

# PSYCHOLOGY

## Overview and Contact Information

The Psychology and Education department offers a wide array of courses in the following areas:

### General Psychology

### Social Psychology

The courses in the area of social psychology are concerned with how the social environment affects the behavior of individuals. Among the major topics covered are the ways attitudes develop and change; the conditions under which individuals adhere to or deviate from social norms; the behavior of groups; communication; social interaction and interpersonal relationships; and the similarities and differences between women's and men's behavior.

### Personality and Abnormal Psychology

The courses in this area cover the fields of personality, abnormal psychology, and psychotherapy. The field of personality, the systematic study of individual differences and similarities, poses questions such as the following: How is each person unique? In what ways are people alike? Abnormal psychology concerns aspects of human behavior that are maladaptive in a person's current context. Students concentrating their study in this area are urged to take additional courses in developmental psychology, social psychology, and biological bases of behavior.

### Developmental and Educational Psychology

Developmental psychology is characterized by a distinct point of view rather than a specific content area. It is concerned with the origins and progressive development over time of perception, thought, language, personality, and social behavior. Educational psychology involves the application of psychology to our understanding of learning, motivation, and teaching, and focuses on both the complex experiences of individual learners and the diverse sociocultural contexts of learning.

The courses in developmental and educational psychology reflect this range of topics and also cover the application of developmental theory and findings in education. Students concentrating their study in this area are urged to take courses in as many of the other areas of psychology as possible.

### Perception and Cognition

The courses in this area are concerned with how we acquire, use, and recollect information. Major topics include visual and auditory perception, learning and memory, and how individuals understand language. Students concentrating their study in this area, especially those with an interest in cognitive neuroscience, are urged to take additional courses in neuroscience and behavior and developmental psychology. Courses in philosophy (PHIL-201) and computer science (COMSC-101) are recommended for those students with interests in cognitive science and artificial intelligence.

### Biological Bases of Behavior

The courses in this area adopt the perspective that behavior is the product of biological processes. Major topics include the physiological causes of behavior, the evolutionary history and function of behavior, and the role of learning in modifying behavior. Students concentrating their study in this area are urged to take additional course work in cognition, perception, and language, and in biological sciences.

## See Also

- Psychology & Education (<http://catalog.mtholyoke.edu/areas-study/psychology-education>)

## Contact Information

**Katherine Binder, Chair**

**Janet Crosby, Academic Department Coordinator**

303 Reese Psychology and Education Building

413-538-2338

<https://www.mtholyoke.edu/acad/psychology>

## Faculty

### This area of study is administered by the Department of Psychology and Education:

Katherine Binder, Professor of Psychology

Francine Deutsch, Professor of Psychology and Education, On Leave Fall 2017, Retiring Spring 2018

Gail Hornstein, Professor of Psychology and Education, Teaching Fall Only

Becky Packard, Professor of Psychology and Education; Director of the Harriet L. and Paul M. Weissman Center, Teaching Fall Only

Amber Douglas, Associate Professor of Psychology and Education; Director of Student Success Initiatives

Mara Breen, Assistant Professor of Psychology and Education

Corey Flanders, Assistant Professor of Psychology and Education

KC Haydon, Assistant Professor of Psychology and Education

Jared Schwartz, Assistant Professor of Psychology & Education

John Tawa, Assistant Professor of Psychology

William Davis, Visiting Lecturer in Psychology & Education

Amy Grillo, Visiting Lecturer in Psychology & Education

## Requirements for the Major

A minimum of 36 credits:

One 100-level course in psychology	4
PSYCH-201 Statistics	4
PSYCH-204 Research Methods in Psychology	4
At the 200 level, all majors must take courses in at least three of the five areas of the psychology curriculum: <sup>1</sup>	12
A) social psychology	
B) personality and abnormal psychology	
C) developmental and educational psychology	
D) perception, cognition and language	
E) biological bases of behavior	
At least one 300-level laboratory course. Current laboratory courses are:	4
PSYCH-310 Laboratory: Social Psychology	
PSYCH-330 Lab in Developmental Psychology	
PSYCH-331 Lab in Early Social and Personality Development	

PSYCH-338	Lab in Educational Psychology	
PSYCH-340	Laboratory in Perception and Cognition	
PSYCH-350	Laboratory in Behavioral Neuroscience	
Two additional 300-level courses, which can be fulfilled by any combination of the following:		8
Additional laboratory courses		
Lecture, seminar, practicum courses		
Independent study at the 300 level <sup>2</sup>		
Total Credits		36

