PSYCHOLOGY

Overview and Contact Information
The major in psychology requires coursework in research methods, statistics, developmental psychology, social psychology, personality and abnormal psychology, perception and cognition, and the study of the biological bases of behavior.

- Developmental psychology includes the study of children, adolescents, and life-span issues.
- Social psychology examines such issues as the psychology of racism, the psychology of women, and the effects of social influence on families and individuals.
- Personality and abnormal psychology deals with theories of personality, concepts of abnormality, psychoanalytic psychology, and the history of psychoanalysis.
- Perception and cognition examines how humans learn, think, remember, see, and hear.
- The study of the biological bases of behavior looks at comparative animal behavior, behavior neuroscience, and sensory psychology.

A hallmark of the curriculum is a series of advanced-level laboratory courses beyond our intermediate-level statistics and research methods courses. Each area of the curriculum has advanced laboratory courses and seminars, providing a very wide range of choice, and requiring hands-on research experience. In addition to our courses, the department emphasizes independent work with faculty, and there is an array of such opportunities, ranging from one-or two-credit experiences for first-year students to honors theses for seniors.

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

Contact Information
Mara Breen, Co-chair
KC Haydon, Co-chair
Janet Crosby, Academic Department Coordinator

303 Reese Psychology and Education Building
413-538-2422
https://www.mtholyoke.edu/academics/find-your-program/psychology

Learning Goals
By participating in coursework and experiences constituting a major in Psychology, students will acquire the following knowledge and skills:

- Through introductory courses, students will gain a comprehensive overview of the field of psychology, the intersections among subfields, and the connections among theory, research, and practice (including both classic and cutting-edge questions and problems within the field).
- Through core courses such as statistics and research methods, students will learn a variety of research approaches (both quantitative and qualitative), develop technological skills and facility with a variety of software, and become fluent in the ethical issues involved in human and non-human research.
- Through intermediate and advanced courses, students will learn how to read primary sources of psychological and educational research (both contemporary and historical), and learn how to analyze underlying assumptions, apply theoretical frameworks, and evaluate the validity of empirical evidence.
- From the curricular offerings, students will understand how psychological and educational questions and research may reflect gender, race, and social class biases and learn innovative ways of applying theory and research to critical social issues.
- Through our unique focus on research and independent study, students will have opportunities to develop skills as articulate writers and speakers and will gain additional research experience through participation in research projects with distinguished department faculty.

Faculty
This area of study is administered by the Department of Psychology and Education:
Katherine Binder, William R. Kenan, Jr. Professor of Psychology, On Leave 2022-2023
Amber Douglas, Professor of Psychology and Education
Becky Packard, Professor of Psychology and Education
Mara Breen, Associate Professor of Psychology and Education
Corey Flanders, Associate Professor of Psychology and Education
KC Haydon, Associate Professor of Psychology and Education
Jennifer Jacoby, Associate Professor of Psychology and Education; Director of First-Year Seminars
Jared Schwartzter, Associate Professor of Psychology and Education
Travis Hodges, Assistant Professor of Psychology
John Tawa, Assistant Professor of Psychology
Karim Chellew Galvez, Visiting Associate Professor in Psychology and Education
Eric Juarez, Mount Holyoke Fellow and Visiting Lecturer in Psychology and Education
Alyssa Norris, Visiting Lecturer in Psychology

Requirements for the Major
A minimum of 36 credits:

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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PSYCH-201</td>
<td>Statistics</td>
<td>4</td>
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<tr>
<td>PSYCH-204</td>
<td>Research Methods in Psychology</td>
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<td>At the 200 level, all majors must take courses in at least three of the five areas of the psychology curriculum: 1</td>
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<tr>
<td></td>
<td>A) social psychology</td>
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<td></td>
<td>B) personality and abnormal psychology</td>
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<td>C) developmental and educational psychology</td>
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<td>D) perception, cognition and language</td>
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<td></td>
<td>E) biological bases of behavior</td>
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1. A-B-E-C-D
At least one 300-level laboratory course. Current laboratory courses are:

