Psychology

The Psychology Department offers B.A. and B.S. undergraduate degrees, an undergraduate minor in general psychology, and M.Sc. and Ph.D. graduate degrees.

Psychology is the science of mind, brain, and behavior. Undergraduate study in psychology provides:

- A knowledge base about how people think, feel, and act as individuals and in groups, from infancy to old age
- An understanding of how psychological principles can be applied in everyday life, including to address societal needs
- Training in scientific reasoning, critical thinking, and problem solving, including effective research methods to address psychological phenomena
- An appreciation of individual, sociocultural, and international diversity
- Opportunities to build skills in writing and oral communication

Psychology majors pursue careers in many areas such as: business including marketing and industrial/organizational psychology; education; medicine/health; mental and behavioral health professions including clinical, counseling, and sports psychology; law; human services; and basic and applied research positions. The knowledge and skills provided by a degree in Psychology are valuable to all such careers.

For more information, please visit our website: http://psychology.cas2.lehigh.edu/

Professors: Mark H. Bickhard, PHD (University of Chicago); Michael J. Gill, PHD (University Texas, Austin); Diane T. Hylan, PHD (Syracuse University); Barbara C. Malt, PHD (Stanford University); Gordon B. Moskowitz, PHD (New York University); Ageliki Nicolopoulou, PHD (University of California Berkeley)

Associate Professors: Susan E Barrett, PHD (Brown University); Amanda C. Brandon, PHD (University of Michigan Ann Arbor); Christopher T. Burke, PHD (New York University); Almut Hupbach, PHD (Universitat Trier); Jesseca Marsh, PHD (Yale University); Padraig G O'Seaghdha, PHD (University of Toronto); Dominic J. Packer, PHD (University of Toronto)

Assistant Professors: Nancy B. Carlisle, PHD (Vanderbilt University, Peabody College); Luc Napper, PHD (University of Sheffield); Valerie Jones Taylor, PHD (Stanford University)

Emeriti: William Newman, PHD (Stanford University); Martin L. Richter, PHD (Indiana State Univer); George K. Shortess, PHD (Brown University)

B.A. MAJOR PROGRAM IN PSYCHOLOGY

The Bachelor of Arts in psychology is a social science major requiring 13 courses (approximately 49 credit hours) in psychology as described below. The B.A. requires four core courses, four 100-level breadth courses, a 100-level recitation section accompanying one of the breadth courses, and four 300-level seminars. Students are required to complete a portfolio of written work that provides a record of their learning and accomplishments throughout the major.

Students must also fulfill college and university degree requirements. This flexible program permits development of one or more minors in other fields. Transfer credits and study abroad course work may be applied toward the major; however, students must take a minimum of two 100-level breadth courses, three 300-level seminars, and the PSYC 201, 202, and 203 sequence at Lehigh to complete a psychology major from Lehigh.

Required Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 001</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>PSYC 201</td>
<td>Research Methods and Data Analysis I</td>
</tr>
<tr>
<td>PSYC 202</td>
<td>Research Methods and Data Analysis II</td>
</tr>
<tr>
<td>PSYC 203</td>
<td>Research Methods and Data Analysis III</td>
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</tbody>
</table>

Breadth Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 107</td>
<td>Child Development</td>
</tr>
<tr>
<td>PSYC 109</td>
<td>Adulthood and Aging</td>
</tr>
<tr>
<td>PSYC 121</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSYC 138</td>
<td>Personality</td>
</tr>
<tr>
<td>PSYC 153</td>
<td></td>
</tr>
</tbody>
</table>

Seminars

15-16

Four 100-level courses, with a minimum of one from each of the following three areas, are required of all majors.

<table>
<thead>
<tr>
<th>Concentration Area</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition and Cognitive Neuroscience</td>
<td>PSYC/COGS 117</td>
<td>Cognitive Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC/COGS 176</td>
<td>Cognitive Neuroscience</td>
</tr>
<tr>
<td>Developmental</td>
<td>PSYC 107</td>
<td>Child Development</td>
</tr>
<tr>
<td></td>
<td>PSYC 109</td>
<td>Adulthood and Aging</td>
</tr>
<tr>
<td>Social and Personality</td>
<td>PSYC 121</td>
<td>Social Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 153</td>
<td>Personality</td>
</tr>
</tbody>
</table>

100-level Recitation

One 100-level recitation section accompanying one of the above breadth courses

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PSYC 138</td>
<td>Child Development Recitation</td>
</tr>
<tr>
<td>PSYC 183</td>
<td>Cognitive Psychology Recitation</td>
</tr>
<tr>
<td>PSYC 184</td>
<td>Cognitive Neuroscience Recitation</td>
</tr>
<tr>
<td>PSYC 185</td>
<td>Personality Recitation</td>
</tr>
<tr>
<td>PSYC 186</td>
<td>Social Psychology Recitation</td>
</tr>
</tbody>
</table>

Seminars

15-16

Four 300-level seminars are required of all B.A. students. Seminars need to span at least two areas. (See list of seminars per area in Psychology Concentrations section below.)

Student Portfolio

Students are also required to complete a portfolio of written work that provides a record of their learning and accomplishments throughout the major.

Total Credits 46-49

1 The fourth 100-level breadth course must be selected from any of the above courses or PSYC 138.

2 Students can not use PSYC 300, PSYC 310, PSYC 391, PSYC 392, PSYC 393 or PSYC 394 to fulfill this requirement. All other 300-level psychology courses can be used to fulfill this requirement.

Optional Concentration

Students in the B.A. program may choose to complete an optional concentration. Concentrations are available in four areas: Cognition and Cognitive Neuroscience; Developmental; Social and Personality; and Clinical and Behavioral Health. Completion of a concentration involves selecting specific 100-level breadth courses and 300-level seminars within the concentration. See listings of individual concentration courses below.

Recommended Electives

The B.A. program in psychology is a flexible preparation for a number of fields. With suitable selection of additional courses, students can prepare themselves for graduate study in any subfield of psychology or for careers in areas for which psychology is a desirable and relevant major such as neuroscience, law, social work, marketing, management, and education.

Depending on the specific subfield of interest, many courses in other departments within CAS, and in other Colleges, may be relevant. Examples include Biological Sciences (especially the Behavioral Neuroscience program), Philosophy, Sociology and Anthropology, Marketing, Economics, Management, Education, and in the interdisciplinary programs of Cognitive Science; Women, Gender, and Sexuality Studies; Health, Medicine, and Society; Global Studies; and Africana Studies.

