

# College of Arts and Sciences 2025-2026 Degree Worksheet

## B.S. NEUROSCIENCE

Page 1 of 2

### COLLEGE of ARTS & SCIENCES Language Requirement

All students who major in the College of Arts & Sciences are required to demonstrate competence in a second language. For complete details:

<https://www.gonzaga.edu/college-of-arts-sciences/about/information-for-students/language-requirement-information>

Credits Sem/Yr

|  |  |
|--|--|
|  |  |
|--|--|

### UNIVERSITY CORE REQUIREMENTS:

#### ► FUNDAMENTAL CORE COURSES

##### Year 1: Understanding & Creating

|  | Credits | Sem/Yr               |
|--|---------|----------------------|
| <i>Writing</i><br>ENGL 101 Writing (fulfills 3 credits Writing Enriched)*                      | 3       | <input type="text"/> |
| <i>Reasoning</i><br>PHIL 101 Reasoning   | 3       | <input type="text"/> |
| <i>First Year Seminar</i><br>Dept. 193   | 3       | <input type="text"/> |
| <i>Communication &amp; Speech</i><br>COMM 100 Communication & Speech                           | 3       | <input type="text"/> |
| <i>Math</i><br>MATH (must be above Math 100)   | 3       | <input type="text"/> |
| <i>Scientific Inquiry (2cr + 1cr lab)</i><br>BIOL or CHEM or PHYS 104/104L (taken year 1 or 2) | 3       | <input type="text"/> |

##### Year 2: Being & Becoming

|   | Credits | Sem/Yr               |
|---|---------|----------------------|
| <i>Christianity &amp; Catholic Traditions</i><br>RELI (see approved list)** | 3       | <input type="text"/> |
| <i>Philosophy of Human Nature</i><br>PHIL 201 Philosophy of Human Nature    | 3       | <input type="text"/> |

##### Year 3: Caring & Doing

|  | Credits | Sem/Yr               |
|--|---------|----------------------|
| <i>World/Comparative Religion</i><br>RELI (see approved list)** (fulfills 3cr Global Studies)* | 3       | <input type="text"/> |
| <i>Ethics</i><br>PHIL 301 Ethics or RELI 330 Principles-Christian Morality                     | 3       | <input type="text"/> |

##### Year 4: Imagining the Possible

|  | Credits | Sem/Yr               |
|--|---------|----------------------|
| <i>Core Integration Seminar</i><br>Dept. 432 | 3       | <input type="text"/> |

**NOTE: some courses have pre-requisites, check the catalog carefully!**

#### ► BROADENING COURSES - see approved list\*\*

|                             | Credits | Sem/Yr               |
|-----------------------------|---------|----------------------|
| Social & Behavioral Science | 3       | <input type="text"/> |
| Literature                  | 3       | <input type="text"/> |
| History                     | 3       | <input type="text"/> |
| Fine Arts & Design          | 3       | <input type="text"/> |

#### ► REQUIRED COURSE DESIGNATIONS - see approved list\*\*

|                   | Credits | Sem/Yr               |
|-------------------|---------|----------------------|
| *Writing Enriched | 9 total | <input type="text"/> |
| Social Justice    | 3 total | <input type="text"/> |
| *Global Studies   | 6 total | <input type="text"/> |

\*\*for list of approved RELI, Broadening & Designated courses, see : <https://my.gonzaga.edu/academics/undergraduate-programs/general-degree-requirements-procedures/university-core>

### B.S. NEUROSCIENCE

**62 Credits**

#### LOWER DIVISION

**38 Credits**

| Course        | Course Title                          | Credits | Grade                |
|---------------|---------------------------------------|---------|----------------------|
| BIOL 105/105L | Info Flow in Biological Systems + Lab | 4       | <input type="text"/> |
| BIOL 106      | Energy Flow in Biological Systems     | 3       | <input type="text"/> |
| BIOL 207/207L | Genetics + Lab                        | 4       | <input type="text"/> |
| NEUR 201      | Introduction to Neuroscience          | 3       | <input type="text"/> |
| CHEM 101/101L | General Chemistry + Lab               | 4       | <input type="text"/> |
| CHEM 230/230L | Organic Chemistry I + Lab             | 4       | <input type="text"/> |
| PSYC 101      | General Psychology                    | 3       | <input type="text"/> |

