Degree Program Description

The study of Psychology aims to understand the mind, behavior, and mental health. The Bachelor of Science in Psychological Sciences (BS) degree is for students interested in a more science-oriented curriculum to better prepare them for further study in science-oriented psychology graduate programs (e.g., neuroscience, quantitative psychology), or medical school (e.g., Doctor of Medicine/MD, psychiatry), or other health-related graduate programs (e.g., pharmacy, physical therapy). The required science track is not noted on the BS diploma or transcripts, but students can indicate the science track on resumes and/or graduate school application forms. Regardless of a student’s ultimate goals, our faculty members believe that students will be best served by completing a rigorous research-oriented program of study. Therefore, students should expect their instructors to take a scientific approach to the particular psychological content of each course. While most psychology majors plan to find employment upon graduation with the undergraduate psychology degree, some psychology majors plan to pursue further study in psychology-related graduate or professional programs. Psychological Sciences majors work in diverse fields such as community and social services, human resources, management and business, health care, student affairs and services, law enforcement, education, and scientific research.

Major Program Requirements

To graduate with a Bachelor of Science in Psychological Sciences from the College of Arts and Science, a student must complete all degree, college and university graduation requirements (http://catalog.missouri.edu/academicdegreerequirements/universityrequirements/), including university general education (http://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/) as well as all degree and college or school requirements. Students are reminded to check the Undergraduate Catalog for course descriptions and prerequisite information.

Major Core Requirements

- The psychology major requires 30 credit hours in psychology coursework.
- All courses that count toward the psychology major requirements must be completed with a grade of C- or better. Grades of D+ or below or U will not be accepted. This includes the statistics requirement(s) and the required science track. The statistics requirement is fulfilled by taking either (a) STAT 1200 and STAT 2200 or (b) STAT 2500, or (c) STAT 1400 and STAT 2200.
- Students must complete MATH 1100 or MATH 1160 and the equivalent of STAT 2500 -- either by completing STAT 1200 and STAT 2200, or by completing STAT 2500.
- Students must complete STAT 1200 or STAT 2500 before or during the same semester as PSYCH 3010.
- Students must complete PSYCH 3010 before PSYCH 3020. PSYCH 3020 is a prerequisite for the Psych Capstone Lab course. PSYCH 3020 may be taken concurrently with PSYCH 4976HW or PSYCH 4976W. PSYCH 3020 must be completed before PSYCH 4977HW or PSYCH 4977W. We make no other exceptions to the research methods sequence requirements.
- Students must complete at least 6 credit hours in psychology courses numbered 4000 or above. The Psychology Capstone Lab may be used to meet this requirement.
- Students must complete at least one psychology course numbered 3000 or above that is designated Writing Intensive (WI). A WI Psychology Capstone Lab can meet this requirement.
- Students may use no more than 12 hours of Special Problems Courses, Special Readings Courses, or Internship Courses (PSYCH 2950, PSYCH 4940, PSYCH 4950, & PSYCH 4960) toward graduation. Within the 12 hours, no more than 9 hours may be Special Problems Courses (i.e., psychology research credit hours). A student may complete either 6 hours of PSYCH 2950 and 3 hours of PSYCH 4950, or they may complete 3 hours of PSYCH 2950 and 6 hours of PSYCH 4950.
- Psych majors may have up to a total of 6 hours of PSYCH 4940. Internships are not required for the psychology major.
- Other than the 12 hour limit of Special Problems Courses, Special Readings Courses, and Internship hours described above, there is no limit to the number of psychology credits that may count toward the required 120 credits to graduate with the Bachelor of Science.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PSYCH 1000</td>
<td>General Psychology</td>
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<tr>
<td>or PSYCH 1000H</td>
<td>General Psychology - Honors</td>
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<tr>
<td>MATH 1100</td>
<td>College Algebra</td>
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<tr>
<td>STAT 2500</td>
<td>Introduction to Probability and Statistics</td>
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<tr>
<td>or STAT 1200</td>
<td>Introductory Statistical Reasoning</td>
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<tr>
<td>&amp; STAT 2200</td>
<td>and Introductory Statistical Methods</td>
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<tr>
<td>or STAT 1400</td>
<td>Elementary Statistics for Life Sciences</td>
<td></td>
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<tr>
<td>&amp; STAT 2200</td>
<td>and Introductory Statistical Methods</td>
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Research Methods Sequence

