

Multidisciplinary Studies - Neuroscience Check Sheet BA and BS (min. 120 hrs required)

1. Courses with "NEUR" prefix can be found under "Interdisciplinary Studies" in the course catalog.

2. No course can count for both Foundations Curriculum (FC) and major requirements.

* May be substituted with alternative BIOL, CHEM, or PHYS courses w/lab if they are not pertinent to student's future advanced degree program, field, or employment aspirations. Student needs to be aware of pre-requisites if alternative courses are taken.

** Requires a faculty mentor and an Independent Study form to be submitted by the mentor; contact Dr. Tran for instructions.

♠ Special permission required; registration will be handled by Dr. Tran.

♣ Blocked for Neuroscience majors and minors to take NEUR 3310 instead of PSYC 3310; special permission required; contact Dr. Tran.

Core Program Courses (29-30 SH)	Course Number	SH	Grade(s)
Principles of Biology and Laboratory II*	<input type="checkbox"/> BIOL 1200 <input type="checkbox"/> BIOL 1201	3, 1	,
General Chemistry and Laboratory II*	<input type="checkbox"/> CHEM 1160 <input type="checkbox"/> CHEM 1161	3, 1	,
Introductory Psychology or Honors Intro Psyc	<input type="checkbox"/> PSYC 1000 or <input type="checkbox"/> PSYC 1060	3	
Psychological Statistics	<input type="checkbox"/> PSYC 2101	4	
Or Elementary Statistical Methods I	<input type="checkbox"/> Math 2228	3	
Or Introduction to Biostatistics	<input type="checkbox"/> BIOS 1500	3	
Research Methods in Psychology (WI)	PSYC 2210	4	
Introduction to Neuroscience	PSYC 3310 (cross-listed NEUR 3310 ♣)	3	
General Physics & Lab*	<input type="checkbox"/> PHYS 1250 <input type="checkbox"/> PHYS 1251	3, 1	,
General Physics & Lab*	<input type="checkbox"/> PHYS 1260 <input type="checkbox"/> PHYS 1261	3, 1	,
Or University Physics (two semesters)*	<input type="checkbox"/> PHYS 2350 <input type="checkbox"/> PHYS 2360	4, 4	,
Neuroscience Thesis I (WI)** -This is equivalent to MULT 3500	NEUR 4950	3	
Neuroscience Thesis II (WI)** -This is equivalent to MULT 4999	NEUR 4951	3	

Laboratory Research Courses (5-6 SH): Any two from the following

Lab Methods in Cellular & Molecular Neuroscience**	NEUR 4201	2	
Lab Methods in Behavioral Neuroscience**	PSYC 4312	3	
Neuroscience: Literature & Lab Experience**	PSYC 4315 (may repeat 1 time)	3	

Senior Capstone (6 SH): Any two from the following (for Seniors in their final year only)

Cellular & Molecular Neuroscience ♠	NEUR 4900	3	
Or Adv Top Sem: Neurobiology of Learning and Memory (WI) ♠	PSYC 4250 (must be Dr. Tran's section)	3	
Behavioral & Integrative Neuroscience ♠	NEUR 4901	3	

Structured Neuroscience Electives (BA 9 SH + 12 SH Foreign Lang; BS 21 SH + 0 SH Foreign Lang)

