Psychological Sciences

General Information

Psychology Academic Advising Office

Undergraduate psychology majors and other students interested in majoring or minoring in Psychology should visit an Academic Advisor in the Psychology Academic Advising Office (Stadler 322) to receive specific information on degree requirements and course offerings, discuss questions about career options, and receive information about graduate work in Psychology. All students are encouraged to see a Psychology Academic Advisor regularly throughout their collegiate careers. It is especially important for all students who are within one calendar year of graduation to meet with a Psychology Academic Advisor. Students will minimize waiting time and will be assured one-to-one attention from an Academic Advisor by calling (314) 516-4561 to schedule an appointment. Office hours for Psychology Academic Advising can be obtained by e-mailing: psy_advising@umsl.edu.

Career Outlook

The undergraduate major in Psychology can provide the foundation for further training in psychology at the graduate level, the background necessary for graduate training in other fields such as the health professions, social work or counseling, or the liberal arts background necessary for entry level positions in many fields such as business, communication, and human services and mental health positions. To function specifically as a psychologist, a graduate degree is required. For more career information please schedule an appointment with an Academic Advisor in the Psychology Academic Advising Office (Stadler 322; 314-516-4561; psy_advising@umsl.edu). For additional information, visit the American Psychological Association website at www.apa.org (http://www.apa.org).

Facilities

The department has several animal and human experimental laboratories furnished with a wide range of psychophysiological equipment. The department also operates three facilities (Community Psychological Services, the Center for Trauma Recovery, and Children's Advocacy Services of Greater St. Louis) which provide training opportunities for students in Psychology, as well as providing psychological assessment services for citizens of the region.

Program Overview

The Psychology department offers a broad-based curricular plan leading to the Bachelor of Arts (BA) degree in Psychology as well as a minor in the field. There are several certificates that can be earned through the department including an undergraduate certificate in neuroscience and an undergraduate and a graduate certificate in trauma studies. The department also offers a terminal Master of Arts in Psychology, with a specialization in either Industrial/Organizational Psychology or Behavioral Neuroscience. The department offers three options within its Ph.D. Program: Clinical Psychology; Behavioral Neuroscience; and Industrial/Organizational Psychology. Finally, the department offers a Clinical Psychology Respecialization-Advanced Graduate Certificate Program. This program is designed for individuals who already have a doctoral degree in Psychology who wish to receive specialty training in Clinical Psychology.

Undergraduate Programs

General Education Requirements

Majors must satisfy the university and college General Education curricular requirements (http://bulletin.umsl.edu/generaleducationrequirements). Selected courses in Psychology may be used to meet General Education Social and Behavioral Sciences and/or Valuing requirements. The courses are listed here in the Bulletin and can be found on the Degree Audit Report System.

Undergraduate Requirements

Majors in Psychology can choose between a track toward the Bachelor of Arts (B.A.) degree or a Bachelor of Science (B.S.) degree. The below courses are required for both B.A. and B.S. degrees. However, other requirements for the B.A. and B.S. degrees differ. Please see descriptions below for each degree and plan your coursework accordingly.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 1000</td>
<td>Choosing A Career In Psychology</td>
<td>1</td>
</tr>
<tr>
<td>PSYCH 1003</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 2201</td>
<td>Psychological Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH 2219</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 2211</td>
<td>Introduction To Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 2245</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 2160</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYCH 2270</td>
<td>Developmental Psychology: Infancy, Childhood And Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 4999</td>
<td>Integrated Psychology</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Hours: 22

Additional Notes

Psychology majors must not take courses in excess of 50 hours in Psychology. Credits completed in Psychology in excess of 50 will not count toward graduation. For example, students earning 53 hours in Psychology will consequently be required to earn a minimum of 123 hours to graduate.

The three course sequence of Math, Psychological Statistics (PSYCH 2201), and Research Methods (PSYCH 2219) require a minimum of three semesters to complete. Students must satisfy the current University mathematical skills requirement before taking PSYCH 2201, Psychological Statistics. PSYCH 2201 is a prerequisite for PSYCH 2219, and hence, PSYCH 2201 must be completed with a grade of C- or higher PRIOR to enrollment in PSYCH 2219.

PSYCH 2201 and PSYCH 2219 cannot be taken concurrently. Students are advised to plan accordingly and to seek assistance from Psychology Academic Advising whenever needed.

Bachelor of Arts in Psychology

Candidates for the B.A. must complete at least 34, but no more than 50, hours of courses taught by or cross-listed with the Department of Psychological Sciences. In addition to the above courses, students must complete four courses numbered 3000 to 4998. No more than 3 hours can be PSYCH 3295 or PSYCH 3390.

Candidates must have a cumulative grade point average of 2.0 or higher in the major overall, and must earn a C- or above in each of the courses comprising the 34 credits applied to the B.A. degree in Psychology. Failure to earn a C- or above in the required courses will necessitate re-taking
them for a satisfactory completion of the C- requirement. No Psychology
courses taken on a satisfactory/unsatisfactory basis may be applied to the
major.

In addition, candidates for the B.A. are required to satisfactorily complete
13 credit hours in one foreign language.

**Bachelor of Science in Psychology**

(pending CBHE approval)

Candidates for the B.S. in Psychology must complete at least 37, but
no more than 50, hours of courses taught by or cross-listed with the
Department of Psychological Sciences. In addition to the above courses,
students must complete the following:

Select four Psychology courses numbered 3000 to 4998

12

In addition, select at least one of the following Psychology courses

Neuroscience

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 4300</td>
<td>Introduction To Psychopharmacology: Drugs And Mental Illness</td>
</tr>
<tr>
<td>PSYCH 4314</td>
<td>Behavioral Neuroscience</td>
</tr>
<tr>
<td>PSYCH 4330</td>
<td>Hormones, The Brain And Behavior</td>
</tr>
<tr>
<td>PSYCH 4340</td>
<td>Introduction to Human Neuroanatomy</td>
</tr>
<tr>
<td>PSYCH 4349</td>
<td>Human Learning And Memory</td>
</tr>
<tr>
<td>PSYCH 4350</td>
<td>Emotions and the Brain</td>
</tr>
<tr>
<td>PSYCH 4372</td>
<td>Introduction to Social Neuroscience</td>
</tr>
</tbody>
</table>

Clinical

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 3340</td>
<td>Clinical Problems Of Childhood</td>
</tr>
<tr>
<td>PSYCH 3500</td>
<td>Health Psychology</td>
</tr>
<tr>
<td>PSYCH 3820</td>
<td>Cross-Cultural Psychology</td>
</tr>
<tr>
<td>PSYCH 4374</td>
<td>Introduction To Clinical Neuropsychology</td>
</tr>
</tbody>
</table>

Applied

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 3316</td>
<td>Fundamentals Of Leadership</td>
</tr>
<tr>
<td>PSYCH 3318</td>
<td>Industrial And Organizational Psychology</td>
</tr>
<tr>
<td>PSYCH 4250</td>
<td>Stereotyping, Prejudice, and Discrimination</td>
</tr>
<tr>
<td>PSYCH 4365</td>
<td>Psychological Testing and Assessment</td>
</tr>
</tbody>
</table>

Natural Science

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 3320</td>
<td>Psychological Testing and Assessment</td>
</tr>
</tbody>
</table>

Select two courses from Biology, Chemistry, and Physics with at
least one of them including a laboratory

Social Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYCH 3390</td>
<td>Psychology Of Trauma</td>
</tr>
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</table>

Select up to two of the following:

Criminology and Criminal Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CRIM 3100</td>
<td>Introduction To Strategies for Social Work Practice</td>
</tr>
<tr>
<td>CRIM 4350</td>
<td>Victimology</td>
</tr>
</tbody>
</table>

Psychology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 2232</td>
<td>Psychology Of Trauma</td>
</tr>
</tbody>
</table>

Social Work

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 4601</td>
<td>Abused And Neglected Children</td>
</tr>
</tbody>
</table>

Sociology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 3250</td>
<td>Sociology Of Victimization</td>
</tr>
</tbody>
</table>

Select up to two of the following:

Criminology and Criminal Justice

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<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>CRIM 3230</td>
<td>Crime Prevention</td>
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</table>

In addition, select at least one of the following Psychology courses

Neuroscience

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<td>Human Learning And Memory</td>
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<td>PSYCH 3340</td>
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Social Science

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<tbody>
<tr>
<td>PSYCH 3390</td>
<td>Psychology Of Trauma</td>
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Select up to two of the following:

Criminology and Criminal Justice

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</table>

Candidates must have a cumulative grade point average of 2.0 or higher
in the major overall, and must earn a C- or above in each of the courses
comprising the 37 credits applied to the B.S. degree in Psychology. Failure
to earn a C- or above in the required courses will necessitate re-taking
them for a satisfactory completion of the C- requirement. No Psychology
courses taken on a satisfactory/unsatisfactory basis may be applied to the
major.