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<tr>
<th>Code</th>
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<th>Credits</th>
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<tr>
<td>PSYCH-310</td>
<td>Laboratory: Social Psychology</td>
<td>4</td>
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<tr>
<td>PSYCH-326</td>
<td>Laboratory in Personality and Abnormal Psychology</td>
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<tr>
<td>PSYCH-330</td>
<td>Lab in Developmental Psychology</td>
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<tr>
<td>PSYCH-331</td>
<td>Laboratory in Early Childhood Learning and Development</td>
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<tr>
<td>PSYCH-340</td>
<td>Laboratory in Perception and Cognition</td>
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<tr>
<td>PSYCH-350</td>
<td>Lab in Biological Bases of Behavior</td>
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Two additional 300-level courses, which can be fulfilled by any combination of the following:

- Lecture, seminar, practicum courses
- Independent study at the 300 level

**Total Credits:** 36

1. At least one of these courses must be from areas D or E. PSYCH-295 cannot be used to fulfill this requirement
2. 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:

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Two other courses at the 200 or the 300 level, of which:

- 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 Advice

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

#### General 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 differences in behavior across gender identities.

#### 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.

#### 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 courses in cognition, perception, and language, and in biological sciences.

### 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. Schwartzer, J. Tawa
Prereq: A 100-level course in Psychology or Neuroscience 100 or AP Psychology. 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
C. Flanders, T. Hodges
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 - 8
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
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
Advisory: Only students doing an honors thesis are permitted to register.
Notes: Must be concurrently enrolled in a 395 independent study.

Social Psychology

PSYCH-210 Social Psychology
Not Scheduled for This Year. 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 or AP Psychology.

PSYCH-212 Individuals and Organizations
Spring. 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: ENS-299ND
Applies to requirement(s): Social Sciences
B. Packard
Restrictions: Course limited to sophomores, juniors and seniors

PSYCH-213 Psychology of Racism
Not Scheduled for This Year. Credits: 4
We begin this course by examining how the concept of race was developed to justify human rights atrocities and how it continues to be used to justify racial disparities today. We then examine theories of racism and its persistence at multiple ecological levels: intrapersonally, interpersonally, and institutionally. Although a theory driven course, students will be asked to apply theory to their own personal experiences, deepening an understanding of our own areas of oppression and privilege. Finally we will turn to inter-group relations theory, attending not only to dominant and minority group race-relation dynamics, but also inter-minority group relations (e.g., Black-Asian relations).
Applies to requirement(s): Social Sciences; Multicultural Perspectives
J. Tawa

PSYCH-219 Topics in Social Psychology

Not Scheduled for This Year. Credits: 4
This course will apply a critical community psychological lens to unpack the reality of financial hardship in the U.S. Topics will include: an introduction to the core values, theories, and tools of community psychology; an exploration of how traditional economic measures (like the Federal Poverty Level, inflation rate, unemployment rate) are defined and used in practice; the implementation and implications of social support policies like SNAP, WIC, TANIF, and Social Security; and how the strengths and weaknesses of the economy and the lived experiences of people experiencing financial hardship are portrayed by the media.
Applies to requirement(s): Social Sciences
A. Anglin
Prereq: PSYCH-100 or AP Psychology.
PSYCH-310 Laboratory: Social Psychology

PSYCH-310AP Laboratory in Social Psychology: 'Community-Based Participatory Action Research'
Not Scheduled for This Year. 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-204.

PSYCH-310QR Laboratory in Social Psychology: 'Qualitative Research in Psychology'
Spring. Credits: 4
Qualitative research in psychology includes the process of identifying qualitatively important patterns and units of meaning to provide rich, contextual descriptions of human experience. This lab course is designed to introduce students to a range of qualitative methodologies, including thematic analysis, grounded theory, and interpretive phenomenology, through the design and implementation of collaborative research projects. We will discuss the merits and limitations of qualitative research, the various challenges experienced within conducting this type of research, and the different philosophical perspectives of various qualitative research paradigms.

