Psychology

Chairperson: Stephen Saunders, Ph.D.
Department of Psychology website (http://www.marquette.edu/psyc/)

Psychology is the science that studies behavior, emotions and mental processes. Psychologists use scientific methods in an attempt to understand and change, if necessary, the way that people think, feel and behave. The Department of Psychology at Marquette University trains both undergraduate and graduate students.

There are many types of psychologists. Developmental psychologists study how people behave and change throughout life. Social psychologists are concerned with the effects of social situations on human behavior. Personality psychologists study individual differences in how people behave. Neuropsychologists study the effects of brain damage, disorder or disease on behavioral and brain function. Biological psychologists and neuroscientists are concerned with the biological bases of behavior. Cognitive psychologists investigate memory, thought, problem solving, and the psychological aspects of learning. Clinical psychologists study ways to understand the causes of psychological problems and help individuals, couples, families and groups to change problematic behavior. Industrial psychologists study the effects of the physical and social aspects of people's work environments on productivity and business. The department takes pride in having nationally recognized scholars in all of these areas. All faculty teach undergraduate courses and are involved in graduate student training.

Major in Psychology

The major in psychology consists of a total of 38 credit hours divided as follows: three required courses (11 credit hours); four courses from each of four content areas (Developmental; Diversity and Inclusion; Personal Processes; Social Processes) (12 credit hours); two courses from the Neurocognitive Foundations content area (6 credits); and three elective psychology courses, two of which must be upper-division (9 credit hours).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 1001</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1700</td>
<td>&amp; PSYC 1700 Modern Elementary Statistics and Psychology Introductory Statistics Lab</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 2001H</td>
<td>Honors Psychological Measurements and Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 2050</td>
<td>Research Methods and Designs in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 2050H</td>
<td>Honors Research Methods and Designs in Psychology</td>
<td></td>
</tr>
<tr>
<td>Content Areas - Choose the required number of upper-division courses from each of the Developmental Psychology, Diversity &amp; Inclusion, Neurocognitive Foundations, Personal Processes, and Social Processes content areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental Psychology - Choose one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 3101</td>
<td>Developmental Psychology: Conception Through Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3120</td>
<td>Developmental Psychology: Adulthood and Aging</td>
<td></td>
</tr>
<tr>
<td>Diversity and Inclusion - Choose one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 3210</td>
<td>The Psychology of Prejudice</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3240</td>
<td>Psychology of Racism</td>
<td></td>
</tr>
<tr>
<td>PSYC 3550</td>
<td>Psychology of Gender Roles</td>
<td></td>
</tr>
<tr>
<td>Neurocognitive Foundations - Choose two of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 3320</td>
<td>Cognition</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 3601</td>
<td>Biopsychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 4330</td>
<td>Human Factors Engineering</td>
<td></td>
</tr>
<tr>
<td>Personal Processes - Choose one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 3401</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3501</td>
<td>Theories of Personality</td>
<td></td>
</tr>
<tr>
<td>Social Processes - Choose one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 3201</td>
<td>Introductory Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3230</td>
<td>Business and Organizational Psychology</td>
<td></td>
</tr>
<tr>
<td>Elective Courses: Choose three PSYC courses, two of which must be upper-division</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 38
1. Students are advised to take MATH 1700 Modern Elementary Statistics and PSYC 1700 Psychology Introductory Statistics Lab in the same term.
2. Other PSYC courses may qualify with departmental approval.

Additional Cognate Course Requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1300</td>
<td>The Nature of Mathematics</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1390</td>
<td>Finite Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 1400</td>
<td>Elements of Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 1410</td>
<td>Calculus for the Biological Sciences</td>
<td></td>
</tr>
<tr>
<td>MATH 1450</td>
<td>Calculus 1</td>
<td></td>
</tr>
<tr>
<td>MATH 1451</td>
<td>Calculus 2</td>
<td></td>
</tr>
</tbody>
</table>

Natural Science Requirement - Choose two courses from the following: ANTH 1201 or ANTH 2201 (not both), BIOL, CHEM, PHYS 6-8

Social Science Requirement - Choose two courses from one or more of the following areas: ANTH (excluding ANTH 1201 and ANTH 2201), CRLS, ECON, POSC, SOCI, SOWJ 6

