# Psychology, BS

An undergraduate degree in psychology provides students with skills that are relevant to many career paths. The major in psychology is designed to contribute to students' general liberal arts and sciences education and to provide a foundation for postbaccalaureate training in psychology and closely related disciplines as well as in areas such as business, law, communication, medicine, and the allied health sciences. Students who intend to enter the job market immediately after graduation should complement their psychology major with substantial preparation in another program more closely tied to their area of interest (e.g., education, social work, business, journalism, nursing). Almost all vocational opportunities in psychology require advanced degrees.

The Bachelor of Science (BS) degree is intended for students who plan to pursue advanced work in psychology or in a related discipline. It requires a specific grade-point average for admission and certain courses in experimental psychology, mathematics, and natural science. The program leaves time for students to supplement the psychology major with another program of study.

Students who change to a psychology major after two years of undergraduate work may find they do not have sufficient background for the BS program.

Students begin with a general introductory course, followed by methodology and data analysis courses, and introductory courses in several broad areas: behavioral neuroscience, developmental science, clinical psychology, cognitive psychology, and social psychology. These courses are followed by upper-level psychology courses selected by each student. For additional information regarding the undergraduate major and career information, visit Undergraduate Programs on the Department of Psychological and Brain Sciences website.

The department maintains excellent facilities to support teaching and research on human and animal behavior. All faculty members are directly engaged in research, and they bring to their undergraduate teaching the excitement that such activity generates. Many opportunities exist for interested and capable students to participate in current research projects in the department.

The department has an active undergraduate organization, Psi Chi + Psych Iowa. The group sponsors speakers, films, career days, and student symposia. The Psi Chi portion is an honors society, whereas the Psych Iowa portion is open to any interested UI undergraduate student.

# **Learning Outcomes**

The learning outcomes for students in the Department of Psychological and Brain Sciences align with several of the learning goals from the American Psychological Association's guidelines for undergraduate psychology education. These learning outcomes expand and deepen students' foundational knowledge obtained through the GE CLAS Core program.

Psychology majors will:

- · understand psychology as an empirical science;
- graduate with a knowledge base in psychology, including an understanding of the major principles and theories in the field's main content areas;

- have learned how to use scientific reasoning to understand psychological phenomena and how to interpret and conduct psychological research; and
- be able to apply their knowledge of psychology to realworld situations and recognize the importance of ethical standards and diversity in psychology.

#### Requirements

The Bachelor of Science with a major in psychology requires a minimum of 120 s.h., including 54-56 s.h. of work for the major, with at least 41 s.h. in psychology courses. Students must maintain a grade-point average of at least 2.00 in all courses for the major and in all UI courses for the major. They must also complete the College of Liberal Arts and Sciences GE CLAS Core. Transfer credits must be approved by the department, and transfer students must complete at least 18 s.h. of psychology courses at the University of Iowa.

The major for the BS emphasizes research methodology, so the BS may be the degree of choice for students who plan to do graduate work in psychology and related research fields. However, a Bachelor of Science is not required for graduate study in psychology. Choice of a degree program should be dictated by a student's personal career goals.

BA and BS students complete the same psychology core and psychology electives. The major for the BS also requires additional psychology topics courses and natural science courses plus mathematics, statistics, or computer science courses. Unlike the BA, there is no second area course requirement.

Students are advised to take PSY:1001 Elementary Psychology as the first course in the major; however, if a student must take PSY:1001 for the first time after completing another psychology course with a higher number, the student may do so.

The BS with a major in psychology requires the following courses or their equivalents.

Requirements	Hours
Psychology Core	6
Lower-Level Psychology Requirements	19
Upper-Level Psychology Electives	9
Psychology Topics Courses	7
Natural Sciences Courses	7
Mathematics, Statistics, or Computer Science Courses	6-8

# **Psychology Core**

All students complete the following coursework for the psychology core.