<sup>1</sup> At least one of these courses must be from areas D or E. PSYCH-295 cannot be used to fulfill this requirement

<sup>2</sup> Only one PSYCH-395 can be used for this requirement

## Additional Specifications

- There are many opportunities for students in psychology to work on an individual basis with faculty on original research (see PSYCH-295, PSYCH-395). Students are encouraged to discuss this option with any member of the department.
- Students who expect to do graduate work in psychology should consult with their advisors or with members of the department regarding their program within the department as well as election of related courses from other departments.
- Declaration of major forms should be signed by the department's academic department coordinator.

## Requirements for the Minor

A minimum of 16 credits:

PSYCH-201	Statistics	4
PSYCH-204	Research Methods in Psychology	4
Two other courses at the 200 or the 300 level, of which:		8
one must be from curriculum areas A–C: social psychology; personality and abnormal psychology; and developmental and educational psychology		
one must be from curriculum areas D–E: perception, cognition, and language; and biological bases of behavior		
Total Credits		16

## Course Offerings

### General Psychology

#### PSYCH-100 Introduction to Psychology

Fall and Spring. Credits: 4

How do we make decisions, form attachments, and learn a language? Can we inherit schizophrenia? Why are we fearful of some situations and not others? What factors influence the way we form attitudes or develop prejudices? This course addresses such questions to provide an overview of current research in psychology.

*Applies to requirement(s): Social Sciences*

*M. Breen, K. Haydon*

#### PSYCH-201 Statistics

Fall and Spring. Credits: 4

Statistical procedures are powerful tools for analyzing and interpreting findings and are necessary for accurate reading and understanding of research findings. This course provides an introduction to the most frequently encountered techniques for describing data and making inferences in psychological research. A variety of computer applications are used.

*Applies to requirement(s): Meets No Distribution Requirement*

*J. Schwartz, J. Tawa*

*Prereq: A 100-level course in Psychology or Neuroscience 100. Coreq: PSYCH-201L.*

#### PSYCH-204 Research Methods in Psychology

Fall and Spring. Credits: 4

This course provides an introduction to the skills necessary for becoming good producers and consumers of psychological research. Students learn to develop research questions, survey related literature, design rigorous and ethically sound studies, and collect, analyze, and interpret quantitative and qualitative data. Students build on their computer skills relevant for psychological research and learn to read and critique original empirical journal articles. The course culminates in an original, collaborative research project, a final paper, and an oral presentation.

*Applies to requirement(s): Social Sciences*

*K. Binder, C. Flanders*

*Restrictions: Course limited to sophomores, juniors and seniors*

*Prereq: PSYCH-201, STAT-240, or STAT-242. Coreq: PSYCH-204L.*

*Advisory: Students must take statistics (PSYCH-201 or STAT-240 or STAT-242) before enrolling in this course.*

#### PSYCH-295 Independent Study

Fall and Spring. Credits: 1 - 4

*The department*

*Instructor permission required.*

#### PSYCH-395 Independent Study

Fall and Spring. Credits: 1 - 8

*The department*

*Instructor permission required.*

#### PSYCH-398 Seminar in Psychological Research

Fall. Credits: 1

This seminar is for students who are completing an honors thesis. The primary purpose of this course is to provide students with constructive support during all stages of their research. In particular, this class will assist students with organizing the various components of their thesis work and help them meet departmental thesis deadlines.

*Applies to requirement(s): Meets No Distribution Requirement*

*Other Attribute(s): Speaking-Intensive, Writing-Intensive*

*J. Gagnon, C. Lee*

*Advisory: Only students doing an honors thesis are permitted to register.*

#### PSYCH-399 Seminar in Psychological Research

Spring. Credits: 1

This seminar is for students who are completing an honors thesis. The primary purpose of this course is to provide students with constructive support during all stages of their research. In particular, this class will assist students with organizing the various components of their thesis work and help them meet departmental thesis deadlines.

*Applies to requirement(s): Meets No Distribution Requirement*

*Other Attribute(s): Speaking-Intensive, Writing-Intensive*

*J. Gagnon, C. Lavigne*

*Advisory: Only students doing an honors thesis are permitted to register.*

## Social Psychology

### PSYCH-210 Social Psychology

*Spring. Credits: 4*

This course covers a range of information within social psychology, including theory, research, and applied contexts. Areas of interest will include self and social perception, attitudes, stereotypes, prejudice, discrimination, group dynamics, interpersonal attraction and relationships, among others.