Applies to requirement(s): Social Sciences
Other Attribute(s): Writing-Intensive
C. Flanders
Prereq: PSYCH-204.

PSYCH-310SJ Laboratory in Social Psychology: 'Social Justice and Education'
Spring. Credits: 4
As U.S. racial group populations are on the rise, educational institutions need to prepare for racial diversity reflected in classrooms from elementary school to college. In this lab course, students will use qualitative research methods and social justice frameworks to code and analyze three distinct data sets, one collected from Puerto Rican parents in Holyoke; one from a college course on social justice; and one from pre-service teachers in public schools. Students will create posters to display their findings on the presence (or absence) of social justice in education at the end-of-semester event.

Crosslisted as: EDUST-351SJ
Applies to requirement(s): Social Sciences, Multicultural Perspectives
Other Attribute(s): Community-Based Learning, Speaking-Intensive, Writing-Intensive
J. Matos
Prereq: PSYCH-204 and EDUC-205 or a multicultural perspectives course that covers race and racism.

PSYCH-319 Seminar in Social Psychology

PSYCH-319GS Seminar in Social Psychology: 'Gender and Sexual Minority Health'
Spring. 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
C. Flanders
Prereq: PSYCH-200 or PSYCH-204 or GNDST-201.

Personality and Abnormal Psychology

PSYCH-220 Theories of Personality
Not Scheduled for This Year. 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

The department
Prereq: A 100-level course in Psychology or AP Psychology.

PSYCH-222 Abnormal Psychology: Clinical Perspectives
Fall. 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
J. Tawa
Prereq: 100-level course in Psychology or AP Psychology.
PSYCH-229 Topics in Personality and Abnormal Psychology

PSYCH-229DE Topics in Personality and Abnormal Psychology: 'Developmental Psychopathology'
Fall. Credits: 4

In this course, we will explore and discuss mental health concerns and psychological problems using a developmental lens. Using foundational readings and through case studies, we will establish an understanding of the psychology field's approach to evaluation, diagnosis, and treatment of psychological problems that are circumscribed to (e.g., reactive attachment) or typically first appear or are first detected in childhood and adolescence (e.g., ADHD, conduct problems, anxiety, developmental disorders, neurodivergence). The primary goal of this course is to establish a foundational understanding of the broad range of psychological concerns of childhood and adolescence. Therefore, we will explore and consider biopsychosocial factors that influence the etiology, assessment, diagnosis, and treatment of such concerns

 Applies to requirement(s): Social Sciences
 A. Norris
 Prereq: PSYCH-100 or AP Psychology.

PSYCH-229PD Topics in Personality and Abnormal Psychology: 'Personality and Individual Differences'
Fall and Spring. Credits: 4

The aim of personality psychology is to study why people perceive, respond and recover differently from similar situations. When we are facing a particular stressful situation we tend to respond in different ways according to our personality characteristics, independently of the specificity of the situation. Therefore, individual differences play a relevant role that need to be considered when we study behavior in different contexts. The objective of this course is to shed light on the main dimensions associated with individual differences, as well as knowing the models that explain personality from different perspectives (factorial, social, and biological theories).

 Applies to requirement(s): Social Sciences
 K. Chellew
 Prereq: PSYCH-100 or AP Psychology.

PSYCH-326 Laboratory in Personality and Abnormal Psychology

PSYCH-326BH Laboratory in Personality and Abnormal Psychology: 'Behavioral Methods for Social and Intergroup Psychology'
Not Scheduled for This Year. 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-326CP Laboratory in Personality and Abnormal Psychology: 'Advanced Statistics in Clinical Psychology'
Fall. Credits: 4

Students will be exposed to a variety of advanced statistics and methods commonly used in clinical psychological research. Statistics and methods that will be covered include but are not limited to: data cleaning strategies, moderation, mediation, and exploratory and confirmatory factor analyses. Students will complete secondary analyses of pre-existing datasets to answer hypotheses related to advancing our understanding of mental health and well-being.

