

MAJOR IN PSYCHOLOGY, MIND, BRAIN, AND BEHAVIOR CONCENTRATION

The Mind, Brain, and Behavior Concentration prepares students to be competitive candidates for graduate programs in cognitive psychology, cognitive neuroscience, behavioral neuroscience, and sensation and perception. Many students considering a career in medicine or an allied health profession also choose to complete this concentration. Students acquire a stronger science and quantitative background compared to the other concentrations in psychology. Students are encouraged to participate as undergraduate research assistants and work with a faculty member on a research project.

Learning Objectives

Successful students will:

1. Attain a solid foundation in the natural sciences.
2. Demonstrate strong analytical, mathematical, and statistical skills.
3. Identify, describe, and demonstrate knowledge of the major branches of psychology.
4. Describe, evaluate, and apply methods for conducting research and analyzing data in psychology.
5. Demonstrate the ability to analyze, synthesize, and evaluate material from psychology.

6. Demonstrate the ability to write and communicate effectively on topics in psychology.
7. Appraise the diversity, complexity and intersectionality of human experience.
8. Apply ethical standards to evaluate psychological science and practice.
9. Engage in professional development and lifelong learning.
10. Demonstrate knowledge of the physiological methods used to study the mind and brain.
11. Demonstrate knowledge of the major content ideas pertaining to the mind and brain (e.g., sensation, perception, cognition).
12. Attain background knowledge and hands-on experience in conducting research on the mind and brain, if the goal is to pursue a graduate degree in this field of study.

Requirements Effective Fall 2025

Students must have a C or better in each of the following courses: PSY 100, PSY 192, PSY 210, PSY 250, PSY 252, PSY 350, PSY 493, the four MBB lecture courses, and the three MBB laboratory courses.

Maximum of 12 credits allowed toward graduation for any combination of PSY 295, PSY 296, PSY 384, PSY 484, PSY 486, PSY 487, PSY 488, PSY 495A-PSY 495F, PSY 496A-PSY 496F, PSY 498A-PSY 498F, PSY 499A-PSY 499F.

Freshman

		AUCC	Credits
CO 150	College Composition (GT-CO2)	1A	3
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	4
PSY 100	General Psychology (GT-SS3)	3C	3
PSY 192	Psychology First-Year Seminar		1
PSY 252	Mind, Brain, and Behavior		3
CS*** ¹			2-4
PHIL*** ²			3
Select three credits from the following:			3
MATH 117	College Algebra in Context I (GT-MA1)	1B	
MATH 118	College Algebra in Context II (GT-MA1)	1B	
MATH 120	College Algebra (GT-MA1)	1B	
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	1B	
MATH 125	Numerical Trigonometry (GT-MA1)	1B	
MATH 126	Analytic Trigonometry (GT-MA1)	1B	
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)		1C	3
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences) ³		3C	3
Elective			0-2
Total Credits			30

Sophomore

PSY 210	Psychology of the Individual in Context	3
PSY 250	Research Design and Analysis I	3
PSY 292B	Seminar: Mind, Brain Behavior	1

