

NEUROBIOLOGY, B.S.

Seven Penn State campuses are scheduled for closure after Spring 2027: DuBois, Fayette, New Kensington, Mont Alto, Shenango, Wilkes-Barre, and York. New students are not being admitted at these campuses.

Begin Campus: Any Penn State Campus

End Campus: University Park

Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2026-27 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition.

Neurobiology, B.S. at University Park Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
BIOL 110, 114 and 115, or 114 and 116 ^{*#}	4-5 BIOL 230W, 234 and 235W, or 234 and 236W ^{*#}	4-5
CHEM 110 ^{*#†}	3 CHEM 112 ^{*†}	3
CHEM 111	1 CHEM 113	1
ENGL 15, 30H, ESL 15, ENGL 137H, or CAS 137H (GWS) [†]	3 MATH 140B (GQ) ^{*†##}	4
PSYCH 100 (GS) [†]	3 General Education Course (GWS) (ENGL/CAS 138H) [†] or General Education Course or Elective	3
PSU First-Year Seminar (not required if enrolled in ENGL/CAS 137H)	1	

15-16

15-16

Second Year

Fall	Credits Spring	Credits
BIOL 222 or 161 and 162 (GN) ¹	4-3 BIOL 322 or 161 and 162 (GN) ¹	3-4
STAT 250, 200, or 240 (GQ) ^{*††}	3-4 CHEM 212	3
CHEM 210	3 CHEM 213	2
BBH 203/PSYCH 260	3 Elective	3
General Education Course (GA)	3 General Education Course (Inter-Domain)	3

16

14-15

Third Year

Fall	Credits Spring	Credits
BIOL/BBH 469 (or BIOL 4XX (Group A)) ²	3 BIOL/BBH 469 or 470 ²	3

PHYS 250	4 PHYS 251	4
BMB 211 or 401	3 General Education Course (Inter-Domain)	3
General Education Course (Inter-Domain)	3 General Education Course (GH, US/IL)	3
Elective	3 Elective	3
16		16

Fourth Year

Fall	Credits Spring	Credits
BIOL 470 (or BIOL 4XX (Group A))	3 BIOL 4XX (Group C)	3
BIOL 4XX (Group B)	3 BIOL 4XX (Group D)	3
General Education Course (Exploration)	3 CAS 100A, 100B, or 100C (GWS) (not required if completed ENGL/CAS 138T) [†]	3
ENGL 202A, 202B, 202C, or 202D (GWS) (202C recommended) [†]	3 Elective	3
General Education Course (GHW)	3 Elective	3
15		15

Total Credits 122-125

* Course requires a grade of C or better for the major

† Course requires a grade of C or better for General Education

Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

¹ BIOL 161 requires a grade of C or better for the major and satisfies General Education and degree requirement

² BIOL 469/BBH 469 requires a grade of C or better for the major

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

Program Notes:

- Group A (Molecular and Cellular Neuroscience): Select a minimum of 3 credits
 - BIOL 404 – Cellular Mechanisms of Vertebrate Physiology
 - BIOL 413 – Cell Signaling
 - BIOL 430 – Developmental Biology
 - BIOL 467 – Molecular Basis of Neurological Diseases
- Group B (Behavioral, Structural, and Cognitive Neuroscience): Select a minimum of 3 credits
 - BBH 468 – Neuroanatomical Bases for Disorders of Behavior and Health
 - BIOL 426 – Developmental Neurobiology
 - BIOL 478 – Comparative Neuroanatomy
 - PSYCH 452 – Learning and Memory
 - PSYCH 462 – Physiological Psychology
 - PSYCH 478 – Clinical Neuropsychology
 - ANTH 466 – The Skull
 - KINES 465 – Neurobiology of Sensorimotor Stroke Rehabilitation
 - KINES 471 – MOTOR CONTROL
- Group C (Additional Coursework on Topics Highly Relevant to Neuroscience): Select a minimum of 3 credits
 - BIOL 418 – Biology of Human Infectious Diseases
 - BIOL 422 – Advanced Genetics
 - BIOL 434 – Pathobiology of Emerging Infectious Disease
 - BIOL 439 – Practical Bioinformatics
 - BIOL 455 – Stem Cell Biology and Therapy
 - BIOL 460 – Human Genetics
 - BIOL 465 – Network Analysis of Biological Systems
 - BIOL 472 – Human Physiology
 - BIOL 475 – Human Pathophysiology
 - BIOL 479 – General Endocrinology
 - BBH 451 – Pharmacological Influences on Health
 - NUTR 460 – Nutritional Neuroscience
- Group D (Laboratory Requirement): Select a minimum of 3 credits
 - BIOL 421 – Comparative Vertebrate Anatomy
 - BIOL 437 – "Histology"
 - BIOL 473 – "Laboratory in Mammalian Physiology"
 - BIOL 476 – "Advanced Human Anatomy - cadaver based"
 - BIOL 477 – "Biology Cadaver Dissection"
 - BIOL 478 – Comparative Neuroanatomy
 - BIOL 496 – Independent Studies (maximum of 3 credits can be applied to this group)
 - BIOL 494 – Internship (maximum of 3 credits can be applied to this group)
 - SC 295, SC 395, SC 495 – (maximum of 3 credits can be applied to this group)
- Electives: Any course may count as an elective EXCEPT for courses on the disallowed course list.
- Disallowed Courses: Duplicated courses and BMB 1, BISC 1, 2, 3, 4, BIOL courses below 110, CHEM courses below, ENGL 4, 5, ESL 4, CAS 126, MATH courses below 21, MICRB 106, 107, PHYS 1, 150, 151, more than 9 credits of SC 295, 395, 495.