<table>
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<tr>
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<tr>
<td>PSYCH 3010</td>
<td>Research Methods in Psychology I</td>
<td>3</td>
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<tr>
<td>or PSYCH 3010H</td>
<td>Research Methods in Psychology I - Honors</td>
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<tr>
<td>PSYCH 3020</td>
<td>Research Methods in Psychology II</td>
<td>3</td>
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<tr>
<td>or PSYCH 3020H</td>
<td>Research Methods in Psychology II - Honors</td>
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</table>

Capstone course (psychology lab course) 3-6

Distribution Areas

Psychology majors are required to complete four distribution courses -- two courses in each of two distribution areas. This ensures that students will have exposure to a wide range of psychological theory and research. In addition, students choose two required additional Psychology courses (6 credit hours) to receive further education according to their interests. Although the distribution areas are presented below as distinct areas of study, a great deal of overlap exists among them. Students should understand the ways in which the various areas complement one another and gain the ability to integrate information learned in the different areas.

Clinical/Social/Developmental Distribution

This distribution area studies the nature and causes of individuals’ thoughts, feelings and behavior in social situations. It analyzes the cultural and biological influences on age-related changes in cognition, emotion, and social behavior that take place throughout an individual’s lifespan. It focuses on scientific study of the causes of mental disorders as well as methods for assessing and alleviating mental health problems. It also is concerned with the study of mental health and wellness, including strategies for preventing the development of mental disorders. Courses in this distribution area include:
Cognitive/Neuroscience Distribution

This distribution area studies the mechanisms of the mind and how they are altered by experience. It also examines the biological basis of the behavior of humans and animals. Courses in this distribution area include:

- PSYCH 2310 Social Psychology 3
- PSYCH 2311 The Art and Science of Living 3
- PSYCH 2320 Introduction to Personality 3
- PSYCH 2410 Developmental Psychology 3
- or PSYCH 2410H Developmental Psychology - Honors
- PSYCH 2411 Stories and Selves 3
- PSYCH 2510 Survey of Psychopathology 3
- PSYCH 2520 Introduction to Addiction Science 3
- PSYCH 2511 Military and Veterans Psychology 3
- PSYCH 2810 Human Sexuality 3
- PSYCH 2830 Human-Companion Animal Interaction 3
- PSYCH 2930 Religion and Psychological Perspectives 3
- PSYCH 3310 Intergroup Relations 3
- PSYCH 3350 Positive Psychology 3
- PSYCH 3351 Positive Motivation 3
- PSYCH 3370 The Science of Mindfulness 3
- or PSYCH 3370W The Science of Mindfulness - Writing Intensive
- PSYCH 3420 Cognitive Development in Childhood 3
- PSYCH 3430 Social Development in Childhood 3
- or PSYCH 3430W Social Development in Childhood - Writing Intensive
- PSYCH 3440 Women's Professional Development 3
- or PSYCH 3440H Women's Professional Development - Honors
- PSYCH 3510 Introduction to Clinical Psychology 3
- or PSYCH 3510W Introduction to Clinical Psychology - Writing Intensive
- PSYCH 3511 Emotion Regulation and the Brain 3
- PSYCH 3815 Cross-Cultural Psychology 3
- or PSYCH 3815H Cross-Cultural Psychology - Honors
- PSYCH 3830 Health Psychology 3
- PSYCH 3840 Individual Differences 3
- PSYCH 3880 African-American Psychology 3
- PSYCH 4440 Sex Differences 3
- PSYCH 4441 Psychology of Youths' Close Relationships 3
- PSYCH 4442 Language and Development in Infancy 3
- PSYCH 4520 Behavior Genetics 3
- PSYCH 4530 Research in Psychopathology 3
- PSYCH 4540 Emotional Disorders in Childhood and Adolescence 3
- PSYCH 4560 Schizophrenia 3
- PSYCH 4561 Psychosis and the Brain 3
- PSYCH 4563 Behavioral and Technology Addictions 3
- PSYCH 4570 Pediatric Neuropsychology 3
- PSYCH 4580 Externalizing Spectrum Disorders 3
- PSYCH 4830 Psychology of Women 3

Note: Due to the overlap in course content, a student may receive credit for only one of the following courses: PSYCH 2410 or PSYCH 2410H or ESC_PS 2500.

Note: Due to overlap in course content, a student may not receive credit for both PSYCH 3350 and ESC_PS 4200.

Psychology Electives (2000-level) 6 credit hours

Students must complete 6 credit hours of psychology elective courses numbered 2000 or above. Up to 3 credit hours may include special problems (e.g., PSYCH 2950 or PSYCH 4950), readings (e.g., PSYCH 4960) or internship (e.g., PSYCH 4940). Capstone Labs may not be counted in this area.

