

# Psychological Science (BS)

This program is offered by the College of Science and Health/ Psychology Department and is only available at the St. Louis main campus.

STEM program

## Program Description

The bachelor of science (BS) in psychological science is designed to provide the biological, cognitive, personality and social context for understanding the behavior of individuals throughout their lifespan. Students who successfully complete the BS in psychological science will have the foundation, research skills and data analysis expertise to succeed in a MA/PhD psychology graduate program (e.g. clinical psychology, experimental psychology, etc.).

Students graduating with a bachelor of science (BS) in psychological science will need to pursue a graduate degree before they are able to obtain professional licensure. Students are encouraged to check entrance requirements for any post-graduate programs prior to finishing their BS at Webster in the event they need to take additional coursework.

## Learning Outcomes

Upon completion of the program, students will be able to:

- Demonstrate a comprehensive understanding of the major concepts, theoretical perspectives, historical trends, and empirical or evidence-based findings in psychology. Apply these psychological science principles to critically evaluate behavior, mental processes and problems of everyday life.
- Apply scientific reasoning to investigate psychological phenomena, in the design and evaluation of research, and the use of statistical methods to interpret quantitative findings. Identify, incorporate, and evaluate sociocultural factors in psychological research.
- Apply ethical standards and socially responsible values across psychological science endeavors including research, practice, and academics. Through the application of psychological principles, demonstrate interpersonal and intercultural responsiveness, to improve quality of life from the local to global levels.
- Demonstrate effective interpersonal and communication skills in processing and expressing information through constructive interactions with others, written and presentation skills for diverse purposes, evidence of psychological literacy, and use of appropriate technological tools to enhance communication. Demonstrate knowledge of equity, diversity, and inclusion to improve communication effectiveness.
- Demonstrate personal and professional growth through self-regulation, effective project management, sound judgment in professional interactions, and collaborative and technological skills in the workplace, leading to a clear plan for life after graduation.
- Detail the biological and genetic underpinnings of human behavior.
- Develop a research hypothesis based on the current psychological science, and then collect, analyze, interpret, and present the data to address the question.

## Degree Requirements

For information on the general requirements for a degree, see Baccalaureate Degree Requirements under the Academic Policies and Information section of this catalog.

- 58 required credit hours

- Applicable University Global Citizenship Program hours, with accommodations for the psychological science BS
- Electives

## Global Citizenship Program for Psychological Science BS

For students completing the psychological science BS, MATH 1430 will satisfy both the requirements of the major and the GCP 'Quantitative Literacy' requirement. BIOL 1010 and BIOL 1040 cannot be used to complete GCP requirements.

## Special Requirements

- Courses completed with a grade below a C- do not count toward fulfilling the specific course requirements of the major.
- Within the 6 credit hours of psychology electives, at least 3 credit hours must be at the 4000-level.
- No more than 6 credit hours obtained in independent learning experiences, reading courses, and assessment of prior learning may be applied toward the 58 credit hours required for the major. However, students may use any number of independent learning experiences, etc. toward their overall bachelor degree requirements.
- Transfer students can apply up to 18 credit hours of approved PSYC course work from other colleges/universities toward the psychology major.
- Student may substitute a higher-level math or biology course for the non-psychology supporting core curriculum requirement. Students must confirm this substitution with the psychology department. Students may also transfer in these requirements.

## Curriculum

The 58 credit hours required for the bachelor of science in psychological science include the following:

### Non-Psychology Supporting Core Requirements:

- MATH 1430 College Algebra (3 hours)
- BIOL 1010 Human Biology (4 hours)
- BIOL 1040 Human Genetics (3 hours)

### Psychology Core Requirements:

- PSYC 1100 Introduction to Psychology (3 hours)
- PSYC 1800 Careers in Psychology (3 hour)
- PSYC 2750 Introduction to Measurement and Statistics (3 hours)
- PSYC 2825 Introduction to Research Methods (3 hours)
- PSYC 3025 Psychology and Ethics (3 hours)
- PSYC 3675 Professional Seminar in Psychology (3 hours)
- PSYC 3825 Psychological Research Design and Analysis (3 hours)
- PSYC 4750 Advanced Statistics (3 hours)
- PSYC 4825 Psychological Science Thesis (3 hours)
- Psychology electives (*at least 3 hours at the 4000-level*) (6 hours)