Course #	Title	Hours
Both of these:		
PSY:1001	Elementary Psychology	3
PSY:2811	Research Methods and Data Analysis in Psychology I	3

# Lower-Level Psychology Requirements

Students take these courses after completing PSY:1001 Elementary Psychology.

Course #	Title	Hours
All of these:		
PSY:2301	Introduction to Clinical Psychology	3
PSY:2401	Introduction to Developmental Science	3
PSY:2501	Introduction to Social Psychology	3
PSY:2601	Introduction to Cognitive Psychology	3
PSY:2701	Introduction to Behavioral Neuroscience	4
PSY:2812	Research Methods and Data Analysis in Psychology II	3

## **Upper-Level Psychology Electives**

Students take three advanced psychology courses (total of 9 s.h.) after satisfactorily completing the psychology core and other specified prerequisites. Psychology courses (prefix PSY) numbered 3000 or above may be used to fulfill this requirement, except those in the following list.

Course #	Title	Hours
PSY:3994	Research Practicum in Psychology	arr.
PSY:3995	Advanced Research Practicum	1-3
PSY:3996	External Practicum in Psychology	1-3
PSY:3997	Teaching/Advising Practicum in Psychology	1-3
PSY:3998	Individual Readings and Projects	1-3
PSY:3999/ BIOL:3999	Independent Research in Neuroscience	2-3
PSY:4020	Laboratory in Psychology	4
PSY:4025	Laboratory in Cognitive Neuroscience	4
PSY:4035	Laboratory in Computational Neuroscience	4
PSY:4090	Psychology Seminar	3
PSY:4990	Honors Thesis Research	1-3
PSY:4995/ BIOL:4995	Honors Research in Neuroscience	arr.

# **Additional Requirements**

### **Psychology Topics Courses**

Course #	Title	Hours
Both of these:		
PSY:4020	Laboratory in Psychology	4
PSY:4090	Psychology Seminar	3

#### **Natural Science Courses**

Course #	Title	Hours
At least 7 s.h. fron	n these:	
BIOL:1140	Human Biology: Nonmajors	4
BIOL:1141	Human Biology: Health Professions	4
BIOL:1411	Foundations of Biology	4

BIOL:2120	Good Genes Gone Bad: Genetic Disorders of Notable Celebrities	3
BIOL:2512	Fundamental Genetics	4
CHEM:1070	General Chemistry I	3
CHEM:1080	General Chemistry II	3
CHEM:1090	Supplemental Chemistry Lab	1
CHEM:1110	Principles of Chemistry I	4
CHEM:1120	Principles of Chemistry II	4
CHEM:1160	Principles of Chemistry Lab	2
CSD:2111	Basic Acoustics for Speech and Hearing	3
CSD:3112	Anatomy and Physiology of Speech Production	4
CSD:3113	Introduction to Hearing Science	4
CSD:3116/ LING:3116	Basic Neuroscience for Speech and Hearing	3
HHP:1400	Human Anatomy and Physiology	3
PHYS:1400	Basic Physics	3-4
PHYS:1409	Basic Physics Lab	1
PHYS:1410	Physics of Sound	3-4
PHYS:1511	College Physics I	4
PHYS:1512	College Physics II	4
PHYS:1611	Introductory Physics I	4
PHYS:1612	Introductory Physics II	4
PHYS:1619	Introductory Physics II Lab	1

# Mathematics, Statistics, or Computer Science Courses

Course #	Title	Hours
At least two courses	from these:	
BIOS:4120	Introduction to Biostatistics	3
CS:1210	Computer Science I: Fundamentals	4
CS:2110	Programming for Informatics	4
CS:2230	Computer Science II: Data Structures	4
CS:2520	Human-Computer Interaction for Informatics	3
MATH:1350	Quantitative Reasoning for Business	4
MATH:1440	Mathematics for the Biological Sciences	4
MATH:1460	Calculus for the Biological Sciences	4
MATH:1550	Engineering Calculus I	4
MATH:1850	Calculus I	4
MATH:1860	Calculus II	4
MATH:2700	Introduction to Linear Algebra	4
STAT:1020/ PSQF:1020	Elementary Statistics and Inference	3
STAT:1030	Statistics for Business	4
STAT:2010	Statistical Methods and Computing	3
STAT:3200/ DATA:3200/ IGPI:3200/ISE:3760	Applied Linear Regression	3