**Requirements for the Minor**

Candidates must complete a minimum of 15 hours of courses taught by
or cross-listed with the Psychology Department, including at least 6 hours
at the 3000 or 4000 level (no more than 3 of these can be PSYCH 3390
(p. 1)). Candidates must have a cumulative grade point average of
2.0 or higher in the minor. Psychology courses taken on a satisfactory/
unsatisfactory basis may not be applied to the minor.

**Undergraduate Certificate in Trauma Studies**

The trauma studies certificate is designed for students who are interested
in a focused specialty in trauma studies or victim services in addition
to their own major. It is appropriate for students in the College of Arts
and Sciences or any of the schools of the university. It is particularly
appropriate for students wishing to pursue careers in psychology, social
work, sociology, criminology, law, public health, or nursing.

**Requirements**

A student may earn a trauma studies certificate by completing 18 hours
with a GPA of 2.0 or better from at least three departments from the
following courses:

Select at least four of the following:

12

Criminology and Criminal Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 1120</td>
<td>Criminal Law</td>
</tr>
<tr>
<td>CRIM 4300</td>
<td>Communities And Crime</td>
</tr>
<tr>
<td>CRIM 4350</td>
<td>Victimology</td>
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</table>

Psychology

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<tbody>
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<td>Psychology Of Trauma</td>
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</table>

Social Work

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<tr>
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</thead>
<tbody>
<tr>
<td>SOC 4601</td>
<td>Child Welfare Practicum Seminar</td>
</tr>
</tbody>
</table>

Sociology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 3250</td>
<td>Sociology Of Victimization</td>
</tr>
</tbody>
</table>

Select up to two of the following:

Criminology and Criminal Justice

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<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 3230</td>
<td>Crime Prevention</td>
</tr>
</tbody>
</table>

1 No more than 3 hours can be PSYCH 3295 or PSYCH 3390.

2 These courses must be above and beyond the General Education
requirements.

3 Pre-requisite Biology courses for PSYCH 2211 Biological Psychology
may not be used to meet the Natural Science requirement.
CRIMIN/SOC 4340  Race, Crime, And Justice  (p. 1)

Political Science
POL SCI 2400  Public Administration  (p. 1)
POL SCI 2420  Introduction To Public Policy  (p. 1)

Psychology
PSYCH/SOC 2160  Social Psychology  (p. 1)
PSYCH 2230  Psychology Of Gender  (p. 1)
PSYCH 2245  Abnormal Psychology  (p. 1)

Social Work
SOC WK 4630  Gender Issues in Social Work  (p. 1)

Sociology
SOC 2102  Introduction To Gender Studies  (p. 1)
SOC/PYSCH 2160  Social Psychology  (p. 1)
SOC 3288  The Sociology Of Conflict  (p. 1)
SOC/Crimin 4340  Race, Crime, And Justice  (p. 1)

Total Hours  18

1  Please seek approval of the Coordinator of the Trauma Studies Certificate in advance

Special Topics courses relevant to trauma studies may be included in the certificate when approved in advance by the coordinator of the trauma studies certificate.

Graduate School Preparation
In addition to the required courses listed above, students interested in applying to graduate school in Psychology are strongly encouraged to become involved in a research project with a Psychology faculty member by securing enrollment in PSYCH 3390, Directed Studies. These positions are available on a limited and competitive basis. No enrollments in PSYCH 3390 are possible without special Instructor permission. Those invited to participate must obtain a special consent form from the instructor in order to enroll. Contact the Psychology Academic Advising office for more information on such positions (psy_advising@umsl.edu).

Undergraduate Learning Outcomes
The Undergraduate Psychology Learning Goals and Outcomes represent reasonable departmental expectations for the psychology major at the University of Missouri-St Louis. They have been modified from the undergraduate learning goals recommended by the American Psychological Association.

Outcome 1. Recommended Courses for General Knowledge Base of Psychology

• Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
• PSYCH 1003 introduces these concepts; all other psychology courses expand on these issues in more depth.

Goal 2. Research Methods in Psychology

• Students will understand basic research methods in psychology, including the development and refinement of theory, hypothesis generation and testing, research design, data analysis and interpretation.
• All courses touch on these issues, but two required courses, PSYCH 2201 and PSYCH 2219 specifically address these issues in depth. In addition, students may take elective courses to strengthen their skills in this area.

Goal 3. Biological and Cognitive Approaches to Understanding Behavior

• Students will have a basic understanding of the biological basis of behavior and cognitive theory and research in psychology.
• The following courses specifically address this goal:
  • PSYCH 2211  Introduction To Biological Psychology  3
  • PSYCH 4349  Human Learning And Memory  3
  • PSYCH 4356  Cognitive Processes  3

Goal 4. Application of Psychology to Personal Development and Mental Health.

• Students will understand and apply psychological principles to personal development and mental health.
• Many psychology courses have a specific application to the personal development and mental health of students and their families, including:
  • PSYCH 2232  Psychology Of Trauma  3
  • PSYCH 2245  Abnormal Psychology  3
  • PSYCH 2270  Developmental Psychology: Infancy, Childhood And Adolescence  3
  • PSYCH 2280  Psychology Of Death And Dying  3
  • PSYCH 3340  Clinical Problems Of Childhood  3
  • PSYCH 3346  Introduction To Clinical Psychology  3
  • PSYCH 4305  Developmental Psychology: Cognitive Development of Children  3
  • PSYCH 4316  Developmental Psychology: Social Development Of Children And Adolescents  3
  • PSYCH 4376  Mental Health And Aging  3

Goal 5. Application of Psychology to Social and Organizational Issues

• Students will understand and apply psychology principles of social and organizational issues, including understanding and respect for cultural diversity.
• The following courses address this goal:
  • PSYCH 2160  Social Psychology  3
  • PSYCH 2222  Group Processes In Organizations  3
The University of Missouri-St. Louis offers a program of studies leading to a Master of Arts Degree in Psychology with a specialization in Behavioral Neuroscience. Masters students take classes with Doctoral level students and conduct research in a core area of study including hormones and behavior, psychophysiology of trauma, neuropsychology and neuroimaging of aging and HIV, brain dysregulation in language disorders, social neuroscience of bias and stigma or neurobiology of emotion.

Students are enrolled into a research group headed by a faculty member with research interests in one of the six areas identified above. That professor serves as the student’s primary mentor throughout their graduate training, though communication and collaboration with other laboratories are encouraged.

Research Facilities: Research facilities include a variety of resources to support animal models of learning and memory, sociosexual behaviors, neuroendocrinology, and psychopharmacology; assessment of human cognition and neuropsychology; electrophysiology labs and psychophysiology labs to measure electrocardiogram, electrodacty activity, respiration, electromyogram, electrooculogram and infrared video-based equipment for tracking eye movements and pupillary response.

Degree Requirements
A total of 32 credit hours is required for the MA degree with an emphasis in the behavioral neuroscience field of experimental psychology. There is no thesis requirement for the Masters degree.