**At least ONE course from EACH of the following five content areas:**

### Biological Perspectives

- PSYC 3850 Sensation and Perception (3 hours)
- PSYC 4300 Health Psychology (3 hours)
- PSYC 4550 Drug and Chemical Dependency (3 hours)
- PSYC 4650 Biopsychology (3 hours)

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## Clinical and Counseling Perspectives

- PSYC 3125 Psychological Disorders (3 hours)
- PSYC 3775 Personality Theory (3 hours)
- PSYC 3900 Introduction to Counseling (3 hours)
- PSYC 4225 Introduction to the Helping Professions (3 hours)

## Lifespan Development Perspectives

- PSYC 2200 Child Psychology (3 hours)
- PSYC 2250 Adolescent Psychology (3 hours)
- PSYC 2300 Lifespan Development (3 hours)
- PSYC 2950 Psychology of Adulthood and Aging (3 hours)

## Learning and Cognitive Perspectives

- PSYC 3325 Applied Learning Theory (3 hours)
- PSYC 3350 Cognitive Psychology (3 hours)
- PSYC 3525 Memory (3 hours)
- PSYC 3725 Psychology of Judgment and Decision Making (3 hours)

## Social and Cross-Cultural Perspectives

- PSYC 3475 International Psychology (3 hours)
- PSYC 3575 Industrial/Organizational Psychology (3 hours)
- PSYC 3600 Social Psychology (3 hours)
- PSYC 3625 Motivation and Emotion (3 hours)

## Recommended Courses

- PSYC 4425 Community Practicum (3 hours)

## Dual Degree Option: BS in Psychological Science/BA in Biology

Students who wish to pursue a dual degree of the bachelor of arts in biology and the bachelor of science in psychological science may do so. Two separate diplomas are issued at the same time. The two degrees cannot be awarded separately or sequentially under this arrangement.

### Degree Requirements

For information on the general requirements for a degree, see Baccalaureate Degree Requirements under the Academic Policies and Information section of this catalog. For information on the general requirements for dual degrees, see Dual Majors and Dual Degrees under the Academic Policies and Information section of this catalog.

- 107 required credit hours
- Applicable University Global Citizenship Program hours, with accommodations\*

\*All students pursuing a dual degree will complete the Global Citizenship Program requirements of one of the programs. Students should review the GCP accommodations for each degree before making their selection of which GCP program to pursue.

### Curriculum

- MATH 1430 College Algebra (3 hours)
- PSYC 1100 Introduction to Psychology (3 hours)
- PSYC 1800 Careers in Psychology (3 hour)
- PSYC 2750 Introduction to Measurement and Statistics (3 hours)
- PSYC 2825 Introduction to Research Methods (3 hours)
- PSYC 3025 Psychology and Ethics (3 hours)

- PSYC 3800 Professional Seminar in Psychology (3 hours)
- Psych 3825 Psychological Research Design and Analysis (3 hours)
- PSYC 4750 Advanced Statistics (3 hours)
- PSYC 4825 Psychological Sciences Thesis (3 hours)
- Psychology electives (*at least 3 hours at the 4000-level*) (3 hours)
- Psychology content areas (15 hours)
- BIOL 1550 Essentials of Biology I (4 hours)  
and BIOL 1551 Essentials of Biology I: Lab (1 hour)
- BIOL 1560 Essentials of Biology II (4 hours)  
and BIOL 1561 Essentials of Biology II: Lab (1 hour)
- BIOL 2010 Evolution (3 hours)
- BIOL 3010 Human Anatomy & Physiology I (3 hours)  
and BIOL 3011 Human Anatomy & Physiology I: Lab (1 hour)
- BIOL 3020 Human Anatomy & Physiology II (3 hours)  
and BIOL 3021 Human Anatomy & Physiology II: Lab (1 hour)
- BIOL 3050 Genetics (3 hours)  
and BIOL 3051 Genetics: Lab (1 hour)
- BIOL 3200 Ecology (3 hours)  
and BIOL 3201 Ecology: Lab (1 hour)
- BIOL 4400 Research Methods (3 hours)
- BIOL 4420 BA Senior Thesis (4 hours)
- CHEM 1100 General Chemistry I (3 hours)  
and CHEM 1101 General Chemistry I: Lab (1 hour)
- CHEM 1110 General Chemistry II (3 hours)  
and CHEM 1111 General Chemistry II: Lab (1 hour)
- CHEM 2100 Organic Chemistry I (3 hours)  
and CHEM 2101 Organic Chemistry I: Lab (1 hour)
- PHYS 1710 College Physics I (3 hours)  
and PHYS 1711 College Physics I: Lab (1 hour)
- PHYS 1720 College Physics II (3 hours)  
and PHYS 1721 College Physics II: Lab (1 hour)
- BIOL, CHEM or PHYS electives (*2000-level or above*) (3 hours)