*Applies to requirement(s): Social Sciences*

*C. Flanders*

*Prereq: A 100 level psychology course.*

### PSYCH-212 Individuals and Organizations

*Fall. Credits: 4*

This course focuses on individual and small-group behavior in the organizational setting. The class will focus on: (1) understanding human behavior in an organizational context; (2) understanding of oneself as an individual contributor and/or leader within an organization, and ways to contribute to organizational change; (3) intergroup communication and conflict management; and (4) diversity and organizational climate.

*Crosslisted as: EOS-299ND*

*Applies to requirement(s): Social Sciences*

*B. Packard*

*Restrictions: Course limited to sophomores, juniors and seniors*

### PSYCH-213 Psychology of Racism

*Spring. Credits: 4*

How do the theories of race and racism correlate with the lived experiences of people of color? In what ways are whites affected by a system that privileges whiteness? This course will explore the mind, behavior, and impact of racism on targeted and privileged racial groups and the subsequent movements of liberation from historical, conceptual, intrapersonal, and interpersonal levels. We will mine the subjective experiences of the authors, looking both for damage and resilience, and we will use this data to help us understand racism's impact on the psyches of those whom it targets and benefits.

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Speaking-Intensive, Writing-Intensive*

*J. Daigle-Matos*

*Restrictions: Course limited to sophomores, juniors and seniors*

### PSYCH-310 Laboratory: Social Psychology

#### PSYCH-310AP Laboratory in Social Psychology: 'Community-Based Participatory Action Research'

*Spring. Credits: 4*

In this course we will apply social psychological research practices to understand a social problem and work toward promoting positive social change. Specifically, we will use community-based participatory action research principles to investigate community concerns related to sexual and mental health, or community-identified pathways to promoting sexual and mental well-being. Students will develop a research project in partnership with community stakeholders, collect and analyze data, and produce a final product that is based on community priorities and is useful for community partners.

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Community-Based Learning*

*C. Flanders*

*Prereq: PSYCH-200 or PSYCH-204.*

### PSYCH-319 Seminar in Social Psychology

#### PSYCH-319GS Seminar in Social Psychology: 'Gender and Sexual Minority Health'

*Fall. Credits: 4*

This course is a critical overview and investigation of health as it relates to the experiences of gender and sexual minority people. We will begin with exploring theoretical understandings of health and marginalization, and use those as frameworks to examine various domains of health. Areas of interest will include mental health, sexual and reproductive health, substance use, disability, and issues related to body size and image. We will end by looking at other structural issues that affect gender and sexual minority health, such as access to care, health education, and health policy.

*Crosslisted as: GNDST-333GS*

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Speaking-Intensive, Writing-Intensive*

*C. Flanders*

*Prereq: PSYCH-200 or PSYCH-204 or GNDST-201.*

#### PSYCH-319RA Seminar in Social Psychology: 'Theories in Race Relations'

*Spring. Credits: 4*

In this seminar course we will examine theory and research on racial group relations. While most theory on race relations has been framed within a Black-White paradigm, in this course, we will pay particular attention to relations between minority groups existing within a context of White sociopolitical power. We will examine social, political, cultural, and psychological perspectives on the causes of prejudice between racial groups, as well as theory and research that promotes healthy group relations and solidarity between oppressed groups. Classes will include some didactic lecturing, but will emphasize discussion based and experiential learning.

*Applies to requirement(s): Social Sciences; Multicultural Perspectives*

*Other Attribute(s): Writing-Intensive*

*J. Tawa*

*Prereq: PSYCH-200 or PSYCH-204.*

## Personality and Abnormal Psychology

### PSYCH-220 Theories of Personality

*Fall. Credits: 4*

How do individuals differ and how are they the same? What factors shape the development of our personalities? This course will introduce students to some of the major psychological theories of and approaches to understanding personality. We will critically examine theory and research on traits, genetics, neuroscience, self and identity, intrapsychic perspectives, regulation and motivation, and cognition, integrating these views into a more complete understanding of personality.