Required Coursework
The following graduate courses are currently required of all Masters students in the Behavioral Neuroscience emphasis area:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 7421</td>
<td>Quantitative Methods I</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH 7422</td>
<td>Quantitative Methods II</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH 5465</td>
<td>Seminar: Behavioral Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 5407</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 5468</td>
<td>Seminar: Cognitive Processes</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 5001</td>
<td>Neuropsychological Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 7483</td>
<td>Directed Research</td>
<td>3</td>
</tr>
<tr>
<td>or PSYCH 7484</td>
<td>Directed Readings</td>
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</tbody>
</table>

Electives
Choose from among the following or courses approved by graduate director:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSYCH 4330</td>
<td>Hormones, The Brain And Behavior</td>
</tr>
<tr>
<td>PSYCH 7403</td>
<td>Psychopathology</td>
</tr>
</tbody>
</table>
University of Missouri-St. Louis

Description of Ph.D. Programs/Options

There are three distinct programs:

• Clinical Psychology;
• Behavioral Neuroscience; and
• Industrial/Organizational Psychology.

Details on each program can be found on the Psychology Department webpage. Each has its own specific curricular and research requirements. The following briefly describes each program.

Clinical Psychology

The Clinical Psychology program has been fully accredited by the American Psychological Association since 1977 and is patterned upon the scientist-practitioner model of clinical training. The Clinical Psychology program requires five years of full-time study. Students are not considered for admission on a part-time basis. Through the medium of courses, practicums, and research experiences, this emphasis area prepares Clinical Psychologists for careers in research, teaching, and clinical practice.

Students in the Clinical Psychology program participate for three years in the Psychology Department's Community Psychological Services clinic. This facility provides psychological services to the public and consultation to outside agencies. Students also receive clinical experience in clerkships and during a full-time, year-long internship. Research requirements include an initial independent research project, a major critical review of research in a specialty area, and a dissertation.

Learning Outcomes for the Ph.D. in Clinical Psychology:

The Ph.D. in Clinical Psychology has the following goals and outcomes:

Goal 1. Students will gain a broad-based foundation of knowledge and conceptual skills necessary for psychological research and practice.

The following courses address this goal:

PSYCH 5465 Seminar: Behavioral Neuroscience 3
PSYCH 5468 Seminar: Cognitive Processes 3
PSYCH 6466 Seminar: Developmental Psychology 1-3
PSYCH 7403 Psychopathology 3
PSYCH 7412 Social Psychology 3

Students will be prepared in multiple approaches to assessment and treatment that are theory-based and research-supported.

The following courses address this goal directly:

PSYCH 7404 Introduction To Clinical Assessment I 4
PSYCH 7406 Introduction To Clinical Assessment II 4
PSYCH 7430 Introduction To Clinical Skills 1
PSYCH 7431 Clinical Supervision 1-3
PSYCH 7434 Introduction to Clinical Interventions 3
PSYCH 7439 Summer Supervision 1
PSYCH 7450 Clinical Internship I 1
PSYCH 7451 Clinical Internship II 1

Total Hours 45
**Goal 2.** Students will develop the ability to evaluate and conduct methodologically sound research of potential benefit to the practice of psychology.

The following courses address this goal directly:

<table>
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<td>PSYCH 7422</td>
<td>Quantitative Methods II</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH 7474</td>
<td>Clinical Research In Applied Settings</td>
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</tr>
<tr>
<td>PSYCH 7485</td>
<td>Research Team I</td>
<td>2</td>
</tr>
<tr>
<td>PSYCH 7486</td>
<td>Research Team II</td>
<td>2</td>
</tr>
<tr>
<td>PSYCH 7487</td>
<td>Thesis Research Project</td>
<td>1-6</td>
</tr>
<tr>
<td>PSYCH 7488</td>
<td>Specialty Examination Research</td>
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<tr>
<td>PSYCH 7492</td>
<td>Ph D Thesis Research</td>
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In addition, students must submit a journal-length manuscript based on their dissertation for review by a professional journal prior to graduation.

**Goal 3.** Students will develop a firm basis for ethical decision-making and adherence to professional standards of conduct in research and practice.

Most courses provide some training in this area, and PSYCH 7432 addresses this goal directly as a required course.

**Goal 4.** Students will develop and display sensitivity and adaptability in their applications of research, assessment and treatment approaches to diverse populations.

Most courses provide some training in this area, and PSYCH 6448 addresses this goal directly as a required course.

**Goal 5.** Students will continue to develop a commitment to the goals of life-long learning, and an awareness of clinical psychology as an evolving science.

All courses are relevant to this goal.

**Behavioral Neuroscience**

The Behavioral Neuroscience program provides opportunities for study, research, and training in various areas including psychophysiology, psychopharmacology, neuroendocrinology, cognitive neuroscience, and neuropsychology. This program prepares students for research careers in academia or industries, such as pharmaceutical firms and medical schools. Full-time enrollment is required.

**Learning Outcomes for the Ph.D. in Behavioral Neuroscience**

The graduate program in Behavioral Neuroscience has the following goals. Outcome measures for each goal allow the faculty to assess the students.

**Goal 1.** Students will gain a broad-based foundation of terminology and basic and conceptual knowledge necessary for teaching and research in the Behavioral Neuroscience field. Outcome measures include grades in coursework, performance on both the written and oral segments of the qualifying exam, as well as active participation in our journal reading groups.

**Goal 2.** Beginning early in their studies, students will learn the basic skills to conduct research in a variety of different paradigms. Outcome measures include successful accomplishments in the laboratories of mentor professors.

**Goal 3.** Beginning early in their studies, students will come to recognize the key to success in the Behavioral Neuroscience field is publishing and seeking grant support. Outcome measures include an easily observable mindset that assesses all scholarly activities in regard to possible publication and/or a suitable idea for submission to a grant agency. Also, regular attendance is expected at all relevant colloquia on campus and at the grant writing seminars offered by the Behavioral Neuroscience faculty.

**Goal 4.** Students will come to recognize the importance of writing and will be constantly developing their writing skills as applied to manuscript preparations and grant applications. Outcome measures are the numbers of manuscripts written and submitted to journals or grant agencies each year.

**Goal 5.** As they progress through the program, students will show increasing self-reliance to initiate a research project and carry it to its completion. Outcome measures are numbers and quality of self-initiated research projects.

**Goal 6.** At the end of their graduate studies, the students will have grown into full colleagues of the faculty and be ready for careers in research and teaching. Outcome measures are a quality dissertation that is successfully defended before peers and being hired for a suitable position (post-doc, assistant professor, junior-level researcher) in the field.

**Industrial/Organizational Psychology**

The Industrial/Organizational Psychology program is offered in cooperation with selected faculty from the College of Business to prepare students for careers in industry or academia. This program embraces the scientist-practitioner model and provides a balanced training in I/O. This emphasis provides "industrial" training in areas such as personnel selection, training, and test development/validation, as well as "organizational" training in areas such as work motivation, leadership, and group processes. Research and other training experiences in various settings are also incorporated.

**Learning Outcomes for the Ph.D. in Industrial/Organizational Psychology:**

The Ph.D. in Industrial/Organizational (IO) Psychology has the following goals:

**Goal 1.** Students will gain a broad-based foundation of knowledge and conceptual skills necessary for applied psychological research and practice.

**Goal 2.** Students will develop the ability to evaluate and conduct methodologically sound research of potential benefit to the theory and practice of psychology.

**Goal 3.** Students will develop the ability to apply psychological principles that are theory-based and research-supported to individuals and groups in organizational settings.

**Goal 4.** Students will develop a firm basis for ethical decision-making in research and practice.

**Goal 5.** Students will display adaptability in their applications of research, assessment and practical psychological approaches to individuals and groups in organizational settings.
## Graduate Certificate Programs

### Clinical Psychology Respecialization-Advanced Graduate Certificate Program

This program is designed for graduates of accredited doctoral programs in psychology who wish to receive training in the specialty field of clinical psychology. Respecialization students are trained within the context of the UMSL Clinical Psychology Doctoral Program, which is accredited by the American Psychological Association. The program provides an integrated sequence of training experiences, including didactic course work and practicum placements. Core graduate-level psychology educational requirements not completed elsewhere are included in the respecialization student's course of study.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: [http://umsl.edu/go/BoH](http://umsl.edu/go/BoH).