## Dual Major Option: Psychological Science/Biological Sciences

Students who wish to pursue a dual major in biological sciences and psychological science may do so. The two majors cannot be awarded separately or sequentially under this arrangement.

### Degree Requirements

For information on the general requirements for a degree, see Baccalaureate Degree Requirements under the Academic Policies and Information section of this catalog. For information on the general requirements for dual degrees, see Dual Majors and Dual Degrees under the Academic Policies and Information section of this catalog.

- 117 required credit hours
- Applicable University Global Citizenship Program hours, with accommodations\*

\*All students pursuing a dual degree will complete the Global Citizenship Program requirements of one of the programs. Students should review the GCP accommodations for each degree before making their selection of which GCP program to pursue.

### Curriculum

- PSYC 1100 Introduction to Psychology (3 hours)
- PSYC 1800 Careers in Psychology (3 hour)

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- PSYC 2750 Introduction to Measurement and Statistics (3 hours)
- PSYC 2825 Introduction to Research Methods (3 hours)
- PSYC 3025 Psychology and Ethics (3 hours)
- PSYC 3800 Professional Seminar in Psychology (3 hours)
- PSYC 3825 Psychological Research Design and Analysis (3 hours)
- PSYC 4750 Advanced Statistics (3 hours)
- PSYC 4825 Psychological Sciences Thesis (3 hours)
- Psychology electives (*at least 3 hours at the 4000-level*) (3 hours)
- Psychology content areas (15 hours)
- BIOL 1550 Essentials of Biology I (4 hours)  
and BIOL 1551 Essentials of Biology I: Lab (1 hour)
- BIOL 1560 Essentials of Biology II (4 hours)  
and BIOL 1561 Essentials of Biology II: Lab (1 hour)
- BIOL 2010 Evolution (3 hours)
- BIOL 3010 Human Anatomy & Physiology I (3 hours)  
and BIOL 3011 Human Anatomy & Physiology I: Lab (1 hour)
- BIOL 3020 Human Anatomy & Physiology II (3 hours)  
and BIOL 3021 Human Anatomy & Physiology II: Lab (1 hour)
- BIOL 3050 Genetics (3 hours)  
and BIOL 3051 Genetics: Lab (1 hour)
- BIOL 3080 Cell Biology (3 hours)  
and BIOL 3081 Cell Biology: Lab (1 hour)
- BIOL 4400 Research Methods (3 hours)
- BIOL 4430 Senior Thesis for BS in Biological Sciences (4 hours)
- CHEM 1100 General Chemistry I (3 hours)  
and CHEM 1101 General Chemistry I: Lab (1 hour)
- CHEM 1110 General Chemistry II (3 hours)  
and CHEM 1111 General Chemistry II: Lab (1 hour)
- CHEM 2100 Organic Chemistry I (3 hours)  
and CHEM 2101 Organic Chemistry I: Lab (1 hour)
- CHEM 2110 Organic Chemistry II (3 hours)  
and CHEM 2111 Organic Chemistry II: Lab (1 hour)
- CHEM 3100 Biochemistry I (3 hours)  
and CHEM 3101 Biochemistry I: Lab (1 hour)
- MATH 1610 Calculus I (5 hours)
- PHYS 2030 University Physics I (3 hours)  
and PHYS 2031 University Physics I: Lab (1 hour)
- PHYS 2040 University Physics II (3 hours)  
and PHYS 2041 University Physics II: Lab (1 hour)
- BIOL, CHEM or PHYS upper level electives (3 hours)

## Dual Major Option: Psychological Science/ Exercise Science

Students who wish to pursue a dual major in exercise science and psychological science may do so. The two majors cannot be awarded separately or sequentially under this arrangement.

