Twin Cities Campus Psychology B.S. Psychology

College of Liberal Arts

- Program Type: Baccalaureate
- Requirements for this program are current for Spring 2021
- Required credits to graduate with this degree: 120
- Required credits within the major: 54 to 61
- Degree: Bachelor of Science

For millennia, our survival as human beings has depended on our ability to understand and predict others behaviors. Today, personal and professional success continues to depend on understanding and predicting human experiences and behavior. Psychology is the scientific study of these experiences and behaviors. Given humans imposing complexity, psychologists employ a range of perspectives, including evolutionary, biological, social, organizational, institutional, and sociocultural. In turn, these perspectives influence psychologists levels of explanation, from genetics to brain physiology, personality, individual differences, social interactions and group memberships, the institutions that we inhabit, and the cultures in which we spend our lives. Like all liberal arts disciplines, psychology addresses human experience, but what makes psychology unique as a scientific discipline are the concepts that psychologists use to make sense of people and the methods that they use to learn more about them.

Our baccalaureate programs provide students with a strong general background in all areas of psychology and with the ability to think and reason critically in a wide variety of settings. All psychology students complete three critical courses essential to achieve those goals: PSY 1001 (Introduction to Psychology) provides a broad overview of what psychologists know about human behavior; PSY 3001W (Introduction to Research Methods) focuses on the skills necessary to generate new knowledge; and PSY 3801 (Introduction to Psychological Measurement and Data Analysis) addresses the skills necessary to test hypotheses using statistical methods. Students will complete additional courses focused on their individual interests, and even if they never plan to become psychological scientists, students will develop the skills needed throughout their lives

to be sophisticated evaluators of psychological information and to navigate the complexities of human behavior.

The B.S. degree emphasizes outside coursework closely related to biological and quantitative psychology, including fields such as neuroscience, cognitive and computer science, biology, chemistry, and mathematics. The B.S. prepares students for graduate work in psychology and related fields, and we encourage students interested in the biological, genetic, or evolutionary underpinnings of human behavior to complete outside courses in the life sciences, including biology, chemistry, and evolution. We encourage students interested in quantitative approaches and the cognitive underpinnings of human behavior to complete outside courses in mathematics, statistics, and computer science. A B.S. degree in psychology provides a valuable background for a variety of careers and graduate and professional academic programs, including psychology, medicine, neuroscience, and computer science. A professional career as a psychologist requires training beyond the baccalaureate degree.

Program Delivery

This program is available:

• via classroom (the majority of instruction is face-to-face)

Admission Requirements

Prospective majors are strongly encouraged to complete PSY 3801 (or a Department of Psychology approved equivalent transfer course) and two Outside Foundation Courses prior to formally declaring the major.

To declare a major, students first complete the Online Declaration Module (https://cla.umn.edu/psychology/undergraduate/majors-minors/declare-your-major) and then schedule an appointment with a psychology advisor (psyadvis@umn.edu).

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the <u>liberal education requirements</u>. Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

Program Requirements

At least 16 upper-division credits in the major must be taken at the University of Minnesota Twin Cities campus. 9 credits within the Outside Foundation Courses requirement must be taken at the University of Minnesota Twin Cities campus.

Students may earn no more than one undergraduate degree in psychology: a BA or a BS or a minor. Students may combine the psychology BS with the developmental psychology minor, but not with the developmental psychology BA or BS.

All incoming CLA freshmen must complete the First-Year Experience course sequence.

All students must complete a capstone in at least one CLA major. The requirements for double majors completing the capstone in a different CLA major will be clearly stated. Students must also complete all major requirements in both majors to allow the additional capstone to be waived. Student completing an addition degree must complete the capstone in each degree area.