### Graduate Certificate in Trauma Studies

The graduate certificate is awarded upon the completion of 18 credit hours of graduate coursework on the topic of trauma studies. No more than nine hours of graduate level independent research or fieldwork may be used for the certificate. The coursework for the certificate must be taken in at least two departments and may include no more than three hours at the undergraduate 3000 or 4000 level.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: [http://umsl.edu/go/Brl](http://umsl.edu/go/Brl).

### Sample Four Year Plan

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### Child Advocacy Studies Courses

**CAST 3290 Traumatic Stress in Childhood and Adolescence: 3 semester hours**
SAME AS PSYCH 3290. Prerequisites: PSYCH 2270 (majors), PSYCH 1268, or approval from the instructor. Exploration of the impact of stressors experienced during infancy, childhood and adolescence. Integrates how theoretical frameworks, cultural considerations and policy implications apply to child development research and practice.

**CAST 4398 Child Maltreatment: A Multidisciplinary Approach: 3 semester hours**
SAME AS PSYCH 4398 and SOC WK 4398. Focuses on clinical aspects of child abuse with attention to identification, reporting, intervention and prevention. Perspectives from the disciplines of psychology and social work are provided.

**CAST 4498 Forensic Investigation of Child Abuse: 3 semester hours**
Prerequisites: CAST 4398/PSYCH 4398/SOC WK 4398. Designed for students across multiple disciplines where knowledge of child abuse investigation and advocacy are necessary. Focuses on the investigative and prosecutorial responses of professionals involved with child abuse cases to expand the student’s knowledge and skills in the most effective response to child abuse investigations. Includes competency-based skills training such as conducting a cursory interview, participating in peer review, doing case presentations, and producing investigative documentation.

**CAST 4598 Child Abuse Assessment and Intervention: 3 semester hours**
Prerequisites: CAST 4398/PSYCH 4398/SOC WK 4398. Provides students with knowledge and skills to intervene effectively and empathically with families that experience child abuse and neglect. Uses experiential learning to develop skills in trauma-focused screening, assessment, and crisis intervention for vulnerable children and their families who are involved with child serving systems such as law enforcement, child protective services, prosecution, and physical and mental health.

**CAST 4698 Internship in Child Advocacy Studies: 3 semester hours**
SAME AS PSYCH 4698. Prerequisites: PSYCH 4398, completion of or concurrent enrollment in PSYCH 4498 and PSYCH 4598, and approval from the CAST director. Internship under CAST staff supervision in child or youth-serving setting. Monthly seminar participation required. Approval from the CAST director is required prior to enrolling.
Psychology Courses

PSYCH 1000 Choosing A Career In Psychology: 1 semester hour
Prerequisite: Psychology Major or consent of instructor. This course is an orientation to the field of psychology for majors and for students who are considering declaring the major. This course is to be completed by native and transfer Psychology majors during their first semester of study at UMSL. Students will be engaged in activities that will help them to develop and identify their professional goals, learn about the various specialties and careers available within the field of psychology, understand the education and skills necessary for various careers, learn the requirements for a psychology major, become familiar with minors that are available at UMSL, think about a possible choice of minor or certificate, and become acquainted with the interest areas of UMSL faculty in Psychology and related fields. All Psychology majors must complete this course during the first semester at UMSL with a grade of C- or higher.

PSYCH 1003 General Psychology: 3 semester hours
A survey of the basic concepts, theories, and pivotal findings over the past 100 years in the science of Psychology, with special emphasis on contemporary concepts and findings that focus on the relation of the brain to normal and pathological behaviors. All Psychology majors must complete this course with a grade of C- or higher.

PSYCH 1268 Human Growth And Development: 3 semester hours
Prerequisites: PSYCH 1003. A survey course, designed for non-majors. This course examines development over the lifespan with an emphasis on the developmental tasks and hazards of each age period. Majors in Psychology and students planning to pursue a career in psychology research, teaching, or practice are strongly encouraged to take PSYCH 2270 instead of this course.

PSYCH 2160 Social Psychology: 3 semester hours
Same as SOC 2160. Prerequisite: PSYCH 1003 or SOC 1010. This course examines the behavior, thoughts, and feelings of individuals in their social environments. The content focuses not only on how people relate to one another, but also on the processes affecting their interactions with others. Specific topics include the self, social judgments, attitudes and persuasion, helping behavior, prejudice, aggression, attraction, conformity and obedience, and group processes. All Psychology majors taking this course instead of PSYCH 2270 must complete it with a grade of C- or higher.

PSYCH 2200 Drugs And Behavior: 3 semester hours
Prerequisite: PSYCH 1003. The course is an introduction to psychopharmacology and the relationship among drugs, and how these impact the brain and behavior. The emphasis is on physiological mechanisms underlying the behavioral responses to psychotherapeutic substances, illicit psychoactive drugs, commonly used substances (alcohol, nicotine, caffeine), and drug-like substances produced naturally in the body.

PSYCH 2201 Psychological Statistics: 4 semester hours
Prerequisites: PSYCH 1003 and satisfaction of the University’s mathematical skills requirement. (With Laboratory) This course serves as an introduction to statistical concepts and methods used in Psychological measurement and the analysis and interpretation of social sciences data. Topics include descriptive statistics, frequency distributions centrality, variability, and correlational measures; as well as an introduction to statistical inference, sampling fundamentals, significance testing and effect size, t-test, and analysis of variance. All Psychology majors must complete this course with a grade of C- or higher before registering for PSYCH 2219.

PSYCH 2205 Human Sexuality: Psychological Perspectives: 3 semester hours
Prerequisites: PSYCH 1003. This course is a comprehensive overview of human sexuality from the standpoint of the behavioral science of Psychology. This course includes a study of sexual anatomy and physiology, intersex classifications, sex and gender differences, sexual orientation, interpersonal and interpersonal aspects of human sexuality, classification and treatment of sexual dysfunction and sexual disorders, sexual victimization, and the methods employed for the scientific examination of human sexual behavior.

PSYCH 2211 Introduction To Biological Psychology: 3 semester hours
Prerequisites: PSYCH 1003 and 3 hours of BIOL chosen from either BIOL 1012, or BIOL 1102, or BIOL 1831. Students with career goals that include graduate study in Psychology are urged to complete the BIOL 1831 prerequisite for this course. This course introduces psychology students to behavioral neuroscience and neuropsychology. Course topics include basic neurological and neurophysiology, neurodegeneration, sensory and motor systems, and the integration of subcortical and cortical networks. All are covered with an emphasis on behavioral outcomes of normal and pathological functioning of the brain. All psychology majors must complete this course with a grade of C- or higher.

PSYCH 2219 Research Methods: 3 semester hours
Prerequisite: Completion of PSYCH 2201 with a final grade of C- or higher is required prior to enrolling in this course. This course is a comprehensive overview of research methods in the social sciences. Topics include technical scientific writing in current APA format, critical evaluation of research literature, the application of statistical methods, and mastery of the ethical principles guiding social sciences research. Course and laboratory work involve designing and evaluating research questions, formulating research hypotheses, designing and conducting original research studies, and presenting research results. All psychology majors must complete this course with a grade of C- or higher.

PSYCH 2222 Group Processes In Organizations: 3 semester hours
Prerequisite: PSYCH 1003 or MGMT 3600. Topics include theory, research and practice in coordination, conflict and decision-making in groups and organizations, as well as the role of influence, power, and leadership effectiveness in understanding interpersonal and group relations.

PSYCH 2230 Psychology Of Gender: 3 semester hours
Same as GS 2230. Prerequisite: PSYCH 1003. Evaluation of psychological theories and research regarding physiological, cognitive, and personality gender differences and similarities, gender related problems in adjustment, and gender specific clinical interventions.

