# PSYCHOLOGY

Darla Frandrup, Regents Science 236 507-786-3142 frandrup@stolaf.edu wp.stolaf.edu/psych

The Department of Psychology is committed to maintaining a rigorous academic curriculum within a supportive community structure. It seeks to address broad questions posed by a liberal education and specific concerns of individual students. St. Olaf College's mission statement provides a framework for curriculum, personal development, and community relations. Because life is more than facts and theories, the Psychology Department encourages students to be responsible citizens dedicated to service, as well as scientific seekers of truth.

Psychology courses introduce the disciplinary knowledge that nurtures growth and behavioral change while providing background for advanced study. Psychology contributes to majors in social work and nursing, to concentrations in environmental studies, family studies, Asian studies, applied linguistics, neuroscience, and gender and sexuality studies, and to the psychology core of the social studies education major.

Psychology majors are prepared for graduate and professional programs in psychology, medicine, law, physical therapy, social work, nursing, and ministry and for entering positions in business, government, or industry.

# **Overview of the Major**

The Department of Psychology follows the American Psychological Association's guidelines of "synthesizing the natural and social science aspects of the discipline, in part, by requiring students to take courses in both knowledge bases." Thus both interpersonal and investigative skills are enhanced. Students benefit from research in the library, laboratory, and field, as well as from internships. Through course structure and faculty diversity, the department challenges students to think critically and creatively as they investigate ways in which animals, especially humans, adapt to their environment through biological, social, emotional, spiritual, perceptual, behavioral, linguistic, and cognitive processes.

# Intended Learning Outcomes for the Major

# **Special Programs**

The Psychology Club, open to all students interested in psychology, is an active organization on campus, as is Psi Chi, the national honor society in psychology. Together they offer group activities of psychological interest. Psychology majors are eligible for affiliate membership in the American Psychological Association and to receive its publications and announcements.

Special study programs include the social studies education program with a major in psychology and internship programs to pursue special areas of interest in the field.

Research groups in the department allow students to participate in a research program associated with a faculty member. Participation in these research groups allows students to learn how research is done in psychology, to practice skills they will need in graduate school and other employment, and to begin the process of becoming a psychologist. Often the research done in research groups is presented at national and regional conferences and published in professional journals.

Departmental honors and awards include the Gordon Allport Award granted each spring to the junior whose aspirations are in basic sympathy with Allport's views and who has made efforts to develop his or her own talents, interests, and personality toward fulfilling his or her individual potential. A psychology endowment fund provides funding for equipment, supplies, and travel expenses for students undertaking research in the department.

# Recommendations for Graduate Study

Students who wish to attend graduate school are encouraged to consult with the psychology faculty to plan a course of study appropriate to their interests.

# Requirements Requirements for the Major

Psychology majors are required to take 10.00 courses to complete the major. The major consists of 9.00 courses in the Department of Psychology and 1.00 course in statistics.

The requirements fall into five categories: foundation courses in the major, content core courses, level III capstone courses, elective courses in the department, and a general education requirement for the major.

Code	Title	Credits	
Foundation Courses in the Major			
PSYCH 125	Principles of Psychology	1.00	
PSYCH 230	Research Methods in Psychology	1.00	
Content Core of the Major			
Students must select areas.	1 course from 3 different core	3.00	
Core A			
PSYCH 235	Sensation and Perception		
PSYCH 238	Biopsychology		
Core B			
PSYCH 236	Conditioning and Learning		
PSYCH 237	Cognitive Psychology		
Core C			
PSYCH 241	Developmental Psychology		
PSYCH 249	Social Psychology		
Core D			
PSYCH 244	Psychology of Personality		
PSYCH 247	Psychopathology		
Level III Capstone Courses			
Two of any level III co	ourses <sup>1</sup>	2.00	
General Education Requirement for the Major			
	y course in statistics that ive statistics and hypothesis	1.00	
STAT 110	Principles of Statistics		

Total Credits		10	
Two additional psychology courses		2.00	
Elective Psychology Courses			
ECON 260	Introductory Econometrics		
SDS 172	Statistics 1		

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Except PSYCH 394, which does NOT count toward the level III requirement. Only one PSYCH 393, PSYCH 396 or PSYCH 398 may fulfill the level III requirement

\*By completing this major, the student also satisfies the OLE Core Writing in the Major requirement.