 Applies to requirement(s): Social Sciences; Multicultural Perspectives
 J. Tawa
 Prereq: PSYCH-204 and one of the following: PSYCH-201, STAT-240, or STAT-242.

PSYCH-326RE Laboratory in Personality and Abnormal Psychology: 'Stigma and Resilience'
Fall and Spring. Credits: 4

Though stigma is understood to underlie and contribute to mental health and illness (e.g., minority stress model), what exactly is ‘stigma’ and how do we measure it? The course will take a broad view of stigma and mental health, but a large focus will be on health behavior such as substance use and sexual behavior. Course topics include methodological issues such as assessment, construct validity, and mixed methods research, as well as empirical research on models of stigma, resilience, and mental health. Students will complete individual final research projects in which they will learn to formulate their own research question, collect and analyze data, and produce a report of their findings (e.g., poster presentation).

 Applies to requirement(s): Social Sciences
 A. Norris
 Prereq: PSYCH-201 and PSYCH-204.

PSYCH-326TR Laboratory in Personality and Abnormal Psychology: 'Transdiagnostic Approaches to Psychopathology'
Fall. Credits: 4

Transdiagnostic approaches to understanding and treating psychopathology seek to identify psychological processes that serve as mechanisms across different types or categories of disorders. In this course, students will learn about the clinical psychology research process including developing research questions, considering ethical issues, conducting a literature review, selecting appropriate measurement tools, and analyzing and interpreting data. Students will apply this knowledge to design and execute a semester-long group research project examining a specific transdiagnostic process and its relationship to symptoms of psychopathology using a preexisting dataset. Throughout the semester, students will work on developing their writing skills, culminating in a complete APA-style research report.

 Applies to requirement(s): Social Sciences
 C. Shepherd
 Prereq: PSYCH-204.
**PSYCH-329 Seminar in Personality and Abnormal Psychology**

This course covers three major theoretical approaches to counseling: short-term psychodynamic, cognitive-behavioral, and solution-focused. Related to each theory we will explore case conceptualization, therapeutic alliance, treatment planning, and mechanisms of change. We will be examining applications to classes of clinical disorders and empirical support for improvement outcomes. Role-playing will be used to illustrate key concepts and approaches to the counseling process. Students will be supported to be reflective and solution focused, evidence-based, process oriented, and to value and facilitate the development of people in the cultural context in which they are embedded.

*Prereq: PSYCH-204.
Advisory: PSYCH-222 recommended.*

**PSYCH-328SN Seminar in Personality and Abnormal Psychology: ‘Stress and Neuroticism’**

This course will explore the relationship between personality and the stress response, in particular, the role of neuroticism in this relationship and its association with health. In particular, we will explore the personality dimensions that play a role in the stress response, the types of stressors and its implication on health, and the techniques to reduce both psychological and physiological stress.

*Prereq: PSYCH-204.
Other Attribute(s): Speaking-Intensive
K. Chellew
Advisory: PSYCH-222 recommended.*

## 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.

*Prereq: PSYCH-204.
Applications: Social Sciences
K. Haydon, K. O'Carroll
Advisory: PSYCH-222 recommended.*

**PSYCH-233 Educational Psychology**

*Fall. 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.

*Crosstipped as: EDUC-233
Applications: Social Sciences
K. O'Carroll, B. Packard
Prereq: A 100-level psychology course or AP Psychology.*

## PSYCH-236 Adolescent and Adult Development

*Spring. Credits: 4*

Adolescence is often thought of as a time of great change and upheaval as children navigate the transition into adulthood. Raging hormones, changing social expectations and relationships, and developing autonomy all contribute to this tumultuous time. This course will examine the biological, cognitive, and social changes that occur during adolescence to develop a better understanding of this unique period of development. Using psychological as well as neuroscience and social science literature the course will examine adolescence through multiple perspectives to develop a well-rounded picture of this developmental period.