PSYCH 2232 Psychology Of Trauma: 3 semester hours
Same as GS 2232. Prerequisites: PSYCH 1003. This course is designed to review the psychological effects of crime, violence, war, natural disasters, and other traumas. Particular attention is paid to the development of specific psychopathology and other negative consequences of traumatic events. The process of recovery from distress following psychological events is further emphasized. The role of gender and its relationship to victimization and the development of psychopathology and recovery are considered throughout the course.
PSYCH 2245 Abnormal Psychology: 3 semester hours
Prerequisite: PSYCH 1003. This course examines the historical views and current perspectives on the possible antecedents, symptoms, and treatments of major psychological disorders, including anxiety, dissociative, mood, somatoform, eating, schizophrenia and substance-related disorders. Major diagnostic categories and criteria, individual and social factors of maladaptive behavior, methods of clinical assessment, research strategies, and types of therapy will also be covered. All psychology majors must complete this course with a grade of C- or higher.

PSYCH 2270 Developmental Psychology: Infancy, Childhood And Adolescence: 3 semester hours
Prerequisites: PSYCH 1003. This course systematically examines theories and research concerning the physical, social, emotional, and cognitive development of children from conception through adolescence. It will provide students with a basic knowledge of infant, child, and adolescent development; its subject matter; its approaches to gathering and evaluating evidence about the causes of behavior; and the ways in which our knowledge is applied to enhance the development and the quality of life of children. It is intended for Psychology majors and students with career interests in research, education, and/or the treatment of children. All Psychology majors taking this course must complete it with a grade of C- or higher.

PSYCH 2272 Developmental Psychology: Adulthood And Aging: 3 semester hours
Same as GERON 2272. Prerequisite: PSYCH 1003. Personality, social, and physiological development from the onset of early adulthood through maturity and old age.

PSYCH 2280 Psychology Of Death And Dying: 3 semester hours
Same as GERON 2280. Prerequisites: PSYCH 1003. A beginning exploration of end-of-life issues integrating the scholarly, social, and individual dimensions of death and dying. This course provides a solid grounding in theory and research, as well as practical application to students’ lives.

PSYCH 2285 American Culture and Minority Mental Health: 3 semester hours
Prerequisites: PSYCH 1003. Provides an examination of the relationship between American culture and mental health. The focus is on the lives of American minority groups, with specific attention given to how racism, prejudice, and minority status currently reveal themselves within a mental health framework. An eclectic, multidisciplinary approach that draws from clinical and social psychology will be utilized.

PSYCH 3205 Evolutionary Psychology: 3 semester hours
Prerequisites: PSYCH 2211. Evolutionary Psychology refers to a fundamentally unique approach to studying and thinking about human and animal behavior through considerations of 1. The challenges and stressors encountered in ancestral environments, 2. The proximate physical, psychological, and anatomical methods that evolved to meet these adaptive problems, and 3. How adaptive or maladaptive these mechanisms are in current environments. Special emphasis will be placed on the evolution of brain structures, cognitive processes, and social behaviors. The content for this course is not new; Evolutionary Psychology involves looking at the science of Psychology through a unique lens, shaped by its tenets. Although appreciation for this approach to psychological research is increasing, it remains controversial in psychology circles. We will discuss the state of this aspect of Psychology as well.

PSYCH 3256 Environmental Psychology: 3 semester hours
Prerequisites: PSYCH 2160 or SOC 2160. Analysis of environmental influences on behavior and man’s influence, in turn, on the environment. Topics will include a consideration of both individual processes relating to the environment (such as the perception, evaluation, and adaptation to the environment) and social processes relating to the environment (such as privacy, territoriality, and crowding).

PSYCH 3290 Traumatic Stress in Childhood and Adolescence: 3 semester hours
Same as CAST 3290. Prerequisites: PSYCH 2270 (majors), PSYCH 1268, or approval from the instructor. Exploration of the impact of stressors experienced during infancy, childhood and adolescence. Integrates how theoretical frameworks, cultural considerations and policy implications apply to child development research and practice.

PSYCH 3295 Selected Projects In Field Placement: 3 semester hours
Prerequisite: Junior standing, fifteen hours of psychology, or consent of instructor. Selected options in field work placement experiences in various local agencies with training and supervision by faculty. (May be repeated once for credit).

PSYCH 3316 Fundamentals Of Leadership: 3 semester hours
Prerequisites: PSYCH 1003 and six additional hours of Psychology, or consent of instructor. This course addresses concepts and methods for developing leadership skills in work and everyday settings. Contemporary approaches to leadership development are reviewed in relation to psychological and organizational theory. This course is designed to be relevant to the wide range of leadership opportunities that arise in work and daily life. Experiential exercises are used to help students discover and develop new leadership skills.

PSYCH 3318 Industrial And Organizational Psychology: 3 semester hours
Same as MGMT 3623. Prerequisite: PSYCH 2201 or MGMT 3600. This course introduces the student to psychological research and theories pertaining to human behavior in the work setting. Topics covered include: selection, performance appraisal, training, leadership, motivation, job satisfaction, and organizational design.

PSYCH 3340 Clinical Problems Of Childhood: 3 semester hours
Prerequisite: PSYCH 1003 and six additional hours of Psychology, or consent of instructor. This course will address the clinical disorders and difficulties of children, as well as the causes and the treatment of these disorders. Topics addressed include autism, childhood schizophrenia, conduct disorders, learning disabilities, ADHD, mood disorders, health-related disorders, anxiety disorders, and child maltreatment. Treatments designed for specific use with children, including behavioral, drug and community mental health approaches will be addressed. This course is recommended for those going on to graduate work in psychology.

PSYCH 3346 Introduction To Clinical Psychology: 3 semester hours
Prerequisite: PSYCH 1003, PSYCH 2245; and three additional hours of Psychology. This course provides a conceptual framework for research, description and understanding of clinical phenomena. Assessment, interviewing, the clinical use of tests and psychological approaches to treatment are also addressed.

PSYCH 3390 Directed Studies: 1-6 semester hours
Prerequisite: Consent of instructor. Directed reading and research. May be repeated for a maximum total of ten hours.
PSYCH 3400 Conceptual and Historical Foundations of Psychology: 3 semester hours
Prerequisite: PSYCH 1003 and three additional hours of Psychology. This course addresses basic questions about human life debated throughout the history of the West that are present in contemporary Psychology. These include the relation between mind and body, how we know about the world, the nature of morality, and how we think and feel. Greek and Judeo-Christian traditions, and science and religion, have provided distinct, fundamental approaches to how these questions have been asked and answered. This course examines these and related historical, conceptual, and theoretical foundations underlying contemporary Psychology.

PSYCH 3500 Health Psychology: 3 semester hours
Prerequisite: PSYCH 1003 and three additional hours of Psychology. Health Psychology involves the discipline and principles of psychology and behavior in understanding how the mind, body, and behavior interact in health and disease. Class topics include theoretical foundations of health and illness, health promotion and primary prevention of illness, health enhancing and health damaging behaviors, psychosomatic illness, stress and coping, pain management, and a variety of specific behavior-related medical illnesses (e.g., heart disease, eating disorders, cancer, AIDS).

PSYCH 3820 Cross-Cultural Psychology: 3 semester hours
Prerequisites: PSYCH 1003 and 9 hours of Psychology The purpose of this course is to present students with a broad theoretical and applied overview of cross-cultural psychology. To this end, the course presents an orientation to the definitions, concepts, theories, and methodologies of crosscultural psychology. Included is an examination of cultural and ecological factors and their influences on perceptual and cognitive processes, personality, language, and other psychological variables.

