# 2020 - 2021 Major Map

## Neuroscience, BS

**School/College:** The College of Liberal Arts and Sciences  
**LABMENBS**

<table>
<thead>
<tr>
<th>Term 1 0 - 14 Credit Hours Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
</table>
| BIO 181: General Biology I (SQ) OR BIO 281: Conceptual Approaches to Biology for Majors I (SQ) | 4 | C | • An SAT, ACT, Accuplacer, IELTS, or TOEFL score determines placement into first-year composition courses.  
• Mathematics Placement Assessment score determines placement in mathematics course.  
• LIA 101, ASU 101, or college-specific equivalent First-Year Seminar required of all first-year students.  
• Select your career interest area and play me3@ASU. |
| CHS 101: The ASU Experience for Health Solutions Students OR LIA 101: Student Success in The College of Liberal Arts and Sciences | | | |
| PSY 101: Introduction to Psychology (SB) | 3 | C | |
| CHM 113: General Chemistry I (SQ) | 4 | C | |
| PSY 230: Introduction to Statistics (CS) OR STP 231: Statistics for Life Science (CS) OR STP 226: Elements of Statistics (CS) | 3 | C | |
| Complete ENG 101 OR ENG 105 OR ENG 107 course(s). | 3 | | |

**Term hours subtotal:** 14-15

### Term 2 14 - 31 Credit Hours Critical course signified by

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| BIO 182: General Biology II (SG) OR BIO 282: Conceptual Approaches to Biology for Majors II | 4 | C | • Students planning to complete courses in the Computational Neuroscience track should complete MAT 265 or MAT 270 no later than term 2.  
• Create a resume & Handshake account with the Career & Professional Development Center  
• Attend a Pre-Health 101 Session  
• Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) |
| CHM 113: General Chemistry I (SQ) | 4 | C | |
| PSY 230: Introduction to Statistics (CS) OR STP 231: Statistics for Life Science (CS) OR STP 226: Elements of Statistics (CS) | 3 | C | |
| Complete ENG 101 OR ENG 105 OR ENG 107 course(s). | 3 | | |

**Term hours subtotal:** 17

### Term 3 31 - 44 Credit Hours Critical course signified by

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<th>Notes</th>
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| CHM 116: General Chemistry II (SQ) | 4 | C | • Students are encouraged to consult with an academic advisor to select upper-division track courses and use electives to complete appropriate prerequisites for their chosen course of study.  
• It is not recommended to take more than two labs courses in a term.  
• Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.)  
• Attend a Study Abroad 101 Session  
• Explore Minors or Certificates |
| Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 | |
| Social-Behavioral Sciences (SB) AND Global Awareness (G) | 3 | |
| Elective | 3 | |
| Complete First-Year Composition requirement. | | |
| Complete Mathematics (MA) requirement. | | |

**Term hours subtotal:** 13

### Term 4 44 - 60 Credit Hours Critical course signified by

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<th>Minimum Grade</th>
<th>Notes</th>
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</table>
BIO 360: Animal Physiology 3 C
PSY 290: Research Methods (L or SG) 4 C
Science and Society Elective 3 C
Humanities, Arts and Design (HU) AND Historical Awareness (H) 3
Elective 3

Term hours subtotal: 16

Term 5 60 - 75 Credit Hours Necessary course signified by ★ Hours Minimum Grade Notes
BIO 476: Cellular and Molecular Neuroscience 3 C • Explore an internship or volunteer experience
PSY 325: Physiological Psychology 3 C • Visit Career and Professional Development Services and meet with a career advisor for assistance with career planning and networking.
Upper Division Science and Society Elective 3 C
Upper Division Social-Behavioral Sciences (SB) OR Upper Division Humanities, Arts and Design (HU) 3
Elective OR BIO 484: Internship OR MIC 484: Internship 3

Term hours subtotal: 15

Term 6 75 - 91 Credit Hours Necessary course signified by ★ Hours Minimum Grade Notes
BIO 477: Systems and Behavioral Neuroscience 3 C • Work with an advisor to discuss upper-division track electives that best fit your personal plan of study.
PSY 426: Neuroanatomy 4 C • Elective credit hours can be used to complete prerequisites for upper-division track electives.
Complete 2 courses:
Upper Division Track Electives 6 C • Meet with your advisor to discuss ways to maximize your remaining time at ASU (i.e. pre-health; 4+1 Masters Programs; study abroad)
Upper Division Literacy and Critical Inquiry (L) 3 • Thinking about graduate school? Consider registering for a grad school test prep course.
Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).

Term hours subtotal: 16

Term 7 91 - 106 Credit Hours Necessary course signified by ★ Hours Minimum Grade Notes
BIO 400: Topics in Neuroscience OR KIN 400: Topics in Neuroscience OR PSY 400: Topics in Neuroscience OR SHS 400: Topics in Neuroscience 3 • Students will complete a minimum of 17 credit hours in any combination of upper-division track courses.
Complete 2 courses:
Upper Division Track Electives 6 C • Thinking about graduate school? Consider registering for a grad school test prep course.
Complete 2 courses:
Elective 6 • Apply for full-time career opportunities

Term hours subtotal: 15

Term 8 106 - 120 Credit Hours Necessary course signified by ★ Hours Minimum Grade Notes
Complete 2 courses:
Upper Division Track Electives 5 C • Students will complete a minimum of 17 credit hours in any combination of upper-division track courses.
Complete 3 courses:
Notes:

- Please keep in mind that the applicability of a specific transfer course toward an ASU degree program depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Transfer agreements that guarantee the completion of university level requirements do not necessarily meet college and major requirements. Please consult with an advisor for more information.

The BS in neuroscience is currently available only as a concurrent degree to ASU students pursuing other majors. It cannot be taken as a stand-alone degree. For more information on how to add this major as a concurrent degree program, students should contact an academic advisor in their major, the Department of Psychology or the School of Life Sciences.

- Upper-division Track Courses may have additional prerequisites. Students are encouraged to plan ahead and complete any prerequisites as electives.

- All students pursuing a BS or BSP degree in The College of Liberal Arts and Sciences must complete two courses from the Science and Society list found at https://thecollege.asu.edu/resources/science-society. At least one of the two courses must be upper-division and students must earn a C or better in the courses. Both Science and Society courses (i.e., all six credits) may count towards any major, minor, related fields, and ASU General Studies requirements.

Elective

Complete an in person or virtual practice interview.

Students not moving on to graduate work may wish to apply for full-time career opportunities.

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### Behavioral Neuroscience

- BIO 331: Animal Behavior
- PSY 320: Learning and Motivation
- PSY 420: Analysis of Behavior (L)
- PSY 470: Psychopharmacology
- PSY 498: Behavioral Neuroendocrinology
- PSY 498: Neurobiology Learning and Memory

### Cognitive Behavioral Neuroscience

- SHS 310: Anatomical and Physiological Bases of Speech
- SHS 311: Hearing Science
- SHS 367: Language Science (SB)
- SHS 375: Speech Science
- SHS 465: Speech and Language Acquisition (SB)
- SHS 485: Acquired Speech and Language Disorders

### Brain, Mind and Behavior

- PSY 320: Learning and Motivation
- PSY 324: Memory and Cognition
- PSY 498: Computational Cognitive Neuroscience

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**Total Hours: 120**

**General University Requirements Legend**
General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2020 - 2021 academic year.