*Applications to requirement(s): Social Sciences
J. Couperus
Prereq: A 100-level course in Psychology or AP Psychology.*

**PSYCH-330 Lab in Developmental Psychology**

*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.

*Applications to requirement(s): Social Sciences
K. Haydon
Prereq: PSYCH-204.*

**PSYCH-331 Laboratory in Early Childhood Learning and Development**

*Spring. Credits: 4*

This course will explore child development in the context of early childhood education. The course will cover topics related to early childhood learning and development including cognition, language and literacy, social-emotional development, and personality development while considering how the early education context supports these developmental processes. Discussion of the early education setting will include the teacher-child relationship, family-school relationships, and curriculum. Through intensive participation in an early education classroom, students will have the opportunity to link course content to practice.

*Applications to requirement(s): Social Sciences
K. O'Carroll
Prereq: PSYCH-204 and PSYCH-230.
Applications: Social Sciences
Notes: 2 labs (3 hours each) required at Gorse Children's Center*
PSYCH-337MV Seminar in Educational Psychology: ‘Motivation’
Fall and Spring. Credits: 4
In this course we will examine multiple theories of motivation and their relevance across a range of organizational settings (including corporations, special programs, and schools or colleges). How do we spark interest in a new subject or inspire people to undertake a challenging project? How do we sustain interest in ourselves and others? This course is relevant for students interested in motivation, whether for attainment (such as within in human resources, talent development, or management) or for learning (whether for students, teachers, or leaders). Because motivation is closely linked to learning and achievement, in addition to well-being and purpose, we will also consider these topics and more.
Crosslisted as: EOS-349MV
Applies to requirement(s): Social Sciences
B. Packard
Restrictions: This course is open to juniors and seniors
Prereq: 8 credits in psychology or entrepreneurship, organizations, and society (EOS).

PSYCH-339 Seminar in Developmental Psychology
PSYCH-339LG Seminar in Developmental Psychology: ‘Language and Literacy Development in Early Childhood’
Spring. 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.
Crosslisted as: EDUST351LG
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-339ND Seminar in Developmental Psychology: ‘Narratives in Development’
Not Scheduled for This Year. Credits: 4
In this seminar, we will explore the development of how children use and engage in stories that help them find meaning in their lives and in the world. Narratives are found throughout our daily lives: in picture books, in videos, and in sharing our personal past. We will examine how they help us find meaning in experiences, the course of their development in different contexts, the role of conversation in learning how to convey narratives, and cultural differences in autobiographical narratives.
Applies to requirement(s): Social Sciences
M. Burch
Prereq: PSYCH-204.

Perception and Cognition
PSYCH-241 Cognitive Psychology
Fall. Credits: 4
Cognitive psychology is the study of how we sense and interpret information from the world around us, incorporate this new information with our prior experiences, and determine how to respond to an ever-changing environment. Thus, 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
J. Couperus
Prereq: A 100-level course in psychology or AP Psychology.

PSYCH-242 Autobiographical Memory, Identity, and Emotion
Fall. Credits: 4
Autobiographical memories of personal past experiences create our life stories. Our memories range from the mundane to the momentous. In this course we will explore the functions of autobiographical memory as well as its development. What are the basic cognitive processes that contribute to our ability to remember and report the past? How do we interpret past events to inform the development of our self-identity? How do social experiences contribute to the development of memory? We will also discuss how emotions at encoding and retrieval influence our recall of past experience as we make meaning of personal past experiences.
Applies to requirement(s): Social Sciences
M. Burch
Prereq: A 100-level course in psychology or AP Psychology.

