>
<td>PSY 452</td>
<td>Techniques of Counseling</td>
</tr>
<tr>
<td>PSY 453</td>
<td>Theories of Counseling</td>
</tr>
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</table>

Psychology Electives: Any three psychology courses listed in the catalog or substitutions approved by the department chairperson

Total Credits 30

Note: All students must complete a “Senior Assessment Exam” during the second semester of their senior year to complete the degree requirements.
Roadmap
Recommended Semester Schedule for Major Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>Freshman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 101 Introduction to Psychology I</td>
<td>3 Credits</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 201 Introduction to Psychology II</td>
<td>3 Credits</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology Area Course (I, II or III)</td>
<td>3 Credits</td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology elective</td>
<td>3 Credits</td>
<td></td>
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</tbody>
</table>

1 This requirement may be completed with 3 or more credits of PSY 495, PSY 497, or PSY 498.

Learning Goals & Objectives

Student Learning Goal 1
Students will demonstrate knowledge in selected discipline-specific content areas of psychology.

Students will:

- Objective A: demonstrate knowledge in learning theory, cognition, and memory;
- Objective B: demonstrate knowledge of sensation and perception, and physiological psychology;
- Objective C: demonstrate knowledge in the areas of clinical and abnormal psychology as well as personality theory;
- Objective D: demonstrate knowledge of social and developmental psychology

Student Learning Goal 2

Students will demonstrate abilities related to scientific inquiry in psychology.

Students will:

- Objective A: demonstrate knowledge of basic research methods;
- Objective B: use basic statistics to test hypotheses and correctly interpret the results of their analyses;
- Objective C: think critically about psychological phenomena and research;
- Objective D: demonstrate the communication skills, information literacy, and technology literacy necessary for conducting and interpreting scientific psychological research.

Student Learning Goal 3

Students will demonstrate knowledge of psychological ethics and social responsibility.

Students will:

- Objective A: demonstrate knowledge of the APA code of Ethics in the treatment of human and nonhuman research participants;
- Objective B: demonstrate knowledge of ethical guidelines within the context of academic and professional psychology.

Minors

The Psychology Department offers several psychology minors:

- Clinical/Counseling Psychology Minor: Child/Adolescent Populations (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/clinical-counseling-psychology-child-adolescent-minor/)
- Clinical/Counseling Psychology Minor: Adult Populations (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/clinical-counseling-psychology-adult-minor/)
- Forensic Psychology Minor (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/forensic-psychology-minor/)
- General Psychology Minor for Non-Majors (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/psychology-minor/)
- Industrial/Organizational Psychology Minor (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/Industrial-Org-minor/)
- Neuropsychology Minor (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/neuropsychology-minor/)
- Psychology Minor (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/psychology-minor/)
- School Psychology (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/school-psychology/)
- Sports Psychology (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/sports-psychology-minor/)

Courses

PSY 101 Introduction to Psychology I 3 Credits
The study of behavior from a psychological perspective. Topics include methods of psychological inquiry, motivation and emotion, thinking and language, learning, memory and physiological basis of behavior. Students taking PSY 101 are expected to be available for participation in research studies or equivalent activity.
Offered: every fall.

PSY 102 Introduction to Psychology II 3 Credits
The study of behavior from a psychological perspective. Topics include methods of psychological inquiry, human development, social behavior, psychological testing, personality, psychopathology and psychotherapy. May be taken before PSY 101. Students taking PSY 102 are expected to be available for participation in research studies or equivalent activity.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every spring.
PSY 201 Basic Statistics for Behavioral Sciences
3 Credits
Descriptive statistics, probability, sampling distributions, hypothesis testing and inferential statistics. SPSS for Windows.
Offered: fall & spring.

PSY 202 Research Methods in Psychology
3 Credits
Philosophical measurement and statistical concepts of common methods of experimental and non-experimental research. Design and execution of project required.
Prerequisite: PSY 201 or equivalent.
Offered: fall & spring.

PSY 203 Lifespan Developmental Psychology
3 Credits
This course is designed to give an introductory overview of lifespan developmental psychology. We begin with neonatal development and end with aging and death. At each period in the lifespan we discuss physical, cognitive, emotional, and social development. By the end of the course, you will be able to identify how human psychological development progresses across the lifespan, explain fundamental historical theories of human development, and describe important scientific research in the field. We also discuss the impact discrimination, economic disadvantage, and other social justice issues can have on development.
Offered: every fall & spring.