Total Credit Hours: 15-18

Department of Public Instruction Certification - Elementary/Middle School Education

College of Education students majoring in Elementary/Middle School Education majors who wish to pursue a second major in psychology must complete a total of 38 credit hours divided as follows: three required courses (11 credit hours), four courses from each of four psychology content areas (Developmental; Diversity and Inclusion; Personal Processes; Social Processes) (12 credit hours); two courses from the Neurocognitive Foundations content area (6 credits); and three elective psychology courses (9 credit hours), two of which must be upper-division courses, as listed below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1001</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1700</td>
<td>Modern Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PSYC 1700</td>
<td>and Psychology Introductory Statistics Lab (^1)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 2001H</td>
<td>Honors Psychological Measurements and Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 2050</td>
<td>Research Methods and Designs in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 2050H</td>
<td>Honors Research Methods and Designs in Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Content Areas - Choose the required number of upper-division courses from each of the Developmental Psychology, Diversity & Inclusion, Neurocognitive Foundations, Personal Processes, and Social Processes content areas.

Developmental Psychology - Choose one of the following courses: 3

- PSYC 3101 | Developmental Psychology: Conception Through Adolescence
- PSYC 3120 | Developmental Psychology: Adulthood and Aging

Diversity and Inclusion - Choose one of the following courses: 3

- PSYC 3210 | The Psychology of Prejudice
- PSYC 3240 | Psychology of Racism
- PSYC 3550 | Psychology of Gender Roles

Neurocognitive Foundations - Choose two of the following courses: 6

- PSYC 3320 | Cognition
- PSYC 3601 | Biopsychology
- PSYC 4330 | Human Factors Engineering

Personal Processes - Choose one of the following courses: 3

- PSYC 3401 | Abnormal Psychology
- PSYC 3501 | Theories of Personality

Social Processes: Choose one of the following courses: 3

- PSYC 3201 | Introductory Social Psychology
- PSYC 3230 | Business and Organizational Psychology

Elective Courses - Choose three PSYC courses, two of which must be upper-division 9

Total Credit Hours: 38
Students are advised to take MATH 1700 Modern Elementary Statistics and PSYC 1700 Psychology Introductory Statistics Lab in the same term.

Other PSYC courses may qualify with departmental approval.

Notes:

1. PSYC 3101 Developmental Psychology: Conception Through Adolescence may be taken instead of EDUC 1001 Psychological Development: Children and Adolescents
2. EDUC 4217 Educating Exceptional Learners may be taken as an elective in the major; for Education primary majors only.

### Department of Public Instruction Certification - Middle/Secondary School Education

College of Education students majoring in Middle/Secondary School Education who wish to pursue a second major in psychology must complete a total of 38 credit hours divided as follows: three required courses (11 credit hours); four courses from each of four content areas (Developmental; Diversity and Inclusion; Personal Processes; Social Processes) (12 credit hours); two courses from the Neurocognitive Foundations content area (6 credits); and three elective psychology courses, two of which must be upper-division (9 credit hours).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1001</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1700 &amp; PSYC 1700</td>
<td>Modern Elementary Statistics and Psychology Introductory Statistics Lab</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 2001H</td>
<td>Honors Psychological Measurements and Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 2050</td>
<td>Research Methods and Designs in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 2050H</td>
<td>Honors Research Methods and Designs in Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Content Areas - Choose the required number of upper-division courses from each of the Developmental Psychology, Diversity & Inclusion, Neurocognitive Foundations, Personal Processes, and Social Processes content areas.

#### Developmental Psychology - Choose one of the following courses:

1. PSYC 3101 Developmental Psychology: Conception Through Adolescence
2. PSYC 3120 Developmental Psychology: Adulthood and Aging

#### Diversity and Inclusion - Choose one of the following courses:

1. PSYC 3210 The Psychology of Prejudice
2. PSYC 3550 Psychology of Gender Roles
3. PSYC 3240 Psychology of Racism

#### Neurocognitive Foundations - Choose two of the following courses:

1. PSYC 3320 Cognition
2. PSYC 3601 Biopsychology
3. PSYC 4330 Human Factors Engineering

#### Personal Processes - Required course:

1. PSYC 3501 Theories of Personality

#### Social Processes - Required Course:

1. PSYC 3201 Introductory Social Psychology

#### Elective Courses: Choose three PSYC courses, two of which must be upper-division

1. Students are advised to take MATH 1700 Modern Elementary Statistics and PSYC 1700 Psychology Introductory Statistics Lab in the same term.

