

PSYCHOLOGY (BA OR BS)

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Introduction

The Department of Psychological Sciences at Canisius University 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 skill set useful in attaining postgraduate and/or career objectives that utilize these methods of scientific inquiry. It is recommended that students begin in the BA program and then, after consulting with their advisor, switch to the BS sometime after their freshman year.

Visit the Departmental website (<https://www.canisius.edu/academics/programs/psychology/>) for a description of the program, faculty, facilities, academic and co-curricular opportunities.

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 Major/Minor Declaration form. This form will be submitted electronically and reviewed and approved by each department chairperson as well as the appropriate associate dean.

Per university 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 course work may be required. Please note that students will receive only one degree unless completing the dual degree (<https://catalog.canisius.edu/undergraduate/>

academics/curricular-information/) requirement including at least 150 undergraduate credit hours, regardless of the number of majors they complete. Both (all) majors appear on a student's transcript.

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. To receive a minor, the student must complete at least 9 credit hours of coursework distinct from their other credentials (i.e., majors, other minors). The complete list of minors is available on the Canisius website (<https://www.canisius.edu/academics/programs/undergraduate/?type%5B%5D=17>) and in the catalog (<https://catalog.canisius.edu/undergraduate/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/curricular-information/core-curriculum/>) or the All-College Honors Curriculum (<http://catalog.canisius.edu/undergraduate/academics/curricular-information/all-college-honors-program/>). 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

Code	Title	Credits
Required Courses		
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology	3
Area I: Neuroscience & Cognition		
Select one of the following:		3
PSY 324	Cognitive Psychology	
PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders	
PSY 399	Social Neuroscience	
PSY 410	Fundamentals of Human Neuropsychology	
Area II: Developmental & Psychosocial		
Select one of the following:		3
PSY 203	Lifespan Developmental Psychology	

PSY 302	Personality Psychology	
PSY 303	Psychopathology	
PSY 318	Social Psychology	
PSY 323	Motivation and Emotion	
PSY 384	Child & Adolescent Psychopathology	
Area III: Outcomes & Applications		
Select one of the following:		3
PSY 229	Industrial/Organizational Psychology	
PSY 329	Leadership and Motivation	
PSY 334	Child, Family and Community Psychology	
PSY 373	Behavior Modification	
PSY 395	Assessment in the Behavioral Sciences	
PSY 452	Techniques of Counseling	
PSY 453	Theories of Counseling	
Psychology Electives: Any three psychology courses listed in the catalog or substitutions approved by the department chairperson		9
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

BS Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (<http://catalog.canisius.edu/undergraduate/academics/curricular-information/core-curriculum/>) or the All-College Honors Curriculum (<http://catalog.canisius.edu/undergraduate/academics/curricular-information/all-college-honors-program/>). 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

Code	Title	Credits
Required Courses		
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology ¹	3
PSY 401	Advanced Statistics Seminar ²	3
PSY 402	Applying Research Methods in Psychology ³	3
Application of Psychology		
Choose one of the following		3
PSY 495	Guided Research in Psychology ⁴	
PSY 498	Psychology Practicum	
PSY 497	Advanced Research Methods in Psychology ⁵	

Area I: Neuroscience & Cognition

Select one of the following:		3
PSY 324	Cognitive Psychology	
PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders ⁶	
PSY 399	Social Neuroscience	
PSY 410	Fundamentals of Human Neuropsychology ⁷	

Area II: Developmental & Psychosocial

Select one of the following:		3
PSY 203	Lifespan Developmental Psychology	
PSY 302	Personality Psychology	
PSY 303	Psychopathology	
PSY 318	Social Psychology	
PSY 323	Motivation and Emotion	
PSY 384	Child & Adolescent Psychopathology	

Area III: Outcomes & Applications

Select one of the following:		3
PSY 229	Industrial/Organizational Psychology	
PSY 329	Leadership and Motivation	
PSY 334	Child, Family and Community Psychology	
PSY 373	Behavior Modification	
PSY 395	Assessment in the Behavioral Sciences	
PSY 452	Techniques of Counseling	
PSY 453	Theories of Counseling	

Psychology Electives

Students may take any three psychology courses listed in the catalog. Substitutions of other courses may be possible but require approval by the department chairperson⁸

Total Credits **39**

Note: All students must complete a "Senior Assessment Exam" during the second semester of their senior year to complete the degree requirements

¹ Please note that PSY 201 is a prerequisite course for PSY 202

² Please note that PSY 401 requires a minimum grade of B- in PSY 201

³ Please note that PSY 202 is a prerequisite course for PSY 402

⁴ Please note that junior or senior status, permission of the instructor and completion of PSY 101, PSY 102, PSY 201 and PSY 202 are prerequisites for PSY 495

⁵ Please note that junior or senior status, permission of the instructor, and completion of PSY 101, PSY 102, PSY 201, PSY 202 and PSY 401 are prerequisites for PSY 497

⁶ Please note that PSY 398 requires a minimum grade of C in PSY 397 or BIO 114 or permission of the instructor

⁷ Please note that a PSY 410 requires a minimum grade of C in PSY 101 or PSY 102, BIO 111 or BIO 114 or BIO 345 or permission from the instructor

⁸ Students enrolled in the Psychology (BS)/Data Analytics (MS) 4+1 program substitute MAT 111 for one psychology elective.

Roadmap

Recommended Semester Schedule for Major Course

Freshman

Fall	Spring
PSY 101	PSY 102

Sophomore

Fall	Spring
PSY 201	PSY 202

Psychology Area Course (I, II or III)	Psychology Area Course (I, II or III)
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Junior

Fall	Spring
Psychology Area Course (I, II or III)	PSY 402 (BS students only)
PSY 401 (BS students only)	MAT 111

Senior

Fall	Spring
Psychology elective	Psychology elective
Psychology Practical Experience (BS students only) ¹	CSC 512 & 512L ²

select one of the following:

CSC 511
& 511L
MAT 500²

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

² MAT 500 is offered in summer.