PSYCH 4250 Stereotyping, Prejudice, and Discrimination: 3 semester hours
Prerequisites: PSYCH 1003, PSYCH 2160/SOC 2160/GS 2150; or consent of instructor. This course will provide an intellectual forum for discussing classic and contemporary theories and methodologies focused on understanding stereotyping, prejudice, and discrimination. Using a social psychological framework, we will assess psychology’s current understanding of why people use and apply stereotypes in their everyday thinking and behavior. We will explore such topics as social categorization, stereotype activation, contemporary forms of prejudice, the social context of prejudice, the consequences of prejudice and discrimination, the stigmatized target’s perspective, coping with prejudice, and techniques for reducing prejudice and discrimination. After completing the course, you will be able to describe the social and cultural influences on stereotyping, prejudice, and discrimination and how they influence our thoughts, feelings, and behaviors. You will have a better understanding of why “isms” in society persist and how we can work to reduce them.

PSYCH 4300 Introduction To Psychopharmacology: Drugs And Mental Illness: 3 semester hours
Prerequisites: PSYCH 1003, PSYCH 2211 or PSYCH 2200; PSYCH 2245. The course is designed to provide an introduction to drugs used to treat anxiety disorders, major depression, schizophrenia, and other psychopathologies. The emphasis will be on understanding neural mechanisms related to psychological disorders and to the effectiveness of current drug treatments.
**PSYCH 4330 Hormones, The Brain And Behavior: 3 semester hours**
Prerequisites: 9 hours of Psychology or Biology, including at least one of the following: PSYCH 2200, PSYCH 2211, or PSYCH 4300 or permission of instructor. This course may be taken for graduate credit with permission of the instructor. Historically, hormones have been studied for their role in reproduction, including reproductive physiology and sexual behaviors. It is now clear, however, that the endocrine system actively interacts with brain regions unrelated to reproduction with the result that sex hormones and neuropeptide hormones influence a wide range of behaviors including mood, anxiety, stress responses, cognition, memory, violence, attachment, aging, weight control and athletic prowess. Emphasis of the class is on hormonal contribution both to reproductive and non-reproductive behaviors with special attention paid to gender behavioral differences.

**PSYCH 4340 Introduction to Human Neuroanatomy: 3 semester hours**
Prerequisites: Grade of B- or above in PSYCH 2211, and nine hours of psychology or biology or consent of instructor. This course is an intensive introduction to brain anatomy. It will explore the structure and function of the human nervous system with the goal of preparing students for advanced study in neuroscience-related fields. Topics will include a review of core concepts from cellular neuroscience, neuroimaging and neuroanatomical techniques, sensory and motor systems, and the anatomical basis of cognitive functions. Based on an understanding of typical brain structure and function, the anatomical and physiological basis of various neurological disorders is explored.

**PSYCH 4349 Human Learning And Memory: 3 semester hours**
Prerequisites: PSYCH 2211 and six additional hours of psychology; or consent of instructor. Is it bad to stay up all night studying for an exam? Can you buy groceries without a shopping list? Why is exposure therapy effective in reducing anxiety? What is your earliest memory? Is your grandmother just forgetful or does she have dementia? Can you explain how to tie shoelaces? Why do victims sometimes only remember the gun and not the perpetrator? Learning and memory happen all day, every day. No matter what you plan to do with your psychology degree (e.g., become a therapist, social worker, lawyer, scientist, teacher, stay-at-home dad/ mom) knowledge of learning and memory will be extremely relevant. In this course we will discuss basic forms of learning and memory such as habituation, sensitization, conditioning, and skill/procedural memory, as well as more complex forms of learning and memory such as semantic memory, episodic autobiographical memory, short-term and working memory, and social learning. Because learning and memory happen in the brain we will also discuss the neurobiological basis of learning and memory on cellular (e.g., long-term potentiation) and system (e.g., hippocampus) levels. In addition, we will discuss how factors such as emotion, aging, sleep, and stress affect memory and learning. Finally, we will look at the relevance of learning and memory for clinical and legal environments.

**PSYCH 4350 Emotions and the Brain: 3 semester hours**
Prerequisites: PSYCH 2211 and six additional hours of psychology; or consent of instructor. Emotions play an important role in everyday life. But what exactly is an emotion? And what happens in your body when you experience an emotion? More specifically, what happens in your brain? Doesn't the limbic system have something to do with emotions? What are the differences and similarities between emotions (such as anger) and motivations (such as hunger)? What happens in your body and brain when you fall in love? And how do emotions influence cognition, such as attention and memory? Conversely, does cognition influence our emotions as well? These are some of the questions that we will answer in this course. Given that many mental disorders involve emotional disturbances, this course is not only relevant for students who are interested in the fundamental knowledge of emotions, but also for students who are interested in clinical psychology.

**PSYCH 4356 Cognitive Processes: 3 semester hours**
Prerequisite: Nine hours of psychology or consent of instructor. This course is an overview of the major topics in cognitive psychology, including perception, visual imagery, attention, memory, knowledge representation and retrieval, language, problem solving, reasoning, judgment, decision making, and intelligence.

**PSYCH 4365 Psychological Tests And Measurements: 3 semester hours**
Prerequisites: Grade of C- or above in PSYCH 2201 and PSYCH 2219, or consent of instructor. This course is a survey of the basic principles, research, and theories on testing and measurement of psychological constructs. Students will critically examine several professionally developed tests and learn about the administration, interpretation, and psychometric qualities of each.

**PSYCH 4372 Introduction to Social Neuroscience: 3 semester hours**
Prerequisites: PSYCH 2160 and PSYCH 2211. An introduction to current theory and research in social neuroscience with a focus on mechanisms underlying mind and behavior interactions using a multi-level integrative analysis. This course will examine how organismic processes are shaped, modulated, and modified by social factors and vice versa. This course may be taken for graduate credit with permission of the instructor.

**PSYCH 4374 Introduction To Clinical Neuropsychology: 3 semester hours**
Prerequisites: Nine hours of Psychology. An introduction to current theory and practice of clinical neuropsychology with a focus on neuropsychological findings concerning relationships between the brain and behavior. Particular attention is devoted to function, neuroanatomy, neurological syndromes, patterns of brain impairment associated with various medical diseases, and methods of neuropsychological assessment and intervention.

**PSYCH 4376 Mental Health And Aging: 3 semester hours**
Same GERON 4376 and SOC WK 4376. Prerequisites: 9 hours of psychology, graduate standing, or consent of instructor. (MSW students normally take all foundation courses prior to enrolling in this course.) This course provides a survey of theory and research in mental health issues for older populations, focusing on psychological and social aspects of mental health and impairment. The course details approaches to understanding prevalence, etiology, assessment, and treatment of the psychological disorders most commonly experienced by older adults, including anxiety, depression, delirium, and dementia, among others.

**PSYCH 4392 Selected Topics In Psychology: 1-3 semester hours**
Prerequisite: Twelve hours of psychology and consent of instructor. A seminar of selected issues and methods in psychology. May be repeated once for credit.
PSYCH 4398 Child Maltreatment: A Multidisciplinary Approach: 3 semester hours
Same as SOC WK 4398 and CAST 4398. Focuses on clinical aspects of child abuse with attention to identification, reporting, intervention and prevention. Perspectives from the disciplines of psychology and social work are provided.

PSYCH 4698 Internship in Child Advocacy Studies: 3 semester hours
Same as CAST 4698. Prerequisites: PSYCH 4398, completion of or concurrent enrollment in PSYCH 4498 and PSYCH 4598, and approval from the CAST director. Internship under CAST staff supervision in child or youth-serving setting. Monthly seminar participation required. Approval from the CAST director is required prior to enrolling.

PSYCH 4999 Integrated Psychology: 2 semester hours
Prerequisites: This course is restricted to Psychology majors and must be taken during majors' final semester of study. This capstone course serves as a review of the primary sub-fields of psychology. An advanced general psychology textbook will guide the class through important contemporary topics in behavioral neuroscience, learning and memory, cognition, psychopathologies and their treatments, and developmental and social psychology. The Major Field Aptitude Test in Psychology will serve as the final exam for the course. All Psychology majors must complete this course with a grade of C- or higher.

