Tentative Neuroscience Course Offerings Updated Oct 2022

Tier 1								
Course #	<u>Course Name</u>	<u>Units</u>	<u>Pre-requisites</u>	<u>Fall</u>	<u>Winter</u>	Spring	<u>Summer</u>	
CBNS106	Intro to Neuroscience	4	BIOL 5B (C- or better), CHEM1C	✓	✓	✓	✓	
CBNS/PSYC120	Cellular Neuroscience	4	CBNS106		✓	✓	✓	
CBNS/PSYC120L	Neuroscience Laboratory	2	CBNS/PSYC120	✓	✓	✓	✓	
CBNS130L (Alternative to 120L)	Computational Neuroscience Lab	2	CBNS/PSYC120			√		
PSYC122L (Alternative to 120L)	Human Neuroimaging Lab	2	Concurrent enrollment in PSYC122 or consent of instructor			✓		
CBNS/PSYC124	Systems Neuroscience	4	CBNS106 (C- or better)	✓		✓	✓	
Tier 2 (5 classes)								
Course #	<u>Course Name</u>	<u>Units</u>	<u>Pre-requisites</u>	<u>Fall</u>	<u>Winter</u>	Spring	<u>Summer</u>	
BIOL178	Hormones and Behavior	4	BIOL5C, MATH7B or 9B, CHEM8C/LC,PHYS2C/LC, BCH100 or BCH110A, one course in statistics			✓	✓	
CBNS101	Fundamentals of Cell Biology	4	CHEM8C; BCH100 or BCH110A (concurrent enroll- ment okay)	✓	✓	✓	✓	
CBNS116	Human Neuroanatomy	4	CBNS106 (C- or better)			✓		
CBNS/PSYC121	Developmental Neuroscience	4	CBNS106		✓		✓	
CBNS/PSYC125	Neuropharmacology	4	CBNS/PSYC 120	✓		✓		
CBNS/PSYC126	Neuroscience of Learning and Memory	4	CBNS106 or PSYC110	✓			√	
CBNS/PSYC127	Behavioral Control Systems	4	CBNS/PSYC120; CBNS/PSYC124 strongly recom- mended			✓		
CBNS129	Brain Control of Bodily Functions	4	CBNS/PSYC124 (C- or better)					
PSYC112	Neural Mechanisms of Animal Behavior	4	CBNS106 or PSYC110 (C- or better)		✓			
PSYC117	Cognitive Neuroscience of Memory & Consciousness	4	CBNS106 or PSYC110 (C- or better)		✓			
PSYC129	Human Neuropsychology	4	CBNS106 (C- or better)				✓	
PSYC 136	Topics in Cognitive Neuroscience	4	CBNS 106 (C- or better)			✓		
PSYC122	Human Neuroimaging	4	CBNS106 or consent of instructor			✓		

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Tentative Neuroscience Course Offerings