2. Other PSYC courses may qualify with departmental approval.

Notes:

1. PSYC 3101 Developmental Psychology: Conception Through Adolescence may be taken instead of EDUC 1001 Psychological Development: Children and Adolescents
2. EDUC 4217 Educating Exceptional Learners may be taken as an elective in the major; for Education primary majors only.
Minor in Psychology

The minor in psychology consists of six courses (18 credit hours), including one required course (3 credit hours) and five elective PSYC courses (15 credit hours), three of which must be upper-division courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 1001</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Elective Courses: Choose five PSYC courses, three of which must be upper-division</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours:</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

1. PSYC 1700 Psychology Introductory Statistics Lab counts toward the minor only if MATH 1700 Modern Elementary Statistics is also taken, preferably in the same term.

Department of Public Instruction Certification - Minor in Psychology

College of Education students pursuing Department of Public Instruction certification must complete six required courses (19 credit hours) and two upper-division elective courses (6 credit hours) for a total of 26 credit hours, as listed below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 1001</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1700 &amp; PSYC 1700</td>
<td>Modern Elementary Statistics and Psychology Introductory Statistics Lab</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 2001H</td>
<td>Honors Psychological Measurements and Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 2050</td>
<td>Research Methods and Designs in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 3101</td>
<td>Developmental Psychology: Conception Through Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3201</td>
<td>Introductory Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3501</td>
<td>Theories of Personality</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Choose two upper-division PSYC courses</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours:</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

Curricular Requirements

- Students must complete 4 credit hours of PSYC 4954H. A final paper and/or presentation is a course requirement.
- Students must complete PSYC 2050H: Advanced Research Methods (4 credits)
- Students must complete at least 2 credit hours of PSYC 4956H with the supervising faculty member.
- Students must have at least a final 3.500 cumulative GPA in Psychology to graduate with Disciplinary Honors in Psychology.

Academic Standards

Students must achieve a 3.200 cumulative GPA and a 3.500 cumulative Psychology GPA in order to graduate with a Comprehensive Honors degree. If a student drops below a 3.200 in any given term during the junior year or any subsequent year, the student receives a letter of warning from the University Honors Program director. If a student drops below a 3.200 cumulative GPA, they are placed on Honors Program academic probation; if they do not achieve a 3.200 cumulative by the end of the following term, they are removed from the program. Students must earn a grade of C or better in a course for it to count toward the Comprehensive Honors Degree.

Eligibility

The program is structured to be completed over the last two years of a student’s academic career. Students are encouraged to obtain research experience as early as possible, but preferably at least during their junior year. Juniors are encouraged to apply to the program in their spring term as long as they meet the cumulative GPA and the cumulative Psychology GPA requirements.

Application

- Students must submit an application to the Honors in Psychology program in Spring term. In the application the student must indicate which psychology faculty member the student would like to work with and describe his/her research experience.
• When submitting an application, the student must have junior standing and have at least a 3.200 cumulative overall GPA for entry into the Disciplinary Honors in Psychology program.

• Student must complete PSYC 2050H Honors Research Methods and Designs in Psychology to be eligible for acceptance into the Disciplinary Honors in Psychology Program.

Courses

**PSYC 1001. General Psychology. 3 cr. hrs.**
Introduction to scientific psychology; biological bases of behavior; perception; principles of learning; intelligence and personality testing; current theories of personality; conflict, adjustment and mental health; interpersonal relations; social processes; applications of psychological principles to human affairs.

**PSYC 1700. Psychology Introductory Statistics Lab. 1 cr. hr.**
Training in the use of statistical software to graph and analyze data for research in the field of psychology. Activities focus on learning to assess and interpret statistical output and prepare APA-style summaries of the results for each of the major types of statistical analyses. It is recommended students take MATH 1700 and PSYC 1700 in the same term. Prereq: PSYC 1001 or equiv.; MATH 1700, recommended to be taken concurrently.

