NEUROBIOLOGY AND PHYSIOLOGY

- A minimum 2.0 average in all biology courses required for this major is necessary to graduate.
- A minimum of 32 credits at or above the 300-level must be completed at a Purdue campus.
- At least one 500-level Biology course other than BIOL 500 or 542 must be completed for graduation.
- 124 Total Credits are necessary to graduate.

### BIOLOGY

**First Year**
- **Core:**
  1. BIOL 121 (2) (fall) and BIOL 131 (3) (spring)
  2. BIOL 136, 137, 138, 139 (1 credit each)
  (two of the four each semester; may be taken in any order)

**Second Year**
- **Core:**
  1. BIOL 231 (3) BIOL 232 (2) (fall)
  2. BIOL 241 (3) BIOL 242 (2) (spring)

**Other Required Biology:**
- 1. BIOL 455 (3) or 538 (3) or 562 (3)
- 2. BIOL 495N (3) or BIOL 559 (3) or BIOL 495I (3)
- 3. a. BIOL 394 (3), or 494 (3), or 499 (3), or
   b. BIOL 500/542; must include 500A or 542N; (3 modules)
- 4. BCHM 561 (3) or CHM 533 (3) or CHM 372 (4) or CHM 373 (3)

**Biology Electives:**
- Select six credits from the following:
  1. BIOL 301/302 (both courses must be taken to fulfill three credits of Biology elective).
  2. Any advanced Biology elective (400 or 500 level) with the exception of BIOL 497, 498, or one credit electives in Biology. Special assignments in Biology (BIOL 495 or 595) require approval of the Neurobiology and Physiology Area Committee.
  3. Three credits (but not less) of advanced research (394 or 494 or 499) can count toward the six credit requirement, provided research is not also used as a substitute for a lab module; approval of the Neurobiology and Physiology Area Committee is required.
  4. BCHM 562.

### MATHEMATICS

MA [161 (5) and 162 (5)] or [165 (4) and 166 (4)] or [223 (3) and 224 (3)] or 173 (5)

**Math Electives:**
- (select one if MA 161-162 or 165-166 or 173 is chosen; two if MA 223-224):
  - C S 177 (4) or 158 (3) or 154 (3); STAT 311 (3), [503 (3) or 511 (3)]; MA 261 (4)

### CHEMISTRY

**General:**
- 1. CHM 115 (4)
- 2. CHM 116 (4)

**Organic:**
- 3. a. CHM 255 (3) and 255L (1), 256 (3) and 256L (1) or
  - b. CHM 261 (3) and 263 (1), 262 (3) and 264 (1) or
  - c. CHM 257 (4) and 257L (1) and either CHM 333 (3) or BCHM 307 (3)

### PHYSICS

PHYS [220 (4) and 221 (4)] or [152 (4) and 241 (3) and 252 (1) and 290D (1)]

### ENGLISH

1. ENGL 106 (4) or 108 (3)
2. Choose one: ENGL 205, 304, 306, 309, 406, 419, 420, 421, 424 (3 credits each)

### LANGUAGE

1. 101 or 103 (both 3)
2. 102 (3) (Unless 103 is taken)
3. 201 (3)
4. 202 (3)

### GENERAL EDUCATION

Consult the College of Science General Education Handout.

### FREE ELECTIVES

Approximately 10 - 15 credits
BIOL 500I is not explicitly required for this major, although it may be a prerequisite for other lab modules. Advanced undergraduate research (394 or 494 or 499) can substitute for one or more of the elective lab modules with approval of the Neurobiology and Physiology Area Committee.

Students who complete a course in physical chemistry (CHM 372 or 373) are automatically exempt from PHYS 290D.