# 2019 - 2020 Major Map

**Neuroscience, BS**

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

### LABMENBS

## Term 1 0 - 14 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHS 101:</strong> The ASU Experience for Health Solutions Students OR LIA 101: Student Success in the College of Liberal Arts and Sciences</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PSY 101:</strong> Introduction to Psychology (SB)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>BIO 181:</strong> General Biology I (SQ) OR <strong>BIO 281:</strong> Conceptual Approaches to Biology for Majors I (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 101</strong> or <strong>ENG 102:</strong> First-Year Composition OR <strong>ENG 105:</strong> Advanced First-Year Composition OR <strong>ENG 107</strong> or <strong>ENG 108:</strong> First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>MAT 251:</strong> Calculus for Life Sciences (MA) OR <strong>MAT 265:</strong> Calculus for Engineers I (MA) OR <strong>MAT 270:</strong> Calculus with Analytic Geometry I (MA)</td>
<td>3-4</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 14-15

## Term 2 14 - 31 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHM 113:</strong> General Chemistry I (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>PSY 230:</strong> Introduction to Statistics (CS) OR <strong>STP 231:</strong> Statistics for Life Science (CS) OR <strong>STP 226:</strong> Elements of Statistics (CS)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>BIO 182:</strong> General Biology II (SG) OR <strong>BIO 282:</strong> Conceptual Approaches to Biology for Majors II</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 101</strong> or <strong>ENG 102:</strong> First-Year Composition OR <strong>ENG 105:</strong> Advanced First-Year Composition OR <strong>ENG 107</strong> or <strong>ENG 108:</strong> First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 17

## Term 3 31 - 44 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHM 116:</strong> General Chemistry II (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB) AND Global Awareness (G)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Complete First-Year Composition requirement.**

**Complete Mathematics (MA) requirement.**

**Term hours subtotal:** 13

## Term 4 44 - 60 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO 360:</strong> Animal Physiology</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>PSY 290:</strong> Research Methods (L or SG)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 17
<table>
<thead>
<tr>
<th>Term 5 60 - 75 Credit Hours</th>
<th>Necessary course signed by 🌟</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 476: Cellular and Molecular Neuroscience</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• Work with an advisor to discuss upper division track electives that best fit your personal plan of study.</td>
</tr>
<tr>
<td>PSY 325: Physiological Psychology</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• Elective credit hours can be used to complete prerequisites for upper division track electives.</td>
</tr>
<tr>
<td>Upper Division Social-Behavioral Sciences (SB) OR Upper Division Humanities, Arts and Design (HU)</td>
<td>3</td>
<td></td>
<td></td>
<td>• Meet with your advisor to discuss ways to maximize your remaining time at ASU (i.e. pre-health; 4+1 Masters Programs; study abroad)</td>
</tr>
<tr>
<td>Elective OR BIO 484: Internship OR MIC 484: Internship OR MBB 484: Internship</td>
<td>3</td>
<td></td>
<td></td>
<td>• Thinking about graduate school? Consider registering for a grad school test prep course.</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
<td>• Apply for full-time career opportunities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 6 75 - 91 Credit Hours</th>
<th>Necessary course signed by 🌟</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 477: Systems and Behavioral Neuroscience</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• Students will complete a minimum of 17 credit hours in any combination of upper division track courses.</td>
</tr>
<tr>
<td>PSY 426: Neuroanatomy</td>
<td>4</td>
<td>C</td>
<td></td>
<td>• Thinking about graduate school? Consider registering for a grad school test prep course.</td>
</tr>
<tr>
<td>Upper Division Literacy and Critical Inquiry (L)</td>
<td>3</td>
<td></td>
<td></td>
<td>• Apply for full-time career opportunities.</td>
</tr>
<tr>
<td>Complete 2 courses: Upper Division Track electives</td>
<td>6</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 7 91 - 106 Credit Hours</th>
<th>Necessary course signed by 🌟</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 400: Topics in Neuroscience OR KIN 400: Topics in Neuroscience OR PSY 400: Topics in Neuroscience OR SHS 400: Topics in Neuroscience</td>
<td>3</td>
<td></td>
<td></td>
<td>• Students will complete a minimum of 17 credit hours in any combination of upper division track courses.</td>
</tr>
<tr>
<td>Complete 2 courses: Upper Division Track electives</td>
<td>6</td>
<td>C</td>
<td></td>
<td>• Gather professional references.</td>
</tr>
<tr>
<td>Complete 2 courses: Elective</td>
<td>6</td>
<td></td>
<td></td>
<td>• Apply to graduate and post-baccalaureate programs.</td>
</tr>
<tr>
<td>Complete 2 courses: Elective</td>
<td>6</td>
<td></td>
<td></td>
<td>• Research employment opportunities.</td>
</tr>
<tr>
<td>Complete 2 courses: Elective</td>
<td>6</td>
<td></td>
<td></td>
<td>• Meet with your advisor to verify remaining degree requirements have been met prior to Term 8.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 8 106 - 120 Credit Hours</th>
<th>Necessary course signed by 🌟</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 2 courses: Upper Division Track electives</td>
<td>5</td>
<td>C</td>
<td></td>
<td>• Students will complete a minimum of 17 credit hours in any combination of upper division track courses.</td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
<td></td>
<td></td>
<td>• Complete an in person or virtual practice interview.</td>
</tr>
<tr>
<td>Complete 2 courses: Elective</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes:

• 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.

<table>
<thead>
<tr>
<th>Behavioral Neuroscience</th>
<th>Sensormotor Control and Physical Rehabilitation</th>
<th>Cognitive Behavioral Neuroscience</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 331: Animal Behavior</td>
<td>KIN 345: Motor and Developmental Learning</td>
<td>SHS 310: Anatomical and Physiological Bases of Speech</td>
</tr>
<tr>
<td>PSY 320: Learning and Motivation</td>
<td>KIN 421: Human Motor Control (L)</td>
<td>SHS 311: Hearing Science</td>
</tr>
<tr>
<td>PSY 420: Analysis of Behavior (L)</td>
<td>KIN 422: Motor Control in Special Populations (L)</td>
<td>SHS 367: Language Science (SB)</td>
</tr>
<tr>
<td>PSY 470: Psychopharmacology</td>
<td>KIN 423: Motor Control and Aging (L)</td>
<td>SHS 375: Speech Science</td>
</tr>
<tr>
<td>PSY 498: Behavioral Neuroendocrinology</td>
<td></td>
<td>SHS 465: Speech and Language Acquisition (SB)</td>
</tr>
<tr>
<td>PSY 498: Neurobiology Learning and Memory</td>
<td></td>
<td>SHS 485: Acquired Speech and Language Disorders</td>
</tr>
</tbody>
</table>

Brain, Mind and Behavior

<table>
<thead>
<tr>
<th>PSY 320: Learning and Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 324: Memory and Cognition</td>
</tr>
<tr>
<td>PSY 498: Computational Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

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

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

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)
Total College Residency Hrs: 12 minimum

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 2019 - 2020 academic year.