For graduate programs in psychology, neuroscience, and related fields, additional coursework in research and statistics is desirable, as is engagement in supervised research and participation in the honors program.

Preparation for programs in health-related areas such as nursing, medicine, and dentistry will include additional coursework in biology,
chemistry, and physics. Students should consult with the appropriate pre-professional advisors to determine specific requirements.

Students interested in applying psychology to fields such as law, marketing, social work, management, or education should consult with faculty in those areas to discuss relevant courses.

**B.S. MAJOR PROGRAM IN PSYCHOLOGY**

The Bachelor of Science in psychology is a highly structured and comprehensive behavioral science major requiring 14 courses (approximately 53 credit hours) in psychology and 9 collateral courses (approximately 31-36 credit hours) as described below. Students are required to complete a portfolio of written work that provides a record of their learning and accomplishments throughout the major. Students must also fulfill college and university degree requirements. Students pursuing a wide-range of post-graduate plans may find this program fits their needs and interests. One difference between the B.S. in psychology and other B.S. programs is that the collateral requirements for the B.S. in psychology allow for a level of breadth that is not always possible in B.S. programs. The collateral courses for the B.S. in psychology span three areas (Mathematics and Computer Science; Natural Science; and Social and Cognitive Science). Hence, students with wide-ranging interests may find that they can pursue their varied interests while fulfilling the collateral requirements for this B.S. program. For students considering graduate programs in psychology, neuroscience, and related fields, additional coursework in research and statistics is desirable, as is engagement in supervised research and participation in the honors program.

Students in the B.S. program must complete a concentration in Cognition and Cognitive Neuroscience; Developmental; Social and Personality; or Clinical and Behavioral Health. Progression through the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment. Students who do not declare their majors early may find it difficult to complete the B.S. major program. Transfer credits and study abroad coursework do not declare their majors early may find it difficult to complete the program is best served through early commitment.

**Requirements for the B.S. in Psychology**

**Collateral Requirements**

For students in the B.S. program, collateral courses can be used to fulfill this requirement. All other 300-level psychology courses can be used to fulfill this requirement. Possible departments include: Africana Studies (AAS), Asian Studies (ASIA), Cognitive Science (COGS), Global Studies (GS), Health, Medicine, & Society (HMS), History (HIST), International Relations (IR), Communication (COMM), Latino American & Latino Studies (LAS), Philosophy (PHIL), Political Science (POLS), Religion Studies (REL), Science, Technology, & Society (STS), Sociology and Anthropology (ANTH, SQAN, SOC), Women, Gender, & Sexuality Studies (WGSS).

**Additional Coursework**

Students can use any two SS courses that are not cross-listed with psychology. Courses must have a SS designation. Students are strongly encouraged to discuss their interests and career goals with their advisor before selecting courses.

**Psychology Requirements**

**Required Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 001</td>
<td>Introduction to Psychology</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 201</td>
<td>Research Methods and Data Analysis I</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 202</td>
<td>Research Methods and Data Analysis II</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 203</td>
<td>Research Methods and Data Analysis III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Breadth Courses**

Four 100-level courses, with a minimum of one from each of the following three areas, are required of all majors.

1. Cognitive and Cognitive Neuroscience
   - PSYC/COGS 117 Cognitive Psychology
   - PSYC/COGS 176 Cognitive Neuroscience

2. Developmental
   - PSYC 107 Child Development
   - PSYC 109 Adulthood and Aging

3. Social and Personality
   - PSYC 121 Social Psychology
   - PSYC 153 Personality

**100-level Recitation**

One 100-level recitation section accompanying one of the above breadth courses

- PSYC 182 Child Development Recitation
- PSYC 183 Cognitive Psychology Recitation
- PSYC 184 Cognitive Neuroscience Recitation
- PSYC 185 Personality Recitation
- PSYC 186 Social Psychology Recitation

**Seminars**

Five 300-level seminars are required of all B.S. students. Seminars need to span at least two areas. (See list of seminars per area in Psychology Concentrations section below.)

**Student Portfolio**

Students are also required to complete a portfolio of written work that provides a record of their learning and accomplishments throughout the major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credits</td>
<td></td>
<td>49-53</td>
</tr>
</tbody>
</table>

1. The fourth 100-level breadth course is determined by the concentration being pursued.
2. Students can not use PSYC 300, PSYC 310, PSYC 391, PSYC 392, PSYC 393, PSYC 394 to fulfill this requirement. All other 300-level psychology courses can be used to fulfill this requirement.
PSYCHOLOGY CONCENTRATIONS
Concentrations are available in four areas: Cognition and Cognitive Neuroscience; Developmental; Social and Personality; and Clinical and Behavioral Health. Students in the B.A. major program may choose to complete a concentration. Students in the B.S. major program are required to complete a concentration. Completion of a concentration involves selecting two specific 100-level breadth courses and three 300-level seminars within the concentration area.

Cognition and Cognitive Neuroscience Concentration
Specified 100-level breadth courses, take both:
- PSYC/COGS 117 Cognitive Psychology
- PSYC/COGS 176 Cognitive Neuroscience

Specified 300-level seminars, choose three:
- PSYC 304 Memory Development from Infancy to Old Age
- PSYC 307 Higher Order Cognition
- PSYC 316 The Talking World: Psychology and Neuroscience of Speaking
- PSYC 320 Psychology of Language
- PSYC/HMS 344 Health Care Reasoning and Decision Making
- PSYC 347 Cognitive Neuroscience of Memory
- PSYC 351 Children’s Thinking
- PSYC 355 Seminar in Cognitive Neuroscience
- PSYC 358 Inside the Infant Mind
- PSYC 362 Cognition in Practice & Policy
- PSYC 369 Memory Under Construction
- PSYC 377 Attention and Attentional Failures

Developmental Concentration
Specified 100-level breadth courses, take both:
- PSYC 107 Child Development
- PSYC 109 Adulthood and Aging

Specified 300-level seminars, choose three:
- PSYC 304 Memory Development from Infancy to Old Age
- PSYC/WGSS 318 Seminar in Gender and Psychology
- PSYC 328 Educational Psychology
- PSYC 346 Child Development and Social Policy
- PSYC 351 Children’s Thinking
- PSYC 352 Adolescence and Emerging Adulthood
- PSYC 358 Inside the Infant Mind
- PSYC 363 Personality and Social Development in Childhood
- PSYC 364 The Meaning and Power of Narratives through the Lifespan
- PSYC/NS 365 Human Development in Cross-Cultural Perspective
- PSYC 368 Children, Psychology, and the Law
- PSYC 375 Development of Good and Evil
- PSYC 378 Emotional Development
- PSYC 383 Attachment Theory & Research: The Study of Close Relationships Across the Lifespan
- PSYC/HMS 386 Child and Adolescent Health Psychology