PSYCH-243 Memory Systems
Spring. Credits: 4
In this course we will discuss the many types of memory we use daily, from remembering the name of a new friend, a favorite birthday party, or even how to ride a bike. We will explore the constructive nature of memories and how they may change over time as well as how memory capabilities develop over the life course. We will also explore the neurological underpinnings of memory and the limits of our brains' memory systems. However, a background in neuroscience is not necessary. In addition to reading scholarly research and participating in demonstrations of the various forms of memory and their properties, students will be expected to integrate their understanding through a final paper.
Applies to requirement(s): Social Sciences
M. Burch
Prereq: A 100-level course in psychology or AP 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.
Crosslisted as: NEURO-246
Applies to requirement(s): Social Sciences
M. Breen
Prereq: PSYCH-100, NEURO-100, or AP Psychology.
Notes: This course counts in the cognitive or bio basis area of the psychology major.

PSYCH-249 Topics in Perception and Cognition

PSYCH-249CN Topics in Perception and Cognition: 'Consciousness'
Fall. Credits: 4
Nagel states, "Without consciousness the mind-body problem would be much less interesting. With consciousness it seems hopeless." Chalmers calls consciousness "the hard problem." Explaining consciousness raises significant challenges for philosophers and cognitive scientists alike, and understanding the nature of the problem is half the battle. This class will explore contemporary philosophical approaches to consciousness, and draw in psychology and neuroscience perspectives. Topics may also include split-brain problems, the nature of dreaming, and altered states.
Crosslisted as: PHIL-250CN
Applies to requirement(s): Humanities
Other Attribute(s): Writing-Intensive
L. Sizer
Prereq: One course in philosophy and either a second course in philosophy or a course in neuroscience.
Notes: Students will learn to read and critically analyze primary research articles in a number of different fields, and are expected to write a series of short papers and complete a final project.

PSYCH-249DE Topics in Perception and Cognition: 'Decision Science'
Fall. Credits: 4
We make choices every day, from choosing what we eat for breakfast to what career we want to pursue. How do we make these choices – choices that can have immediate rewards but also long-lasting consequences? In this course, we will examine the neurobiological and psychological mechanisms of decision making. We will explore how theories from both the biological and social sciences have combined to help us understand why and how we make the decisions we do.
Applies to requirement(s): Social Sciences
E. Juarez
Prereq: A 100-level course in Psychology or AP Psychology.

PSYCH-249EP Topics in Perception and Cognition: A to Zzzs: The Psychology and Neurobiology of Sleep
Fall. Credits: 4
Sleep is one of the great enigmas of behavior and physiology. Why would individuals spend 1/3 of their lives in a state that prevents reproducing, collecting resources, or climbing social hierarchies? As Dr. Rechtschaffen eloquently put it: "If sleep does not serve an absolutely vital function, then it is the biggest mistake the evolutionary process has ever made." In this course, we will explore the psychological and neurobiological functions of sleep. We will seek scientifically informed answers to questions like: why do we dream? And what happens when we don't get enough sleep?
Applies to requirement(s): Social Sciences
S. Lokhandwala
Prereq: A 100-level course in Psychology or AP Psychology.

PSYCH-249HB Topics in Perception and Cognition: 'Human Behavior Change'
Spring. Credits: 4
Interventions are an important experimental tool that psychologists and clinicians have used for years to improve health and well-being. Recently, psychologists and economists have begun applying the theories of decision making and the principles of intervention to promote behavior change. In this course, we will explore the foundations of these interventions, examine how they have been used by researchers to promote human behavior change, and evaluate the ethical implications of these procedures at scale.
Applies to requirement(s): Social Sciences
E. Juarez
Prereq: A 100-level course in Psychology or AP Psychology.

PSYCH-340 Laboratory in Perception and Cognition
PSYCH-340CL Laboratory in Perception and Cognition: 'Cognition and Literacy'
Not Scheduled for This Year. 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
Prereq: PSYCH-204.
Notes: 3 hours per week as a literacy tutor in Springfield is required.