### Degree Requirements

For information on the general requirements for a degree, see Baccalaureate Degree Requirements under the Academic Policies and Information section of this catalog. For information on the general requirements for dual degrees, see Dual Majors and Dual Degrees under the Academic Policies and Information section of this catalog.

- 116 required credit hours
- Applicable University Global Citizenship Program hours, with accommodations\*

\*All students pursuing a dual degree will complete the Global Citizenship Program requirements of one of the programs.

Students should review the GCP accommodations for each degree before making their selection of which GCP program to pursue.

### Curriculum

- MATH 1430 College Algebra (3 hours)
- BIOL 1040 Human Genetics (3 hours)
- PSYC 1100 Introduction to Psychology (3 hours)
- PSYC 1800 Careers in Psychology (3 hour)
- PSYC 2750 Introduction to Measurement and Statistics (3 hours)
- PSYC 2825 Introduction to Research Methods (3 hours)
- PSYC 3025 Psychology and Ethics (3 hours)
- PSYC 3675 Professional Seminar in Psychology (3 hours)
- PSYC 3825 Psychological Research Design and Analysis (3 hours)
- PSYC 4750 Advanced Statistics (3 hours)
- PSYC 4825 Psychological Sciences Thesis (3 hours)
- Psychology electives (*at least 3 hours at the 4000-level*) (3 hours)
- Psychology content areas (15 hours)
- BIOL 1550 Essentials of Biology I (4 hours)  
and BIOL 1551 Essentials of Biology I: Lab (1 hour)
- BIOL 2350 Nutrition (3 hours)
- BIOL 3010 Human Anatomy & Physiology I (3 hours)  
and BIOL 3011 Human Anatomy & Physiology I: Lab (1 hour)
- BIOL 3020 Human Anatomy & Physiology II (3 hours)  
and BIOL 3021 Human Anatomy & Physiology II: Lab (1 hour)
- BIOL 4400 Research Methods (3 hours)
- EXSC 1318 Careers in Exercise Science (1 hour)
- EXSC 1400 Foundations of Exercise Science (3 hours)
- EXSC 2100 Coaching Health and Human Performance (2 hours)
- EXSC 2356 Principles of Athletic Training (3 hours)
- EXSC 3050 Exercise Physiology (3 hours)
- EXSC 3250 Kinesiology (3 hours)  
and EXSC 3251 Exercise Kinesiology: Lab (1 hour)
- EXSC 4680 Exercise Prescription and Testing (3 hours)  
and EXSC 4681 Exercise Testing and Prescription: Lab (1 hour)
- EXSC 4683 Exercise Prescription for Special Populations (3 hours)
- EXSC 4875 Exercise Science Internship (3 hours)
- CHEM 1100 General Chemistry I (3 hours)  
and CHEM 1101 General Chemistry I: Lab (1 hour)
- CHEM 1110 General Chemistry II (3 hours)  
and CHEM 1111 General Chemistry II: Lab (1 hour)
- PHYS 1710 College Physics I (3 hours)  
and PHYS 1711 College Physics I: Lab (1 hour)
- PHYS 1720 College Physics II (3 hours)  
and PHYS 1721 College Physics II: Lab (1 hour)
- Elective (minimum 3 credits)

**Elective:** Students choose from **ONE** of the following courses (not already completed for program requirements)

- BIOL 4430 Senior Thesis for BS in Biological Science (4 hours)
- BIOL 1800 Medical Terminology (3 hours)
- PSYCH 3075 Stress Management (3 hours)
- PSYC 3125 Psychological Disorders (3 hours)
- PSYC 3150 Positive Psychology (3 hours)
- PSYC 4300 Health Psychology (3 hours)