*Applies to requirement(s): Social Sciences*

*W. Davis*

*Restrictions: Course limited to sophomores, juniors and seniors*

*Prereq: A 100 level course in Psychology.*

**PSYCH-222 Abnormal Psychology: Clinical Perspectives**

*Fall and Spring. Credits: 4*

This course surveys the psychological field of abnormal psychology. We will explore historical foundations, theories, research, assessment, and treatment as they relate to diagnoses included in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Throughout the course, we will critically examine the concept of abnormality and its intersection with societal and cultural contexts.

*Applies to requirement(s): Social Sciences*

*W. Davis, J. Tawa*

*Prereq: 100-level course in Psychology.*

**PSYCH-326 Laboratory in Personality and Abnormal Psychology****PSYCH-326BH Laboratory in Personality and Abnormal Psychology: 'Behavioral Methods for Social and Intergroup Psychology'**

*Fall. Credits: 4*

Relatively recent technological and methodological developments offer psychologists an opportunity to study social and intergroup behavior with greater sophistication than ever before. In this lab course, students will complete a semester long group research project that implements one of four possible innovative behavioral methods: Implicit association tests, social network analysis, physiological assessment, or a virtual world research method. Group projects will culminate in a presentation of their research to the class and a brief written report of findings that will be structured as a professional conference presentation submission.

*Applies to requirement(s): Social Sciences*

*J. Tawa*

*Prereq: PSYCH-200 or PSYCH-204.*

**PSYCH-326PR Laboratory in Personality and Abnormal Psychology: 'Personality Research'**

*Spring. Credits: 4*

This course provides a hands-on introduction to psychological research in the domain of personality psychology. We will consider research methods, personality assessments, the intersection of personality and social psychology, and issues broadly relevant to psychological research. Students will work collaboratively in groups through all phases of a research project, including conducting a literature review, designing a study, receiving ethics approval, collecting data, conducting statistical analyses, and reporting the results. Projects will examine a topic within personality psychology and will be chosen by students in consultation with the professor.

*Applies to requirement(s): Social Sciences*

*W. Davis*

*Restrictions: This course is open to Juniors and Seniors.*

*Prereq: PSYCH-200 or PSYCH-204.*

*Advisory: A course in personality or social psychology preferred.*

**PSYCH-329 Seminar in Personality and Abnormal Psychology****PSYCH-329HV Seminar in Personality and Abnormal Psychology: 'Hearing Voices'**

*Fall. Credits: 4*

Hearing voices is a fundamental human experience that is sometimes pathologized, sometimes sought after, and often terrifying. It has existed throughout history; current estimates suggest 4-10% of the population may at times hear voices. These experiences have been understood in dramatically different ways, and our readings will range widely across social, cognitive, biological, ethnographic, spiritual, and political perspectives. Several sessions will be co-taught (via video) with Jacqui Dillon, Chair of the Hearing Voices Network, England. Each student will complete a semester-long project, involving data analysis or literature review or practicum work in a community organization.

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Speaking-Intensive, Writing-Intensive*

*G. Hornstein*

*Instructor permission required.*

*Prereq: 8 credits in Psychology and permission of instructor.*

*Advisory: Students must submit an information sheet (form available in department office) by noon on Friday of advising week to get permission to register for the course.*

**PSYCH-329PS Seminar in Personality and Abnormal Psychology: 'Positive Psychology'**

*Fall and Spring. Credits: 4*

This course examines the emerging field of Positive Psychology which uses science to understand and enhance positive aspects of the human experience (i.e., "the good life"). Positive Psychology stands in contrast to more traditional psychological approaches that focus on pathology. We will critically examine theory and research in Positive Psychology, including strengths and virtues, meaning in life, positive coping, authenticity, happiness, gratitude, flow, religion/spirituality, and optimism. We will also explore applications and interventions informed by positive psychology in domains personally relevant to students' lives such as school, work, and close relationships.

*Applies to requirement(s): Social Sciences*

*W. Davis*

*Restrictions: This course is open to Juniors and Seniors.*

*Prereq: PSYCH-200 or PSYCH-204.*

*Advisory: A course in personality, abnormal, or social preferred.*

**Developmental and Educational Psychology****PSYCH-230 Developmental Psychology**

*Fall and Spring. Credits: 4*

Examines changes in cognitive, social, and emotional functioning, including theory and research that illuminate some central issues in characterizing these changes: the relative contributions of nature and nurture, the influence of the context on development, continuity versus discontinuity in development, and the concept of stage. Includes observations at the Gorse Children's Center.