# Courses

# **PSYCH 125:** Principles of Psychology

This whirlwind introduction comprehensively examines foundational principles, theoretical approaches, and major areas of study within psychology. Acting as skeptical scientists, students gain another lens on the human experience by which they can better understand themselves and others. Students see psychology as a science and challenge "common sense" explanations about how people function. This gateway course captures the essence of the liberal arts, applying to almost any career choice. Offered each semester. Also counts toward nursing, social studies education, and social work majors and educational studies concentration.

# PSYCH 220: Socioemotional Development in Cultural Context

This course explores children's socioemotional and self development in cultural context. Students examine larger theoretical frameworks and developmental patterns concerning socioemotional development, paying special attention to the various familial and cultural contexts that lead to the creation of individual selves and cultural beings. Some of the questions the course explores include: How do children become emotional beings? How do cultural factors shape our sense of self and identity, our motivations, and interactions with others? Offered during January Term.

Prerequisite: PSYCH 125.

### **PSYCH 221:** Menacing Minds

Psychopaths, blazing a path of disregard and devastation through life, are a chilling example of the darker side of humanity. Students critically compare psychopathy as portrayed in the popular media to psychology's theoretical and empirical understanding. They explore questions such as: What are the hallmark characteristics of a psychopath? Where can psychopaths be found? What causes psychopathy? Students also examine the question of what the existence of psychopathy means for the rest of us. Offered periodically during January Term.

Prerequisite: PSYCH 125.

# PSYCH 222: Psychology of Hearing

How do we hear? What do we hear? How do we know? This course examines the perception of the acoustic world through our sense of hearing. Topics include the structure of sound itself (acoustics), how sound is encoded and processed by the brain, and how we come to understand sound as something beyond a physical stimulus (representation, meaning, and interpretation). Additional topics include speech perception, music, hearing loss, and cochlear implants. Offered periodically during January Term. Also counts toward applied linguistics and neuroscience concentrations.

Prerequisite: PSYCH 125 recommended.

# PSYCH 227: Environmental Psychology at Rocky Mountain National Park (study away)

This course investigates the human relationship with the natural world, examining ways in which the natural environment is important psychologically to human beings. Integrating aspects of theoretical and empirical psychology, environmental studies and literature, we explore meanings, values, and questions such as: How are we affected by nature? What affects people's attitudes and behaviors toward the environment? How do we respond to environmental challenges? How does the field of psychology address the natural world? Offered periodically during January Term. Apply through Smith Center for Global Engagement. Also counts toward environmental studies major (all emphases) and concentration.

Prerequisite: PSYCH 125 or ENVST 137.

# PSYCH 229: Psychology of Spirituality and Religion

Spiritual and religious experience and practices are human activities that can be investigated with psychological methods and theories. To do so faithfully, one must deal with the tension between scientifically understanding something and explaining it away. Students review the large multidisciplinary literature in this area. They also explore the religion/science tension by reporting on current news items and by participating in a chosen private spiritual practice (e.g. meditation) and systematically analyzing the experience. Offered periodically. **Prerequisites:** PSYCH 125.

### PSYCH 230: Research Methods in Psychology

This course prepares students with tools for understanding how research studies in psychology are conceptualized, designed, and ethically conducted, and how data is analyzed, interpreted, and disseminated. Students apply this understanding in independent and small group research projects. In the process, students develop critical reading, thinking, and scientific writing skills. Students attend lectures plus one two-hour laboratory per week. Offered each semester. Also counts toward environmental studies major and statistics and data science and public health studies concentrations.

Prerequisites: PSYCH 125, and STAT 110 or SDS 172 or ECON 260.

### PSYCH 232: Gender Equality in Norway (study abroad)

Students learn how gender is perceived, constructed, and experienced in contemporary Norway, using psychological and sociocultural perspectives to explore topics such as family life, youth development/ empowerment, education, employment, media/advertising, health, and sexuality. They also examine Indigenous Sámi and immigrant perspectives. Lectures, site visits, and other field experiences augment scholarly readings and contribute to an understanding of gender equality as a foundational guiding principle and practice in an increasingly diverse Norwegian society. Offered periodically during January term. Apply through Smith Center for Global Engagement. Also counts toward Norwegian and gender and sexuality studies majors and Nordic studies and gender and sexuality studies concentrations. Prerequisites: PSYCH 125 or a course in Nordic studies, gender and sexuality studies, family studies, or sociology/anthropology, or permission of instructor; PSYCH 241 or PSYCH 249 strongly recommended.