PSY 229 Industrial/Organizational Psychology
3 Credits
Selection, evaluation and training of personnel, facilitation of group dynamics on the job, leadership, worker motivation and effects of workplace environment on performance and morale. Emphasis on student career development.
Offered: occasionally.

PSY 230 Psychology of Religion and Spirituality
3 Credits
Psychology of Religion and Spirituality covers the measurement, biological processes, triggers, development, and behavioral correlates of religion and spirituality broadly defined.
Prerequisite: Minimum grade of C- in RST 101.
Offered: occasionally.

PSY 235 Health Psychology
3 Credits
Psychology of health-related behaviors, including coping with stress and ill health, physician-patient relationships, compliance with medication and psychological influences on specific disorders. Students conduct personal stress assessments and design interventions.
Offered: occasionally.

PSY 302 Personality Psychology
3 Credits
Covers modern theories on what personality is, different ways of approaching and assessing personality, how personality develops across the lifespan, causes of individual differences in personality, and the many important things personality influences such as physical and psychological health.
Offered: once a year.

PSY 303 Abnormal Psychology
3 Credits
Overview of the clinical symptoms associated with adult psychiatric disorders identified in the Diagnostic and Statistical Manual, 5th Edition (DSM-V). Factors associated with the development of the various types of psychopathology are examined and empirically validated treatments for these conditions are reviewed. The impact of mental illness on those afflicted, their family members and society is examined.
Offered: every fall & spring.

PSY 307 Adolescent Psychology
3 Credits
Physiological, psychological and emotional factors in achieving maturity. Focuses on time frame from pre-puberty to emerging adulthood. Extension of theoretical orientation to adolescent problems. Emphasis on real world problems and solutions.
Offered: occasionally.

PSY 310 Applied Behavioral Analysis
3 Credits
This course focuses on the principles of applied behavior analysis and their application in classroom and home environments. Students receive in-depth instruction in functional behavioral assessments as well as the application of ABA principles to intervention, skill acquisition, and data management.
Offered: once a year.

PSY 312 Autism Spectrum Disorders and Developmental Disabilities
3 Credits
This course provides an in-depth review of the characteristics and features of autism spectrum disorders (ASD) and their impact on the adaptive, social, emotional, and behavioral functioning of individuals with ASD. Additionally this course will cover treatments and interventions for individuals with ASD. Attention will be given to etiology, myths, assessment, research-based interventions, program models, and legal issues.
Offered: once a year.

PSY 318 Social Psychology
3 Credits
This course will examine scientific research on how individuals’ thoughts and emotions influence social behavior. Topics will include persuasion, stereotyping and prejudice, social identity, aggression, and relationships.
Offered: once a year.

PSY 320 Cultural Psychology
3 Credits
Humans learn from our cultures in all aspects of our lives. Choosing a mate, political attitudes, prejudices, and even basic perceptions all depend on cultural learning. In all our actions we rely on ideas, values, strategies, feelings, and goals that have been shaped by our cultures. We cover both the psychological universals and the variations across cultures.
Fulfills College Core: Core Capstone
Offered: fall & spring.

PSY 323 Motivation and Emotion
3 Credits
Covers behavioral, cognitive and physiological theories of motivation and emotion with special focus on humanistic motivational theories. Through course activities and assignments, students will apply the theories learned in class to their own behaviors, examine the nature and progress made on their personal goals during the semester and understand the dynamic interplay between goal- directed behavior and emotion.
Offered: spring.

PSY 324 Cognitive Psychology
3 Credits
The psychological processes that enable us to acquire, store, retrieve and use knowledge. Topics include perception, attention, memory, language, thinking, and decision making. Applications in education, psychopathology.
Offered: once a year.

PSY 326 Psychology of Memory
3 Credits
Examines the findings from laboratory research to gain a better understanding of the structure and organization of memory. Topics include working memory, encoding and retrieval processes, implicit memory and multiple memory systems, reconstructive processes in memory, eyewitness memory, developmental changes in memory, neuropsychological correlates of memory and memory disorders, source memory, memory improvement, and the repressed/recovered memory controversy.
Offered: occasionally.
This course examines the developmental changes experienced during late life. We begin by examining the demography and science of aging. We then turn to the normative physical, cognitive, and psychosocial changes that come with aging. We also consider variability in normative age related changes. We examine the fine threshold between function and disability as well as important issues in late life such as long-term care and death & dying. Throughout the semester we engage with these topics with a variety of hands-on learning and lecture experiences to augment our excellent text. In particular, we address the unique challenges of aging for marginalized groups in a series of immersive projects.