SPCM*** ⁴			3
Select one group from the following:			5
GROUP A:			
CHEM 107	Fundamentals of Chemistry (GT-SC2)	3A	
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)	3A	
GROUP B:			
CHEM 111	General Chemistry I (GT-SC2)	3A	
CHEM 112	General Chemistry Lab I (GT-SC1)	3A	
Select one course from the following:			3
STAT 301	Introduction to Applied Statistical Methods		
STAT 307	Introduction to Biostatistics		
Select one course from the following: ⁵			3
ETST***			
PSY 305	Psychology of Religion		
PSY 327	Psychology of Women		
PSY 328	Psychology of Human Sexuality		
PSY 437	Psychology of Gender		
WS***			
Any additional AUCC 1C course			
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		3B	6
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		3D	3
Total Credits			30
Junior			
BMS 300	Principles of Human Physiology		4
PSY 350	Research Design and Analysis II		3
Select two Mind, Brain, and Behavior (MBB) lecture courses from the following: ⁶			6
PSY 352	Learning and Memory		
PSY 452	Cognitive Psychology	4B	
PSY 454	Biological Psychology	4B	
PSY 456	Sensation and Perception	4B	
PSY 458	Cognitive Neuroscience	4B	
Select two MBB laboratory courses from the following: ⁶			4
PSY 453	Cognitive Psychology Laboratory	4A	
PSY 455	Biological Psychology Laboratory	4A	
PSY 459	Cognitive Neuroscience Laboratory	4A	
Select at least five credits from the following quantitative courses:			5
DSCI 235	Data Wrangling		
DSCI 3** or DSCI 4** ⁷			
MATH 125	Numerical Trigonometry (GT-MA1)	1B	
MATH 126	Analytic Trigonometry (GT-MA1)	1B	
MATH 141	Calculus in Management Sciences (GT-MA1)	1B	
MATH 155	Calculus for Biological Scientists I (GT-MA1)	1B	
MATH 157	One Year Calculus IA (GT-MA1)	1B	
MATH 159	One Year Calculus IB (GT-MA1)	1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)	1B	
MATH 3** or MATH 4** ⁷			
STAT 158	Introduction to R Programming		
STAT 3** or STAT 4** ⁷			
Advanced Writing (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)		2	3

Electives			5
	Total Credits		30
Senior			
PSY 493	Capstone Seminar	4C	3
Select one 3-5 credit course from the following list: ⁸			3-5
BC 3** or BC 4**			
BMS 3** or BMS 4**			
BZ 3** or BZ 4**			
CHEM 3** or CHEM 4**			
CS 3** or CS 4**			
PH 3** or PH 4**			
Select two MBB lecture courses not previously taken from the following:			6
PSY 352	Learning and Memory		
PSY 452	Cognitive Psychology	4B	
PSY 454	Biological Psychology	4B	
PSY 456	Sensation and Perception	4B	
PSY 458	Cognitive Neuroscience	4B	
Select one laboratory course not previously taken from the following:			1-5
BC 404	Comprehensive Biochemistry Laboratory		
BMS 301	Human Gross Anatomy		
BMS 302	Laboratory in Principles of Physiology		
BMS 310	Anatomy for the Health Professions		
BMS 320	Virtual Laboratory in Physiology		
BMS 330	Microscopic Anatomy		
BMS 345	Functional Neuroanatomy		
BZ 310	Cell Biology		
BZ 311	Developmental Biology		
BZ 330	Mammalogy		
BZ 348/MATH 348	Theory of Population and Evolutionary Ecology		
CHEM 322	Foundations of Chemical Biology Laboratory		
CHEM 344	Modern Organic Chemistry Laboratory		
CHEM 433	Clinical Chemistry		
CHEM 434	Forensic Chemistry Laboratory		
CHEM 440	Advanced Organic Chemistry Laboratory		
CHEM 442	Chemistry of Hemp and Cannabis		
CS 312	Modern Web Applications		
CS 410	Introduction to Computer Graphics		
CS 415	Software Testing		
CS 425	Introduction to Bioinformatics Algorithms		
CS 430	Database Systems		
CS 435	Introduction to Big Data		
CS 445	Introduction to Machine Learning		
CS 462	Engaging in Virtual Worlds		
CS 464	Principles of Human-Computer Interaction		
MATH 340	Intro to Ordinary Differential Equations		
MATH 345	Differential Equations		
MATH 435	Projects in Applied Mathematics		
PH 315	Modern Physics Laboratory		
PH 353	Optics and Waves		
PSY 453	Cognitive Psychology Laboratory	4A	
PSY 455	Biological Psychology Laboratory	4A	

PSY 457	Sensation and Perception Laboratory	4A	
PSY 459	Cognitive Neuroscience Laboratory	4A	
Electives ⁹			11-17
Total Credits			30
Program Total Credits:			120

¹ Select any CS course except CS 192 or variable credit options. Some courses with this prefix will also satisfy the AUCC 3B requirement.