# **PSYCH 235:** Sensation and Perception

In this course, students will explore the processes of sensation (how our sensory epithelia change physical information from the environment into electrical impulses in our brains) and perception (how we utilize those electrical impulses to form a representation of the world giving rise to our subjective realities). Students participate in in class psychophysical, physiological, and perceptual activities on vision, hearing, touch, smell, and taste in order to enhance their learning. Offered annually. Counts toward neuroscience concentration. **Prerequisite:** PSYCH 125.

# PSYCH 236: Conditioning and Learning

How do psychologists characterize the most basic aspects of the learning process? While some emphasis is on analysis of the behavioral viewpoint (Pavlov, Skinner), students also examine the ways current investigators apply these basic principles to problems in other fields. These include behavioral therapy for a variety of psychological disturbances, research on the neurobiology of drug reward, and analysis of consumer behavior. Students engage in hands-on activities as a part of the class to enhance their learning. Offered annually. Also counts toward neuroscience, educational studies and business and management studies concentrations. **Prerequisite:** PSYCH 125.

# PSYCH 237: Cognitive Psychology

This survey of cognition examines how we acquire (perception, attention, learning), store (memory), communicate (language) and use knowledge (thinking, judgment, problem solving, decision making, creativity). Such issues influence how we educate people, evaluate eyewitnesses in court, convince consumers to buy products, and improve our memory or attention. Students will engage in handson activities as a part of the class to enhance our study of the mind. Offered annually. Also counts toward applied linguistics and neuroscience concentrations.

Prerequisite: PSYCH 125.

# PSYCH 238: Biopsychology

How do biological factors influence fundamental aspects of psychology and behavior? In this course, students learn about relationships between the brain and behavior and use neuroanatomical, physiological, and biochemical levels of analysis to understand basic behavioral processes and systems, including sensation, movement, emotion, sleep and arousal, hunger, motivation, learning, and psychopathology. Offered each semester. Also counts toward biology major and neuroscience concentration.

Prerequisite: PSYCH 125 or BIO 123, BIO 227 or CH/BI 227.

# PSYCH 239: Drugs, the Brain and Behavior

From legalized marijuana, to the widespread use of antidepressants and antianxiety medications, to the ubiquitous presence of coffee shops, the "drug culture" affects nearly everyone in our society. This course introduces the world of psychopharmacology, with an emphasis on the basic neural mechanisms underlying the effects of drugs, including their portrayal in popular movies and music. By learning how drugs can affect the way neurons communicate, students become more thoughtful consumers. Offered periodically during January Term. Also counts toward neuroscience and public health studies concentrations.

**Prerequisites:** PSYCH 125 or PSYCH 238 or any Level I biology, chemistry, or chemistry/biology course.

# PSYCH 241: Developmental Psychology

This course helps students better understand human development from the moment of conception and across the life span. The course focuses on biological and environmental factors that shape human development. Major changes in physical, cognitive, personality and social development are discussed. Offered each semester. Also counts toward kinesiology, nursing, social work, and gender and sexuality studies majors and educational studies, family studies, and gender and sexuality studies concentrations.

Prerequisite: PSYCH 125.

# PSYCH 244: Psychology of Personality

Students examine theories of normal personality development in an effort to understand the factors that shape personality. Is personality biologically determined? Is it a result of interpersonal experiences, learning and reinforcement? Are other factors involved as well? Students investigate prominent personality theories and research and their conceptualizations of this fundamental aspect of human experience. Offered annually. **Prerequisite:** PSYCH 125.

# PSYCH 247: Psychopathology

Why are certain experiences or patterns of behavior considered psychologically "abnormal?" Students investigate a wide array of psychological disorders, including anxiety disorders, depression, eating disorders, and schizophrenia. Students examine models used to conceptualize abnormal behavior, as well as current evidence and theories regarding the etiology and treatment of these important and sometimes devastating disorders. Offered each semester. Also counts toward kinesiology major.