**PSYC 1700H. Honors Psychology Introductory Statistics Lab. 1 cr. hr.**
Training in the use of statistical software to graph and analyze data for research in the field of psychology. Activities focus on learning to assess and interpret statistical output and prepare APA-style summaries of the results for each of the major types of statistical analyses. Prereq: PSYC 1001; and MATH 1700H, which must be taken concurrently.

**PSYC 2001. Psychological Measurements and Statistics: Lecture Only. 3 cr. hrs.**
Lecture component for awarding transfer credits equivalent to MATH 1700. External course course should cover logic and rationale of psychological measurement; scales of measurement and statistical techniques; descriptive statistics, the normal distribution and sampling theory, introduction to statistical inference; t-test, simple analysis of variance, chi square, measures of correlation. Psychology majors must complete additional lab component PSYC 1700.

**PSYC 2001H. Honors Psychological Measurements and Statistics. 4 cr. hrs.**
Logic and rationale of psychological measurement. Scales of measurement and statistical techniques. Descriptive statistics, the normal distribution and sampling theory, introduction to statistical inference. T-test, simple analysis of variance, chi square, measures of correlation. As an Honors Program course, includes a more intensive research or project component. Prereq: PSYC 1001 or equiv.; three years of high school mathematics or MATH 1100 or equiv.; admission to University Honors Program.

**PSYC 2050. Research Methods and Designs in Psychology. 4 cr. hrs.**
Scientific methods and their application in psychology with emphasis on the experimental method. May include experimental, quasi experimental, correlational and survey designs, as well as selection and implementation of descriptive and statistical analyses, individual laboratory projects, and preparation of scientific reports. Prereq: PSYC 1001; and MATH 1700 and PSYC 1700.

**PSYC 2050H. Honors Research Methods and Designs in Psychology. 4 cr. hrs.**
Scientific methods and their application in psychology with emphasis on the experimental method. May include experimental, quasi experimental, correlational and survey designs, as well as selection and implementation of descriptive and statistical analyses, individual laboratory projects, and preparation of scientific reports. As a Honors Program course, includes a more intensive research or project component. Prereq: PSYC 1001; MATH 1700 and PSYC 1700; or PSYC 2001H.

**PSYC 2101. Introduction to Life-Span Developmental Psychology for the Health Professions. 3 cr. hrs.**
Principles, theories, and research in development. The entire life-span from conception to death is studied with emphasis on theoretical approaches and empirically obtained data. The effects of genetic, social and environmental factors on typical development patterns. Counts towards the major in Psychology only for students with double majors in Nursing and Psychology. Prereq: PSYC 1001 or equiv.

**PSYC 3101. Developmental Psychology: Conception Through Adolescence. 3 cr. hrs.**
Examines the developing human being from conception through adolescence. The concepts, methods and theories relevant to the study of the developing child and adolescent are considered. Investigates the major physical, cognitive, social and emotional changes during the phase of the life course, as well as the genetic and contextual influences on development. Fulfills the developmental content requirement for the Psychology major. Prereq: PSYC 1001 or EDUC 1001; or equiv.

**PSYC 3120. Developmental Psychology: Adulthood and Aging. 3 cr. hrs.**
Survey of theory and research in adulthood. Emphasis on adulthood, middle age, and old age. Typical developmental patterns will be analyzed, as well as genetic, social, and environmental determinants. Fulfills the developmental content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

**PSYC 3201. Introductory Social Psychology. 3 cr. hrs.**
The nature and concept of social psychology with a focus on theory and research methodology; socialization processes; small group behavior including conformity, leadership, problem-solving; attitudes and attitude change; prejudice, racism and sexism; and interpersonal relationships. Fulfills the social content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

**PSYC 3210. The Psychology of Prejudice. 3 cr. hrs.**
An overview of theory and research on the psychological underpinnings of intergroup intolerance, with emphasis given to racism, sexism and heterosexism. Theories that explain how stereotypes and prejudices form are covered. The experience and impact of being a target of discrimination are considered. Prejudice reduction techniques are reviewed. Prereq: PSYC 2050.
PSYC 3220. Human Sexuality. 3 cr. hrs.
The scientific study of human sexuality from both a biological and behavioral perspective. Topics include: male and female sexual anatomy and sexual functioning, conception, pregnancy, childbirth, sexual variations, and sexually transmitted diseases. Prereq: PSYC 1001 or equiv., or INGS major or minor.