Outside Foundation Courses Take 18 or more credit(s) including 3 or more sub-requirements(s) from the following: Philosophy Take 0 - 11 credit(s) from the following: •PHIL 1005 - Scientific Reasoning (4.0 cr) •PHIL 3601W - Scientific Thought [WI] (4.0 cr) •PHIL 3607 - Philosophy of Psychology (4.0 cr) •PHIL 5201 - Symbolic Logic I (4.0 cr) •PHIL 5202 - Symbolic Logic II (4.0 cr) •PHIL 1001 - Introduction to Logic [MATH] (4.0 cr) or PHIL 1001H {Inactive}[MATH] (4.0 cr) •PHIL 3605 - Disease, Diagnosis, and Intervention: Conceptual Issues in Medicine (3.0 cr) or PHIL 4607 - Philosophy of the Biological Sciences (3.0 cr) Computer Science/Math Take 0 - 11 credit(s) from the following: •CSCI 1103 - Introduction to Computer Programming in Java (4.0 cr) •CSCI 1113 - Introduction to C/C++ Programming for Scientists and Engineers (4.0 cr) •MATH 2243 - Linear Algebra and Differential Equations (4.0 cr) •MATH 2263 - Multivariable Calculus (4.0 cr) •CSCI 1133 - Introduction to Computing and Programming Concepts (4.0 cr) or CSCI 1133H - Honors Introduction to Computing and Programming Concepts (4.0 cr) •CSCI 1933 - Introduction to Algorithms and Data Structures (4.0 cr) or CSCI 1933H - Honors Introduction to Algorithms and Data Structures (4.0 cr) or CSCI 1913 - Introduction to Algorithms, Data Structures, and Program Development (4.0 cr) •CSCI 2011 - Discrete Structures of Computer Science (4.0 cr) or CSCI 2011H - Honors Discrete Structures of Computer Science (4.0 cr) •MATH 1142 - Short Calculus [MATH] (4.0 cr) or MATH 1241 - Calculus and Dynamical Systems in Biology [MATH] (4.0 cr) or MATH 1371 - CSE Calculus I [MATH] (4.0 cr) or MATH 1271 - Calculus I [MATH] (4.0 cr) or MATH 1571H - Honors Calculus I [MATH] (4.0 cr) •MATH 1272 - Calculus II (4.0 cr) or MATH 1572H - Honors Calculus II (4.0 cr) Physical Science Take 0 - 11 credit(s) from the following: •CHEM 1015 - Introductory Chemistry: Lecture [PHYS] (3.0 cr) •CHEM 1017 - Introductory Chemistry: Laboratory [PHYS] (1.0 cr) CHEM 1061 - Chemical Principles I [PHYS] (3.0 cr) with CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr) or CHEM 1071H - Honors Chemistry I [PHYS] (3.0 cr) with CHEM 1075H - Honors Chemistry I Laboratory [PHYS] (1.0 cr) or CHEM 1081 - Chemistry for the Life Sciences I [PHYS] (3.0 cr) with CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr) CHEM 1062 - Chemical Principles II [PHYS] (3.0 cr) with CHEM 1066 - Chemical Principles II Laboratory [PHYS] (1.0 cr) or CHEM 1072H - Honors Chemistry II [PHYS] (3.0 cr) with CHEM 1076H - Honors Chemistry II Laboratory [PHYS] (1.0 cr) •CHEM 1082 - Chemistry for the Life Sciences II (3.0 cr) with CHEM 1086 - Chemistry for the Life Sciences II Laboratory (1.0 cr) •CHEM 2081 - Chemistry for the Life Sciences III (3.0 cr) with CHEM 2085 - Chemistry for the Life Sciences III Laboratory (2.0 cr) •CHEM 2301 - Organic Chemistry I (3.0 cr) or CHEM 2331H - Honors Elementary Organic Chemistry I (3.0 cr) •CHEM 2302 - Organic Chemistry II (3.0 cr)

or CHEM 2332H - Honors Elementary Organic Chemistry II (3.0 cr)

