

























## 2023 - 2024 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  ENG 105: Advanced First-Year Composition OR 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 (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 (MA)	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  ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
BIO 182: General Biology II (SG)	4	C	
Term hours subtotal:	7		
Term 2 - B 21 - 27 Credit Hours	Hours	Minimum Grade	Notes
MAT 251: Calculus for Life Sciences (MA) OR MAT 265: Calculus for Engineers I (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>
PSY 101: Introduction to Psychology (SB)	3	C	
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 (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 (HU) AND Cultural Diversity in the U.S. (C)	3		
Term hours subtotal:	7		
		Minimum	

Term 3 - B 34 - 40 Credit Hours <b>Critical course signified by</b> 	Hours	Grade	Notes
NEU 290: Data Science for Neuroscience Majors	3	C	
Social-Behavioral Sciences (SB) AND Global Awareness (G)	3		
 Complete Mathematics (MA) requirement.			
Complete First-Year Composition requirement.			
Term hours subtotal:	6		
Term 4 - A 40 - 47 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 CHM 116: General Chemistry II (SQ)	4	C	
Science and Society Elective	3	C	
Term hours subtotal:	7		
Term 4 - B 47 - 53 Credit Hours	Hours	Minimum Grade	Notes
Computer/Statistics/Quantitative Applications (CS)	3		• Participate in an <b>internship</b>
Literacy and Critical Inquiry (L)	3		
Term hours subtotal:	6		
Term 5 - A 53 - 59 Credit Hours <b>Necessary course signified by</b> 	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 <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 360: Animal Physiology	3	C	• A total of 18 credit hours is required from the major electives. • Take advantage of <b>career resources</b> .
 Upper Division Major Electives	3	C	
Term hours subtotal:	6		
Term 6 - A 65 - 71 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 476: Cellular and Molecular Neuroscience	3	C	• Draft a <b>resume</b>
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Term hours subtotal:	6		
Term 6 - B 71 - 77 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 NEU 325: Biopsychology OR BIO 477: Systems and Behavioral Neuroscience	3	C	
Elective	3		
 Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	6		
Term 7 - A 77 - 83 Credit Hours <b>Necessary course signified by</b> 	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
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Upper Division Literacy and Critical Inquiry (L)	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: Upper Division Major Electives	6	C	
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: Elective	6		
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 394: Language and the Brain
NEU 394: Neuroscience of Learning and Motivation		NEU 394: Neuroimaging Methods
NEU 494: Anatomy of the Nervous System		NEU 394: Neuroscience of Perception
NEU 494: Brain and Emotion		NEU 494: Cognitive Neuroscience of Memory

Systems and Computational Neuroscience

BIO 439: Computing for Research

SHS 310: Anatomical and Physiological Bases of Speech

SHS 311: Hearing Science

**Notes:**

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- 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.

**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

**Total College Residency Hrs:** 12 minimum

**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 next to courses on the major map were valid for the 2023 - 2024 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.