Tier 3 (10 units) Additional Tier 2 courses can be used for this category									
<u>Course #</u>	<u>Course Name</u>	<u>Units</u>	<u>Prerequisites</u>	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>	<u>Summer</u>		
BCH 110A**	General Biochemistry	4	BIOL5A, CHEM8C/8LC C- or better	✓	✓				
BCH 110B	General Biochemistry	4	BCH 110A C- or consent of instructor		✓	✓			
BCH 110C	General Biochemistry	4	BCH 110A C- or better, BIOL 102 or consent of instructor. BCH 110B highly recommended.		✓	✓			
BCH 120	Topics in Human Biochemistry	4	BCH 100 C+ or better or BCH 110B C- or better or consent of instructor			✓			
BCH 162	Advanced Biochemistry Lab	5	BCH 15, BCH 110B, BCH 110C C- or better or consent of instructor		✓	✓			
BIOL/ENTM 100	General Entomology	4	BIOL5C or consent of instructor	✓		✓			
BIOL 102	Introductory Genetics	4	BIOL5B C- or better	✓	✓	✓	✓		
BIOL 105	Evolution	4	BIOL5C C– or better, BIOL102, MATH7B, PHYS2C/2LC, BCH 100 or 110A, one course in statis- tics, or consent of instructor	✓	√	√	✓		
BIOL 107A	Molecular Biology	4	BIOL5C,CHEM8C/8LC, MATH7B, PHYS2C/2LC, BCH 100 or 110A	✓	✓	✓	✓		
BIOL 108	Population Genetics and Genomics	4	BIOL5C,CHEM8C/8LC, MATH7B, PHYS2C/2LC one course in statistics	✓					
BIOL 110	Biology of Human Problems	4	BIOL5C,CHEM8C/8LC, MATH7B, PHYS2C/2LC BCH 100 or 110A, one course in stats	✓		✓	✓		
BIOL 151	Invertebrate Zoology	5	BIOL5C, PHYS2A C- or better			✓			
BIOL 160	Animal Behavior	4	BIOL5C, BIOL102 C- or better, MATH7B, PHYS2C/2LC BCH 100 or 110A, one course in stats		✓		✓		
BIOL 161A	Functional Anatomy of Vertebrates	5	BIOL 5C, CHEM8A/8LA, MATH7B, PHYS2A/2LA, C- or better	✓					
BIOL 161B	Functional Anatomy of Vertebrates	5	BIOL161A CHEM8B/8LB, PHYS2B, all C- or better		✓				
BIOL/ENTM 162	Insect Behavior	4	BIOL5C or BIOL/ENTM 100 or consent of instructor	✓		✓			
BIOL171A	Human Anatomy and Physiology	4	BIOL5C, CHEM8C/8LC, MATH7B, PHYS2C/2LC, BCH 100 or 110A		✓				
BIOL 171L	Human Anatomy and Phys Lab	1	BIOL171A, Concurrent Enrollment in BIOL171B			✓			
BIOL 173	Insect Physiology	4	BIOL5B, CHEM8C/LC, or consent of instructor			✓			
BIOL 175	Comparative Animal Physiology	4	BIOL5C, BIOL161A, CHEM8C/8LC, MATH7B, PHYS2C/2LC BCH 100 or 110A, STAT10. BIOL151 and 161B recommended.						

^{**} BCH 110A allowed in Tier 3 if BCH 100 taken first

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Tentative Neuroscience Course Offerings

Tier 3 Continued								
Course #	<u>Course Name</u>	<u>Units</u>	<u>Prerequisites</u>	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>	<u>Summer</u>	
CBNS108	Intro to Developmental Biology	4	BIOL102, CHEM8C, or consent of instructor			✓	✓	
CBNS/ENTX150	Cancer Biology	4	BCH110C or BIOL107A or CBNS101 (may be taken concurrently with consent of instructor)	✓		✓	✓	
CBNS165	Stem Cell Biology	4	CBNS101 or consent of instructor		✓		✓	
CBNS169	Human Embryology	4	BIOL5C or consent of instructor					
CBNS 194***	Independent Reading	1-2	Consent of Instructor. Repeatable to a max of 4 units.	✓	✓	✓	✓	
CBNS 197***	Research for Undergraduates	1-4	Sophomore standing and 1 course in CBNS or UD standing, consent of instructor. Repeatable.	✓	✓	✓	✓	
CBNS 199***	Senior Research	1-4	Senior Standing, consent of instructor. Repeatable.	✓	✓	✓	✓	
CS 170	Introduction to Artificial Intelligence	4	CS 100 C- or better, CS 111	✓	✓	✓		
PHYS 139L	Electronics for Scientists	5	PHYS2B B– or better, or PHYS40C C– or better or PHYS41B C– or better or consent of instructor	✓		✓		
PSYC 115	Drugs and Behavior	4	CBNS 106 C- or better or consent of instructor	✓			✓	
PSYC 130	Fundamentals of Learning and Conditioning	4	PSYC 1, 2, 11, 12 C– or better or consent of instructor					
PSYC 132	Perception	4	PSYC 1, 2, 11, 12 C– or better or consent of instructor		✓		✓	
PSYC 134	Cognitive Processes	4	PSYC 1, 2, 11, 12 C– or better or consent of instructor	✓		✓	✓	
PSYC 135	Psycholinguistics	4	PSYC 1, 2, 11, 12					

^{***} Up to 9 units CBNS 194, 197 and 199 allowed in Tier 3, must be taken for a letter grade. Research in other departments must be reviewed by Neuroscience department before being applied to Tier 3.

Schedule subject to change

Please consult catalog.ucr.edu for full list of pre-requisites and course descriptions