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•CHEM 2311 - Organic Lab (4.0 cr)
 or CHEM 2312H - Honors Organic Lab (5.0 cr)
•PHYS 1101W - Introductory College Physics I [PHYS, WI] (4.0 cr)
 or PHYS 1107 - Introductory Physics Online I [PHYS] (4.0 cr)
•PHYS 1102W - Introductory College Physics II [PHYS, WI] (4.0 cr)
 or PHYS 1108 - Introductory Physics Online II [PHYS] (4.0 cr)
•PHYS 1201W {Inactive}[PHYS, WI] (5.0 cr)
  or PHYS 1301W - Introductory Physics for Science and Engineering I [PHYS, WI] (4.0 cr)
 or PHYS 1401V - Honors Physics I [PHYS, WI] (4.0 cr)
•PHYS 1202W {Inactive}[PHYS, WI] (5.0 cr)
  or PHYS 1302W - Introductory Physics for Science and Engineering II [PHYS, WI] (4.0 cr)
 or PHYS 1402V - Honors Physics II [PHYS, WI] (4.0 cr)

    Biological Science

Take 0 - 11 credit(s) from the following:
•ANTH 1001 - Human Evolution [BIOL] (4.0 cr)
•BIOL 1101 - Genetics and Society [CIV] (3.0 cr)
•EEB 3409 - Evolution (3.0 cr)
•NSCI 3505W - Mind and Brain [WI] (4.0 cr)
•NSCI 3101 - Neurobiology I: Molecules, Cells, and Systems (3.0 cr)
•PHSL 3061 - Principles of Physiology (4.0 cr)
•ANTH 3002 - Sex, Evolution, and Behavior: Examining Human Evolutionary Biology (4.0 cr)
 or EEB 3002 - Sex, Evolution, and Behavior: Examining Human Evolutionary Biology (4.0 cr)
•ANTH 4329 - Primate Ecology and Social Behavior (3.0 cr)
 or EEB 4329 - Primate Ecology and Social Behavior (3.0 cr)
•BIOC 3021 - Biochemistry (3.0 cr)
 or BIOC 3022 - Biochemistry for Life Scientists (3.0 cr)
 BIOL 1001 - Introductory Biology: Evolutionary and Ecological Perspectives [BIOL] (4.0 cr)
  or BIOL 1001H - Introductory Biology I: Evolutionary and Ecological Perspectives [BIOL] (4.0 cr)
 or BIOL 1003 - Evolution and Biology of Sex [BIOL] (4.0 cr)
•BIOL 1009 - General Biology [BIOL] (4.0 cr)
  or BIOL 1009H - Honors: General Biology [BIOL] (4.0 cr)
 BIOL 1951 - Foundations of Biology Lecture I for Biological Sciences Majors [BIOL] (4.0 cr)
   with BIOL 1961 - Foundations of Biology Lab I for Biological Sciences Majors [BIOL] (2.0 cr)
•BIOL 4003 - Genetics (3.0 cr)
 or GCD 3022 - Genetics (3.0 cr)
•BIOL 4004 - Cell Biology (3.0 cr)
 or GCD 3033 - Principles of Cell Biology (3.0 cr)
•EEB 3411 - Introduction to Animal Behavior (3.0 cr)
 or EEB 3412W - Introduction to Animal Behavior, Writing Intensive [WI] (4.0 cr)
 or EEB 3811W - Animal Behavior in the Field [WI] (4.0 cr)

    NSCI 2001 - Human Neuroanatomy (without a lab) (3.0 cr)

 or NSCI 2101 - Human Neuroanatomy [BIOL] (4.0 cr)
•PHSL 3050 {Inactive}(3.0 cr)
 or PHSL 3051 - Human Physiology (4.0 cr)
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Major Courses

Take 36 or more total credits including: Foundation Courses, Distribution Area Courses, Senior Project and any Electives needed to reach the minimum 36 credits in Psychology coursework. 3 Foundation Courses, 5 Distribution Area Courses, and Capstone are all required.

Foundation Courses

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Take exactly 3 course(s) from the following:

•PSY 1001 - Introduction to Psychology [SOCS] (4.0 cr)

or PSY 1001H - Honors Introduction to Psychology [SOCS] (4.0 cr)

•PSY 3801 - Introduction to Psychological Measurement and Data Analysis [MATH] (4.0 cr)

or PSY 3801H - Honors Introduction to Psychological Measurement and Data Analysis [MATH] (4.0 cr)

•PSY 3001W - Introduction to Research Methods [WI] (4.0 cr)

or PSY 3001V - Honors Introduction to Research Methods [WI] (4.0 cr)
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Distribution Area Courses

At least one course in Distribution Area courses must be at the 4xxx level or above, excluding: CPSY 4303, PSY 4902V, 4960, 4993, 4994V, 4996H, 5960, & 5993. Students should take additional Psychology courses from the Distribution Areas lists or the list of "Additional Elective Options" to reach the 36 credit minimum for the major.