Prerequisite: PSYCH 125.

# PSYCH 249: Social Psychology

Why are people prejudiced and how can we reduce prejudice? Why do people help others? What is self-esteem and how do we defend it? How does romantic attraction develop? What are emotions and how do they influence us? In this introduction to the ways people interact and think about each other, students design their own theories of social behavior. Offered annually. Also counts toward business and management studies concentration.

Prerequisite: PSYCH 125.

# PSYCH 250: Industrial/Organizational Psychology

Students apply psychological facts and principles to the problems that permeate business and industry. Topics include organizational structure, personnel management, employee-supervisor relationships, job satisfaction and motivation, communication and leadership. Offered periodically. Also counts toward business and management studies concentration.

Prerequisite: PSYCH 125.

# PSYCH 251: Sport and Exercise Psychology

This course examines the thoughts, feelings, and behaviors of individuals in the context of physical activity and how psychological factors affect and are affected by involvement and performance in sport and exercise. Students study theory and research as well as apply principles of sport psychology, drawing from the fields of both psychology and kinesiology. Students explore current issues as well as major topics in the area, such as motivation, leadership, and team dynamics. Offered periodically.

Prerequisite: PSYCH 125.

# PSYCH 254: Culture and Place in Psychology

Many psychological processes once assumed to be similar around the world are actually powerfully influenced by culture. This course explores ways in which cultural context affects psychological experience, including cognition, emotion, personality, values, social behavior, and subjective well-being. Students study the methods, constructs, and findings of cultural psychology, and reflect on their own cultural experiences; thus this course is particularly appropriate for students returning from or preparing to study abroad. Offered periodically.

Prerequisite: PSYCH 125.

# PSYCH 290: Topics in Psychology

This topics-based survey course examines the basic principles of psychological science within a given subdiscipline. Students use critical thinking skills to examine fascinating topics such as: language development, health psychology, spirituality, education, learning and memory, choice and decision-making, hormones and behavior, perception, sensation, neuroethics, cultural psychology, neuropsychology, and lifespan development. Students apply basic principles from introductory psychology and act as skeptical scientists. This course applies to many career choices in today's world and provides insight into self and others. May be repeated if topic is different. Offered periodically.

Prerequisite: PSYCH 125.

# PSYCH 294: Academic Internship

# PSYCH 297: Research Experience (0.25, 0.50, 1.00)

The Research Experience course gives students credit for research experiences in the lab of a psychology department faculty member. Emphasis is placed on the iterative process of experimentation and analysis in ongoing faculty research projects. P/N. Offered annually. Does not count toward psychology major requirements. **Prerequisite:** PSYCH 125, at least one additional course in the department, and permission of instructor.

# PSYCH 298: Independent Study

This opportunity to investigate in depth a topic of interest, typically culminating in a library research-based paper, is strongly recommended as preparation for PSYCH 398. Offered each semester. **Prerequisite:** PSYCH 125, at least three courses in the department, and permission of instructor; PSYCH 230 is strongly recommended.

#### **PSYCH 336:** Neuroscience of Addiction

This seminar explores current knowledge of mechanisms involved in behavioral responses to drugs of abuse at the systems, cellular, and molecular levels. The action of stimulant drugs, alcohol, and the opiates on reward pathways are discussed in terms of behavioral neurobiology, pharmacology, and gene expression. Consideration is given to the role of environmental cues and stress in relapse to drug-seeking both in animal models and human studies. Offered periodically. Also counts toward neuroscience concentration. **Prerequisites:** PSYCH 230, and PSYCH 238 or NEURO 239.

### PSYCH 337: Neurobiology of Learning and Memory

Memory is a fundamental part of human existence, but what do we currently know about the neurobiology that underlies this remarkable ability? In this seminar, students present and discuss recently published research that examines the neurobiology of learning and memory from molecular, cellular, behavioral and cognitive neuroscience perspectives. Offered periodically. Also counts toward neuroscience concentration.

Prerequisites: PSYCH 230, and PSYCH 238 or NEURO 239.

