

Psychological Sciences BS

By pursuing a Bachelor of Science (BS) degree in Psychological Sciences, students will learn about mental processes, the brain, and behavior in humans and other animals. Students will also learn to think critically, to understand and conduct scientific research, to communicate clearly, to take ethical and social responsibility, and to plan their careers. An important difference between the BS and the Bachelor of Arts (BA) degrees in Psychological Sciences is that the BS degree involves taking additional math and science classes beyond the general education math and science classes, while the BA degree involves learning a foreign language. Students can use the upper-level psychology courses to explore the breadth of Psychological Sciences or to focus on a specific subdiscipline such as mental health/trauma, child/lifespan development, or biological psychology. Students will be led and inspired by the faculty of the Department of Psychological Sciences, who are passionate about teaching and are actively involved in scientific research and community service.

General Education Course Requirements

Majors must satisfy the university and college General Education curricular requirements. Selected courses in Psychology may be used to meet General Education Social and Behavioral Sciences requirements.

Degree Requirements

Core

MATH 1030	College Algebra (MOTR MATH 130) ¹	3
MATH 1035	Trigonometry ¹	2
PSYCH 1000	Choosing a Career in Psychology ³	1
PSYCH 1003	General Psychology (MOTR PSYC 100)	3
PSYCH 2201	Psychological Statistics	4
PSYCH 2211	Introduction to Biological Psychology	3
PSYCH 2219	Research Methods in Psychological Science	3
PSYCH 2245	Psychological Disorders	3
PSYCH 2250	Social Psychological Science	3
PSYCH 2268	Lifespan Developmental Psychology (MOTR PSYC 200)	3
or PSYCH 2270	Developmental Psychology: Infancy, Childhood and Adolescence	
PSYCH 4999	Integrated Psychology	2

Additional Requirements

PHIL 2256	Bioethics	3
or PHIL 3380	Philosophy of Science	
Select four Psychology courses numbered 3000 to 4998 ²		12
In addition, select at least one of the following Psychology courses:		3

Neuroscience

PSYCH 4300	Introduction to Psychopharmacology: Drugs and Mental Illness	
PSYCH 4314	Behavioral Neuroscience	

PSYCH 4330		
PSYCH 4340	Introduction to Human Neuroanatomy	
PSYCH 4349	Human Learning and Memory	
PSYCH 4350	Emotions and the Brain	
PSYCH 4372	Introduction to Social Neuroscience	

Clinical

PSYCH 3340	Clinical Issues of Childhood	
PSYCH 3500	Health Psychology	
PSYCH 3820	Cross-Cultural Psychology	
PSYCH 4374	Introduction to Clinical Neuropsychology	

Applied

PSYCH 3318	Industrial and Organizational Psychology	
PSYCH 4250	Stereotyping, Prejudice, and Discrimination	
PSYCH 4365	Psychological Testing and Assessment	

Math and Natural Science 4-5

Choose one of the following:

BIOL 1141	Human Physiology and Anatomy II	
BIOL 1831	Introductory Biology: From Molecules to Organisms (MOTR BIOL 150L)	
CHEM 1111	Introductory Chemistry I (MOTR CHEM 150L)	
CHEM 1121	Introductory Chemistry II	
MATH 1800	Analytic Geometry and Calculus I	
PHYSICS 1011	Basic Physics I	

Social Science 3

Select one course from Anthropology, Criminology & Criminal Justice, Economics, Political Science, and Sociology

Total Hours 55-56

Candidates for the B.S. in Psychology must complete at least 40, 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:

- ¹ Students who test into MATH 1045 may meet the math core requirement in lieu of taking MATH 1030 and MATH 1035.
- ² No more than 3 hours can be PSYCH 3295 or PSYCH 3390.
- ³ PSYCH 1000 requirement must be satisfied before the student completes 24 hours of course work.

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 40 credits applied to the B.S. degree in Psychology. Failure to earn a C- or above in the ~~these~~ required courses will necessitate re-taking them for a satisfactory completion of the ~~C-~~ requirement in all 40 hours. No Psychology courses taken on a satisfactory/unsatisfactory basis may be applied to the major.

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).

Learning Outcomes

Upon completion of the degree, graduates of the BS in Psychology program at UM-St. Louis will be able to:

- Demonstrate an integrative understanding of psychological concepts, theories, research, and historical trends in psychology and the prediction of behavior across the scientific subdisciplines (e.g., behavioral neuroscience, clinical, developmental, industrial/organizational, social, etc.). **(Psychological Science Knowledge Base)**
- Summarize and explain use of the scientific approach to solve behavioral problems and articulate how behavioral explanations rely on critical thinking, scientific reasoning, weighing evidence and tolerating ambiguity. **(Critical Thinking)**
- Evaluate and identify appropriate research methods in psychology and at least one other STEM discipline, including research design, data analysis (i.e., selecting, conducting, and interpreting basic statistical tests) and data interpretation. **(Scientific Inquiry)**
- Communicate using a variety of formats in a clear, concise way. **(Communication)**
- Demonstrate respect for members of diverse groups with sensitivity to issues of power, privilege and discrimination, while adopting social and ethical values that build community at local, national and global levels. **(Ethical and Social Responsibility)**
- Display professionalism and ownership of professional growth and learning through an evolving career development plan tailored to one's accurate self-assessment of abilities, achievements, motivations and work habits. **(Professional Development)**

Sample Four Year Plan

First Year

Fall	Hours	Spring	Hours
INTDSC 1003 ¹		1 PSYCH 2245	3
PSYCH 1000		1 PSYCH 2268 or 2270	3
PSYCH 1003		3 BIOL 1012	3
ENGL 1100		3 MATH 1035	2
MATH 1030		3 CORE - Communication Proficiency	3
EXPLORE - Humanities & Fine Arts		3 EXPLORE - Mathematics and Life/ Natural Sciences	3
	14		17

Second Year

Fall	Hours	Spring	Hours
PSYCH 2201		4 PSYCH 2219	3
CORE - US History and Government		3 PSYCH 2250	3
EXPLORE - Mathematics and Life/ Natural Sciences		3 PSYCH XXXX Mathematics and Natural Science Major Requirement	3
EXPLORE - Humanities and Fine Arts		3 EXPLORE - Humanities and Fine Arts	3
Cultural Diversity Requirement		3 Elective or minor	3
	16		15

Third Year

Fall	Hours	Spring	Hours
PSYCH 2211		3 PSYCH 3XXX Psychology Sub Area Requirement	3
PHIL 2256 or 3380		3 PSYCH 3XXX Psychology Sub Area Requirement	3
PSYCH 3XXX Psychology Sub Area Requirement		3 PSYCH 3XXX Social Science Major Requirement	3
ENGL 3100		3 EXPLORE - Mathematics and Life/ Natural Sciences	3
Elective or minor		3 Elective or minor	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PSYCH 3000+ course		3 PSYCH 4999	2
Additional Neuroscience, Clinical, or Applied Psychology course		3 Elective or minor	3
Elective or minor		3 Elective or minor	3
Elective or minor		3 Elective or minor	3
Elective or minor		3 Elective or minor	3
	15		14

Total Hours: 121

¹ INTDSC 1003 is required only for first-time freshmen and transfer students with less than 24 college credits.

Please Note: This plan is an example of what a four year plan could look like for a typical student. Placement exam scores in math as well as the completion of coursework may change the plan. It should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor each semester. All requirements are subject to change.