










## 2024 - 2025 Major Map

### Neuroscience, BS

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

| Term 1 - A 0 - 8 Credit Hours Critical course signified by    | Hours | Minimum Grade | Notes  |
|--|-------|---------------|--|
| ENG 101 or ENG 102: First-Year Composition OR<br> ENG 105: Advanced First-Year Composition OR<br>ENG 107 or ENG 108: First-Year Composition   | 3     | C             | <ul style="list-style-type: none"> <li>ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students</li> </ul>  |
| ASU 101-LA: The ASU Experience   | 1     |               |  |
| BIO 181: General Biology I (SCIT OR SQ)  | 4     | C             |  |
| Term hours subtotal:   | 8     |               |  |
| Term 1 - B 8 - 14 Credit Hours Critical course signified by   | Hours | Minimum Grade | Notes  |
|  NEU 101: Introduction to Neuroscience  | 3     | C             | <ul style="list-style-type: none"> <li>Students who test into MAT 251 or MAT 270 should enroll in that course in Term 1.</li> <li>View ASU Online first-year student registration information <a href="#">here</a>.</li> <li>Select your Career Interest Communities and play <a href="#">me3@ASU</a>.</li> <li>Join a student club or <a href="#">professional organization</a>.</li> </ul> |
| Mathematics (MATH)   | 3     | C             |  |
| Term hours subtotal:   | 6     |               |  |
| Term 2 - A 14 - 21 Credit Hours Critical course signified by    | Hours | Minimum Grade | Notes  |
| ENG 101 or ENG 102: First-Year Composition OR<br> ENG 105: Advanced First-Year Composition OR<br>ENG 107 or ENG 108: First-Year Composition | 3     | C             |  |
| BIO 182: General Biology II (SCIT OR SG)   | 4     | C             |  |
| Term hours subtotal:   | 7     |               |  |
| Term 2 - B 21 - 27 Credit Hours  | Hours | Minimum Grade | Notes  |
| MAT 251: Calculus for Life Sciences (MATH OR MA) OR MAT 265: Calculus for Engineers I (MATH OR MA)   | 3     | C             | <ul style="list-style-type: none"> <li>MAT 251 or MAT 270 may require prerequisites which should be taken in Term 1.</li> <li>Participate in a <a href="#">volunteer experience</a>.</li> </ul>  |
| Elective   | 3     |               |  |
| Complete ENG 101 OR ENG 105 OR ENG 107 course(s).  |       |               |  |
| Term hours subtotal:   | 6     |               |  |
| Term 3 - A 27 - 34 Credit Hours Critical course signified by    | Hours | Minimum Grade | Notes  |
|  CHM 113: General Chemistry I (SCIT OR SQ)  | 4     | C             | <ul style="list-style-type: none"> <li>Take advantage of <a href="#">online tutoring resources</a>.</li> </ul>   |
| Humanities, Arts and Design (HUAD)   | 3     |               |  |
| Term hours subtotal:   | 7     |               |  |
| Term 3 - B 34 - 40 Credit Hours Critical course signified by    | Hours | Minimum Grade | Notes  |

| NEU 290: Data Science for Neuroscience Majors (QTRS OR CS)<br>OR STP 231: Statistics for Life Science (QTRS OR CS) | 3     | C             |   |
|--|-------|---------------|---|
| Social and Behavioral Sciences (SOBE)  | 3     |               |   |
| 🚩 Complete Mathematics (MATH) requirement.   |       |               |   |
| Complete First-Year Composition requirement.   |       |               |   |
| Term hours subtotal:   | 6     |               |   |
| Term 4 - A 40 - 47 Credit Hours Critical course signified by 🚩   | Hours | Minimum Grade | Notes   |
| 🚩 CHM 116: General Chemistry II (SCIT OR SQ)   | 4     | C             |   |
| Science and Society Elective   | 3     | C             |   |
| Term hours subtotal:   | 7     |               |   |
| Term 4 - B 47 - 53 Credit Hours  | Hours | Minimum Grade | Notes   |
| Humanities, Arts and Design (HUAD)   | 3     |               | • Participate in an <b>internship</b>   |
| Sustainability (SUST)  | 3     |               |   |
| Term hours subtotal:   | 6     |               |   |
| Term 5 - A 53 - 59 Credit Hours Necessary course signified by ⭐  | Hours | Minimum Grade | Notes   |
| ⭐ NEU 310: Fundamentals of Cognitive Neuroscience  | 3     | C             | • The College of Liberal Arts and Sciences' Residency Requirement: Before graduation, at least 12 credit hours of upper-division (300 and 400 level) track coursework must be completed through courses offered by The College of Liberal Arts and Sciences.                            |
| Upper Division Science and Society Elective  | 3     | C             |   |
| Term hours subtotal:   | 6     |               |   |
| Term 5 - B 59 - 65 Credit Hours Necessary course signified by ⭐  | Hours | Minimum Grade | Notes   |
| ⭐ BIO 360: Animal Physiology   | 3     | C             | • A total of 18 hours is required from the major electives. A maximum of 6 total hours from NEU 394 (Neuroscience Undergraduate Teaching Assistant), NEU 484, NEU 492, NEU 493, and NEU 499 can be used to satisfy major requirements.<br>• Take advantage of <b>career resources</b> . |
| ⭐ Upper Division Major Electives   | 3     | C             |   |
| Term hours subtotal:   | 6     |               |   |
| Term 6 - A 65 - 71 Credit Hours Necessary course signified by ⭐  | Hours | Minimum Grade | Notes   |
| ⭐ BIO 476: Cellular and Molecular Neuroscience   | 3     | C             | • Draft a <b>resume</b>   |
| Global Communities, Societies and Individuals (GCSI)   | 3     |               |   |
| Term hours subtotal:   | 6     |               |   |
| Term 6 - B 71 - 77 Credit Hours Necessary course signified by ⭐  | Hours | Minimum Grade | Notes   |
| ⭐ BIO 477: Systems and Behavioral Neuroscience OR NEU 477: Systems and Behavioral Neuroscience                     | 3     | C             |   |
| Elective   | 3     |               |   |
| Term hours subtotal:   | 6     |               |   |
| Term 7 - A 77 - 83 Credit Hours Necessary course signified by ⭐  | Hours | Minimum Grade | Notes   |
| ⭐ Upper Division Major Electives   | 3     | C             | • Use Handshake to research <b>employment opportunities</b>   |
| Elective   | 3     |               |   |
| Term hours subtotal:   | 6     |               |   |