STAT:3210	Experimental Design and Analysis	3
STAT:3510/ IGPI:3510	Biostatistics	3
STAT:4143/ PSQF:4143	Introduction to Statistical Methods	3

### **Teacher Licensure**

Students interested in teaching in elementary and/or secondary schools should seek admission to the Teacher Education Program (TEP) in the College of Education.

To qualify for licensure in secondary teaching, students in the TEP complete a degree in education as well as a related College of Liberal Arts and Sciences degree. See Apply on the College of Education website for details on requirements and deadlines for applying to the College of Education and about TEP choices of majors leading to licensure.

#### Honors

## Honors in the Major

Students majoring in psychology have the opportunity to graduate with honors in the major. They must maintain a cumulative University of Iowa grade-point average (GPA) of at least 3.33 and a minimum GPA of 3.50 in the major.

There are two routes for honors in the major, one of which involves a thesis project as a capstone. For students who pursue honors without a thesis, other experiences constitute the capstone. Both routes include extra coursework. Interested students are encouraged to read Honors in Psychology on the department's website.

# **National Honor Society**

The department sponsors a chapter of Psi Chi, the national honor society in psychology and an affiliate of the American Psychological Association. Students who have a GPA of at least 3.00 overall and in psychology coursework and who have completed 9 s.h. of psychology courses may request a membership application form. Consult the department's academic coordinator for more information.

## University of Iowa Honors Program

In addition to honors in the major, students have opportunities for honors study and activities through membership in the University of Iowa Honors Program. Visit Honors at Iowa to learn about the university's honors program.

Membership in the UI Honors Program is not required to earn honors in the psychology major.

#### Admission

Admission to the major is selective. To be eligible for admission to the BS program, students must have completed 30 s.h. of college coursework (excluding any credit by exam) and must have a cumulative grade-point average of 2.67 or higher. There is no limit on the number of qualified students admitted to the BS program. Students who do not meet the minimum admission requirements may petition the department in writing, presenting additional evidence of their qualifications. Entering first-year and transfer students who have completed less than 30 s.h. of coursework and are interested in entering the BS program are admitted to the BA program until they satisfy the admission requirements for the BS program. New transfer students who meet the admission requirements for the BS program may choose to enter the BS or the BA program.

Students in the BA program may switch to the BS program if they meet admission requirements at the time of the request. Students may switch from the BS to the BA program at any time.

#### Career Advancement

The major in psychology is designed to contribute to students' general liberal arts and sciences education and to provide a foundation for postbaccalaureate training in psychology and closely related disciplines as well as areas such as business, law, communication, medicine, and the allied health sciences.

Undergraduate psychology students who do not intend to enroll in graduate school immediately after earning their bachelor's degree frequently earn a second major in a discipline that has broad opportunities for employment, such as education, social work, business, journalism, or nursing.

Learn more about careers in psychology at the American Psychological Association website.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.

#### Academic Plans

## **Four-Year Graduation Plan**

The following checkpoints list the minimum requirements students must complete by certain semesters in order to stay on the university's Four-Year Graduation Plan. Courses in the major are those required to complete the major; they may be offered by departments other than the major department.

The psychology major for the BS is open only to students who have earned 30 s.h. and have a grade-point average of at least 2.67. Students complete 7 s.h. of natural science coursework, either as part of the GE CLAS Core or in addition to it. Students must also complete two quantitative and formal reasoning courses which may require some preliminary work.