*Applies to requirement(s): Social Sciences*

*A. Grillo, K. Haydon*

*Prereq: A 100 level psychology course.*

**PSYCH-233 Educational Psychology**

*Fall and Spring. Credits: 4*

What do we learn? How do we learn? Why do we learn? In this course, we will study issues of learning, teaching, and motivation that are central to educational psychology. We will explore the shifting paradigms within educational psychology, multiple subject matter areas, (dis)continuities between classroom and home cultures, students' prior experiences, teachers as learners, ethnic and gender identity in the classroom, and learning in out-of-school settings. Requires a prepracticum in a community-based setting.

*Crosslisted as: EDUC-233*

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Community-Based Learning*

*A. Grillo*

*Restrictions: Course limited to sophomores, juniors and seniors*

*Notes: Prepracticum required. Many of the available placements for this course are in after-school settings (one afternoon per week)*

**PSYCH-330 Lab in Developmental Psychology****PSYCH-330RD Lab in Developmental Psychology: 'Laboratory in Romantic Development: Observational Coding Methodology'**

*Fall. Credits: 4*

Students will work in teams to code videotaped observations of romantic partners discussing relationship conflicts. Students will learn to code emotion expressions and behavior at the dyadic and individual levels. Course topics include methodological issues such as coding bias, construct validity, and intercoder reliability, as well as empirical research on individual differences in conflict behavior and links between conflict behavior and relationship outcomes. Students will complete individual final research projects to report original quantitative multivariate analyses based on data generated during the course.

*Applies to requirement(s): Social Sciences*

*K. Haydon*

*Restrictions: This course is open to Juniors and Seniors.; This course is limited to Psychology or Psychology and Education majors.*

*Prereq: PSYCH-200 or PSYCH-204.*

*Advisory: Psychology 200, 201*

**PSYCH-331 Lab in Early Social and Personality Development**

*Fall. Credits: 4*

In the role of a participant-observer, each student studies intensively the social and personality development of the children in one classroom at the Gorse Children's Center at Stonybrook. Students learn how to articulate developmental changes and individual differences by analyzing detailed observations. Topics include social cognition, peer relationships, social skills, concepts of friendship, emotional development, identity formation, self-esteem, and the social and cultural context of development.

*Applies to requirement(s): Social Sciences*

*A. Grillo*

*Prereq: PSYCH-200 or PSYCH-204, and PSYCH-230.*

*Notes: 2 labs (3 hours each) required at Gorse Children's Center*

**PSYCH-337 Seminar in Educational Psychology****PSYCH-337SD Seminar in Educational Psychology: 'Self-Directed Learning'**

*Spring. Credits: 4*

Are children "wired" to be able to learn without direct instruction? Does the process of schooling diminish or enhance our capacity to be self-directed learners? What factors determine one's readiness for self-directed learning, and can self-directed learning be "taught?" What role, if any, do teachers play in self-directed learning? This seminar explores these questions in the context of an ongoing ethnographic study of an alternative education program within a public high school. Participants will have a chance to engage with data from that study and practice qualitative research skills through site visits to schools that encourage self-directed learning.

*Applies to requirement(s): Social Sciences*

*A. Grillo*

*Instructor permission required.*

*Advisory: Preference given to students who have taken Educational Psychology and have some familiarity with qualitative research.*

*Notes: Interested students should email Professor Grillo during advising week to explain why they want to take this seminar.*

**PSYCH-338 Lab in Educational Psychology****PSYCH-338YC Lab in Educational Psychology: 'Young Children, iPads, and Learning'**

*Spring. Credits: 4*

What is play? What behaviors do children exhibit as they play together in an early childhood setting? In what ways are traditional play and digital play (with educational apps) similar and different? What types of stories and images do young children create as they engage with apps together? This course provides opportunities to interact with young children while exploring these and related questions about digital play and social learning. Students collect observational data of preschool children playing with iPad apps, conduct qualitative analyses, and increase their understanding of play. Topics of study include social competence, gender segregation, app design, and multimodal learning.

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Community-Based Learning*

*S. Lawrence*

*Instructor permission required.*

*Prereq: PSYCH-200 or PSYCH-204, and PSYCH-230 or PSYCH-233.*

*Notes: 2-3 hours per week are required at Gorse Children's Center.*

**PSYCH-339 Seminar in Developmental Psychology****PSYCH-339LG Seminar in Developmental Psychology: 'Language and Literacy Development in Early Childhood'**

*Not Scheduled for This Year. Credits: 4*

This course explores how home and school learning environments influence the development of language and literacy skills of children ages 3-8. It examines situations in which families and schools, although utilizing different languages, dialects, and ways of communicating, can work together to enhance children's language learning. Particular attention is given to children's development of academic language -- the written and spoken language needed to understand and create texts required for success in school.