Fulfills College Core: Core Capstone

Offered: Occasionally.

PSY 370 School Psychology

This course is an introduction to the field of school psychology including historical foundations, current issues, principles of assessment and service delivery models. This course focuses heavily on applying current research and evidence-based practice for children with behavioral, emotional, developmental and learning problems in schools. Issues involving schools as systems, cultural diversity, human exceptionality, professional standards, legal/ethical considerations, and the interrelationship between general and special education are emphasized.

Prerequisite: PSY 203.

Offered: Every fall.

PSY 373 Behavior Modification

A study of the principles of conditioning and learning as applied to practical approaches of behavior management and change. Students will learn how to conduct a functional analysis of problematic behavior and how to apply evidence based behavior-change techniques. Self-regulation and cognitive-behavioral techniques will also be discussed.

Offered: Every fall.

PSY 375 Psychology of Addiction

This course aims to deepen and broaden students’ understanding of addiction. Specific attention will be paid to investigating the similarities and differences between chemical/substance addictions and behavioral/process addictions. Addiction to tobacco, alcohol, hard drugs, food eating, gambling, internet (and other electronic media), shopping, love, sex, exercise and work will be examined. The etiology of addiction will be studied, including biological and genetic factors, family and community issues, and societal and cultural influences. The consequences of addiction, as well as prevention and treatment approaches, will be examined at the individual, family, community, and societal levels. This course will draw on current research in the area of addiction, and will emphasize critical thinking and analysis of the current controversies in the field.

Offered: Every spring.

PSY 380 Science and Pseudoscience in Psychology: Thinking Critically

This course will provide students with the skills needed to scientifically evaluate fringe-science, paranormal, and otherwise unorthodox claims about human behavior that regularly appear in popular culture and in the popular media. A major focus of the course will be on biases and heuristics in cognition that are typically adaptive but that also lead to predictable errors in reasoning.

Fulfills College Core: Field 5 (Social Sciences)

Offered: Every spring.

PSY 384 Child & Adolescent Psychopathology

This course will introduce students to the signs and symptoms of various psychiatric disorders of childhood and adolescence (e.g., conduct disorder, ADHD). Factors correlated with the development of these disorders are reviewed and empirically validated treatments for these conditions are discussed.

Prerequisite: A grade of C- or higher in PSY 101 and PSY 102.

Offered: Every fall.

PSY 391 Biopsychology of Stress

This course is designed to give students an understanding of the anatomical, physiological and psychological components and effects of short-term and long-term stress. Material includes effects of stress on cardiovascular, digestive, reproductive, endocrine, and immune systems as well as factors that modulate the stress response.

Offered: Once a year.
PSY 392 Prosocial Behavior 3 Credits
This course will examine the scientific evidence for what motivates people to behave in ways that benefit others. Topics include altruism, psychopathy, preferences for fairness, and the neuroscientific underpinnings of morality.
Fulfills College Core: Justice
Offered: Fall

PSY 395 Assessment in the Behavioral Sciences 3 Credits
Addresses fundamentals of classic test theory, scaling, reliability, and validity and provides an overview of measures of intelligence, achievement, and personality for clinical, educational, and research use.
Prerequisite: PSY 201.
Offered: fall & spring.

PSY 396 Behavior Intervention/Spec Pop 3 Credits
This RBT course has been designed for individuals that meet the eligibility requirements of the Behavior Analyst Certification Board (e.g., the person must possess a high school degree). This course is a hybrid course designed to teach you the basic principles, procedures and the underlying philosophy of ABA delivered in class and online. This training program is based on the Registered Behavior Technician Task List and is designed to meet the 40-hour training requirement for the RBT credential. The program is offered independent of the BACB.
Offered: occasionally.

PSY 397 Neurobiology of Mental Disorders 3 Credits
Examines the role of the putative biological underpinnings of the symptoms, etiology and treatment of various mental disorders. Includes introduction to neuroanatomy, neurophysiology, and neurotransmitter systems.
Prerequisite: PSY 101 or PSY 102, or permission of instructor.
Offered: every fall.