PSYC 3230. Business and Organizational Psychology. 3 cr. hrs.
Psychology applied to practical problems in employment contexts: mental abilities, personality and interviewing in personnel selection; motivation and job attitudes; performance appraisal, occupational safety and health; leadership; group or team dynamics; organizational change and development; pertinent legal issues. Fulfills the social content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

PSYC 3240. Psychology of Racism. 3 cr. hrs.
An overview of the far reaching psychological effects of racism on the individual, primarily in the context of the United States and with a specific focus on anti-Blackness. Interrogates society’s lay theories about race and racism. Explores how race and racism influences the psychological processes of groups who hold power and status, as well as how racism can shape and influence the beliefs, attitudes and behavior of marginalized low status groups (i.e., Black individuals and other non-Whites). Prereq: PSYC 1001 and Jr. stdg.

PSYC 3301. Learning and Behavior. 3 cr. hrs.
A comprehensive survey of methods and findings of classical and operant conditioning. Some introduction to theories of learning. Fulfills the cognitive content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

PSYC 3320. Cognition. 3 cr. hrs.
Examines historical and current theories, methods and research into cognition; including perception, attention, memory, language, problem solving, etc. Integrates perspectives from cognitive psychology, cognitive neuroscience and neuropsychology. Fulfills the cognitive content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

PSYC 3401. Abnormal Psychology. 3 cr. hrs.
Psychological disorders are examined, including schizophrenia, mood disorders, anxiety disorders, substance use, eating disorders and personality disorders. Causes and treatments of these conditions are addressed, including psychological, biological and cultural factors. Fulfills the clinical content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

PSYC 3410. Childhood Psychopathology. 3 cr. hrs.

PSYC 3420. Health Psychology. 3 cr. hrs.
Examines the psychological aspects of health and illness. Topics include health promotion, stress and coping, prevention, lifestyle and health, psychological adaptation to chronic illness and pain, rehabilitation and health service delivery. Prereq: PSYC 2050 or PSYC 3601.

PSYC 3430. Psychology of Gender and Health. 3 cr. hrs.
Examines how gender informs an understanding of biological, psychological, and social factors that influence health. Topics include health consequences of gender roles and stereotypes, health consequences of gender-based stigma and discrimination, and intervention implications. Fulfills the diversity content requirement for the Psychology major. Prereq: PSYC 2050 or PSYC 3601, or equiv.

PSYC 3440. Health Disparities: A Biopsychological Perspective. 3 cr. hrs.
Provides broad overview of the biological underpinnings of health disparities. Topics include historical foundations and the conceptualization of race/ethnicity to stress biology, social determinants of health and practices and policies that contribute to inequity. Interdisciplinary biopsychosocial model provides framework that incorporates biology, psychology, sociocultural and environmental factors. Prereq: PSYC 1001; and MATH 1700 and PSYC 1700.

PSYC 3501. Theories of Personality. 3 cr. hrs.
Discusses the formulation of personality theory, including its purpose and problems. The psychoanalytic, behavioral, humanistic and other theories of personality and their various applications to human behavior are reviewed. Reviews research methods and findings. Fulfills the clinical content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

PSYC 3550. Psychology of Gender Roles. 3 cr. hrs.
Biological, cultural and socialization bases of gender roles; the psychology of women and men. The meaning of gender roles and the consequences for relationships, sexuality and personal and professional aspirations. The pressure of gender stereotypes and implications for mental and physical health. Prereq: MATH 1700 and PSYC 1700.

PSYC 3560. Psychology of Religion. 3 cr. hrs.
Empirical research and findings pertinent to religion and religious experiences, psychological theories regarding religion, religious practices and experiences, religious orientation and awareness. Prereq: PSYC 1001.

PSYC 3601. Biopsychology. 3 cr. hrs.
Addresses functional neuroanatomy and the way in which the brain mediates behavior, emotion and cognition. Topics include sensory and perceptual systems, neural development, emotion, learning, memory, sleep, consciousness, reproduction, and neurological and psychological disorders. Fulfills the biopsychology content requirement for the Psychology major. Prereq: PSYC 1001.
PSYC 3610. Animal Behavior. 3 cr. hrs.
Animal behavior, both in natural and experimental situations, emphasizing early experience, motivation, physiological mechanisms, adaptiveness and the evolution of behavior. Prereq: PSYC 1001 or equiv.

