# 2019 - 2020 Major Map

**Neuroscience, BS**

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

**LABMENBS**

## Term 1 0 - 14 Credit Hours

### Critical course signified by ✨

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS 101: 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>PSY 101: Introduction to Psychology (SB)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>BIO 181: General Biology I (SQ) OR BIO 281: Conceptual Approaches to Biology for Majors I (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MAT 251: Calculus for Life Sciences (MA) OR MAT 265: Calculus for Engineers I (MA) OR MAT 270: 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

### Critical course signified by ✨

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

**Term hours subtotal:** 17

## Term 3 31 - 44 Credit Hours

### Critical course signified by ✨

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 116: 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

### Critical course signified by ✨

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

**Explore an internship or volunteer experience.**

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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 freshman students.

Select your career interest area and play me3@ASU

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.)

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.

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 Historical Awareness (H)** 3

**Complete 2 courses:**

| Elective | 6 |

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**Term hours subtotal:** 16

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**Term 5 60 - 75 Credit Hours Necessary course signified by 🌟**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌟 BIO 476: Cellular and Molecular Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>🌟 PSY 325: Physiological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Upper Division Social-Behavioral Sciences (SB) OR Upper Division Humanities, Arts and Design (HU)</td>
<td>3</td>
</tr>
<tr>
<td>Elective OR BIO 484: Internship OR MIC 484: Internship OR MBB 484: Internship</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

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**Term hours subtotal:** 15

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**Notes**

- Visit Career and Professional Development Services and meet with a career advisor for assistance with career planning and networking.
- Work with an advisor to discuss upper division track electives that best fit your personal plan of study.
- Elective credit hours can be used to complete prerequisites for upper division track electives.
- Meet with your advisor to discuss ways to maximize your remaining time at ASU (i.e. pre-health; 4+1 Masters Programs; study abroad)
- Thinking about graduate school? Consider registering for a grad school test prep course.
- Apply for full-time career opportunities.

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**Term 6 75 - 91 Credit Hours Necessary course signified by 🌟**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌟 BIO 477: Systems and Behavioral Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>🌟 PSY 426: Neuroanatomy</td>
<td>4</td>
</tr>
<tr>
<td>Upper Division Literacy and Critical Inquiry (L)</td>
<td>3</td>
</tr>
<tr>
<td>Complete 2 courses: Upper Division Track electives</td>
<td>6</td>
</tr>
</tbody>
</table>

| Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s). | |

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**Term hours subtotal:** 16

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**Notes**

- Students will complete a minimum of 17 credit hours in any combination of upper division track courses.
- Thinking about graduate school? Consider registering for a grad school test prep course.
- Apply for full-time career opportunities

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**Term 7 91 - 106 Credit Hours Necessary course signified by 🌟**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Minimum Grade</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>
</tr>
<tr>
<td>Complete 2 courses: Upper Division Track electives</td>
<td>6</td>
</tr>
</tbody>
</table>

| Complete 2 courses: Elective | 6 |

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**Term hours subtotal:** 15

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**Notes**

- Students will complete a minimum of 17 credit hours in any combination of upper division track courses.
- Gather professional references
- Apply to graduate and post-baccalaureate programs.
- Research employment opportunities.
- Meet with your advisor to verify remaining degree requirements have been met prior to Term 8

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**Term 8 106 - 120 Credit Hours Necessary course signified by 🌟**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 2 courses: Upper Division Track electives</td>
<td>5</td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
</tr>
<tr>
<td>Complete 2 courses: Elective</td>
<td>6</td>
</tr>
</tbody>
</table>

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**Term hours subtotal:** 14

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**Notes**

- Students will complete a minimum of 17 credit hours in any combination of upper division track courses.
- Complete an in person or virtual practice interview.
• The BS in neuroscience is currently available only as a concurrent degree to ASU students pursuing other majors. It cannot be taken a 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 | | |
|-------------------------| | |
| PSY 320: Learning and Motivation | | |
| PSY 324: Memory and Cognition | | |
| PSY 498: Computational Cognitive Neuroscience | | |

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.

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)
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.