# PSYCH 338: Neurobiology of Psychopathology

With recent advances in neuroscience, we can now describe the biological correlates of many psychological disorders, including schizophrenia, depression and anxiety disorders. In this discussion-based course, students use published research findings to examine the connections between the symptoms of these pathologies and changes in brain neurobiology, biochemistry, and physiology. Offered periodically. Also counts toward neuroscience concentration. **Prerequisites:** PSYCH 230 and PSYCH 247, and PSYCH 238 or NEURO 239.

#### **PSYCH 339:** Cognitive Neuroscience

Cognitive neuroscience investigates the biological bases of higher order cognition and complex human behavior (or more simply put, how the brain enables the mind). Discussion topics include the methodologies of cognitive neuroscience, perception, attention, learning, memory, language, executive function, emotion, development, social cognition, and consciousness. Offered periodically. Also counts toward neuroscience and applied linguistics concentrations.

Prerequisites: PSYCH 230, or PSYCH 238 and NEURO 239.

# PSYCH 340: Frontiers in Aging: Cells to Society

Rapid global aging represents the next great challenge that students in a broad range of majors must be prepared to address. Students will consider contemporary and enduring questions about aging from multidisciplinary perspectives to explore issues, methods, and theories surrounding what life will be like as people grow older. Students will interact with older adults in the community to understand aging in context. Also counts toward the neuroscience concentration. **Prerequisites:** PSYCH 125 and PSYCH 230.

### PSYCH 341: Infant Behavior and Development

This seminar examines development from birth to age three. Topics include prenatal development, birth and the newborn, physical and motor development, caregiver relationships, infant mental health, cognition, and language development. Students explore questions such as: How long-lasting are the effects of early experiences? How do diverse cultural contexts influence early development? Course format is primarily discussion-based and includes community-based experiential learning projects. Offered annually. Also counts toward applied linguistics concentration.

Prerequisites: PSYCH 230 and PSYCH 241 or permission of instructor.

# PSYCH 342: Positive Psychology: The Science of Optimal Human Experience

This seminar investigates "the good life," exploring what psychology can tell us about human flourishing and psychological well-being. Empirical evidence is examined to understand some of the best aspects of life, such as the function of positive emotions, the role of traits in well-being, sources of meaning and life satisfaction, and character strength and virtue. Personality and sociocultural factors are emphasized in this exploration of the positive potentials of human life. Offered periodically. Also counts toward business and management studies concentration.

Prerequisites: PSYCH 230, and PSYCH 244 or PSYCH 249.

# PSYCH 346: Social Psychological Perspectives on Diversity

What is diversity? Who is impacted by diversity? How is diversity studied? In this discussion-based course, students unpack issues on diversity relating to identity, power, and privilege with a particular emphasis on race and ethnicity in the United States. Students use theory and research from social psychology to examine individual, interpersonal, and societal factors that shape the way people perceive and respond to difference. Finally, students discuss strategies for reducing intergroup bias and inequality. Offered periodically. Also counts toward race and ethnic studies concentration. **Prerequisite:** PSYCH 230.

# PSYCH 350: Parenting and Child Development in Diverse Families

This course explores research on parenting and child development across a variety of diverse family structures and sociocultural contexts, including families with primary caregiving fathers, divorced and remarried parents, adoptive parents, gay and lesbian parents. Students discuss similarities and variability across families, and examine how factors such as gender, sexual orientation, race/ethnicity and social class shape parenting experiences and unique psychosocial challenges that "nontraditional" families may confront. Students examine and bridge the empirical literature with popular culture and media portrayals of families. Offered periodically. Also counts toward gender and sexuality studies major and educational studies, family studies, and gender and sexuality studies concentrations. **Prerequisite:** PSYCH 241; PSYCH 230 is strongly recommended.

# PSYCH 375: Clinical and Counseling Psychology

This course examines several major theoretical perspectives on psychotherapy. Students review empirically supported treatments for specific clinical disorders, as well as "nonspecific" factors that affect the therapeutic process. Students explore ethical and legal challenges related to psychotherapy delivery, as well as multicultural and other diversity issues. Course format is primarily discussion-based. Offered annually. Also counts toward business and management studies concentration.