PSYC 3650. Affective Neuroscience. 3 cr. hrs.
Explores the biological foundations of emotion and other affective states. Emphasizes the role of the nervous system (including brain, hormones, neurons, physiology) in the elaboration of affective states (e.g. sexual behavior, fear, social isolation, feeding, joy, pain) in both animals and humans. Includes study of current technologies for visualizing brain processes. Fulfills the biopsychology content requirement for the Psychology major. Prereq: PSYC 1001 or equiv.

PSYC 3701. Principles of Psychological Testing. 3 cr. hrs.
History of psychological and educational testing; uses and interpretations of test results; ethical issues and bias in testing; norms, reliability, and the validity of test score use; test construction and psychometric analysis; individual and group tests of intellectual functioning; personality measurement; testing in education, occupational and clinical settings; cross-cultural considerations in the administration and interpretation of tests. Prereq: PSYC 1001; MATH 1700 and PSYC 1700.

PSYC 3830. The Psychology of Fantasy and Imagination. 3 cr. hrs.
Review of theoretical, experimental, and clinical literature on fantasy and imagination; development of imaginal processes; types of imagery; cerebral asymmetries and the imaging process; physiology of imagination; imagery and learning; imagery and verbal communication; role of fantasy and imagination in creativity; imagination and make believe play; function of fantasy in sexual behavior; diagnostic and therapeutic uses of fantasy and imagination; role of imagination in hypnosis. Prereq: PSYC 1001 or equiv.

PSYC 3840. Psychology of Happiness. 3 cr. hrs.
Focuses on the emerging research and theory in positive psychology on the nature of happiness. The determinants and correlates of happiness will be examined, including the role played by love, humor, forgiveness, religion, compassion, and spirituality in creating happiness. Prereq: PSYC 1001.

PSYC 4320. Learning and Memory. 3 cr. hrs.
Examines theories and in-depth critique of research into how people learn, remember and forget. Includes both conscious and unconscious aspects of learning and remembering, the neural mechanisms that serve these processes, and factors that influence whether we remember or forget. Prereq: PSYC 3320 or PSYC 3601.

PSYC 4330. Human Factors Engineering. 3 cr. hrs.
Practical application of theories of human cognition, memory, sensation, perception and motor performance to person-machine interaction, equipment design and control of human error are reviewed. Includes design of controls and displays, automation, artificial intelligence, occupational stress, accident analysis and prevention, workspace and environmental factors that influence optimal performance. Fulfills the cognitive content requirement for the Psychology Major. Prereq: PSYC 1001; or engineering major; or cons. of instr.

PSYC 4350. The Psychology of Death and Dying. 3 cr. hrs.

PSYC 4701. Introduction to Clinical Psychology. 3 cr. hrs.
Clinical psychology as a science and profession is discussed. Topics include the history, ethics, theories, roles and methods of clinical psychology. Also addressed are current issues concerning the practice of clinical psychology. Prereq: PSYC 3401.

PSYC 4720. Psychology of Marriage and Family. 3 cr. hrs.
Psychological theories and research pertinent to understanding couple and family functioning is covered. Topics vary but typically include fundamental issues such as how intimate relationships develop and change over time, communication, conflict and support in close relationships, and the role of gender in shaping experiences in close relationships. Prereq: PSYC 2050 or INGS major or minor.

PSYC 4800. Applied Behavior Analysis. 3 cr. hrs.
Introduction to topics in applications and research methods in behavior analysis, a science involving the study of human behavior and environmental variables that affect behavior. Topics include a review of basic learning principles, ABA research methods and applications of ABA. Prereq: PSYC 1001; MATH 1700 and PSYC 1700; or PSYC 2001H.

PSYC 4801. History and Systems of Psychology. 3 cr. hrs.
The development of psychological thinking from the 17th century to the present. The contributions of Descartes and Newton to Locke and the other British empiricists and, through them, to German mechanism and physiological psychology. The influence of Darwin, Freud, behaviorism and Gestalt psychology. The phenomenological and humanistic movement after World War II. Prereq: PSYC 1001.