Social and Personality Concentration
Specified 100-level breadth courses, take both:
- PSYC 121 Social Psychology
- PSYC 153 Personality

Specified 300-level seminars, choose three:
- PSYC/HMS 302 Stress and Coping

DEPARTMENT HONORS IN PSYCHOLOGY
Students in either the B.A. or B.S. degree programs may undertake a program that leads to graduation with department honors. The honors program permits majors of unusual academic ability and interest to explore topics in greater depth than the curricula normally allow. Under faculty supervision, a student normally spends the first semester of the senior year enrolled in PSYC 391 doing library research, learning the appropriate methodology, and preparing a written proposal and oral presentation. In the second semester, while the student is enrolled in PSYC 392, the proposal is implemented, culminating in a written honors thesis and oral presentation.

In the junior year, students may apply for the honors program with the department Honors Program Director. To be eligible to participate in the honors program, a student must maintain overall and major GPAs of 3.5.

MINOR PROGRAM
General Psychology
The general psychology minor consists of a minimum of five courses in psychology including the introductory course (PSYC 001). At
least three of the five required psychology courses must be taken at Lehigh. Each course must be at least three credits. Students should declare this minor in the Psychology Department office.

FOR GRADUATE STUDENTS
The Department of Psychology offers a distinctive, research-intensive graduate program with specializations in cognitive, developmental, and social psychology. The department accepts mainly Ph.D. students, who obtain a master’s degree in the process of working for the doctorate. However, well-qualified students may also be accepted for a Master of Science degree. Students are trained primarily for positions at universities, and in basic or applied research settings. For more information visit: http://psychology.cas2.lehigh.edu/content/welcome-graduate-program-psychology.

In addition we offer two non-degree Certificate Programs in collaboration with other departments and programs.
The Graduate Certificate in Stereotypes, Prejudice, Discrimination, and Intergroup Relations is administered by the Psychology Department. Information is available via: http://psychology.cas2.lehigh.edu/content/stereotypes-prejudice-discrimination-and-intergroup-relations-graduate-certificate.
The Graduate Certificate in Cognitive Science is administered by the Cognitive Science Program. Information is available at: http://psychology.cas2.lehigh.edu/content/cognitive-science-graduate-certificate.

Requirements for a Ph.D. in the Department of Psychology
Research
All graduate students are expected to be involved in research throughout their graduate careers. There are also several formal research requirements of the program.
First-Year Apprenticeship
First-year students are expected to choose an advisor and begin to work on research projects as early as possible. An oral report of the student’s research activities is made to the department. Students will submit a draft Master’s Thesis Proposal by June 1 of the first year of the Ph.D. program.
Master’s Thesis
A master’s thesis (usually empirical or data-based) is required. An oral presentation of the thesis is made to the department. Students entering with a master’s degree may instead conduct an equivalent non-degree Pre-dissertation Project.
Third-Year independent scholarly activity
Third-year students will work toward formulation of their dissertation proposal by completing a literature review or writing a small grant proposal. By the end of the third year of the Ph.D. program, students will choose a dissertation committee, and meet to report on their research activities.
Doctoral Dissertation
This is an original piece of scholarly work usually involving empirical research, although original theoretical or historical research is possible with faculty approval.
Course work
For the Ph.D., the minimum course requirements include:
• Three core courses covering cognitive psychology (PSYC 403), developmental psychology (PSYC 402), and social cognition (PSYC406);
• Two courses in statistics and research methodology (PSYC 421 and PSYC 422);
• At least three graduate seminars (PSYC 430 and above);
• Two elective courses, approved by the advisor;
• A professional development seminar (PSYC 409)

Teaching
Students are encouraged to participate in teaching as appropriate for their training throughout their graduate years. Normally, students begin as teaching assistants and progress to teaching independently.

General Examination
A general examination is required for all doctoral candidates and will be completed at the end of the second year of the Ph.D. program. Readings and questions for the exam will be compiled by faculty in the student’s specialization area.

Requirements for a Master of Science in the Department of Psychology
Research
Master of Science students will complete the First-Year Apprenticeship and Master’s Thesis requirements as described in the Ph.D. section above.

Coursework
For the M.Sc., the minimum course requirements include:
• Two core courses covering cognitive psychology (PSYC 403), developmental psychology (PSYC 402), or social cognition (PSYC 406);
• Two courses on statistics and research methodology (PSYC 421, and PSYC 422 or approved equivalent);
• Two elective courses, approved by the advisor;
• A professional development seminar (PSYC 409)

Evaluation
Graduate students are evaluated on their performance in coursework, research and scholarship, teaching assistantships, and the general examination. The faculty provides each student with an annual written evaluation of their progress in the graduate program.

Financial Support
Support for Ph.D. students is available in the form of teaching and research assistantships, fellowships and scholarships.

How To Apply
Information about admission and financial aid can be obtained from the Department of Psychology or found at: https://psychology.cas2.lehigh.edu/node/67. While a strong undergraduate background in psychology is desirable, promising students with majors other than psychology are encouraged to apply. Completed application forms, plus transcripts, letters of recommendation, and a report of scores on the Graduate Record Exam and advanced tests in psychology should be submitted no later than January 1 of the year of admission. New students are normally accepted for entrance into the program only for the fall semester.

Courses
PSYC 001 Introduction to Psychology 4 Credits
Psychology as a science of behavior. Natural science aspects such as learning, sensation-perception, and physiological bases; and social science aspects such as human development, intelligence, and personality. Methodologies appropriate to these areas, and related societal problems.
Attribute/Distribution: SS

PSYC 012 Introduction to Human Neuroscience 4 Credits
In this introductory course, we will uncover how our brains are able to give rise to the complexities of human thought and behavior. We will examine the neural bases of seeing, hearing, sleep, dreaming, sexual behavior, emotion, aggression, behavioral disorders, learning, and memory.
Attribute/Distribution: NS

PSYC 107 Child Development 4 Credits
Survey of theories and research concerning perceptual, cognitive, social, and personality development through infancy and childhood. May not be taken pass/fail. Open to Freshmen with departmental permission.
Prerequisites: PSYC 001 or SOC 001
Attribute/Distribution: SS
PSYC 109 Adulthood and Aging 4 Credits
Social science approaches to the latter two-thirds of life. Cognitive and personality development; attitudes toward aging; social behavior of older adults; widowhood; retirement. May not be taken pass/fail. Open to Freshmen with departmental permission.
Prerequisites: PSYC 001 or SOC 001
Attribute/Distribution: SS