**Prerequisites:** junior or senior standing and PSYCH 230, and PSYCH 244 or PSYCH 247.

### **PSYCH 376:** Forensic Psychology

Students examine the application of clinical psychology in the context of the U.S. legal system. Students use empirical articles, secondary sources, case studies, and legal sources (e.g., U.S. Supreme Court cases) to investigate how psychologists conduct evaluations of psycholegal issues like competency to stand trial, insanity pleas, and civil commitment. Students discuss the ethical, legal, societal, and mental health benefits and consequences of how the U.S. legal system resolves issues pertaining to mental illness. Offered periodically. **Prerequisites:** PSYCH 230 and PSYCH 247.

### **PSYCH 390:** Issues in Psychology

Seminars allow in-depth study of particular themes or topics in psychology. See department Website for descriptions and additional prerequisites. Offered annually. May be repeated if topic is different. **Prerequisite:** PSYCH 230.

# **PSYCH 391:** Topics in Psychology

**Sample Topic:** The Psychology of Good and Evil Why do we feel it is important to judge behavior as morally good or bad? How do we make these judgments? What makes it possible for people to commit acts of extraordinary heroism or evil? Good answers to these questions require knowledge of philosophical and theological ethics and of the empirical work on moral action and judgment. Students read both and ask how they do (and should) inform each other.

**Prerequisite:** PSYCH 230 and at least two level II psychology courses, or permission of the instructor.

# **PSYCH 393:** Advanced Research Collaborations

This project-based course allows students to explore advanced research areas in Psychology. Dedicated student and faculty collaborative research and experiential learning opportunities allow in-depth study of particular themes or topics in psychology. Topics vary with faculty leading the course and may complement 200 level course offerings. May be repeated if the topic is different. Counts towards Neurosciences or Linguistics concentrations depending on topic. Offered annually. See department website for descriptions and additional prerequisites for specific courses.

Prerequisite: PSYCH 230.

# PSYCH 394: Academic Internship

# PSYCH 396: Directed Undergraduate Research

This course provides a comprehensive research opportunity, including an introduction to relevant background material, technical instruction, identification of a meaningful project, and data collection. The topic is determined by the faculty member in charge of the course and may relate to their research interests. Offered annually. May be offered as a 1.00 credit course or .50 credit course.

Prerequisite: determined by individual instructor.

# PSYCH 398: Independent Research

Students have the opportunity to work in depth on a research project of interest under the supervision of a member of the psychology department faculty. Offered each semester. Depending on course topic, may count toward the neuroscience concentration. **Prerequisite:** STAT 110, SDS 172, or ECON 260; PSYCH 230; four additional courses in the department; and permission of instructor. PSYCH 298 is strongly recommended.

# Faculty

#### Department Chair, 2024-2025 Carlo O.C. Veltri

Professor of Psychology clinical psychology; psychopathology; psychological assessment; personality; forensic psychology

### **Kadie Ausherbauer**

Visiting Assistant Professor of Psychology

Jessica M. Benson (on sabbatical fall semester 2024-25) Associate Professor of Psychology

# Grace E. Cho

Professor of Psychology developmental psychology; child development; cultural psychology; socioemotional development; parent-child processes

### Shelly D. Dickinson

Associate Professor of Psychology

behavioral neuroscience; addiction; conditioning and learning; psychopharmacology

# Anna Erickson

Adjunct Assistant Professor of Psychology

# Dana L. Gross

Professor of Psychology developmental psychology; study away and study abroad

# **Emily Hazlett**

Adjunct Assistant Professor of Psychology

# **Charles Huff**

Professor of Psychology social psychology; moral psychology; science and technology studies; psychology of religion

# Jeremy L. Loebach (on sabbatical 2024-25)

Associate Professor of Psychology cognitive neuroscience; speech and hearing sciences; psycholinguistics

# Donna McMillan

Professor of Psychology clinical psychology; personality psychology; environmental psychology; positive psychology

# Jessica Mueller

Adjunct Instructor of Psychology

# Gary M. Muir

Professor of Psychology; Grace A. Whittier Endowed Chair of Science behavioral neuroscience; cognitive neuroscience; neurobiology of spatial navigation; neurobiology of learning and memory

# **Daniel Nelson**

Associate Professor of Psychology

# Jessica R. Petok

Associate Professor of Psychology aging; adult development; cognition; memory and learning

# Nathaniel (Nate) Powell

Visiting Assistant Professor of Psychology

# **Piercarlo Valdesolo**

Adjunct Associate Professor of Psychology