² Select any PHIL course except variable credit options. Some courses with this prefix will satisfy the AUCC 3B requirement.

³ Select any course in category 3C of the AUCC except HONR 492 or any PSY course.

⁴ Select any SPCM course except SPCM 178 and variable credit options. Some courses with this prefix will satisfy the AUCC 3B requirement.

⁵ Select one course from this list, excluding variable credit options, that is not counted elsewhere.

⁶ Two PSY lecture courses from the set of PSY 452, PSY 454, PSY 456, and PSY 458 are needed to satisfy the AUCC 4B requirement, and two PSY laboratory courses from the set of PSY 453, PSY 455, and PSY 459 are needed to satisfy the AUCC 4A requirement.

⁷ Selections may include any 300- or 400-level courses from DSCI, MATH, or STAT, excluding STAT 301 and STAT 307

⁸ Select any 3-5 credit 300- or 400-level course from BC, BMS, BZ, CHEM, CS, or PH, excluding variable credit courses, that is not counted elsewhere.

⁹ Select enough elective credits to bring the program to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).

Major Completion Map

Distinctive Requirements for Degree Program:

Students must have a C or better in each of the following courses: PSY 100, PSY 192, PSY 210, PSY 250, PSY 252, PSY 350, PSY 493, the four MBB lecture courses, and the three MBB laboratory courses.

Maximum of 12 credits allowed toward graduation for any combination of PSY 295, PSY 296, PSY 384, PSY 484, PSY 486, PSY 487, PSY 488, PSY 495A-PSY 495F, PSY 496A-PSY 496F, PSY 498A-PSY 498F, PSY 499A-PSY 499F.

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)		X	1A	3
PSY 100	General Psychology (GT-SS3)		X	3C	3
PSY 192	Psychology First-Year Seminar		X		1
CS***					2-4
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)				1C	3
Elective					0-2
Total Credits					14

Semester 2		Critical	Recommended	AUCC	Credits
LIFE 102	Attributes of Living Systems (GT-SC1)		X	3A	4
PSY 252	Mind, Brain, and Behavior		X		3
PHIL ***					3
Select three credits from the following:					3
MATH 117	College Algebra in Context I (GT-MA1)			1B	
MATH 118	College Algebra in Context II (GT-MA1)	X		1B	
MATH 120	College Algebra (GT-MA1)			1B	
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	X		1B	
MATH 125	Numerical Trigonometry (GT-MA1)			1B	
MATH 126	Analytic Trigonometry (GT-MA1)			1B	
Social and Behavioral Sciences (Except HONR 492 or any PSY course) (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)				3C	3
CO 150 and PSY 100 must be completed by the end of Semester 2.		X			
Total Credits					16

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
PSY 250	Research Design and Analysis I		X		3
Select one group from the following:			X		5