PSYCH-340CM Laboratory in Perception and Cognition: 'Understanding Children's Minds'
Spring. Credits: 4
In this course we will learn about and apply developmental and cognitive research practices to examine cognition and its development. Specifically, we will learn about a subset of assessment tools covering toddlerhood to middle childhood and will design several studies based on the interests of the class. (Depending on COVID restrictions this may mean we are limited to online assessments.) Students will collect and analyze data, and produce a final product reporting their findings.
Applies to requirement(s): Social Sciences
J. Couperus
Prereq: PSYCH-204.
PSYCH-340EL Laboratory in Perception and Cognition: ‘Human Electrophysiology’
Not Scheduled for This Year. Credits: 4
This course surveys the theory and practice of using recordings of electrical activity of the brain to study aspects of human cognition. Lectures will describe how event-related brain potentials (ERPs) have been used to address issues related to language, memory, attention, and perception, and students will gain experience critically reading and evaluating research reports in this area. Students will also learn how to collect, process, statistically analyze, and interpret ERP data through the completion of group research projects.
Applies to requirement(s): Social Sciences
M. Breen
Prereq: PSYCH-204.

Fall. Credits: 4
This course is an upper-level lab designed for students who wish to learn electrophysiological techniques and how to apply those techniques to answer research questions in the domain of cognitive neuroscience. Students will have the opportunity to develop an original research project from conception through analysis. They will also learn the theory behind the technique and how it works. Course requirements will consist of reading primary research articles, designing, and programming an event related potential (ERP) research project, learning to collect ERP data, conduct data analysis and test original hypotheses using existing data.
Applies to requirement(s): Social Sciences
J. Couperus
Prereq: PSYCH-204.
Advisory: A cognitive psychology course is recommended.

PSYCH-349 Seminar in Perception and Cognition
PSYCH-349AD Seminar in Perception and Cognition: ‘Adult Literacy’
Not Scheduled for This Year. Credits: 4
In this seminar, we will explore a number of literacy issues as they relate to the ever-present challenge of adult illiteracy. We will examine the following topics as they relate to adults with low-literacy skills: vocabulary acquisition, reading comprehension, and writing abilities. This is a Community-Based Learning course, and students will spend time each week tutoring adults in local Adult Basic Education centers to gain first-hand insights into these issues.
Crosslisted as: EDUST-351AD
Applies to requirement(s): Social Sciences
Other Attribute(s): Community-Based Learning
K. Binder
Prereq: PSYCH-204.

PSYCH-349AM Seminar in Perception and Cognition: ‘Art, Music, and the Brain’
Not Scheduled for This Year. 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
Other Attribute(s): Writing-Intensive
M. Breen, A. Mueller
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-204.
Advisory: A 200-level course in Cognitive Psychology recommended.

PSYCH-349MC Seminar in Perception and Cognition: ‘Music Cognition’
Not Scheduled for This Year. Credits: 4
Every culture in the world has some form of music, but why do humans develop music, and what function does it serve? In this course, we’ll explore the cognitive and neural processes that underlie music perception and production, and ask the following questions: Does music have universal features that cross cultures? How does music convey emotion? What do infants know about music? Is music specifically human? And finally, what are the parallels between music and language? Through these questions, we’ll learn about basic processes of cognition, as well as functions of a variety of human brain regions, and we will gain insight into what makes music such an integral part of our daily lives.
Applies to requirement(s): Social Sciences
M. Breen
Instructor permission required.
Prereq: PSYCH-204.
Advisory: A cognitive psychology course recommended.
PSYCH-349MG Seminar in Perception and Cognition: 'Imagination'
Spring. Credits: 4
Our memory systems enable us to imagine things that have never happened or that haven't happened yet. Imagination allows us to flexibly plan for our futures and take new perspectives on our past. As a result, our capacity for imagination contributes to our personal identities and goals as well as our shared sense of history and collective action. In this course, we will investigate imagination and constructive memory processes by discussing and interacting with texts from psychology, neuroscience, history, and documentary.
Applies to requirement(s): Social Sciences
E. Juarez
Prereq: PSYCH-204.

Biological Bases of Behavior

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.
Crosslisted as: NEURO-254
Applies to requirement(s): Social Sciences
J. Schwartzer
Prereq: PSYCH-100, NEURO-100, or AP Psychology.