PSYC 110 Statistical Analysis of Behavioral Data 4 Credits
Principles of experimental design and statistical analysis: characteristics of data and data collection; descriptive statistics; hypothesis testing theory and practice; correlation, chi-square, t-test, analysis of variance. Three hours lecture and one hour computer lab. Department permission required. Open to Freshmen with departmental permission.
Attribute/Distribution: ND

PSYC 115 (REL 115) Religion And Psychology 4 Credits
A study of the origins, development and consequences of religion from a psychological perspective. Attention will be given to classic and contemporary sources, with a focus on major psychoanalytic theorists of religion (Freud, Jung, Erikson); psychological analyses of religious experience (e.g., Wm. James, Victor Frankl); and the diverse cultural and religious forms that structure the connection between religion and psychology (e.g., Buddhist psychology, Japanese Morita therapy).
Attribute/Distribution: HU

PSYC 117 (COGS 117) Cognitive Psychology 4 Credits
The architecture and dynamics of the human mind: How we acquire knowledge through perception, represent and activate it in memory, and use it to communicate, make decisions, solve problems, and reason creatively. May not be taken pass/fail.
Prerequisites: PSYC 001 or COGS 007
Attribute/Distribution: SS

PSYC 121 Social Psychology 4 Credits
Theories, methods of investigation, and results of research on the way social and psychological processes interact in human behavioral settings. Topics include analysis of self and relationships, dynamics of small groups, attitudes and persuasion, prejudice, prosocial and antisocial behavior. May not be taken pass/fail. Open to Freshmen with departmental permission.
Prerequisites: SOC 001 or PSYC 001
Attribute/Distribution: SS

PSYC 138 (HMS 138) Abnormal Psychology 4 Credits
Examines research and theory on the patterns, causes, and treatment of various forms of abnormal behavior.
Prerequisites: PSYC 001
Attribute/Distribution: SS

PSYC 153 Personality 4 Credits
Examination of the major theoretical frameworks psychologists use to understand human thought, feeling, and behavior. Whereas these frameworks each emphasize very different concepts (e.g., the unconscious mind vs. culture vs. neurotransmitters), they are united in their effort to answer the question: Why does a given individual think, feel, or behave as she does? May not be taken pass/fail.
Prerequisites: PSYC 001 or SOC 001
Attribute/Distribution: SS

PSYC 160 Independent Study 1-3 Credits
Readings on topics selected in consultation with a staff member. Consent of faculty sponsor required.
Repeat Status: Course may be repeated.
Prerequisites: PSYC 001
Attribute/Distribution: SS

PSYC 161 Supervised Research 1-3 Credits
Apprenticeship in ongoing faculty research program. Literature review, experimental design, data collection and analysis, and professional writing under faculty supervision. Consent of faculty sponsor required.
Repeat Status: Course may be repeated.
Prerequisites: PSYC 001 or COGS 007
Attribute/Distribution: SS

PSYC 162 Psychological Field Work 1-3 Credits
Work-study practice including supervised experience in one of several local agencies. Development of familiarity with the operations of the agency and working with individual patients or students. Must have completed two additional psychology courses. Consent of instructor required.
Repeat Status: Course may be repeated.
Prerequisites: PSYC 001
Attribute/Distribution: SS

PSYC 176 (COGS 176) Cognitive Neuroscience 4 Credits
Perception and cognitive neuroscience as the link between mental processes and their biological bases. Visual and auditory perception; the control of action; neuropsychological syndromes of perception, language, memory and thought; neural network (connectionist) models of mental processes. May not be taken pass/fail.
Prerequisites: PSYC 001 or COGS 007
Attribute/Distribution: NS

PSYC 182 Child Development Recitation 1 Credit
Research, discussion, and analysis of topics in child development.
Prerequisites: PSYC 107
Can be taken Concurrently: PSYC 107
Attribute/Distribution: ND

PSYC 183 Cognitive Psychology Recitation 1 Credit
Research, discussion, and analysis of topics in cognitive psychology.
Prerequisites: PSYC 117 or COGS 117
Can be taken Concurrently: PSYC 117, COGS 117

PSYC 184 Cognitive Neuroscience Recitation 1 Credit
Research, discussion, and analysis of topics in cognitive neuroscience.
Prerequisites: PSYC 176 or COGS 176
Can be taken Concurrently: PSYC 176, COGS 176
Attribute/Distribution: ND

PSYC 185 Personality Recitation 1 Credit
Research, discussion, and analysis of topics in personality.
Prerequisites: PSYC 153
Can be taken Concurrently: PSYC 153

PSYC 186 Social Psychology Recitation 1 Credit
Research, discussion, and analysis of topics in social psychology.
Prerequisites: PSYC 121
Can be taken Concurrently: PSYC 121

PSYC 201 Research Methods and Data Analysis I 4 Credits
Part 1 of a course sequence on how to design and analyze psychological research. This course sequence focuses on developing research questions and answering them using appropriate research designs and complementary data analysis techniques: descriptive statistics, hypothesis testing, correlation, regression, chi-square, t-test, analysis of variance. Three hours of lecture and one hour of computer lab. Department permission required.
Prerequisites: PSYC 001

PSYC 202 Research Methods and Data Analysis II 4 Credits
Part 2 of a course sequence on how to design and analyze psychological research. This course sequence focuses on developing research questions and answering them using appropriate research designs and complementary data analysis techniques: descriptive statistics, hypothesis testing, correlation, regression, chi-square, t-test, analysis of variance. Three hours of lecture and one hour of computer lab. Department permission required.
Prerequisites: PSYC 201

PSYC 203 Research Methods and Data Analysis III 4 Credits
Part 3 of a course sequence on how to design and analyze psychological research. Students will design, conduct, and analyze behavioral research studies and develop skills in scientific writing. Department permission required.
Prerequisites: PSYC 201 and PSYC 202
PSYC 210 Experimental Research Methods and Laboratory 4 Credits
Designing, conducting, and reporting psychological experiments. Laboratory exercises, report writing, and a group research project. Consent of department required.
Prerequisites: PSYC 001 and PSYC 110

PSYC 300 Apprentice Teaching 1-4 Credits

PSYC 302 (HMS 302) Stress and Coping 4 Credits
How does stress affect the psychological system, and what psychological mechanisms are in place to help people overcome environmental stressors? This seminar examines classic and contemporary theories and research on stress, coping, and social support.
Prerequisites: PSYC 121 or PSYC 153 or HMS 160 or HMS 180
Attribute/Distribution: SS