**Before the third semester begins:** PSY:1001 Elementary Psychology and one additional course in the major.

**Before the fifth semester begins:** one course for the department's quantitative and formal reasoning requirement and three additional courses in the major, including PSY:2811 Research Methods and Data Analysis in Psychology I and PSY:2812 Research Methods and Data Analysis in Psychology II.

**Before the seventh semester begins:** two more courses in the major, one course for the major's natural science requirement, and at least 90 s.h. earned toward the degree.

**Before the eighth semester begins:** second course for the department's quantitative and formal reasoning requirement and two more courses in the major.

**During the eighth semester:** enrollment in all remaining coursework in the major, all remaining GE CLAS Core courses, and a sufficient number of semester hours to graduate.

# Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

#### **Psychology, BS**

i sychology	, 65	
Course	Title	Hours
Academic Care	er	
Any Semester		
	ongly encouraged to complete	
	ticums, and other experiential	
	94 Research Practicum in	
in psychology.	quired if planning to complete a PhD	
GE CLAS Core: Si	ustainability <sup>a</sup>	
OL CLAS COTE. SI	Hours	0
First Year	nours	0
Fall		
	Elementary Psychology <sup>b</sup>	2
PSY:1001		3
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4
GE CLAS Core: U	nderstanding Cultural Perspectives	3
c		5
GE CLAS Core: W	/orld Languages First Level	4 - 5
Proficiency or ele	ective course <sup>a</sup>	
CSI:1600	Success at Iowa	1
	Hours	14-16
Spring		
PSY:2501 or PSY:2401	Introduction to Social Psychology <sup>e</sup>	3
	or Introduction to Developmental Science	
RHET:1030 or ENGL:1200	Rhetoric: Writing and Communication or The Interpretation of Literature	3 - 4
GE CLAS Core: W Proficiency or ele	/orld Languages Second Level	4 - 5
Elective course <sup>f</sup>		3
Elective course <sup>f</sup>		3
Liective course	Hours	16-18
Second Year Fall	nours	10-10
PSY:2401 or PSY:2501	Introduction to Developmental Science <sup>e</sup> or Introduction to Social Psychology	3
PSY:2811	Research Methods and Data Analysis in Psychology I	3
GE: Natural Scion	nces without Lab <sup>b, c, g</sup>	3
	/orld Languages Third Level	4 - 5
Proficiency or ele		4 - 3
Elective course <sup>f</sup>		2 - 3
	Hours	15-17
<b>Spring</b> PSY:2301	Introduction to Clinical Psychology	3

