NEUROSCIENCE, B.S.

Neuroscience is an interdisciplinary field of study that employs the tools and perspectives of biology, psychology, chemistry, physics, mathematics, philosophy and medicine to achieve a better understanding of brain structure, function and behavior.

A degree in neuroscience places students in an excellent position to address the basic science of brain function. It offers many possibilities for applications within medicine, science and industry. Saint Louis University's neuroscience major offers courses that further the understanding of psychiatric, neurological and developmental disorders with the goal of developing innovative treatment options through basic and applied research.

Neuroscience is an appropriate major for students planning to continue their postgraduate education in neuroscience or related professional fields.

Additional program highlights include:

- SLU provides a genuinely interdisciplinary degree in neuroscience.
- Neuroscience is a growing field, with new initiatives to develop innovative technologies to foster a better understanding of brain function.
- SLU's neuroscience program offers a rigorous and interdisciplinary curriculum emphasizing pre-professional training.

Leadership
Tony W. Buchanan, Ph.D.
Co-Director
Judith M. Ogilvie, Ph.D.
Co-Director

Curriculum Overview
Courses in SLU's neuroscience major include lectures, seminars and laboratory experiences. The curriculum includes four core neuroscience courses: Introduction to Neuroscience: Molecular, Cellular and Systemic; Introduction to Neuroscience: Behavioral and Cognitive; a neuroscience lab course; and a neuroscience seminar in the senior year.

Additionally, students are required to take related courses from the biology department and from the psychology department and courses in chemistry, physics, mathematics and philosophy. Students must also complete SLU's undergraduate University Core requirements.

Neuroscience students are required to complete a capstone learning experience, consisting of several options, including research, practica or advanced coursework, all of which are designed to provide the opportunity to integrate coursework with an active learning experience and to give students exposure to the breadth of the field of neuroscience and the potential for understanding its applications in the real world.

Fieldwork and Research Opportunities
SLU's neuroscience program features opportunities for research through existing collaborations with the biology and psychology departments and the Henry and Amelia Nasrallah Center for Neuroscience (https://www.slu.edu/research/center-for-neuroscience/).

Careers
Graduates with a B.S. in neuroscience have a strong outlook for future employment. They will be able to find work in industries such as medicine, veterinary medicine, pharmaceuticals, biotechnology, education, computer science and artificial intelligence.

An undergraduate degree in neuroscience from Saint Louis University provides a solid base for students interested in attending graduate school, medical school or working in psychology, biology, chemistry, physics, biomedical engineering, law, medicine or philosophy.

Admission Requirements
Begin Your Application (http://www.slu.edu/apply.php)
Saint Louis University also accepts the Common Application.

Freshman
All applications are thoroughly reviewed with the highest degree of individual care and consideration to all credentials that are submitted. Solid academic performance in college preparatory coursework is a primary concern in reviewing a freshman applicant's file.

To be considered for admission to any Saint Louis University undergraduate program, applicants must be graduating from an accredited high school, have an acceptable HiSET exam score or take the General Education Development (GED) test.

Transfer
Applicants must be a graduate of an accredited high school or have an acceptable score on the GED.

Students who have attempted fewer than 24 semester credits (or 30 quarter credits) of college credit must follow the above freshmen admission requirements. Students who have completed 24 or more semester credits (or 30 quarter credits) of college credit must submit transcripts from all previously attended college(s).

In reviewing a transfer applicant's file, the Office of Admission holistically examines the student's academic performance in college-level coursework as an indicator of the student's ability to meet the academic rigor of Saint Louis University. Where applicable, transfer students will be evaluated on any courses outlined in the continuation standards of their preferred major.

International Applicants
All admission policies and requirements for domestic students apply to international students along with the following:

- Demonstrate English Language Proficiency
- Proof of financial support must include:
  - A letter of financial support from the person(s) or sponsoring agency funding the time at Saint Louis University
  - A letter from the sponsor's bank verifying that the funds are available and will be for the duration of study at the University
- Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include the courses taken and/or lectures attended, practical laboratory work, the maximum and minimum grades attainable, the grades earned or the results of all end-of-term examinations, and any honors or degrees received. WES and ECE transcripts are accepted.
Scholarships and Financial Aid

There are two principal ways to help finance a Saint Louis University education:

• Scholarships: Scholarships are awarded based on academic achievement, service, leadership and financial need.