PSYC 304 Memory Development from Infancy to Old Age 4 Credits
Memory development throughout the lifespan. We will discuss methods invented to study memory in preverbal infants, and the amazing memory capacities they have revealed. We will explore memory components that develop during early and middle childhood, look at memory in adults, and consider the normal and pathological decline of memory in older age, and possible ways of slowing aging processes down.
Prerequisites: PSYC 117 or COGS 117 or PSYC 176 or COGS 176 or COGS 007
Attribute/Distribution: SS

PSYC 307 Higher Order Cognition 4 Credits
In depth exploration of selected areas of higher level cognition such as thinking and reasoning, metacognition, expertise, executive processes, language and thought.
Prerequisites: PSYC 117 or COGS 117
Attribute/Distribution: SS

PSYC 310 Advanced Research Methods in Psychology 4 Credits
Experimental and nonexperimental research design; Sampling and selection from populations; Data exploration; Quantitative and qualitative measurement and analysis; Computer-based data collection; and other specialized topics.
Prerequisites: PSYC 210

PSYC 311 The Psychology of Stereotyping, Prejudice, and Discrimination 4 Credits
We first examine the basic cognitive processes that make stereotyping a functional aspect of everyday cognition, and then turn toward examining emotional, motivational, and personality differences that affect one’s level of prejudice. Finally, we will study the role of social forces in transmitting prejudice (parents, schools, religion, media) and the impact of societal prejudice (discrimination) on those who are the targets of prejudice. How stereotypes, prejudice, and discrimination are understood, measured, expressed, and altered is the focus of the course.
Prerequisites: PSYC 153 or PSYC 121
Attribute/Distribution: SS

PSYC 313 Person Perception 4 Credits
Psychological processes involved in forming impressions of others. Survey of the factors that influence the way in which we think about the people who make up our social environment and of the laboratory methods with which experimental social psychology investigates person perception. The emphasis is on demonstrating the joint impact of the behaviors performed by others and the biases/expectancies that we bring into the social setting.
Prerequisites: PSYC 153 or PSYC 121
Attribute/Distribution: SS

PSYC 314 Social Cognition 3,4 Credits
Examines the cognitive processes through which people make sense of social groups, individual others, themselves, and the world. Topics include judgment and decision making, attitudes and persuasion, ordinary personology, stereotyping and prejudice, and the self.
Prerequisites: PSYC 121
Attribute/Distribution: SS

PSYC 316 The Talking World: Psychology and Neuroscience of Speaking 4 Credits
Intricate processes underlie the everyday activity of speaking. We will examine the components of speaking, from thinking to articulation, within and across individual speakers and languages, using behavioral and neuroscientific evidence.
Prerequisites: PSYC 117 or COGS 117 or PSYC 176 or COGS 176
Attribute/Distribution: NS

PSYC 317 Psychology of Emotion 4 Credits
A selective overview of the scientific study of emotion. Topics will include: historical and modern theories of emotion, physiological and neuropsychological aspects of emotions, evidence that facial expressions of emotion may be universal among humans, and the role of emotion in cognition.
Prerequisites: PSYC 110
Attribute/Distribution: SS

PSYC 318 (WGSS 318) Seminar in Gender and Psychology 4 Credits
Gender as shaped by psychological and social psychological processes. Socialization, communication and power, gender stereotypes, methodological issues in sex differences research. Consent of department required.
Prerequisites: PSYC 210
Can be taken Concurrently: PSYC 210
Attribute/Distribution: SS

PSYC 319 (HMS 319) The Psychology of Trauma 4 Credits
This course explores the nature of psychological trauma, including the physiological, emotional, cognitive, behavioral, interpersonal, and developmental impact of exposure to extreme stress and traumatic events. Historical and current perspectives on the individual and cultural effects of trauma will be examined, including consequences of relational trauma, traumatic loss, injury/illness, crime, combat exposure, terrorism, natural disasters, and vicarious traumatization. Posttraumatic Stress Disorder and related conditions will be explored, as will the nature of effective intervention techniques, recovery, adaptive coping, and resilience.
Prerequisites: PSYC 138 or HMS 138

PSYC 320 Psychology of Language 4 Credits
Psychological processes involved in language comprehension, production, and use. Topics include the relation of language to thought; word meaning; speech perception; language acquisition; sign language; language in society.
Prerequisites: PSYC 117 or PSYC 176 or COGS 007 or COGS 117 or COGS 176
Attribute/Distribution: SS

PSYC 321 Language Development 4 Credits
Descriptive and theoretical accounts of the development of language. Primary focus is on the development of spoken language in infancy and early childhood. Involves observation of children at various stages of language development.
Prerequisites: PSYC 107 or PSYC 117 or COGS 117
Attribute/Distribution: SS

PSYC 327 (HMS 327) Health Psychology 4 Credits
This course provides an overview of the psychological study of health. The course explores psychological theories that aim to explain health behavior (e.g., why do people smoke?) and the role of psychology in understanding the experience of illness. This course also examines how psychological research and theory can be applied to promote health behavior (e.g., how can we design interventions to promote physical activity).
Prerequisites: PSYC 001
Attribute/Distribution: SS

PSYC 328 Educational Psychology 4 Credits
Overview of historical, contemporary, and emerging issues in the field of educational psychology. Implications of various social, cognitive and behavioral educational-psychological theories for teaching and learning in the classroom.
Prerequisites: PSYC 107
Attribute/Distribution: SS
PSYC 332 The Psychology of Morality 4 Credits
We begin with the Big Questions: Are human beings intrinsically good? How potent is our intrinsic capacity for goodness? What does it mean to be “good” or “moral”? How can we answer these questions? Next, we examine a variety of motives, capacities, and emotions that can promote our “good” behavior. Some examples include empathy, compassion (and other moral emotions), the justice motive, the norm enforcement motive, moral intuitions, social bonds, and perhaps even our general capacity for reason.
Prerequisites: PSYC 121
Attribute/Distribution: SS

PSYC 334 (HMS 334, WGSS 334) The Psychology of Body Image and Eating Disorders 4 Credits
The course addresses the psychosocial aspects of the development of healthy and unhealthy body image and eating disorders. The roles of personality traits/individual factors, family and interpersonal functioning, and cultural factors will be examined, as will the impact of representations of body image in mass media. Public health and psychological interventions for prevention and treatment will be explored. Personal accounts/memoirs, clinical case presentations, and documentary and dramatic films will be incorporated in the presentation of topics.
Attribute/Distribution: SS