| Term 7 - B 83 - 89 Credit Hours   | Hours | Minimum Grade | Notes                                      |
|---|-------|---------------|--|
| American Institutions (AMIT)  | 3     |               |  |
| Governance and Civic Engagement (CIVI)                                    | 3     |               |  |
| Term hours subtotal:  | 6     |               |  |
| Term 8 - A 89 - 95 Credit Hours <b>Necessary course signified by</b> ★    | Hours | Minimum Grade | Notes                                      |
| ★ Complete 2 courses:   | 6     | C             |  |
| Upper Division Major Electives  |       |               |  |
| Term hours subtotal:  | 6     |               |  |
| Term 8 - B 95 - 101 Credit Hours  | Hours | Minimum Grade | Notes                                      |
| Upper Division Elective   | 3     |               | • Gather professional references           |
| Elective  | 3     |               |  |
| Term hours subtotal:  | 6     |               |  |
| Term 9 - A 101 - 107 Credit Hours <b>Necessary course signified by</b> ★  | Hours | Minimum Grade | Notes                                      |
| ★ Upper Division Major Electives  | 3     | C             | • Apply for graduate school                |
| Upper Division Elective   | 3     |               |  |
| Term hours subtotal:  | 6     |               |  |
| Term 9 - B 107 - 113 Credit Hours   | Hours | Minimum Grade | Notes                                      |
| Complete 2 courses:   | 6     |               |  |
| Upper Division Elective   |       |               |  |
| Term hours subtotal:  | 6     |               |  |
| Term 10 - A 113 - 120 Credit Hours <b>Necessary course signified by</b> ★ | Hours | Minimum Grade | Notes                                      |
| ★ Upper Division Major Electives  | 3     | C             | • Apply for full-time career opportunities |
| Elective  | 4     |               |  |
| Term hours subtotal:  | 7     |               |  |

- A total of 18 credit hours is required from the major 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.

#### Hide Course List(s)/Track Group(s)

|  |                                     |   |
|--|-------------------------------------|---|
| Behavioral Neuroscience                          | Cellular and Molecular Neuroscience | Cognitive Neuroscience                    |
| NEU 307: Your Brain on Drugs                     | BIO 331: Animal Behavior            | NEU 323: Neuroscience of Perception       |
| NEU 394: Neuroscience of Learning and Motivation |                                     | NEU 394: Language and the Brain           |
| NEU 460: Brain and Emotion                       |                                     | NEU 394: Neuroimaging Methods             |
|  |                                     | NEU 494: Cognitive Neuroscience of Memory |

| Experiential Coursework                                | Systems and Computational Neuroscience                |
|--|---|
| NEU 394: Neuroscience Undergraduate Teaching Assistant | BIO 439: Computing for Research                       |
| NEU 484: Internship                                    | NEU 426: Neuroanatomy                                 |
| NEU 492: Honors Directed Study                         | SHS 310: Anatomical and Physiological Bases of Speech |
| NEU 493: Honors Thesis                                 | SHS 311: Hearing Science                              |
| NEU 499: Individualized Instruction                    |   |

- **Total Hours:** 120
- **Upper Division Hours:** 45 minimum
- **University Undergraduate Graduation Requirements**

**Notes:**

Mathematics Placement Assessment score determines placement in first mathematics course.

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.

General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.