PSY:2812	Research Methods and Data Analysis in Psychology II	3
GE CLAS Core	e: Historical Perspectives <sup>c</sup>	3
Proficiency or	e: World Languages Fourth Level r elective course d	4 - 5
Elective cours		3
	Hours	16-17
Third Year Fall		
Fall PSY:2601	Introduction to Cognitive	2
PS1:2001	Introduction to Cognitive Psychology <sup>e</sup>	3
PSY:2701	Introduction to Behavioral Neuroscience	4
GE CLAS Core	e: Values and Society <sup>c</sup>	3
Elective cours	se <sup>f</sup>	3
Elective cours	se <sup>†</sup>	3
_	Hours	16
Spring		-
numbered 30		3
science cours		3 - 4
GE CLAS Core	e: Literary, Visual, and Performing Arts <sup>c</sup>	
	e: Natural Sciences with Lab <sup>b, c, g</sup>	4
Elective cours	se	2 - 3
	Harris	15 17
	Hours	15-17
Fourth Year		15-17
		<b>15-17</b> 4
Fourth Year Fall PSY:4020	Laboratory in Psychology level psychology course (prefix PSY,	
Fourth Year Fall PSY:4020 Major: upper- numbered 30	Laboratory in Psychology level psychology course (prefix PSY,	4
Fourth Year Fall PSY:4020 Major: upper- numbered 30	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>n</sup> e: International and Global Issues <sup>c</sup>	4
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>h</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup>	4 3 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>h</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup>	4 3 3 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>h</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup> se f Hours	4 3 3 2 <b>15</b>
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090	Laboratory in Psychology elevel psychology course (prefix PSY, 100 or above) <sup>h</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup> se <sup>f</sup> <b>Hours</b> Psychology Seminar	4 3 3 2 <b>15</b> 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30	Laboratory in Psychology elevel psychology course (prefix PSY, 100 or above) e: International and Global Issues <sup>c</sup> se <sup>f</sup> se <sup>f</sup> Hours Psychology Seminar elevel psychology course (prefix PSY, 100 or above)	4 3 3 2 <b>15</b>
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30 Major: second science cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) e: International and Global Issues <sup>c</sup> se <sup>f</sup> Hours Psychology Seminar level psychology course (prefix PSY, 100 or above) d mathematics, statistics, or computer se <sup>1</sup> , 1	4 3 3 2 <b>15</b> 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30 Major: second science cours Elective cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>n</sup> a: International and Global Issues <sup>c</sup> se <sup>f</sup> Hours Psychology Seminar level psychology course (prefix PSY, 100 or above) <sup>n</sup> d mathematics, statistics, or computer se <sup>f</sup>	4 3 3 2 <b>15</b> 3 3 3 - 4 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30 Major: second science cours Elective cours Elective cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>n</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup> Hours Psychology Seminar level psychology course (prefix PSY, 100 or above) <sup>n</sup> d mathematics, statistics, or computer se <sup>f</sup> se <sup>f</sup>	4 3 3 2 <b>15</b> 3 3 3 3 - 4
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30 Major: second science cours Elective cours Elective cours Elective cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>n</sup> a: International and Global Issues <sup>c</sup> se <sup>f</sup> Hours Psychology Seminar level psychology course (prefix PSY, 100 or above) <sup>n</sup> d mathematics, statistics, or computer se <sup>f</sup>	4 3 3 2 <b>15</b> 3 3 3 - 4 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30 Major: second science cours Elective cours Elective cours Elective cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>n</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup> <b>Hours</b> Psychology Seminar level psychology course (prefix PSY, 100 or above) <sup>n</sup> d mathematics, statistics, or computer se <sup>f</sup> se <sup>f</sup> se <sup>f</sup> cation: apply on MyUI before deadline	4 3 3 2 <b>15</b> 3 3 3 - 4 3
Fourth Year Fall PSY:4020 Major: upper- numbered 30 GE CLAS Core Elective cours Elective cours Spring PSY:4090 Major: upper- numbered 30 Major: second science cours Elective cours Elective cours Elective cours	Laboratory in Psychology level psychology course (prefix PSY, 100 or above) <sup>n</sup> e: International and Global Issues <sup>c</sup> se <sup>f</sup> <b>Hours</b> Psychology Seminar level psychology course (prefix PSY, 100 or above) <sup>n</sup> d mathematics, statistics, or computer se <sup>f</sup> se <sup>f</sup> cation: apply on MyUI before deadline rebruary for spring, September for fall)	4 3 3 2 <b>15</b> 3 3 3 4 3 2

a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative and Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Society.

b Fulfills a major requirement and may fulfill a GE requirement.

c GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.

- d Students who have completed four levels of a single language or two levels of two different languages in high school or college have satisfied the GE CLAS Core World Languages requirement. Students who have completed three levels of a single language may complete a fourthlevel course in the same language or may choose an approved World Language and Cultural Exploration course. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course. Contact your academic advisor or CLAS Undergraduate Programs Office with questions concerning the World Languages requirement.
- e PSY:2301, PSY:2401, PSY:2501, and PSY:2601 may be completed in any order.
- f Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- g Choose from an approved list to meet Psychology BS major requirements.
- h Students take three advanced psychology courses (total of 9 s.h.) after satisfactorily completing the psychology core and other specified prerequisites. See the General Catalog for list of courses that do not count toward this requirement.
- i See the General Catalog for list of approved courses.
- j Enrollment in math courses requires completion of a placement exam.
- k Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Degree Services.