Take 5 or more course(s) from the following:

Distribution Area A: Cognitive and Brain Sciences

Take 2 or more course(s) totaling 6 or more credit(s) from the following:

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    PSY 3011 - Introduction to Learning and Behavior (3.0 cr)

•PSY 3031 - Introduction to Sensation and Perception (3.0 cr)
•PSY 3051 - Introduction to Cognitive Psychology (3.0 cr)
•PSY 3061 - Introduction to Biological Psychology (3.0 cr)
•PSY 4021 - Creativity Sciences: Minds, Brains, and Innovation (3.0 cr)
•PSY 4032 - Psychology of Music (3.0 cr)
•PSY 4036 - Perceptual Issues in Visual Impairment (3.0 cr)
•PSY 5014 - Psychology of Human Learning and Memory (3.0 cr)
•PSY 5015 - Cognition, Computation, and Brain (3.0 cr)
•PSY 5018H - Mathematical Models of Human Behavior (3.0 cr)
•PSY 5031W - Perception [WI] (3.0 cr)
•PSY 5036W - Computational Vision [WI] (3.0 cr)
•PSY 5037 - Psychology of Hearing (3.0 cr)
•PSY 5038W - Introduction to Neural Networks [WI] (3.0 cr)
•PSY 5052 - Psychology of Attention (3.0 cr)
•PSY 5054 - Psychology of Language (3.0 cr)
•PSY 5062 - Cognitive Neuropsychology (3.0 cr)
•PSY 5063 - Introduction to Functional MRI (3.0 cr)
•PSY 5064 - Brain and Emotion (3.0 cr)
•PSY 5065 - Functional Imaging: Hands-on Training (3.0 cr)
•PSY 5066 - Neuroscience, Philosophy and Ethics (3.0 cr)

    Distibution Area B: Clinical, Personality, and Social

Take 1 or more course(s) totaling 3 or more credit(s) from the following:
•CPSY 3301 - Introduction to Developmental Psychology [SOCS] (4.0 cr)
•CPSY 4303 - Adolescent Psychology (3.0 cr)
•PSY 3101 - Introduction to Personality (3.0 cr)
•PSY 3201 - Introduction to Social Psychology (3.0 cr)
•PSY 3206 - Introduction to Health Psychology (3.0 cr)
•PSY 3301 - Introduction to Cultural Psychology (3.0 cr)
•PSY 3604 - Introduction to Psychopathology (3.0 cr)
•PSY 3617 - Introduction to Clinical Psychology (3.0 cr)
•PSY 3633 {Inactive}(3.0 cr)
•PSY 3666 - Human Sexuality (3.0 cr)
•PSY 5101H - Honors: Personality: Current Theory and Research (3.0 cr)
•PSY 5202 - Attitudes and Social Behavior (3.0 cr)
•PSY 5204 - Psychology of Interpersonal Relationships (3.0 cr)

    PSY 5205 - Applied Social Psychology (3.0 cr)

•PSY 5206 - Social Psychology and Health Behavior (3.0 cr)
•PSY 4207 - Personality and Social Behavior (3.0 cr)
  or PSY 5207 - Personality and Social Behavior (3.0 cr)
•Distribution Area C: Individual Differences, Quantitative, and Applied
Take 2 or more course(s) totaling 6 or more credit(s) from the following:
•PSY 3121 - History and Systems of Psychology (3.0 cr)
•PSY 3511 - Introduction to Counseling Psychology (3.0 cr)
•PSY 3711 - Psychology in the Workplace (3.0 cr)

    PSY 4501 - Psychology of Women and Gender (3.0 cr)

•PSY 4521 - Psychology of Stress and Trauma (3.0 cr)
•PSY 5136 - Human Abilities (3.0 cr)