*Applies to requirement(s): Social Sciences*

*J. Jacoby*

*Prereq: PSYCH-230, PSYCH-233, or PSYCH-241.*

*Advisory: Prior coursework in developmental psychology, educational psychology, or cognitive psychology required.*

**PSYCH-339RL Seminar in Developmental Psychology: 'Close Relationships across the Lifespan'***Spring. Credits: 4*

This course will cover developmental implications of close relationships from infancy through adulthood with a focus on parents, friendships, and romantic partners. The goal is to examine normative developmental processes through a relational lens.

*Applies to requirement(s): Social Sciences**K. Haydon*

*Restrictions: This course is open to Juniors and Seniors.; This course is limited to Psychology or Psychology and Education majors.*

*Prereq: PSYCH-230.***Perception and Cognition****PSYCH-240 Sensation and Perception***Fall. Credits: 4*

The act of taking in (sensation) and making sense of (perception) information from the world around us is a core element of the human experience. Indeed, these processes form both the boundary and conduit between an individual and the broader world. This course examines the neural and cognitive mechanisms that allow us to convert different wavelengths of light, changing vibrations in the air, floating chemicals, heat, pressure, and other stimuli into a unified representation of reality – and all the interesting things that happen when those mechanisms get tricked or disrupted!

*Applies to requirement(s): Social Sciences**A. Fitzroy**Prereq: PSYCH-100.***PSYCH-241 Cognitive Psychology***Fall. Credits: 4*

Cognition encompasses a range of phenomena that define our mental lives. This course considers empirical investigations and theoretical accounts of cognitive issues, including learning and memory, creativity and problem solving, decision making, attention, consciousness, and language.

*Applies to requirement(s): Social Sciences**K. Binder**Prereq: A 100-level course in psychology.***PSYCH-246 Cognitive Neuroscience***Spring. Credits: 4*

Cognitive psychologists investigate the features and functions of the human mind through behavioral techniques; neuroscientists explore the physiology of the human brain. Cognitive Neuroscience lies at the intersection of these disciplines, and asks questions like: How are memories represented in the brain? Is our brain pre-prepared to learn language and if so, how? How does the average human brain still outperform most face recognition software? This course explores the cognitive and neural processes that support vision, attention, language, memory, and music. It introduces basic neuroanatomy, functional imaging techniques, and behavioral measures of cognition.

*Applies to requirement(s): Social Sciences**M. Breen**Prereq: PSYCH-100 or NEURO-100.*

*Notes: This course counts in the cognitive or biol bases area of the psychology major.*

**PSYCH-340 Laboratory in Perception and Cognition****PSYCH-340CL Laboratory in Perception and Cognition: 'Cognition and Literacy'***Fall. Credits: 4*

Adult illiteracy in the U.S. presents an ever-growing challenge. To understand this problem, we will learn various theories of reading. However, since many models of reading are based on data gathered from children, we will also examine how the cognitive abilities of adults are different from those of children. A large component of this class concerns learning the lab techniques associated with assessing reading abilities. In addition, since this is a community-based learning course, each student will become a tutor for an adult enrolled in an area literacy program.

*Applies to requirement(s): Social Sciences**Other Attribute(s): Community-Based Learning**K. Binder**Instructor permission required.**Prereq: PSYCH-200 or PSYCH-204, and permission of instructor.**Advisory: Students must email Professor Binder during advising week.**Notes: 3 hours per week as a literacy tutor in Springfield is required.***PSYCH-349 Seminar in Perception and Cognition****PSYCH-349AM Seminar in Perception and Cognition: 'Art, Music, and the Brain'***Spring. Credits: 4*

Art and music are a part of all human cultures. Is there something about the human brain that drives us to paint and sing? We will examine how the brain simultaneously processes different aspects of visual and auditory stimuli, ask how this processing may affect the way we do art and music, and explore where these phenomena may occur in the brain. As we engage in discussion and hands-on activities, we will discover the commonalities between the arts and the sciences including practice, experimentation, exploration, innovation, and creativity.

