

BINGHAMTON UNIVERSITY

STATE UNIVERSITY OF NEW YORK

APPENDIX

Major: BS Integrative Neuroscience Harpur College of Arts and Sciences

Major Requirements: courses in () indicate Binghamton course equivalent

(8) courses in the major must be taken in residence at Binghamton University: PSYC 344, PSYC 362, PSYC 327 or BIOL 375 or BIOL 453, one approved seminar, one lab, and 3 additional courses.

CORE COURSES: The following 12 core courses (48 credit hours) are required. If CHEM 111 is taken, the total is 11 courses for 44 credit hours):

- **PSY 101** (PSYC 111), (PSYC 243 - prerequisite: PSYC 111), (PSYC 344 - prerequisite: PSYC 243) & (PSYC 362 - pre or co-requisite: PSYC 243)
- **BIO 203** (BIOL 117) & **BIO 101** (BIOL 118) & (BIOL 375 or BIOL 453 or PSYC 327)
- **CHM 140** (CHEM 107) & **CHM 240** (CHEM 108)/ **OR** (CHEM 111), & **CHM 260** (CHEM 231) & **CHM 262** (CHEM 332) – **CHM 260 & 262** together fulfill (CHEM 335)
- **An approved Integrative Neuroscience Seminar** (4 cr.): PSYC 473 or BIOL 483 or two BIOL 480 (2 cr.) courses

**MATH 147 & 148 and credit for AP Statistics are NOT acceptable equivalents for PSYC 243*

ELECTIVE REQUIREMENTS: a total of (24) credit hours:

(6) credits MATH, CHEM, PHYSICS electives, (4) credits Related Subjects electives, (4) credits Type (A) BIOL electives, (4) credits Type (B) BIOL electives, & (6) credits PSYC electives

ADDITIONAL ELECTIVE STIPULATIONS: (3) elective courses must be lab courses with at least (1) taken in residence at Binghamton University & (16) elective credits must be upper level (300 or above)

- **MATH/CHEM/PHYS ELECTIVES:** Minimum (6) credit hours of chemistry, math, physics selected from: **CHM 250** (CHEM 221), 335, 434, **MAT 280** (MATH 224 & 225), **MAT 281** (MATH 226 & 227), **MAT 282** (MATH 323), CS 140, 240, **PHY 186** (PHYS 121) or (PHYS 131), **PHY 286** (PHYS 122) or (PHYS 132)
- **RELATED SUBJECTS ELECTIVES:** Minimum (4) credit hours in related subjects selected from ANTH 111, 117, 168, 243, 244, 247, 248, 334, 335, 336, 337, 338, 366, 380H, 380R, 428, BIOL 105, CLAS 121, CS 100, 105, 110, GEOG 422, HIST 230, 238, **PHR 100** (PHIL 121), **PHR 103** (PHIL 122), PHIL 148, PHIL 423, and SOC 251
- **TYPE A BIOLOGY ELECTIVES:** Minimum (4) credit hours selected from BCHM 301, 302, 425, 426, BIOL 224, 301, 302, 311, 313, 314, 318, 326, 402, 405, 425, 426, 427, 428
- **TYPE B BIOLOGY ELECTIVES:** Minimum (4) credit hours selected from BIOL 351, 352, 355, 371, 373, 378, 379, 437, 450, 451, 452, 454, 456, 471, 472, 475, 476
- **TYPE A OR B BIOLOGY ELECTIVES:** Selected from BIOL 251, 252, 324, 330, 331, 340, 347, 435, 441, 483i, BE 340
- **PSYCHOLOGY ELECTIVES:** Minimum (6) credit hours selected from **PSY 201 or 202** (PSYC 220), **PSY 102** (PSYC 223), PSYC 330, 350, 351, 352, 355, 356, 357, 358, 359, 360, 363, 385, 406

**A complete list of approved elective courses for the major can be found at: <http://bit.ly/1vdLaHg>*

It is essential that you are strategic when selecting courses at Bergen Community College (Bergen CC) in order to maximize the fulfillment of as many General Education and Harpur College requirements as possible before transferring to Binghamton.

Harpur College Requirements

- There are additional Harpur College requirements for General Education, Foreign Language and Writing. For more information see page #3 of this Appendix.
- Harpur College requires at least 44 credits taken in residence at Binghamton University and a total of at least 126 credits (including transfer credit) to graduate.
- Courses must have a grade of C- or better to be accepted for transfer credit. Courses for some majors may require a higher grade to be accepted as credit toward the major (noted on page #2 of this Appendix if applicable).

Please Note: The schedule below is only one example of how the BS in Integrative Neuroscience major can be completed in eight semesters. Your academic advisor or major advisor may recommend that you take courses in a different sequence based on credits earned previously.