PSYC 335 (BIOS 335) Animal Behavior 3 Credits
Discussion of the behavior of invertebrates and vertebrates and analysis of the physiological mechanisms responsible for behavioral actions, and adaptive value of specific behavior patterns.
Prerequisites: BIOS 121 and BIOS 122
Attribute/Distribution: NS

PSYC 338 Phenomenology and Theory of Childhood Disorders 4 Credits
The nature, classification, and treatment of childhood disorders.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 341 Social Psychology and Social Issues 4 Credits
This course examines the methods, concepts, and research findings associated with the effort to apply social psychology to the understanding and amelioration of social problems. Special attention will be paid to the topic of human conflict.
Attribute/Distribution: SS

PSYC 344 (HMS 344) Health Care Reasoning and Decision Making 4 Credits
Health care professionals diagnose physical and mental illnesses and create treatment plans to improve their patients’ health. How do these professionals make decisions related to these important issues? We will explore the literature on how medical and mental health professionals reason and make decisions about health care issues. Topics to be covered include diagnosis, treatment decisions, access to care, and how these reasoning processes are swayed. Consideration will be given to patient decision-making as well.
Prerequisites: PSYC 117 or COGS 117 or COGS 007 or HMS 160 or HMS 180
Attribute/Distribution: SS

PSYC 346 Child Development and Social Policy 4 Credits
This course explores the intersection of child development research and social policy. We will examine what we know about healthy child development from current research and how it can help inform and improve existing programs, policies, and recommendations for children and families. Topics include critical social policy issues such as child care, early childhood education, child abuse, divorce and child custody, adolescent pregnancy, poverty, bullying, and technology and media.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 347 Cognitive Neuroscience of Memory 4 Credits
This seminar explores the brain systems and neural mechanisms involved in the formation and retrieval of memories. Topics include mechanisms of storage, retrieval and forgetting in normal and clinical populations, emotional memory systems, superior autobiographical memory, role of sleep, and effects of stress on memory.
Prerequisites: PSYC 117 or COGS 117 or PSYC 176 or COGS 176
Attribute/Distribution: NS

PSYC 348 (HMS 348) Drugs and Behavior 4 Credits
Why are some people more vulnerable to substance use problems than others? How can we effectively address substance abuse in our society? This course explores theories and research on the complex psychological, social, and biological factors that contribute to substance use and disorders. Topics include theories of addiction, characteristics of illegal and legal drugs, risk and protective factors, and research on substance abuse prevention.
Prerequisites: PSYC 001 or HMS 160 or HMS 180
Attribute/Distribution: SS

PSYC 349 (HMS 349) Participatory and Action Research in Psychology 4 Credits
Action research is used to understand important real-world social problems and promote social action. Participatory research engages community members as equals to help identify areas of focus and to design studies and interventions. This course provides an overview of the rich history of these approaches in psychology, an in-depth look at how they can be used effectively, and an opportunity to gain hands-on experience.
Prerequisites: PSYC 121 or PSYC 153 or HMS 160 or HMS 180
Attribute/Distribution: SS

PSYC 350 The Psychology of Evil 4 Credits
It has been said that no animal could ever be as cruel as a human being. Indeed, human beings have a notable propensity for inflicting harm on other human beings: Physical assault, homicide, torture, and even genocide. What is the psychology behind such actions? What are the root causes? In exploring these questions, we will consider the issue of what, if anything, can be done to reduce evil in the world.
Prerequisites: PSYC 121 or PSYC 153
Attribute/Distribution: SS

PSYC 351 Children’s Thinking 4 Credits
This course examines the development of children’s thinking from infancy through adolescence. We will discuss current research and theories on the content of children’s knowledge and how mental abilities develop. We will also consider the implications of research on children’s thinking for real-world questions about parenting, education, and policy-making. Topics include memory, concepts, social cognition, language, reading, mathematics, and individual and cultural differences.
Prerequisites: PSYC 107 or PSYC 117 or COGS 007 or COGS 117
Attribute/Distribution: SS

PSYC 352 Adolescence and Emerging Adulthood 4 Credits
Adolescence is a dynamic development period encompassing multiple interrelated changes in the biological, cognitive, psychological, and social domains. This course will cover theories and research in adolescence and explore connections between research and policy. We will also consider whether emerging adulthood is a separate stage of development.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 353 Social Justice and Social Change 4 Credits
How do people decide to engage in collective action to challenge social injustice? We will examine motivators and tactics of resistance, as well as barriers to change, against the historical backdrop of the civil rights movement and in the context of current societal and global disparities.
Prerequisites: PSYC 121
Attribute/Distribution: SS
PSYC 354 Psychological Assessment 4 Credits
Basic concepts in the construction, selection, administration, scoring, and interpretation of assessment procedures commonly used in psychology. Selection and evaluation of assessment procedures. Supervised experience administering, scoring, and interpreting assessment procedures.
Prerequisites: PSYC 110
Attribute/Distribution: SS

PSYC 355 Seminar in Cognitive Neuroscience 4 Credits
How have measures of brain activity contributed to our understanding of human information processing? Discoveries from "peering into the brain" have led to conclusions that would have been impossible using behavioral measures alone. In this course we will examine topics that highlight the unique benefit of cognitive neuroscience techniques to the understanding of human cognition.
Prerequisites: PSYC 176 or COGS 176
Attribute/Distribution: NS

PSYC 358 Inside the Infant Mind 4 Credits
How do babies understand and learn about the world? This course explores the origin and development of human knowledge by venturing inside the infant mind. Topics include current research and theory on infants' understanding of objects, number, language, and people. Research examining thinking in non-human primates is also considered to shed light on what aspects of knowledge are and are not uniquely human.
Prerequisites: PSYC 107 or PSYC 117 or COGS 007 or COGS 117
Attribute/Distribution: SS

PSYC 362 Cognition in Practice & Policy 3-4 Credits
Taking the study of cognition from principle to practice, this course examines how basic research and theory informs understanding of human performance in real-world settings. Topics will be chosen from domains such as automobile safety, environmental and medical decision-making, human-technology interaction, spatial navigation, and breakdown of cognition under fatigue and alcohol. Public policy implications will be considered.
Prerequisites: PSYC 117 or COGS 007 or COGS 117
Attribute/Distribution: SS

