Neuroscience B.S. Degree Requirements

Required Mentoring

NEUR 1950 (0) First-Year Mentoring NEUR 2950 (0) Second-Year Mentoring Enrollment in mentoring is required for graduation. These are zero credit "courses" that meet one time.

Courses in Neuroscience (8 credit hours)

NEUR 3400 (3) Introduction to Neuroscience 1 NEUR 3500 (3) Introduction to Neuroscience 2

NEUR 3550 (1) Neuroscience Lab

NEUR 4900 (1^) Neuroscience Seminar

Courses in Biology (24 credit hours)

BIOL 1240 (3) Principles of Biology I

BIOL 1245 (1) Principles of Biology I Laboratory

BIOL 1260 (3) Principles of Biology II

BIOL 1265 (1) Principles of Biology II Laboratory

BIOL 3020 (3) Cellular Biochemistry & Molecular Biology

BIOL 3040 (3) Cellular Structure & Function

BIOL Electives (10 credit hours from the list below; must include one lab course)

Biology Elective Courses (lab courses indicated in italic)

BIOL 3010 (3) Evolution BIOL 3030 (3) Principles of Genetics BIOL 3060 (1) Cell Structure & Function Laboratory BIOL 3100 (1) Experiments in Genetics Lab BIOL 3420 (5) Comparative Anatomy of the Vertebrates BIOL 3470 (2) General Physiology Laboratory BIOL 3480 (3) Exercise Physiology BIOL 4010 (3) Sex, Evolution, and Behavior BIOL 4030 (3) Introduction to Genomics BIOL 4050 (2) Molecular Technique Lab BIOL 4070 (3) Advanced Biological Chemistry BIOL 4080 (3) Advanced Cell Biology BIOL 4150 (3) Nerve Cell Mechanisms in Behavior BIOL 4250 (3) Neurobiology of Disease BIOL 4360 (3) Animal Behavior BIOL 4370 (1) Animal Behavior Lab BIOL 4410 (3) Comparative Animal Physiology BIOL 4440 (4) Vertebrate Histology: Structure and Function of Tissues BIOL 4500 (3) Introductory Endocrinology BIOL 4510 (3) Behavioral Endocrinology BIOL 4540 (3) Human Systemic Physiology BIOL 4600 (3) Developmental Biology BIOL 4610 (2) Developmental Biology Lab

BIOL 4630 (3) Foundations of Immunobiology

BIOL 4700 (3) Molecular Biology

Courses in Psychology (19 credit hours)

PSY 1010 (3) General Psychology

PSY 2050 (4) Foundations of Research Methods & Statistics w/ Lab

PSY 3100 (3) Brain, Mind, & Society

PSY Electives (9 credit hours from the list below)

Psychology Elective Courses PSY 3120 (3) Cognitive Psychology PSY 3160 (3) Learning & Memory PSY 3210 (3) Developmental Psychology: Child PSY 3230 (3) Developmental Psychology: Adolescence PSY 3300 (3) Social Psychology PSY 3310 (3) Personality Theory PSY 4140 (3) Psychopharmacology PSY 4150 (3) Science of Sleep PSY 4350 (3) Health Psychology PSY 4390 (3) Abnormal Psychology

<u>Courses in Chemistry (8 credit hours)</u> CHEM 1110 (3) General Chemistry I Lecture CHEM 1115 (1) General Chemistry I Laboratory CHEM 1120 (3) General Chemistry II Lecture CHEM 1125 (1) General Chemistry II Laboratory

<u>Courses in Mathematics (4 credit hours)</u> MATH 1510 (4) Calculus I

<u>Courses in Philosophy (3 credit hours)</u> PHIL 4280 (3) Biology and Mind

Courses in Physics (4 credit hours) PHYS 1310 (3) Physics I PHYS 1320 (1) Physics I Laboratory

Capstone/Inquiry/Honors Project (1-3 credit hours):

All neuroscience majors must complete a capstone or equivalent project (e.g., Psychology Capstone course, Biology Senior Inquiry, Honors Thesis, etc.). The rationale for this requirement is to provide the opportunity to integrate coursework with an active learning experience, such as research. Courses that meet this requirement include, but are not limited to, the following:

BIOL 4890 Senior Inquiry: Comprehensive Examination BIOL 4970 Library Project BIOL 4980 Advanced Independent Research PSY 4010 Advanced Research Methods and Statistics PSY 4880 Capstone Research Project PSY 4900 Critical Thinking about Psych

Required Senior Residency

NEUR 4950 (0) Senior Residency

Enrollment in NEUR 4950 during your final semester is required for graduation. This is a zero credit "course" that notifies the Registrar of the student's intention to graduate that semester. No actual class attendance is involved.

^ NEUR 4900: This course is currently listed as a 3 credit hour course. This course is expected to be changed to a 1 credit hour course in Spring 2018.

Note: Many biology courses are offered only in one semester or in alternating years. Please consult with Neuroscience mentors.

Note: Students taking a Pre-Professional Health curriculum will be required to complete additional course requirements for medical or other professional schools as outlined by SLU's Pre-Professional Health Studies Program.