• Financial Aid: Financial aid is provided in the form of grants and loans, some of which require repayment.

For priority consideration for merit-based scholarships, apply for admission by Dec. 1 and complete a Free Application for Federal Student Aid (FAFSA) by March 1.

For information on other scholarships and financial aid, visit www.slu.edu/financial-aid (https://www.slu.edu/financial-aid/).

Learning Outcomes

1. Graduates will be able to identify core concepts of neuroscience.
2. Graduates will be able to synthesize information to formulate hypotheses, design experiments and engage in scientific research.
3. Graduates will be able to communicate neuroscientific information in a clear, reasoned manner, both verbally and in writing.
4. Graduates will have the foundation to successfully pursue post baccalaureate education and/or professional career.

Requirements

Neuroscience students must complete a minimum total of 70 credits for the major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>University Undergraduate Core</td>
<td>32-35</td>
</tr>
<tr>
<td>Major Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEUR 3400</td>
<td>Introduction to Neuroscience 1: Cellular, Molecular and Systemic</td>
<td>3</td>
</tr>
<tr>
<td>NEUR 3500</td>
<td>Introduction to Neuroscience 2: Cognitive and Behavioral</td>
<td>3</td>
</tr>
<tr>
<td>NEUR 3550</td>
<td>Neuroscience Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 4900</td>
<td>Neuroscience Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1240</td>
<td>General Biology: Information Flow and Evolution &amp; Principles of Biology I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1260</td>
<td>General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3020</td>
<td>Biochemistry and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3040</td>
<td>Cell Structure &amp; Function</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1010</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3100</td>
<td>Brain, Mind, &amp; Society</td>
<td>3</td>
</tr>
<tr>
<td>Neuroscience Electives Courses</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

19 credits of Neuroscience elective courses are required. Six credits must be selected from courses with the "Neuroscience - Biology" attribute, one credit must be selected from courses with the "Neuroscience - Biology Lab" attribute, and six credits from the "Neuroscience - Psych" attribute. The final six credits may come from your choice of "Neuroscience - Biology", "Neuroscience - Psych", or the "Neuroscience - Anthro" attributes.

Required Courses in Chemistry

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1110</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1115 &amp; General Chemistry 1 Laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1120</td>
<td>General Chemistry 2</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1125 &amp; General Chemistry 2 Laboratory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required Courses in Mathematics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1510</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

Required Course in Humanities

Select from one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 4280</td>
<td>Biology and Mind</td>
<td></td>
</tr>
<tr>
<td>HCE 4280</td>
<td>Controversies in Neuroethics</td>
<td></td>
</tr>
<tr>
<td>ENGL 4530</td>
<td>Medicine, Mind, and Victorian Fiction</td>
<td></td>
</tr>
</tbody>
</table>

Required Course in Physics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1310</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHYS 1320 &amp; College Physics I Laboratory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required Statistics Course

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2050</td>
<td>Foundations of Research Methods and Statistics</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1300</td>
<td>Elementary Statistics with Computers</td>
<td></td>
</tr>
</tbody>
</table>

Capstone/Inquiry/Honors Project

Students must select one course with the "Neuroscience Capstone" attribute, such as:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4970</td>
<td>Library Project</td>
<td></td>
</tr>
<tr>
<td>BIOL 4980</td>
<td>Advanced Independent Study</td>
<td></td>
</tr>
<tr>
<td>NEUR 4865</td>
<td>Capstone Neurophysiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>NEUR 4869</td>
<td>Critical Thinking about Neuroscience</td>
<td></td>
</tr>
<tr>
<td>PSY 4965</td>
<td>Capstone Practicum Project</td>
<td></td>
</tr>
<tr>
<td>PSY 4967</td>
<td>Capstone Research Project</td>
<td></td>
</tr>
</tbody>
</table>

General Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11-18</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