PSYC 363 Personality and Social Development in Childhood 4 Credits
Issues related to social development (e.g., attachment, social competence), social contexts (e.g., family, day care), and personality development (e.g., sex roles, aggression, temperament) from infancy through adolescence.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 364 The Meaning and Power of Narratives through the Lifespan 4 Credits
Examines the complex role of narratives—told to and by children, and enacted by children in play—in children's experience and development. Compares and seeks to integrate different approaches in psychology and other disciplines. In the process, we will also be addressing three basic questions: what is narrative, how is it significant, and how should we study it?
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 365 (GS 365) Human Development in Cross-Cultural Perspective 4 Credits
The formation of mind and personality is shaped in profound ways by the sociocultural contexts within which individuals develop. This course introduces students to basic theoretical and methodological issues and explores important examples of cross-cultural variation and diversity, using comparisons between different societies and between different subcultures within American society. Topics include cognition, language, personality, moral development, socio-emotional development, identity, attachment, and socialization. Materials drawn from anthropology, sociology and education in addition to psychology.
Prerequisites: PSYC 109 or PSYC 107 or PSYC 121
Attribute/Distribution: SS

PSYC 366 Seminar In Cognitive Aging 4 Credits
Information processing by older adults: perception, attention, memory, speech and text processing and comprehension. The course will also examine the effects on cognitive processing of such diseases as Alzheimer’s and Parkinson’s.
Prerequisites: PSYC 109
Attribute/Distribution: SS

PSYC 367 Clinical Psychology 4 Credits
The science and profession of helping people overcome psychological problems. Theories of human personality and abnormality in relation to techniques for assessing and treating psychosocial problems and in the light of empirical evidence of validity and effectiveness. Professional issues are also covered.
Prerequisites: PSYC 153 and PSYC 138
Attribute/Distribution: SS

PSYC 368 Children, Psychology, and the Law 4 Credits
Covers psychological research on child witnesses, child victims, juvenile crime, children's rights and decision-making capabilities, divorce and custody. Implications of psychological research for social policy and legal reform will be discussed.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 369 Memory Under Construction 4 Credits
Investigation of the constructive nature of human memory through hands-on exercises, reading and discussion. Includes exploration of personal memories, a memory expanding project, and a final project. Coverage includes autobiographical memory, expert memory, and memory disorders.
Prerequisites: PSYC 176 or COGS 007 or COGS 117 or COGS 176
Attribute/Distribution: SS

PSYC 375 Development of Good and Evil 4 Credits
The goal of the course is to trace the origins of children's good (i.e., prosocial and moral) and evil (i.e., aggressive and bullying) behavior. We will examine the biological (e.g., genetic), cognitive (e.g., social information processing), and contextual factors (e.g., media, parenting, neighborhoods, and peers) that contribute to the development of children's good and evil behavior.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 377 Attention and Attentional Failures 4 Credits
Attention allows us to function in complex environments where there is more information than we could possibly process all at once and failures of attention can have drastic consequences. Experimental and neuropsychological evidence will be surveyed for topics including basic attentional phenomena, the role of attention in everyday tasks, and the impact of attentional failures from mind wandering to neuropsychological deficits like ADHD.
Prerequisites: PSYC 117 or PSYC 176 or COGS 007 or COGS 117 or COGS 176
Attribute/Distribution: SS

PSYC 378 Emotional Development 4 Credits
The course will cover selected topics in emotional development from infancy through adulthood. Topics will include: infant attachment (learning to love), romantic attachment (being in love), emotion regulation, sympathy/empathy, anger/aggression, temperament, etc. We will also discuss the ways in which significant relationships with peers and parents shape children’s emotional development.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 380 Sports Psychology 4 Credits
Theory, research and application comprise this focal area of psychology. The course will allow students to explore the theory and research giving rise to individual, team, and peak performance assessment and interventions. Topics will include assessment, affect modulation, imagery, cognitive formulation, and psychodynamic development.
Prerequisites: PSYC 110 or PSYC 153
PSYC 381 Special Topics In Psychology 4 Credits
Topics vary from semester to semester. Topics are presented at an advanced level. Previous course work in psychology and consent of faculty sponsor required.
Repeat Status: Course may be repeated.

PSYC 382 (BIOS 382) Endocrinology of Behavior 3 Credits
Hormonal effects upon animal and human behavior. Emphasis on neuroendocrinology of steroid hormone involvement in reproductive behaviors.
Prerequisites: BIOS 121
Attribute/Distribution: NS

PSYC 383 Attachment Theory & Research: The Study of Close Relationships Across the Lifespan 4 Credits
This course will examine the influence of close relationships across the lifespan on personality development. We will examine the influence of parents, peers, siblings, and romantic relationships using traditional attachment theory. In addition, we will also explore how attachment quality is measured and the clinical applications of attachment theory.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 384 Self and Identity 4 Credits
We will examine different types of identity (e.g., personal, relational, collective) and the cognitive processes that allow for a multifaceted yet unified sense of self. We will study how self-related motives (e.g., enhancement, consistency, distinctiveness) influence self-knowledge, self-regulation, and mental health. Finally, we will explore the origins of self from evolutionary, neuroscientific, and cultural perspectives.
Prerequisites: PSYC 121 or PSYC 153
Attribute/Distribution: SS

PSYC 386 (HMS 386) Child and Adolescent Health Psychology 4 Credits
Focuses on developmental research and theory related to health and wellness issues in children and adolescents. Topics include children's understanding of biology and disease, disease management, medical consent, education and policy efforts to promote children's health.
Prerequisites: PSYC 107
Attribute/Distribution: SS

PSYC 389 Honors Project 1-8 Credits
Repeat Status: Course may be repeated.

PSYC 391 Thesis 4 Credits
Written report: Literature review and design of project in selected area of psychology. Only open to students in the honors program. Consent of Honors Program Coordinator required.
Prerequisites: PSYC 210
Attribute/Distribution: ND

PSYC 392 Honors Thesis 3 Credits
Execution of project designed in PSYC 391. Final report and oral presentation. Only open to students in the honors program. Consent of Honors Program Coordinator required.
Prerequisites: PSYC 391

PSYC 393 Independent Research 1-3 Credits
Individual research projects designed and executed in collaboration with faculty sponsor. Regular meetings with sponsor to give progress reports and receive feedback. Student reads relevant literature and writes report in APA format. Consent of faculty sponsor required.
Repeat Status: Course may be repeated.
Prerequisites: PSYC 210 or PSYC 161

PSYC 394 Senior Research Project 3 Credits
Literature review, design and execution of project in selected area of psychology. Intended for senior majors in psychology. Consent of faculty sponsor required.
Repeat Status: Course may be repeated.

