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 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

**Courses in Chemistry (8 credit hours)**
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

**Courses in Mathematics (4 credit hours)**
MATH 1510 (4) Calculus I

**Courses in Philosophy (3 credit hours)**
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.