Biology Elective Courses

Students must take a one-credit biology lab to be selected from courses with the "Neuroscience - Biology Lab" attribute.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3010</td>
<td>Evolutionary Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 3030</td>
<td>Principles of Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 3060</td>
<td>Cell Structure &amp; Function Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 3100</td>
<td>Experiments in Genetics Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 3420</td>
<td>Comparative Anatomy of the Vertebrates</td>
<td></td>
</tr>
<tr>
<td>BIOL 3470</td>
<td>General Physiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 4010</td>
<td>Sex, Evolution, and Behavior</td>
<td></td>
</tr>
<tr>
<td>BIOL 4030</td>
<td>Introduction to Genomics</td>
<td></td>
</tr>
<tr>
<td>BIOL 4050</td>
<td>Molecular Technique Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 4070</td>
<td>Advanced Biological Chemistry</td>
<td></td>
</tr>
<tr>
<td>BIOL 4250</td>
<td>Neurobiology of Disease</td>
<td></td>
</tr>
</tbody>
</table>
BIOL 4360 Animal Behavior & BIOL 4370 Animal Behavior Lab ¹
BIOL 4410 Comparative Animal Physiology
BIOL 4440 Vertebrate Histology: Structure and Function of Tissues ¹
BIOL 4510 Behavioral Endocrinology
BIOL 4520 Biochemical Pharmacology
BIOL 4540 Human Systemic Physiology
BIOL 4600 Developmental Biology
BIOL 4630 Foundations of Immunobiology
BIOL 4700 Molecular Biology
BIOL 4720 Cancer Biology

1 Biology Lab Course

Psychology Elective Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3120</td>
<td>Cognitive Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 3160</td>
<td>Learning &amp; Memory</td>
<td></td>
</tr>
<tr>
<td>PSY 3210</td>
<td>Developmental Psych: Child</td>
<td></td>
</tr>
<tr>
<td>PSY 3230</td>
<td>Developmental Psychology: Adolescence</td>
<td></td>
</tr>
<tr>
<td>PSY 3300</td>
<td>Social Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 3310</td>
<td>Personality Theory</td>
<td></td>
</tr>
<tr>
<td>PSY 3460</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 4140</td>
<td>Psychopharmacology</td>
<td></td>
</tr>
<tr>
<td>PSY 4150</td>
<td>Science of Sleep</td>
<td></td>
</tr>
<tr>
<td>PSY 4350</td>
<td>Health Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Anthropology Elective Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2210</td>
<td>Biological Anthropology</td>
<td></td>
</tr>
<tr>
<td>ANTH 2400</td>
<td>Linguistic Anthropology</td>
<td></td>
</tr>
<tr>
<td>ANTH 4240</td>
<td>Primate Social Behavior</td>
<td></td>
</tr>
</tbody>
</table>

Pre-Professional Health

Students taking a pre-professional health curriculum will be required to complete additional course requirements for medical or other professional schools as outlined by the pre-professional health studies program.

Non-Course Requirements

All majors are required to participate in first-year mentoring.

Continuation Standards

Students must have a minimum of a 3.0 GPA in the following required major courses by the conclusion of two semesters at Saint Louis University:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1010</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1240 &amp; BIOL 1245</td>
<td>General Biology: Information Flow and Evolution and Principles of Biology I Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Students who fall below a 3.00 GPA will be placed on program probation. In order to continue as a neuroscience major after four semesters at Saint Louis University, students must obtain at least a 3.00 GPA in the following required major courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1010</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 2050</td>
<td>Foundations of Research Methods and Statistics or STAT 130 Elementary Statistics with Computers</td>
<td></td>
</tr>
<tr>
<td>BIOL 1240 &amp; BIOL 1245</td>
<td>General Biology: Information Flow and Evolution and Principles of Biology I Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 1260 &amp; BIOL 1265</td>
<td>General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 3020</td>
<td>Biochemistry and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 3040</td>
<td>Cell Structure &amp; Function</td>
<td></td>
</tr>
<tr>
<td>CHEM 1110 &amp; CHEM 1115</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 1120 &amp; CHEM 1125</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td></td>
</tr>
<tr>
<td>NEUR 3400</td>
<td>Introduction to Neuroscience 1: Cellular, Molecular and Systemic</td>
<td></td>
</tr>
</tbody>
</table>

Transfer students will be assessed on a case-by-case basis.