PSYC 4820. Concepts and Principles of Behavior. 3 cr. hrs.
Provides an introduction to learning and the philosophy and science of behavior analysis, including topics which focus on basic principles of respondent (classical) and operant conditioning, as well as single subject research methods. Exposure to experimental psychology research pertaining to the subject matter of human and animal learning. Prereq: PSYC 1001; MATH 1700 and PSYC 1700, or PSYC 2001H.

PSYC 4931. Topics in Psychology. 3 cr. hrs.
Contemporary theoretical and research trends in selected contemporary areas of psychology. Topics to be announced in the Schedule of Classes. Prereq: Cons. of instr. varies by topic.
PSYC 4954H. Honors Psychology Research Seminar. 2 cr. hrs.
Students identify a research topic, prepare a research proposal and then develop a substantive research paper, describing an original empirical project; an original, applied evaluation project; or a critical systematic literature review over the course of the academic year. As an Honors Program course, includes a more intensive research or project component. Prereq: Admission to Psychology Disciplinary Honors Program.

PSYC 4956. Advanced Undergraduate Research. 1-3 cr. hrs.
Readings, discussion and application of psychological research under the direction of a Psychology faculty adviser. Students are expected to review the literature on an assigned or negotiated topic and design and propose a specific research project that parallels or expands upon their semester experience. 1-3 semester credits. Course may be repeated for credit. A maximum of six credits of PSYC 4956, 4995, and 4999 combined may be counted as electives toward the minimum requirements for the major or minor. Prereq: Cons. of instr.

PSYC 4956H. Honors Advanced Undergraduate Research. 1-3 cr. hrs.
Readings, discussion and application of psychological research under the direction of a Psychology faculty adviser. Students are expected to review the literature on an assigned or negotiated topic and design and propose a specific research project that parallels or expands upon their semester experience. As an Honors Program course, includes a more intensive research or project component. 1-3 semester credits. Course may be repeated for credit. A maximum of six credits of PSYC 4956, 4995 and 4999 combined may be counted as electives toward the minimum requirements for the major or minor. Prereq: Cons. of instr.; admission to Psychology Disciplinary Honors Program.

PSYC 4960. Advanced Undergraduate Seminar. 3 cr. hrs.
Readings and discussion course designed to provide a high level overview of psychology with an emphasis on selected current topics. Each student will be expected to design and propose, but not necessarily conduct, a specific scholarly project. Prereq: Cons. of instr.

PSYC 4963. Peer Tutoring in Psychology. 3 cr. hrs.
Work with instructors to assist students in psychology courses; must attend lectures, hold office hours, tutor individual students and conduct exam preview sessions. Assist instructor as otherwise needed. Meet with the director of the program and other tutors to review material and concepts. Prereq: Jr. or Sr. stndg.; 3.350 Psychology GPA.

PSYC 4964. Field Experience in Psychology. 3 cr. hrs.
Placement in a specially selected applied setting in which the student has the opportunity to observe psychological knowledge, skills and values demonstrated in one or more professional roles. Requires supervision in the setting and direction by the course instructor. Accompanied by seminar with readings, journals and reflections, presentations a term paper and demonstrated knowledge of appropriate ethical principles. Prereq: Sr. stndg., psychology major, and cons. of dept. ch.

PSYC 4995. Independent Study in Psychology. 1-3 cr. hrs.
Faculty-supervised, independent study/research of a specific area or topic in Psychology. A maximum of six credits of PSYC 4956, 4995 and 4999 combined may be counted as electives toward the minimum requirements for the major or the minor. Prereq: Cons. of instr.

PSYC 4999. Senior Thesis. 3 cr. hrs.
Develop an original project under the direction of a psychology faculty adviser. Independently review the literature, develop a question, conduct the research, analyze the results and present the conclusions. A maximum of six credits of PSYC 4999 alone or PSYC 4956, PSYC 4995 and PSYC 4999 combined can apply toward the major or minor. Prereq: PSYC major, PSYC 2050 or PSYC 2050H, Sr. stndg., 3.000 GPA, and GPA of at least 3.500 in Psychology.