GROUP A:				
CHEM 107	Fundamentals of Chemistry (GT-SC2)		3A	
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)		3A	
GROUP B:				
CHEM 111	General Chemistry I (GT-SC2)		3A	
CHEM 112	General Chemistry Lab I (GT-SC1)		3A	
Select one course from the following:		X		3
STAT 301	Introduction to Applied Statistical Methods			
STAT 307	Introduction to Biostatistics			
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			3D	3
Total Credits				14
Semester 4		Critical	Recommended	AUCC
PSY 210	Psychology of the Individual in Context	X		3
PSY 292B	Seminar: Mind, Brain Behavior		X	1
SPCM***				3
Select one course from the following:				3
ETST***				
PSY 305	Psychology of Religion			
PSY 327	Psychology of Women			
PSY 328	Psychology of Human Sexuality			
PSY 437	Psychology of Gender			
WS***				
Any additional AUCC 1C course				
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			3B	6
PSY 210, PSY 250, PSY 252, and the STAT requirement must be completed by the end of Semester 4.		X		
Total Credits				16
Junior				
Semester 5		Critical	Recommended	AUCC
PSY 350	Research Design and Analysis II		X	3
Select one Mind, Brain, and Behavior (MBB) lecture course from the following:				3
PSY 352	Learning and Memory			
PSY 452	Cognitive Psychology			4B
PSY 454	Biological Psychology			4B
PSY 456	Sensation and Perception			4B
PSY 458	Cognitive Neuroscience			4B
Select one MBB lab from the following:				2
PSY 453	Cognitive Psychology Laboratory			
PSY 455	Biological Psychology Laboratory			
PSY 459	Cognitive Neuroscience Laboratory			
Select at least five credits from the following quantitative courses:				5
DSCI 235	Data Wrangling			
DSCI 3** or DSCI 4**				
MATH 125	Numerical Trigonometry (GT-MA1)			1B
MATH 126	Analytic Trigonometry (GT-MA1)			1B
MATH 141	Calculus in Management Sciences (GT-MA1)			1B
MATH 155	Calculus for Biological Scientists I (GT-MA1)			1B
MATH 157	One Year Calculus IA (GT-MA1)			1B
MATH 159	One Year Calculus IB (GT-MA1)			1B
MATH 160	Calculus for Physical Scientists I (GT-MA1)			1B
MATH 3** or MATH 4**				

STAT 158	Introduction to R Programming				
STAT 3** or STAT 4**					
Elective					2
CHEM 107, CHEM 108, and LIFE 102 must be completed by the end of Semester 5.		X			
Total Credits					15
Semester 6		Critical	Recommended	AUCC	Credits
BMS 300	Principles of Human Physiology	X			4
Select one MBB lecture course not previously taken from the following:			X		3
PSY 352	Learning and Memory				
PSY 452	Cognitive Psychology			4B	
PSY 454	Biological Psychology			4B	
PSY 456	Sensation and Perception			4B	
PSY 458	Cognitive Neuroscience			4B	
Select one MBB lab not previously taken from the following:			X		2
PSY 453	Cognitive Psychology Laboratory			4A	
PSY 455	Biological Psychology Laboratory			4A	
PSY 457	Sensation and Perception Laboratory			4A	
PSY 459	Cognitive Neuroscience Laboratory			4A	
Advanced Writing (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)				2	3
Elective					3
BMS 300 and PSY 350 must be completed by the end of Semester 6.		X			
Total Credits					15
Senior					
Semester 7		Critical	Recommended	AUCC	Credits
Select one 3-5 credit course from the following list:					3-5
BC 3** or BC 4**					
BMS 3** or BMS 4**					
BZ 3** or BZ 4**					
CHEM 3** or CHEM 4**					
CS 3** or CS 4**					
PH 3** or PH 4**					
Select one MBB lecture course not previously taken from the following:			X		3
PSY 352	Learning and Memory				
PSY 452	Cognitive Psychology			4B	
PSY 454	Biological Psychology			4B	
PSY 456	Sensation and Perception			4B	
PSY 458	Cognitive Neuroscience			4B	
Lab course not previously taken (see list on Concentration Requirements tab)			X		1-5
Electives					2-8
Total Credits					15
Semester 8		Critical	Recommended	AUCC	Credits
PSY 493	Capstone Seminar	X		4C	3
Select one course not previously taken from the following:		X			3
PSY 352	Learning and Memory				
PSY 452	Cognitive Psychology			4B	
PSY 454	Biological Psychology			4B	
PSY 456	Sensation and Perception			4B	
PSY 458	Cognitive Neuroscience			4B	
Electives		X			9

The benchmark courses for the 8th semester are the remaining courses in the entire program of study. X

Total Credits	15
Program Total Credits:	120