Learning Goals and 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:

Child, Family and Community Studies (<http://catalog.canisius.edu/undergraduate/college-arts-sciences/sociology/social-sciences-minor-child-family-community-studies/>)

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-Organizational-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/>)

Combined Degree Programs

- 4+1 Psychology BS/Data Analytics MS (<http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/4-1-psychology-data-analytics/>)
- 3+2 Psychology BA/MSW or BS/MSW (<http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/3-2-psychology-msw/>) (University at Buffalo)
- 3+3 Psychology BA/JD (<http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/3-3-psychology-jd/>) (University at Buffalo)

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 270 Psychobiography 3 Credits

This course will provide a forum to understand the life of an individual, a literary figure, or a historical period through the use of psychological science. At the same time, it facilitates the critical evaluation of psychological theory by examining where theory and research work in real-world contexts.

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 Psychopathology 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 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 329 Leadership and Motivation 3 Credits

Determinants of leadership effectiveness, factors influencing effectiveness in maintaining leadership position, influencing followers and accomplishing group objectives. Emphasis on communication competencies, group interaction, experiential learning.

Prerequisite: PSY 101 or PSY 102, & junior or senior standing.

Offered: spring.

PSY 334 Child, Family and Community Psychology 3 Credits

Focuses on the prevention of mental, emotional and behavioral disorders through the study of family and community influences on the developing child. Risk and preventive factors are examined and interventions at the family and community level are explored. Introduces students to the field of community psychology and offers meaningful ways for students to apply concepts. Also counts for CRJ credit.

Offered: every fall.

PSY 335 Psychopathology in Media 3 Credits

An examination of the manner by which psychopathology is presented in various forms of media (e.g., movies, TV, internet). The validity of the information presented is comparatively analyzed against empirically generated diagnostic criteria, and the resulting impact of misinformation and inaccurate portrayals on societal knowledge/views of individuals with mental illness is discussed.

Offered: occasionally.

PSY 340 Stereotyping and Prejudice 3 Credits

This course will examine stereotyping, prejudice, and discrimination from a social psychological perspective. This will include a focus on both individual differences and situational influences on stereotyping and prejudice, as well as a consideration of the cognitive and emotional factors that can promote or inhibit these processes.

Fulfills College Core: Diversity

Offered: Occasionally.

PSY 352 Learning Psychology 3 Credits

This course focuses on historical and contemporary perspectives of learning, with special attention given to behavioral, cognitive, social cognitive, and constructivist approaches. Biological, motivational and affective aspects of learning are also presented. Relevant basic and applied research will be covered, along with practical applications for daily living.

Offered: occasionally.

PSY 360 Psychology and Law 3 Credits

Examines issues of considerable importance to the criminal justice system using empirical techniques from psychology. Topics include the conviction of the innocent, lie detection, the death penalty, the insanity defense, civil commitment, eyewitness memory, false and repressed memories, children in the courtroom, jury decision-making, and expert testimony.

Offered: spring of even-numbered years.

PSY 365 Psychology of Aging 3 Credits

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 3 Credits

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 3 Credits

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 3 Credits

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 377 Psychology of Violence and Aggression 3 Credits

This course will focus on violence and aggression using a multidisciplinary approach. We will explore developmental, psychological, sociological, physiological, and cultural theories that are used to understand the roots and consequences of violence and aggression. We will examine aggression and violent behavior across the lifespan, exploring the etiology of violence and aggression. More specifically, the course will help students examine the interactions between biology, psychology and our social world that may place individuals at risk for engaging in aggressive or violent acts or may serve as protective factors for violence and aggression. Through this understanding we will examine responses to and interventions for aggression and violence. We will also explore the impact on the victims and representations of aggression and violence in media.

Offered: every fall.

PSY 384 Child & Adolescent Psychopathology 3 Credits

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, PSY 102, and PSY 303.

Offered: every fall.

PSY 388 Environmental Psychology**3 Credits**

This course will engage students in learning about their relationship with our natural world. We will investigate the ways in which behavioral scientists are studying the connection between psychology and nature. We will explore the benefits to being outdoors as well as the challenges with coping with our individual, community, and species impact on the climate crisis. We will use the lens of developmental science to study how humans adopt attitudes and behaviors that support our environment, and work to understand strategies to combat structural barriers in equitable access to green spaces and wilderness. Throughout the semester, students will learn by doing as we partner with local community organizations to help assess and promote regional efforts to care for our environment.

Offered: fall of even-numbered years.**PSY 391 Biopsychology of Stress****3 Credits**

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 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.

Offered: every spring.**PSY 399 Social Neuroscience****3 Credits**

This course will provide an introduction to the field of social neuroscience. This will include a focus on how social processes are implemented at the neural level, and also how neural mechanisms help give rise to social phenomena and cultural experiences. Specifically, we will review theories and methods guiding social neuroscience, as well as psychological research examining the brain basis of processes such as emotion, group identity, and social decision making.

Offered: spring of odd-numbered years.**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:** every spring.**PSY 410 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 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 Research Methods in Psychology****3 Credits**

Intended for advanced students with the interest of understanding applied data management, analysis, and open science. Students will identify a dataset they want to work with over the semester and preregister and archive their project rationale, hypotheses, and analytic plan following best practices in open science. Students will present their project at Ignatian Scholarship Day. The course will provide an introduction to the programming language R and to the Open Science Framework.

Offered: spring of even-numbered years.

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.