PSYC 402 Developmental Psychology 3 Credits
Survey of theories and research concerning perceptual, cognitive, social, and personality development through infancy and childhood. Must have graduate standing or consent of instructor.

PSYC 403 Cognitive Psychology 3 Credits
Survey of theories and research in cognitive psychology. Must have graduate standing or consent of instructor.

PSYC 404 (BIOS 404) Behavioral Neuroscience 3 Credits
Theoretical and empirical issues in biopsychology. Must have graduate standing or consent of instructor.

PSYC 406 Social Cognition 3 Credits
Theory and research on cognitive processes in personality and social functioning. The self, personality consistency and change, causal attributions, social judgment, goals and self-regulation, and mood and emotion. Topics may vary. Must have graduate standing or consent of instructor.

PSYC 409 Professional Seminar I 1 Credit
For students entering the Ph.D. program: Acculturation to graduate school and the Psychology Ph.D. program in particular; professional issues of relevance to individuals at the outset of a research career in psychology. Department permission required.

PSYC 410 Professional Seminar II 1 Credit
For students nearing graduation: Professional issues of special relevance to Psychology Ph.D. students preparing for academic or nonacademic postdoctoral employment. Department permission required.

PSYC 412 First Year Research Project 1-3 Credits
Research project or paper to be completed by June of the first year of the Ph.D. program under the direction of a faculty advisor. May be repeated in second semester of program.
Repeat Status: Course may be repeated.

PSYC 421 Statistical Analysis of Psychological Data I 3 Credits
First of a two-semester sequence covering essential issues in statistical analysis as practiced by psychologists. Topics include data description, probability, z and t-tests, general linear model, simple correlation/regression, univariate analysis of variance, chi-square. Emphasis on connecting research designs to appropriate statistical tests, data interpretation, and implementation in statistical packages. Department permission required.

PSYC 422 Statistical Analysis of Psychological Data II 3 Credits
Second course of the two-semester statistics sequence. Topics include advanced analysis of variance designs, analysis of covariance, multivariate analysis, multiple regression, and analysis of categorical data. Emphasis on connecting research designs to appropriate statistical tests, data interpretation, and implementation in statistical packages. Consent of department required.
Prerequisites: PSYC 421

PSYC 423 (COGS 423) Foundations of Cognitive Science 3 Credits
Survey of fundamental theory and methodologies from artificial intelligence, linguistics, cognitive psychology, philosophy, and neuroscience, as well as salient research problems such as knowledge acquisition and representation, natural language processing, skill acquisition, perception and action, and the philosophical question of intentionality.

PSYC 433 Cognitive Neuroscience Techniques 3 Credits
This glimpse into the toolkit of modern cognitive neuroscience provides an overview of a range of techniques from psychopharmacology and single cell recording, to human neuroimaging and neuropsychology. The course introduces different techniques with a focus on issues of temporal and spatial resolution, costs and benefits, and appropriateness for different research questions. Students will develop the skills to be knowledgeable consumers of the modern literatures in psychology and related fields that are increasingly incorporating a range of neuroscience methods.
Prerequisites: PSYC 403

PSYC 443 Seminar In Language Acquisition 3 Credits
Special topics in language acquisition. Content will vary each time the seminar is offered.
Prerequisites: PSYC 402 or PSYC 403
Prerequisites: the theories about social objects, constructs, mindsets, stereotypes, expectancies, and mechanisms through which influence is exerted. These influences impact on social judgment, with a focus on the cognitive processing and conflict reduction.

PSYC 466 Prosocial Cognition, Emotion, and Behavior 3 Credits
In this course we will examine such phenomena as compassion, caregiving, sympathy, justice motivation, and helping. We will begin with an examination of human nature: Is prosociality fundamental to human nature? Subsequently, we will examine how prosociality can be nurtured by particular developmental experiences. Finally, we will examine the literature on the nature of prosociality in adulthood: What cognitive capacities support prosociality? What situational factors promote prosociality? What emotional qualities promote prosociality? What belief systems are linked to prosociality?
Prerequisites: PSYC 406

PSYC 476 Seminar In Cognition 3 Credits
Selected topics in human information processing, including such areas as attention, memory, language and comprehension, and decision-making. Area of emphasis will vary from year to year.
Prerequisites: PSYC 403

PSYC 478 (COGS 478) Ontological Psychology 3 Credits
Principles and constraints for the modeling of psychological phenomena: Representation, perception, memory, knowing, emotions, consciousness, language, and rationality.

PSYC 480 Seminar in Cognitive Development 3 Credits
Selected topics in cognitive development in infancy and childhood, including such areas as conceptual development, memory development, the development of reasoning abilities, and language acquisition. Emphasis will vary from year to year.
Prerequisites: PSYC 402

PSYC 481 Selected Topics in Social and Personality Development 3 Credits
Topics include emotional and sex-role development, peer relations, and social competence. Emphasis will vary from year to year.
Prerequisites: PSYC 402

PSYC 482 Seminar In Adult Development 3 Credits
Application of lifespan developmental theory and methodology to personality, social, and cognitive development in adulthood.
Prerequisites: PSYC 402

PSYC 483 Seminar In Cultural Psychology 3 Credits
Major theoretical approaches and empirical debates in cultural psychology, with a focus on the interplay of individual and sociocultural elements in the formation of mind, the emergence of the self, and the definition and reproduction of culture.
Prerequisites: PSYC 402

PSYC 484 (WGSS 484) Psychology of Gender 3 Credits
Major theoretical approaches and empirical debates in the psychology of gender, with a focus on the interplay of nature and nurture in producing gender similarities, gender differences and gender variation in personality, social behaviors, cognitive abilities, achievement, sexuality, and mental health. Methodological issues in gender research. Consent of instructor required.

PSYC 490 Thesis Research 1-6 Credits
Master's Thesis or Pre-dissertation Project research directed by committee.

PSYC 495 Narrative & Psychology 3 Credits
This course explores the increasing significance of narrative analysis in psychology by delineating the conceptual foundations of a narrative perspective and considering arguments for narrative as an integrative paradigm in psychological research. Particular emphasis will be on the constitutive role of narrative in cognitive and socio-emotional development, the formation of identity, moral understanding, and other domains. Some specific topics will be narrative development, autobiographical memory, self-narrative, identity development, narratives of conflict, and the role of narrative in socialization and education.

PSYC 499 Dissertation Research 1-15 Credits
Ph.D. dissertation research directed by dissertation committee.