Second Language Alternative for students pursuing a Bachelor of Science in Psychological Sciences

Students pursuing the Bachelor of Science in Psychological Sciences may opt to satisfy the second language requirement through approved alternative coursework consisting of at least 12 credits in courses numbered 2000 or above from any combination of the following subjects: Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Korean, Portuguese, Russian, South Asian Studies, and/or Spanish. These courses may not be used to satisfy other degree requirements with the exception of the Writing Intensive requirement. Students should note that the option of a Second Language Alternative is applicable specifically to the Bachelor of Science in Psychological Sciences. The Second Language Requirement for the Bachelor of Arts in Psychological Sciences and for the Bachelor of Arts in Psychology is 12 to 13 hours of a single second language sequence.

Approved Science Course Tracks

Psychological Sciences Bachelor of Science students must complete 12 credit hours of approved science coursework in one of the following five approved areas: Biological Sciences, Chemistry, Computer Science,
Mathematics, or Statistics. Course grades must be a C- or higher. Grades of D+ or below or U will not be accepted.

**Biological Sciences Track**

**Required Core: (5 hours)**
- CMP_SC 2050 Introduction to Biological Systems with Laboratory 5
- CMP_SC 1050 General Principles and Concepts of Biology and General Biology Laboratory

**Additional Approved Coursework (at least 7 credit hours from the list below)**
- CMP_SC 2200 Cell Biology 1
- CMP_SC 220H Cell Biology - Honors
- CMP_SC 2300 Introduction to Molecular Biology 4
- CMP_SC 2300H Introduction to Molecular Biology - Honors
- CMP_SC 2300HW Introduction to Molecular Biology - Honors/Writing Intensive 5

**Chemistry Track**

**Required Core: (6 to 8 hours)**
- CHEM 2100 College Chemistry I 3
- CHEM 2110 Organic Chemistry I 3
- CHEM 2110H Organic Chemistry I - Honors 5
- CHEM 2400 Fundamentals of Inorganic Chemistry with Lab 3
- CHEM 3200 Quantitative Methods of Analysis with Lab 4
- CHEM 3300 Fundamentals of Physical Chemistry (OR CHEM 3310 Physical Chemistry) 3
- CHEM 4170 Medicinal Chemistry 3
- CHEM 4400 Inorganic Chemistry 3

**Mathematical Sciences Track**

**Required Courses: (The Math Track requires 13 credit hours):**
- MATH 1700 Calculus I 5
- MATH 1700H Calculus I - Honors
- MATH 2300 Calculus III 3
- MATH 2300H Calculus III - Honors

**Statistics Track**

**Required Core: (6 hours)**
- STAT 3500 Introduction to Probability and Statistics II 3
- STAT 4710 Introduction to Mathematical Statistics 3

**Additional Approved Coursework (at least 6 credit hours from list below)**
- STAT 4710 Statistical Software and Data Analysis 3
- STAT 4710H Statistical Software and Data Analysis - Honors 3
- STAT 4830 Categorical Data Analysis 3

Note: Students completing this track must complete additional math courses to meet the pre-req's for STAT 4710. Students will complete MATH 1160 or MATH 1140 and MATH 1500, MATH 1700 and MATH 2300 in sequence as prerequisites to STAT 4710.

**Computer Science Track**

**Required Core: (8 hours):**
- CMP_SC 3380 Algorithm Design and Programming I 4
- CMP_SC 1050 Algorithm Design and Programming II 4

**Additional Approved Coursework (at least 6 credit hours from list below)**
- MATH 1700 Analytic Geometry and Calculus I 5
- MATH 1700H Analytic Geometry and Calculus I - Honors
- MATH 1700H Calculus II - Honors
- MATH 2300H Calculus III - Honors

**Semester Plan**

Below is a sample plan of study, semester by semester. A student’s actual plan may vary based on course choices where options are available. Psychology majors are required to earn a C- or higher (no D+ or below) in all Psychology courses, including STAT 2500 or STAT 1200 and STAT 2200 or STAT 1400 and STAT 2200 and all Science Track courses.

**First Year**

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<td>ENGLISH 1000</td>
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<td>3 Psych Cognitive/Neuroscience Distribution Course*</td>
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| Total | 15-17 |
### Second Year

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| Total Credits: 15-17  | 16-18 |

### Third Year

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| Total Credits: 16  | 15-17 |

### Fourth Year

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| Total Credits: 16-18  | 12-13 |

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1 Course meets degree program requirement.

* Course meets University General Education and/or campus graduation requirement.

+ Course meets College of Arts & Science foundation (Basic Skills)