PSYCH 5001 Neuropsychological Assessment: 3 semester hours
Prerequisites: Admission to Psychology graduate program, or consent of instructor. This graduate level course will review neuroanatomical systems that mediate primary cognitive networks and methods of assessments and interpretation of data. The course will also review common neurological and psychiatric conditions that result in neuropsychological compromise.

PSYCH 5340 Human Neuroanatomy: 3 semester hours
Prerequisites: Admission to graduate program in psychology or consent of instructor. This course provides an overview of brain anatomy for graduate students in psychology and related disciplines. It explores the structure and function of the human nervous system both in health and disease. The course will cover core concepts from cellular neuroscience, neuroimaging and neuroanatomical techniques, sensory and motor systems, and the anatomical basis of cognitive functions.

PSYCH 5400 Seminar: Special Topics in Behavioral Neuroscience: 1 semester hour
Prerequisites: Admission to the graduate program in behavioral neuroscience or consent of the instructor. A seminar of selected contemporary topics in behavioral neuroscience. The class will meet weekly to discuss a journal article in the field with special focus on the methodologies used in neuroscience research. May be repeated for a total of 3 credit hours, provided the subject matter is different.

PSYCH 5407 Psychopharmacology: 3 semester hours
Prerequisite: 12 units of graduate-level. An examination of the effects of drugs on the brain and on behavior. Primary emphasis is on those drugs used in the treatment of affective disorders, schizophrenia and anxiety.

PSYCH 5465 Seminar: Behavioral Neuroscience: 3 semester hours
Prerequisites: Graduate standing or permission of instructor. Behavioral neuroscience is the study of the relation of the brain to behavior. The field has emerged as the new face of psychology; there are few subfields in psychology that have not been influenced by findings from animal labs, and from human studies employing physiological recordings, neuroimaging and psychotherapeutic drugs. This course will serve as an introduction for graduate students in psychology of brain morphology and function with an emphasis on normal and pathological behaviors.

PSYCH 5468 Seminar: Cognitive Processes: 3 semester hours
Prerequisites: Admission to the Graduate Program in Psychology or consent of instructor. This course is an introduction to classic and contemporary theories, methodologies, and theoretical perspectives used in the field of cognitive psychology. The emphasis is on basic research in the field of cognitive psychology but some applications of these experiments are discussed as well. The class will read and discuss chapters from cognitive psychology textbooks as well as classic and contemporary empirical journal articles in cognitive Psychology.

PSYCH 5610 Mechanisms Of Aging I: The Aging Body: 1 semester hour
Same as SOC WK 5610 and GERON 5610. Prerequisites: Graduate standing and BIOL 1102 or equivalent. (MSW students normally take all foundation courses prior to enrolling in this course.) Introduces students with a social sciences/humanities background to the normal changes in the biology and chemistry of the aging human body and how these changes affect behavior.

PSYCH 5611 Mechanisms Of Aging II: The Aging Brain: 1 semester hour
Same as SOC WK 5611 and GERON 5611. Prerequisites: GERON 5610 or SOC WK 5610 or PSYCH 5610 or equivalent or consent of instructor. (MSW students normally take all foundation courses prior to enrolling in this course.) Provides students with a social sciences/humanities background a basic introduction to the biology and chemistry of the aging human brain and nervous system and how these systems impact behavior.

PSYCH 5612 Mechanisms Of Aging III: Diseases Of Aging: 1 semester hour
Same as SOC WK 5612 and GERON 5612. Prerequisites: GERON 5610 and GERON 5611, or SOC WK 5610 and SOC WK 5611, or PSYCH 5610 and PSYCH 5611 or equivalent or consent of instructor. (MSW students normally take all foundation courses prior to enrolling in this course). Provides students with a social sciences/humanities background with the information on how diseases associated with aging exacerbate the effects of aging on the human body, mind, and behavior.

PSYCH 6415 Seminar in Health Psychology & Behavioral Medicine: 3 semester hours
Prerequisites: Consent of instructor. This course analyzes research, theory, and clinical applications in the interrelationships of behavior, psychological states, physical health and disease. Discussion includes theoretical foundations of health and illness, biopsychosocial factors affecting health and illness, diagnostic issues, prevention, interdisciplinary treatment applications, health and public policy, and research issues. Critical evaluation of theory and empirical support for clinical applications will be discussed.

PSYCH 6441 Aging And Health Behavior: 3 semester hours
Same as GERON 6441. Prerequisite: Graduate standing. This course examines sociocultural influences on health care practices of older adults. The role of social support and other social resources in the health behavior of older adults is emphasized. Topics include self care decisions, formal service utilization, family caregiving, and planned interventions for older adults.
PSYCH 6448 Multicultural Issues In Clinical Psychology: 3 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. A survey of theoretical perspectives utilized in the treatment of various cultural groups. Their relationship to and implications for the treatment of members of various cultural groups will be explored. Strategies and ethical concerns in diagnosis, test interpretation, and treatment are considered.

PSYCH 6466 Seminar: Developmental Psychology: 1-3 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. A critical examination of contemporary problems in developmental psychology.

PSYCH 7403 Psychopathology: 3 semester hours
Prerequisite: Admission to clinical psychology program or permission of instructor. A critical examination of the clinical-experimental literature in psychopathology. Etiologies of cognitive/affective functions and dysfunctions are explored, and implications for therapeutic interventions considered.

PSYCH 7404 Introduction To Clinical Assessment I: 4 semester hours
Prerequisites: Admission to Clinical Psychology program. Fundamentals of clinical assessment with emphasis on interviewing and the measurement of cognitive functioning. This course includes a laboratory.

PSYCH 7405 History And Systems In Psychology: 3 semester hours
Prerequisites: Admission to Clinical Psychology program or consent of instructor. A comprehensive overview of the history of psychology with emphasis on the systems of thought that have shaped contemporary psychological theory and research.

PSYCH 7406 Introduction To Clinical Assessment II: 4 semester hours
Prerequisites: PSYCH 7404. This course addresses theory and techniques of personality assessment including clinical interviewing, objective and projective assessment, and integrative report writing.

PSYCH 7410 Women And Mental Health: 3 semester hours
Same as GS 6410. Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course will focus on contemporary research on the psychology of women pertaining to mental health issues. Etiology and treatment of disorders disproportionately affecting women will be emphasized.

PSYCH 7412 Social Psychology: 3 semester hours
Prerequisites: Admission to psychology doctoral program or consent of instructor. A review of key areas in contemporary theory and research in social psychology.

PSYCH 7419 Existential Issues In Clinical Psychology: 3 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course will review existential thought in psychology and its application to understanding clinical problems and treatment. Particular attention will be given to how psychotherapy can be understood within an existential framework that focuses on the issues of death, freedom, responsibility, and isolation.

PSYCH 7421 Quantitative Methods I: 4 semester hours
Prerequisites: Admission to the Graduate Program in Psychology or consent of instructor. A comprehensive study of univariate statistical concepts and analyses used in psychological research. Topics include descriptive statistics, normal distributions, z, t, F, chi-square statistics, and distributions. Correlation, simple and multiple regression, factorial and repeated measures analysis of variance, significance testing and effect size are also examined.

PSYCH 7422 Quantitative Methods II: 4 semester hours
Prerequisites: PSYCH 7421 and consent of instructor. A comprehensive study of the use of multivariate statistics in data analysis. Topics include the general linear model, multiple regression, factor analysis, and multivariate analysis of variance.

PSYCH 7423 Quantitative Methods III: 3 semester hours
Prerequisites: PSYCH 7422 and PSYCH 7429 and consent of instructor. A selective study of the use of multivariate statistics in data analysis. Topics include structural equation modeling, multilevel modeling, and analysis of longitudinal data.

PSYCH 7429 Psychometric Theory: 3 semester hours
Prerequisites: PSYCH 7421, PSYCH 7422 and consent of instructor. A consideration of classical and modern theories of psychological testing. Topics include test reliability, validity and construction.