PSY 398 Neurobiology of Childhood Mental Disorders 3 Credits
This course is a sequel to Neurobiology of Mental Disorders and focuses on the neurobiological underpinnings of several developmental and other mental disorders affecting children today. There is extensive discussion of the role of a variety of prenatal and postnatal stressors in the development of mental disorders.
Prerequisite: Minimum grade of C in PSY 397 or BIO 114 or BIO 345 or Permission of Instructor.
Offered: every spring.

PSY 401 Advanced Statistics Seminar 3 Credits
Topics include bivariate and multiple regression, least-squares estimation, model-building techniques, assumptions and diagnostics, mediation and moderation, the logistic model and exploratory factor analytic techniques. SPSS will be used throughout. Students will conduct a final research project through secondary analysis of a large national data set.
Prerequisite: Minimum grade of B- in PSY 201.
Offered: every fall.

PSY 402 Applying Research Methods in Psychology 3 Credits
This course is designed to provide students with hands-on practice with experimental research methods in psychology. Students will learn how to plan, conduct, and analyze their own experimental research, and develop the knowledge and skills to apply and critique the scientific method across a variety of settings.
Prerequisite: PSY 202.
Offered: spring.

PSY 403 Fundamentals of Human Neuropsychology 3 Credits
An advanced course that provides students with a perspective on the neural mechanisms underlying behavior. Material covered in the course will include (but not be limited to) structure and function of the brain from the cellular to the structural levels, brain imaging techniques, and brain development, plasticity and neurological disorders.
Prerequisite: Minimum grade of C in PSY 101 or 102 or BIO 111 or BIO 114 or BIO 345 or Permission of Instructor.
Offered: spring.

PSY 431 Sensation and Perception 3 Credits
This course is an introduction to sensory systems and perceptual processes. Course focuses on each of the major sensory systems, beginning with the anatomy and physiology of the sense organ, and builds up to how we represent that information in the mind.
Prerequisite: Minimum grade of C in PSY 101 or PSY 102.
Offered: occasionally.

PSY 452 Techniques of Counseling 3 Credits
Examines the therapeutic relationship and traditional counseling and psychotherapy skills. Provides the opportunity to practice counseling strategies in an encouraging and supportive environment. Assists in the development of effective communication skills applicable in professional, general human services, and nonprofessional helper roles. Assessment and treatment strategies, used to address the most common disorders encountered in counseling, are studied.
Offered: every fall.

PSY 453 Theories of Counseling 3 Credits
Explores classic and contemporary theories of counseling. Cultural competency and empirical research are examined. Counseling approaches for specific diagnoses are discussed. Relates theories to students’ personal experiences and observations of others. Assists students with exploring their personal views regarding therapeutic change.
Offered: spring.

PSY 495 Guided Research in Psychology 1-6 Credits
Opportunity for students interested in designing and conducting empirical research to collaborate with faculty in research activities leading to undergraduate or professional conference presentations and possible publication.
Prerequisite: PSY 101, PSY 102, PSY 201, PSY 202, junior or senior status, & permission of instructor.
Offered: fall, spring, & summer.

PSY 497 Advanced Experimental Psychology 3 Credits
Intended for advanced students with the interest, prerequisites and commitment to experimental research. Involves students in hands-on data collection and statistical analysis.
Prerequisite: PSY 101, PSY 102, PSY 201, PSY 202, PSY 401, junior or senior status, & permission of instructor.
Offered: fall.
PSY 498 Psychology Practicum 3-6 Credits
Practicum allows students to engage in an extensive real-world learning experience in an organizational context relevant to Psychology. Placements include positions in such areas as schools, human resources, marketing, social services, as well as medical and forensic settings. Students increase their mastery of specific areas of Psychology by using theories and practices in these applied settings. The opportunity to work at a professional site helps students develop appropriate work standards, explore career options, and build mentor and other network relationships in the workplace. Students are required to spend 120 hours at their practicum site over the course of the semester. Supervision is provided by an on-site staff as well as a faculty advisor. For more information regarding this course and the application process, please contact the Psychology Department.
Prerequisite: permission of chair or supervising faculty member. Restriction: Second semester junior or senior status; 3.0 minimum GPA.
Offered: every fall, spring, & summer.

PSY 499 Independent Study 3 Credits
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall, spring, & summer.