See specific important departmental information in the University Bulletin at: <http://bit.ly/1ydLaHg>

The **BOLD** areas below indicate Bergen CC courses that fulfill Integrative Neuroscience BS major requirements & the Binghamton equivalent course follows in ()

Year	Fall	Spring	Key/Notes
1	<p>Bergen CC *# PSY 101 (PSYC 111) * CHM 140 (CHEM 107) * (1) course in MATH, CHEM. PHYS electives listed on page 1 + Gen Ed and other Binghamton requirements</p>	<p>Bergen CC **(1) PSY elective: PSY 201 or 202 (PSYC 220) or PSY 102 (PSYC 223) * CHM 240 (CHEM 108) * (1) course in MATH, CHEM. PHYS electives listed on page 1 + Gen Ed and other Binghamton requirements</p>	<p>* Fulfills Binghamton Integrative Neuroscience major requirement ** Fulfills (1) PSYC elective # This course requires a grade of "C" or higher to declare major. + All other courses taken should fulfill Gen Ed, additional Foreign Language and Harpur Writing Requirements</p>
2	<p>Bergen CC * BIO 203 (BIOL 117) */***CHM 260 (CHEM 231) + Gen Ed and other Binghamton requirements</p>	<p>Bergen CC * BIO 101 (BIOL 118) */***CHM 262 (CHEM 332) + Gen Ed and other Binghamton requirements</p>	<p>* Fulfills Binghamton Integrative Neuroscience major requirement *** together fulfill (CHEM 335) + All other courses taken should fulfill Gen Ed, additional Foreign Language and Harpur Writing Requirements</p>
3	<p>Binghamton University • Meet with your major advisor and Harpur advisor */# PSYC 243 *BIOL 375 or 453 or PSYC 327 *(1) PSYC elective 300/400 level ~ See comment in "Notes" section</p>	<p>Binghamton University • Declare the major if requirements are met at: neuro@binghamton.edu. *PSYC 344 *PSYC 362 *BIOL Type A or Type A/B elective (4 cr.) 300/400 level ~ See comment in "Notes" section</p>	<p>* Fulfills Binghamton Integrative Neuroscience major requirement # This course requires a grade of "C" or higher to declare major. ~ Complete any Gen Ed, Harpur Writing and Harpur Language requirements not met at Bergen CC</p>
4	<p>Binghamton University *BIOL Type B or Type A/B elective (4 cr.) 300/400 level * (1) Related subjects elective (4 cr.) 300/400 level ~ See comment in "Notes" section</p>	<p>Binghamton University *Approved Integrative Neuroscience seminar (4 cr.) PSYC 473 or BIOL 480/483 ~ See comment in "Notes" section</p>	<p>* Fulfills Binghamton Integrative Neuroscience major requirement ~ Complete any Gen Ed, Harpur Writing and Harpur Language requirements not met at Bergen CC</p>

*It is highly recommended that the Gen Ed Laboratory Science (L), Gen Ed Mathematics (M) and additional foreign language requirement be completed at Bergen CC before transferring to Binghamton (unless they will be fulfilled by courses required for the major that must be taken at Binghamton University).

Additional Binghamton General Education Requirements:

*Information on Binghamton General Education requirements can be found at: <http://bit.ly/1iE0uTA>

1) AP and/or IB credit may fulfill some requirements. Bergen CC academic advising will apply any applicable fulfilled requirements.

2) In addition to the SUNY Gen Ed requirements, Binghamton also requires a minimum of two credits in physical education, wellness, or both physical education and wellness.

* The 2-credit physical education requirement can be fulfilled at Bergen CC.

The Harpur College Foreign Language requirement: For all requirements except Foreign Language, transfer students who have been certified as meeting a SUNY-wide General Education requirement prior to matriculation at Binghamton will be certified as having met the corresponding Binghamton requirement.

- Because the SUNY-wide Foreign Language requirement is one college-level course and the Binghamton University Foreign Language requirement for students in Harpur is fulfilled by a second-semester college-level course in foreign language, transfer students in those schools who fulfilled the SUNY-wide Foreign Language requirement may need additional coursework to fulfill the Binghamton University Foreign Language requirement.

*This additional foreign language requirement can be fulfilled at Bergen CC.

***To determine if you have fulfilled the Binghamton University foreign language requirement go to the foreign language calculator at: <http://bit.ly/1me5WNr>**

The Harpur All College Writing Requirement: A maximum of 3 transfer courses in English composition, rhetoric or literature (of which only 1 may count as a C/J course) may be applied to this requirement. Harpur College establishes the following requirements in composition (C), writing (W) and/or (J) courses.

All candidates for a baccalaureate degree from Harpur College must complete one of the following combinations of C, J and W courses for completion of the writing requirement:

- two C/J and three W; or
- three C/J and one W; or
- four C/J

Students are strongly urged to take at least one four-credit (C) course within their first two semesters (32 credits) at Harpur College.

Composition (C) courses emphasize writing as a process of revision and require a minimum of 20 pages of expository prose. At least 50 percent of the course grade is based on student writing. Writing (W) courses provide considerable experience in and feedback on writing as a tool of college-level teaching and learning. Written assignments in W courses constitute 30 to 100 percent of the basis for the grade in the course and typically consist of a minimum of 10 pages of writing.

(J) courses require 20 pages and a minimum of two oral presentations.

*For a complete and detailed list of Harpur College requirements go to: <http://bit.ly/1i5SBeH>