PSYCH-256 Hormones and Behavior
Fall and Spring. Credits: 4
Does the idea of Finals Week stress you out? Have you ever felt hungry or thirsty? Is our biology to blame when people cheat on their partners? From mental health and hunger to sexual motivation and aggression, our hormones dictate many of our basic choices and ultimately control how we interact with our world. This course will explore how hormones communicate with our brain to influence behaviors such as sexual attraction and reproduction, parental care, and social behavior. Special emphasis will be placed on the underlying biology and role of the nervous system in regulating hormone levels.
Applies to requirement(s): Social Sciences
T. Hodges
Prereq: PSYCH-100, NEURO-100, or AP Psychology.

PSYCH-259 Topics in Biological Bases of Behavior

PSYCH-259MH Topics in Biological Bases of Behavior: 'Mental Health, Drugs, and the Brain'
Not Scheduled for This Year. Credits: 4
We are constantly hearing about drugs in the media, both those used for the treatment of mental health challenges as well as those used for recreation. But beyond the media, what do we know about how drugs (both illicit and prescription) affect the brain, neurocircuitry, and behavior? In this course we will explore neuropsychopharmacology in the context of clinical disorders such as schizophrenia and affective disorders as well as in substance use and addiction. Through this lens we will explore the underlying neurotransmitter systems of the brain and how substances influence nervous system function and behavior.
Applies to requirement(s): Social Sciences
J. Schwartzer
Other Attribute(s): Writing-Intensive
Prereq: PSYCH-100 or AP Psychology.

PSYCH-350BN Lab in Biological Bases of Behavior

PSYCH-350 Lab in Biological Bases of Behavior: 'Laboratory in Behavioral Neuroscience'
Spring. 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 brain chemistry analyses. 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-204.
Advisory: 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-359BP Seminar in Biological Bases of Behavior: 'Development, Environment, and Brain Plasticity'
Not Scheduled for This Year. Credits: 4
How is the brain shaped by our environment? How do everyday experiences affect how we process and experience the world? This course explores the mechanisms of plasticity within the brain from conception through adulthood and the factors that influence them. The course will include topics such as the effects of environmental toxins on the brain, reorganization of the brain following injury, how traumatic events impact neurotransmitter systems, and how these changes affect behavior. In doing so this course will cover developmental, structural, functional and chemical plasticity.
Applies to requirement(s): Social Sciences
Other Attribute(s): Writing-Intensive
J. Couperus
Prereq: PSYCH-204.
PSYCH-359CN Seminar: Biological Bases of Behavior: ‘Clinical Neuroscience’
Not Scheduled for This Year. 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. Schwartz
Prereq: PSYCH-204.
Advisory: NEURO-100 and PSYCH-254 strongly recommended.

PSYCH-359GE Seminar in Biological Bases of Behavior: ‘Neuroscience and Psychology of Sex and Gender’
Fall. Credits: 4
This course is designed to examine sex, gender, and sexuality in multiple contexts. The primary aim of this course is to develop an understanding of the psychology and neuropsychology/neuroscience of sex, gender, and sexuality. Additionally the course will examine how biological and environmental factors influence sex, gender, and sexuality across development and how these factors influence differences in brain and behavior. Course requirements will include reading primary research articles in the fields of psychology, neuroscience, sociology, anthropology, and women's studies.
Applies to requirement(s): Social Sciences
J. Couperus
Prereq: PSYCH-204.

Not Scheduled for This Year. Credits: 4
This course explores the mechanisms of plasticity within the brain from conception through childhood and the factors that influence them. The goal of the course is to provide students with an understanding of how the brain can be shaped through biological development and experience and how these processes are reflected in behavior. For example, topics will include reorganization of the brain following injury, effects of environmental toxins on the brain, as well as how these changes in the brain affect behavior.
Applies to requirement(s): Social Sciences
J. Couperus
Prereq: PSYCH-204.