*Crosslisted as: MUSIC-321AM**Applies to requirement(s): Social Sciences**M. Breen, L. Laderach**Restrictions: This course is limited to seniors.**Instructor permission required.*

*Prereq: At least 8 credits at the 200 level in Psychology, Neuroscience and Behavior, Art History, or Music.*

**PSYCH-349LT Seminar in Perception and Cognition: 'Language and Thought'***Fall. Credits: 4*

Languages differ in the way they describe the world. For example, the noun for bridge is feminine in German, but masculine in French. Russian has two words for blue, while English has only one. The Piraha (an Amazonian hunter-gatherer tribe) arguably have no number words. In this course, we will be asking to what extent these cross-linguistic differences are reflected in thought. That is, do German speakers think bridges are more feminine than French speakers do? Can Russian speakers discriminate different shades of blue better than English speakers? Can the Piraha count? In exploring these questions, we hope to discover how tightly linked language and thought are.

*Applies to requirement(s): Social Sciences**M. Breen**Prereq: PSYCH-200 or PSYCH-204.**Advisory: A 200-level course in Cognitive Psychology recommended.*

## Biological Bases of Behavior

### PSYCH-253 Brain, Behavior, and Immunology

*Fall. Credits: 4*

Why do repeated concussions increase risk of developing depression? Why does that approaching cold hold off until finals week is over then hit like a freight train? When you stand to give a presentation, why does your mouth go dry, perspiration bead on your skin, and your heart start racing? These questions can be answered by the intricate relationship between the nervous and immune systems. This course will introduce the basic biology of these systems and demonstrate how they interact with each other and our environment to control our mood and behavior. "Stress" will be highlighted throughout the course as an example of brain, behavior, and immunology working together.

*Applies to requirement(s): Social Sciences*

*J. Church*

*Prereq: PSYCH-100.*

### PSYCH-254 Psychopharmacology

*Spring. Credits: 4*

Psychopharmacology focuses on the impact that drugs (both illicit and prescription) have on the brain, neurocircuitry, and behavior. Students will explore the underlying neurotransmitter systems of the brain and discover how substances influence nervous system function including the experience of pain, sleep, emotional states, motivation, addiction, and mental health. The course will bridge concepts in chemistry, biology, psychology, and neuroscience by highlighting major drug classes and their underlying mechanisms of action. Additional discussions will focus on the economic, social, and political aspects of the drug market, as well as ethics and legalities of the drug industry.

*Applies to requirement(s): Social Sciences*

*J. Schwartzer*

*Prereq: PSYCH-100 or NEURO-100.*

### PSYCH-350 Laboratory in Behavioral Neuroscience

*Fall. Credits: 4*

This intensive laboratory course will train students to use the technical methods and tools commonly used in behavioral neuroscience research. Skills covered will include animal care and handling, use of behavioral assays, pharmacology, and neurosurgical procedures. Students will engage in weekly exercises and hands-on experiments to study the link between brain function and behavioral responses. These preclinical tools will be used to test research questions related to learning and memory, social-emotional responses, and drug-seeking behaviors. After completion of this course, students will have a deeper understanding of the design and implementation of behavioral neuroscience research.

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Writing-Intensive*

*J. Schwartzer*

*Instructor permission required.*

*Prereq: PSYCH-200 or PSYCH-204.*

*Notes: Interested students must meet with the instructor before or during the advising week to obtain additional information about the course.*

### PSYCH-359 Seminar: Biological Bases of Behavior

#### PSYCH-359CN Seminar: Biological Bases of Behavior: 'Clinical Neuroscience'

*Spring. Credits: 4*

Explore how psychology, neuroscience, and medicine come together to study the etiology and treatment of neuropsychiatric disorders. Students will examine the behavioral features and neurobiology behind various clinical disorders such as Autism, ADHD, Substance Use Disorders, Mood Disorders, Schizophrenia, Anxiety, and Neurodegenerative Diseases. The course will rely on primary research to identify how changes in physiology and biology might manifest in the behaviors that define psychopathology. Students will gain a deeper understanding of clinical and preclinical techniques used to study these disorders while bridging their knowledge of molecular, cellular, and systems neuroscience research.

*Applies to requirement(s): Social Sciences*

*Other Attribute(s): Speaking-Intensive*

*J. Schwartzer*

*Prereq: PSYCH-200 or PSYCH-204.*

*Advisory: Neuroscience 100 strongly recommended.*