    PSY 5137 - Introduction to Behavioral Genetics (3.0 cr)

•PSY 5138 {Inactive}(3.0 cr)
•PSY 5501 - Self, Society and Health - What's Work Got To Do With It? (3.0 cr)
•PSY 5708 - Organizational Psychology (3.0 cr)
•PSY 5862 - Psychological Measurement: Theory and Methods (3.0 cr)
•PSY 5865 - Advanced Measurement: Theory and Application (3.0 cr)
•PSY 5701 - Employee Selection and Staffing (3.0 cr)
•PSY 5703 - Psychology of Organizational Training and Development (3.0 cr)
•PSY 3135 - Introduction to Individual Differences (3.0 cr)
  or PSY 5135 - Psychology of Individual Differences (3.0 cr)

    Additional Elective Options

Take 0 or more course(s) from the following:
Take at most 3 credit(s) from the following:
 •PSY 3960 - Undergraduate Seminar in Psychology (1.0 - 5.0 cr)
 •PSY 3896 - Internship in Psychology (1.0 - 4.0 cr)
 •PSY 3993 - Directed Study (1.0 - 6.0 cr)
 •PSY 3996 - Undergraduate Fieldwork and Internship in Psychology (1.0 - 4.0 cr)
  •PSY 4960 - Seminar in Psychology (1.0 - 4.0 cr)
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- •PSY 4996H Honors Internship/Externship (1.0 6.0 cr)
- •PSY 5960 Topics in Psychology (1.0 4.0 cr)
- •Students may count up to 6 credits of PSY 4993/5993 toward the electives sub-requirement. An additional 3 credits of PSY 4993/5993 is required for the senior project.

Take at most 6 credit(s) from the following:

- •PSY 4993 Directed Research: Special Areas of Psychology and Related Sciences (1.0 6.0 cr)
- •PSY 5993 Research Laboratory in Psychology (3.0 cr)

Capstone

Students demonstrate analytic skills and an understanding of the modes of inquiry common to psychology. The capstone synthesizes knowledge gained over the program of study.

Students who double major and choose to complete the capstone requirement in their other major are still required to take the Psychology BS capstone.

General Sequence

Take PSY 4993 or 5993 one semester prior to, or concurrent with PSY 3901W.

Take exactly 2 course(s) totaling 6 or more credit(s) from the following:

- •PSY 3901W Capstone in Psychology Research Laboratory [WI] (3.0 cr)
- •PSY 4993 Directed Research: Special Areas of Psychology and Related Sciences (1.0 6.0 cr)
- or PSY 5993 Research Laboratory in Psychology (3.0 cr)

or Honors Sequence

Students who fulfill the Capstone requirement with PSY 4902V must take PSY 4994V as a prerequisite. PSY 4994V is typically taken in the Spring semester of Junior year. Students should plan this sequence with Psychology Advising and Psychology Honors faculty. Students must enroll in PSY 4902V for a minimum of 3, but no more than 6 credits.

Take exactly 2 course(s) totaling 7 - 10 credit(s) from the following:

- •PSY 4994V Honors Research Practicum [WI] (4.0 cr)
- •PSY 5994 Directed Research: Psy Honors Thesis (1.0 6.0 cr)

Upper Division Writing Intensive within the major

Students are required to take one upper division writing intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.

Take 0 - 1 course(s) from the following:

- •PSY 3001V Honors Introduction to Research Methods [WI] (4.0 cr)
- •PSY 3001W Introduction to Research Methods [WI] (4.0 cr)
- •PSY 3901W Capstone in Psychology Research Laboratory [WI] (3.0 cr)
 •PSY 3902W Capstone in Psychology Individual Interests [WI] (3.0 cr)
- •PSY 5994 Directed Research: Psy Honors Thesis (1.0 6.0 cr)
- •PSY 4994V Honors Research Practicum [WI] (4.0 cr)
- •PSY 5031W Perception [WI] (3.0 cr)
- •PSY 5036W Computational Vision [WI] (3.0 cr)
- •PSY 5038W Introduction to Neural Networks [WI] (3.0 cr)