Survey of Human Physiology & Anatomy, Lab	<input type="checkbox"/> BIOL 2130 <input type="checkbox"/> BIOL 2131	4, 1	,
Or Human Physiology & Anatomy I, Lab	<input type="checkbox"/> BIOL 2140 <input type="checkbox"/> BIOL 2141	3, 1	,
Or Human Physiology & Anatomy, Lab	<input type="checkbox"/> BIOL 2150 <input type="checkbox"/> BIOL 2151	3, 1	,
Principles of Genetics	BIOL 2300	3	
Cellular Physiology	<input type="checkbox"/> BIOL 3310 <input type="checkbox"/> BIOL 3311	4, 0	,
Microbiology and Lab	<input type="checkbox"/> BIOL 3220 <input type="checkbox"/> BIOL 3221	4, 0	,
Cell and Developmental Biology	<input type="checkbox"/> BIOL 3260	3	
Principles of Animal Physiology	BIOL 3320	3	
Biological Evolution, Lab	<input type="checkbox"/> BIOL 3620 <input type="checkbox"/> BIOL 3621	3, 1	,
Transmission Electron Microscopy	<input type="checkbox"/> BIOL 5510 <input type="checkbox"/> BIOL 5511	4, 0	,
Scanning Electron Microscopy and X-Ray Analysis	<input type="checkbox"/> BIOL 5520 <input type="checkbox"/> BIOL 5521	2, 0	,
Principles of Biochemistry I (Co-req BIOL 4891)	<input type="checkbox"/> BIOL 4880 <input type="checkbox"/> BIOL 4891 (see UG cat)	3, 1	,
Principles of Biochemistry II (Co-req BIOL 4891)	<input type="checkbox"/> BIOL 4890 <input type="checkbox"/> BIOL 4891 (see UG cat)	3, 1	,
Histology and Lab	<input type="checkbox"/> BIOL 5450 <input type="checkbox"/> BIOL 5451	4, 0	,
Organic Chemistry I and Lab I	<input type="checkbox"/> CHEM 2750 <input type="checkbox"/> CHEM 2753	3, 1	,
Organic Chemistry II and Lab II	<input type="checkbox"/> CHEM 2760 <input type="checkbox"/> CHEM 2763	3, 1	,
Literature in Neurosciences**	NEUR 4200	1	
Introduction to Philosophical Issues in Biology	PHIL 1262	3	
Introduction to Philosophy of Science	PHIL 2261	3	
Philosophy of Mind	PHIL 3255	3	
Psychology of Learning	PSYC 3225	3	
Cognitive Psychology	PSYC 3226	3	
Learning Theories Applications	PSYC 3227	3	
Neuropsychology	PSYC 3311	3	
Sensation & Perception	PSYC 3312	3	
Abnormal Psychology	PSYC 3375	3	
Behavioral Pharmacology Seminar	PSYC 4340	3	

For internal use: T = transfer credit; P = placement credit; (R) = grade replacement

Foundations Curriculum 42 SH (must be designated as Foundations Curriculum "FC" in catalog)

English Courses (6 SH)	Course Number	SH	Grade(s)
Composition (WI)	ENGL 1100	3	
Composition (WI)	ENGL 2201 (in general cannot take in same calendar year as ENGL 1100 and for Neuroscience majors it must be a section in Arts and Humanities, Health Sciences, Multidisciplines, or Social Science)	3	
Total SH			

Science Courses (8 SH) Courses from BIOL*, CHEM*, GEOG 1300, GEOL, PHYS (*can also be HNRS or Interdisciplinary Studies), and ANTH** (**certain courses apply). At least one lab course must accompany a lecture course. CHEM 1150,1151 are pre-requisites for CHEM 1160,1161 (see page 1).

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Total SH			

Social Science Courses (9 SH) Select courses from at least 3 of the following: ANTH, COMM, HNRS, Interdisciplinary Studies, ECON, GEOG*, HIST, POLS, PSYC, RCLS, SOCI. Courses cannot count for both the social science requirement and a Neuroscience Major requirement. *See catalog to ensure "SO" (Social Science) designation.

Total SH			

Mathematics (3 SH) One course at least equivalent to MATH 1050, 1065, 1066, 1067, or 2127, or PHIL 1500

Total SH			

Humanities & Fine Arts (9 SH) At least 1 course in Humanities* (ENGL Lit, American Lit, FORL Lit, PHIL, RELI, and selected Linguistics courses) and 1 course in Fine Arts (Art, Dance, Music, Theatre Arts). COMM 2020, COMM 2410, COMM 2420, ENGL 2815 count as FA courses. *Certain HNRS and Interdisciplinary courses apply as long as they have the FA designation.

Total SH			

Health, Exercise and Sport Science (3 SH)

Lifetime Physical Activity and Fitness Laboratory	KINE 1000	1	
Health in Modern Society	HLTH 1000	2	
Total SH			

Free Electives from "FC" designation (enough to total 120 SH)

Total SH			

Foreign Language (12 SH) Not part of FC but is required for BA degree in Neuroscience. Must complete through 1004 in one lang.

		3	
		3	
		3	
		3	
Total SH			

Certain honors and interdisciplinary courses (for example, CDFR, ETHN, HNRS, INTL, RUSI, and WOST) with the FC designation may be used to satisfy foundations curriculum requirements. For specific courses that meet the foundations curriculum requirements see your catalog.