PSYCH 7430 Introduction To Clinical Skills: 1 semester hour
Prerequisites: Admission to doctoral program in clinical psychology. An introduction to processes and procedures involved in psychotherapy.

PSYCH 7431 Clinical Supervision: 1-3 semester hours
Prerequisite: Admission to Clinical Psychology Program. Supervised experience in clinical practice. May be repeated six times for credit.

PSYCH 7432 Ethics And Professional Issues: 3 semester hours
Prerequisites: Admission to Clinical Psychology program. A study of issues in professional development, clinical supervision, risk management, and ethical standards as they relate to teaching, research, and professional practice.

PSYCH 7433 Clerkship in Clinical Psychology: 1 semester hour
Prerequisites: Admission to the doctoral program in Clinical Psychology. Supervised training in an affiliated agency or organization following completion of two years of course work. (May be repeated 3 times).

PSYCH 7434 Introduction to Clinical Interventions: 3 semester hours
Prerequisites: Admission to Clinical Psychology program and PSYCH 7406. This course focuses on conceptual and methodological issues that are central to the development, evaluation and application of interventions in clinical psychology. Topics include efficacy and effectiveness research, introduction to theories of behavior change, and applications with specific populations.

PSYCH 7439 Summer Supervision: 1 semester hour
Prerequisites: PSYCH 7431. Supervised experience in clinical practice at all graduate year levels during the summer months. Can be repeated for credit.

PSYCH 7442 Seminar: Cognitive And Behavioral Interventions: 3 semester hours
Prerequisites: PSYCH 7434. This course focuses on the theory and practice of cognitive-behavioral interventions in the field of clinical psychology.
PSYCH 7447 Trauma And Recovery: 3 semester hours
Prerequisites: Graduate Trauma Studies Certificate. A comprehensive seminar on the psychological effects associated with exposure to potentially traumatic events. The course will include information on the history of trauma studies; definitions of stressful and traumatic events; common responses to these events; theoretical models for conceptualizing traumatic responses; information on specific types of traumatic events; and issues in treatment.

PSYCH 7449 Research Methods and Project Development In Applied Psychology: 1-3 semester hours
Prerequisite: Admission to the Graduate Program in Psychology or consent of instructor. This course focuses on the basics of conducting research in Industrial-Organizational Psychology. Topics include: philosophy of science; reliability and validity; experimental, quasi-experimental, and non-experimental designs; power; meta-analysis; survey/item analyses; and cross-cultural methods. In addition, the course includes group supervision of initial research that leads to thesis or dissertation proposals. Can be taken up to three times for a total of 6 credit hours.

PSYCH 7450 Clinical Internship I: 1-9 semester hours
Prerequisite: Consent of advisor. Formal, one year, full-time internship providing student with in-depth supervised training within a site approved by the American Psychological Association. This course is repeated in the fall and spring semesters of the internship year.

PSYCH 7451 Clinical Internship II: 1-9 semester hours
Prerequisite: PSYCH 7450 and consent of advisor. Formal, one-year, full-time internship providing student with in-depth supervised training within a site approved by the American Psychological Association. (Taken in the final summer of the internship).

PSYCH 7454 Seminar: Personnel Psychology: 3 semester hours
An analysis of theories and research in personnel and industrial psychology. Topics include testing, assessment centers, performance appraisal, and interviewing.

PSYCH 7455 Seminar: Organizational Psychology: 3 semester hours
An analysis of theories and research in organizational psychology. Topics include theories of motivation, leadership, job design, group process decision-making, organizational effectiveness, and the relation between organizations and their environment.

PSYCH 7457 Seminar: Special Topics In Industrial Psychology: 3 semester hours
A seminar of selected issues and methods in personnel psychology.

PSYCH 7458 Seminar: Special Topics In Organizational Psychology: 3 semester hours
A seminar of selected issues and methods in organizational psychology.

PSYCH 7459 Practicum In Industrial/Organizational Psychology: 1-4 semester hours
Supervised experience in personnel or human resource management.

PSYCH 7461 Summer Research in I/O Psychology: 1 semester hour
Prerequisites: Admission to I/O program. Supervised experience on research topics in I/O psychology at all graduate year levels during the summer months. Can be repeated for credit.

PSYCH 7464 Field Experiences in Industrial-Organizational Psychology: 3 semester hours
Prerequisites: PSYCH 7454 and PSYCH 7455 or consent of instructor. The course focuses on the innovative application of psychological theory and principles to solving some pressing human resources issues, including actual organizational projects. Through readings, discussions and projects, students obtain hands-on experience with applied psychological issues, striking the needed balance between the theoretical and applied components of Industrial-Organizational psychology.

PSYCH 7465 Applied Issues In Organizational Psychology: 3 semester hours
Prerequisites: PSYCH 7455 or consent of instructor. Course focuses on the application of psychological theory and principles to organizational development consulting. While such consulting is ultimately intended to enhance organizational level functioning, applications of this approach begin with learning at the individual and small group levels. In this course, students work through real-world cases that address real organizational problems. In addition to this casework, the readings and class discussions will address the theoretical and practical links between individual/team learning and organizational development.

PSYCH 7466 Seminar Series in Industrial/Organizational Psychology: 1 semester hour
Prerequisites: Open only to students in the I/O Psychology Graduate Program. A seminar series involving speakers, presentations, and discussions focusing on applied and theoretical perspectives, techniques, and research in the field of Industrial/Organizational Psychology. May be taken up to 6 times for credit.

PSYCH 7469 I/O Professional Issues And Ethics: 3 semester hours
Prerequisite: Consent of Instructor. In this course students learn the ethical standards as they relate to teaching, research and professional practice in industrial organizational psychology. Other professional and career issues are also discussed.

PSYCH 7472 Special Topics In Psychology: 1-3 semester hours

PSYCH 7474 Clinical Research In Applied Settings: 3 semester hours
Prerequisites: PSYCH 7421 and PSYCH 7422. This course provides information on the design and implementation of research in applied settings (e.g., human service agencies). Topics include program evaluation, consultation models, risk factor analysis, presentation and health promotion, and quality control.

PSYCH 7476 Seminar In Developmental Psychopathology: 2 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. Introduction to principles, theory, and methods of study in the field of clinical child psychology. Emotional and behavioral dysfunctions are considered from developmental and socialization perspectives.

PSYCH 7477 Clinical Intervention with Children and Families: 3 semester hours
Prerequisite: PSYCH 7434 and PSYCH 7476. This course provides an overview of the theory and practice of clinical interventions with children, adolescents, and families.

PSYCH 7478 Directed Research In Industrial/Organizational Psychology: 1-4 semester hours
Independent study of an issue in industrial/organizational psychology through the application of research techniques.
PSYCH 7479 Directed Readings In Industrial/Organizational Psychology: 1-4 semester hours
Independent literature review of a topic in industrial/organizational psychology.

PSYCH 7483 Directed Research: 1-10 semester hours

PSYCH 7484 Directed Readings: 1-10 semester hours

PSYCH 7485 Research Team: 3 semester hours
Prerequisites: Doctoral standing. Group supervision of research leading to the Independent Research Project.

PSYCH 7486 Research Team II: 2 semester hours
Prerequisites: Completion of Independent Research Project or third year standing in doctoral program in clinical psychology. Group supervision of advanced research related to dissertation proposal and program's comprehensive examination required for doctoral candidacy.

PSYCH 7487 Thesis Research Project: 1-6 semester hours
Prerequisites: Admission to the doctoral program in clinical psychology. Supervised original research project of a clinically-related topic.

PSYCH 7488 Specialty Examination Research: 1-6 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology. Supervised original review and analysis of a clinically-related topic.

PSYCH 7491 MA Thesis Research: 1-10 semester hours
Prerequisite: Graduate standing and consent of instructor.

PSYCH 7492 Ph D Thesis Research: 1-10 semester hours
Prerequisite: Graduate standing and consent of instructor.