Graduation Requirements

- Complete a minimum of 120 credits (excluding pre-college level courses numbered below 1000).
- Complete the University Undergraduate Core curriculum requirements.
- Complete major requirements: minimum 30 credits required.
- Complete remaining credits with a second major, minor, certificate and/or electives to reach the minimum of 120 credits required for graduation.
- Achieve at least a 2.00 cumulative grade point average, a 2.00 grade point average in the major(s) and a 2.00 grade point average in the minor/certificate, or related elective credits.
- Complete department/program-specific academic and performance requirements.
- Complete at least 50% of the coursework for the major and 75% for the minor/certificate through Saint Louis University or an approved study abroad program.
- Complete 30 of the final 36 credits through Saint Louis University or an approved study abroad program.
- Complete an online degree application by the required University deadline.
Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Traditional Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1010</td>
<td>General Psychology (! satisfies CORE 3600)</td>
<td>3</td>
</tr>
<tr>
<td>! BIOL 1240 &amp; BIOL 1245</td>
<td>General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (! satisfies CORE 3800)</td>
<td>4</td>
</tr>
<tr>
<td>! CHEM 1110 &amp; CHEM 1115</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory (! satisfies CORE 3800)</td>
<td>4</td>
</tr>
<tr>
<td>CORE 1000</td>
<td>Ignite First Year Seminar</td>
<td>2-3</td>
</tr>
<tr>
<td>CORE 1500</td>
<td>Cura Personalis 1: Self in Community</td>
<td>1</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
<td>17-18</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation in First-Year Mentoring Events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>! BIOL 1260 &amp; BIOL 1265</td>
<td>General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>! CHEM 1120 &amp; CHEM 1125</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1510</td>
<td>Calculus I (satisfies CORE 3200)</td>
<td>4</td>
</tr>
<tr>
<td>CORE 1900</td>
<td>Eloquienia Perfecta 1: Written and Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Credits</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Year Two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 3020</td>
<td>Biochemistry and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2050 or STAT 1300</td>
<td>Foundations of Research Methods and Statistics (! satisfies CORE 3200 or Elementary Statistics with Computers)</td>
<td>3-4</td>
</tr>
<tr>
<td>PSY 3100</td>
<td>Brain, Mind, &amp; Society (satisfies CORE 3600)</td>
<td>3</td>
</tr>
<tr>
<td>CORE 1200</td>
<td>Eloquienia Perfecta 2: Oral and Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>CORE 1700</td>
<td>Ultimate Questions: Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3-6</td>
</tr>
<tr>
<td>Credits</td>
<td>18-22</td>
<td></td>
</tr>
</tbody>
</table>

| Year Three |                                                              |         |
| Fall       |                                                              |         |
| NEUR 3500 | Introduction to Neuroscience 2: Cognitive and Behavioral     | 3       |
| NEUR 3550 | Neuroscience Laboratory                                      | 1       |
| PHYS 1310 & PHYS 1320 | College Physics I and College Physics I Laboratory | 4       |
| Neuroscience Elective (p. 2) |                                                 | 3       |
| CORE 2800 | Eloquienia Perfecta: Creative Expression                    | 2-3     |
| CORE 3500 | Cura Personalis 3: Self in the World                        | 1       |
| Credits | 14-15                                                        |         |
| Spring    |                                                              |         |
| Neuroscience Elective (p. 2) |                                                 | 1-4     |
| Neuroscience Elective (p. 2) |                                                 | 3       |
| CORE 3400 | Ways of Thinking: Aesthetics, History, and Culture          | 3       |
| General Electives |                                              | 6-8     |
| Credits | 13-18                                                        |         |
| Year Four |                                                              |         |
| Fall      |                                                              |         |
| PHIL 4280 or HCE 4280 or ENGL 4530 | Biology and Mind or Controversies in Neuroethics or Medicine, Mind, and Victorian Fiction | 3       |
| Neuroscience Elective (p. 2) |                                                 | 1-4     |
| Neuroscience Elective (p. 2) |                                                 | 3       |
| General Electives |                                              | 6       |
| NEUR 4900 | Neuroscience Seminar                                        | 1       |
| Credits | 14-17                                                        |         |
| Spring    |                                                              |         |
| Capstone/Inquiry/Honors Project |                                             | 1-3     |
| Neuroscience Elective (p. 2) |                                                 | 1-4     |
| Neuroscience Elective (p. 2) |                                                 | 3       |
| CORE 4000 | Collaborative Inquiry                                       | 2-3     |
| General Electives |                                              | 6       |
| Credits | 13-19                                                        |         |
| Total Credits |                                              | 120-140 |         |

Pre-Professional Health Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1010</td>
<td>General Psychology (! satisfies CORE 3600)</td>
<td>3</td>
</tr>
</tbody>
</table>

---

Pre-Professional Health Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1010</td>
<td>General Psychology (! satisfies CORE 3600)</td>
<td>3</td>
</tr>
</tbody>
</table>
# Neuroscience, B.S. 2022-2023

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1240 &amp; BIOL 1245</td>
<td>General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (satisfies CORE 3800)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1110 &amp; CHEM 1115</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory (satisfies CORE 3800)</td>
<td>4</td>
</tr>
<tr>
<td>CORE 1000</td>
<td>Ignite First Year Seminar</td>
<td>2-3</td>
</tr>
<tr>
<td>CORE 1500</td>
<td>Cura Personalis 1: Self in Community</td>
<td>1</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>17-18</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Spring
- Participation in First-Year Mentoring Events

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1260 &amp; BIOL 1265</td>
<td>General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1120 &amp; CHEM 1125</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1510</td>
<td>Calculus I (satisfies CORE 3200)</td>
<td>4</td>
</tr>
<tr>
<td>CORE 1900</td>
<td>Eloquencia Perfecta 1: Written and Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Year Two

#### Fall
- BIOL 3020 | Biochemistry and Molecular Biology | 3 |
- CHEM 2410 & CHEM 2415 | Organic Chemistry 1 and Organic Chemistry 1 Laboratory | 4 |
- PSY 3100 | Brain, Mind, & Society (satisfies CORE 3600) | 3 |
- PSY 2050 or STAT 1300 | Foundations of Research Methods and Statistics (satisfies CORE 3200) or Elementary Statistics with Computers | 3-4 |
- CORE 1200 | Eloquencia Perfecta 2: Oral and Visual Communication | 3 |
| **Credits** | **16-17** | |

#### Spring
- BIOL 3040 | Cell Structure & Function | 3 |
- CHEM 2420 & CHEM 2425 | Organic Chemistry 2 and Organic Chemistry 2 Laboratory | 4 |
- NEUR 3400 | Introduction to Neuroscience 1: Cellular, Molecular and Systemic | 3 |
- CORE 1600 | Ultimate Questions: Theology | 3 |
- CORE 1700 | Ultimate Questions: Philosophy | 3 |
| **Credits** | **16** | |

### Year Three

#### Fall
- NEUR 3500 | Introduction to Neuroscience 2: Cognitive and Behavioral | 3 |
- NEUR 3550 | Neuroscience Laboratory | 1 |
- PHYS 1310 & PHYS 1320 | College Physics I and College Physics I Laboratory | 4 |
- Neuroscience Elective (p. 2) | | 3 |
- CORE 2800 | Eloquencia Perfecta 3: Creative Expression | 2-3 |
- **Credits** | **11-20** | |

#### Spring
- NEUR 3500 | Introduction to Neuroscience 3: Clinical Neuroscience | 3 |
| **Credits** | **11-20** | |

### Year Four

#### Fall
- PHIL 4280 or HCE 4280 or ENGL 4530 | Biology and Mind or Controversies in Neuroethics or Medicine, Mind, and Victorian Fiction | 3 |
- Neuroscience Elective (p. 2) | | 1-4 |
- Neuroscience Elective (p. 2) | | 3 |
- General Electives | | 3-9 |
- NEUR 4900 | Neuroscience Seminar | 1 |
| **Credits** | **11-20** | |

#### Spring
- Capstone/Inquiry/Honors Project | | 1-3 |
- Neuroscience Elective (p. 2) | | 1-4 |
- Neuroscience Elective (p. 2) | | 3 |
- CORE 4000 | Collaborative Inquiry | 2-3 |
- General Electives | | 4-10 |
| **Credits** | **11-23** | |

**Total Credits**: 120-147