#### One of the following course and lab combinations:

|               |                         |   |                      |
|---------------|-------------------------|---|----------------------|
| PHYS 111/111L | General Physics I + Lab | 5 | <input type="text"/> |
| <b>OR</b>     |                         |   |                      |
| PHYS 121/121L | Physics I + Lab         | 5 | <input type="text"/> |

#### One of the following course and lab combinations:

|                |                          |   |                      |
|----------------|--------------------------|---|----------------------|
| PHYS 112/112L  | General Physics II + Lab | 5 | <input type="text"/> |
| <b>OR</b>      |                          |   |                      |
| PHYS 122/1122L | Physics II + Lab         | 5 | <input type="text"/> |

#### One of the following statistics courses:

|          |                                    |   |                      |
|----------|------------------------------------|---|----------------------|
| PSYC 202 | Statistics for Psychology          | 3 | <input type="text"/> |
| MATH 121 | Introductory Statistics            | 3 | <input type="text"/> |
| MATH 221 | Applied Statistics                 | 3 | <input type="text"/> |
| HPHY 205 | Experimental Design and Statistics | 3 | <input type="text"/> |

#### UPPER DIVISION

**24 Credits**

| Course   | Course Title             | Credits | Grade                |
|----------|--------------------------|---------|----------------------|
| NEUR 399 | Scientific Communication | 3       | <input type="text"/> |
| NEUR 499 | Neuroscience and Society | 3       | <input type="text"/> |
| BIOL 376 | Cellular Neurophysiology | 3       | <input type="text"/> |
| HPHY 451 | Systems Neuroscience     | 3       | <input type="text"/> |
| HPHY 453 | Neuroanatomy             | 3       | <input type="text"/> |

**Choose at least 9 credits from any of the following courses in any combination from any area:**

#### Cellular and Molecular

|               |                         |   |                      |
|---------------|-------------------------|---|----------------------|
| BIOL 331      | Parasitology            | 3 | <input type="text"/> |
| BIOL 335      | Advanced Genetics       | 3 | <input type="text"/> |
| BIOL 337      | Developmental Biology   | 3 | <input type="text"/> |
| BIOL 338/338L | Histology + Lab         | 4 | <input type="text"/> |
| BIOL 351      | Advanced Cell Biology   | 3 | <input type="text"/> |
| BIOL 370/370L | Microbiology + Lab      | 4 | <input type="text"/> |
| BIOL 374      | Immunology              | 3 | <input type="text"/> |
| BIOL 375      | Virology                | 3 | <input type="text"/> |
| BIOL 456/456L | Molecular Biology + Lab | 4 | <input type="text"/> |

#### Physiological and Anatomical

|               |                                 |   |                      |
|---------------|---------------------------------|---|----------------------|
| BIOL 341/341L | Human Physiology + Lab          | 4 | <input type="text"/> |
| BIOL 371/371L | Vertebrate Biology + Lab        | 4 | <input type="text"/> |
| HPHY 375/375L | Biomechanics + Lab              | 4 | <input type="text"/> |
| HPHY 376/376L | Exercise Physiology + Lab       | 4 | <input type="text"/> |
| HPHY 402      | Clinical Exercise Physiology    | 3 | <input type="text"/> |
| BIOL 441      | Advanced Animal Physiology      | 3 | <input type="text"/> |
| BIOL 451/451L | Comparative Endocrinology + Lab | 4 | <input type="text"/> |
| HPHY 452      | Neuromuscular Control           | 3 | <input type="text"/> |
| HPHY 478      | Physiology of Aging             | 3 | <input type="text"/> |
| HPHY 485      | Biomedical Engineering          | 3 | <input type="text"/> |

continued on Page 2

# College of Arts and Sciences 2025-2026 Degree Worksheet

## B.S. NEUROSCIENCE

Page 2 of 2

*continued from Page 1*

Additional courses may count toward elective credits upon permission from the Neuroscience Director.

Note: some of these courses have prerequisites that are not required by the Neuroscience major and must be fulfilled before registration.

### **Philosophical**

|      |                              |   |  |
|------|------------------------------|---|--|
| PHIL | 404 Philosophy of Science    | 3 |  |
| PHIL | 406 Philosophy of Mind       | 3 |  |
| PHIL | 437 Philosophy of Time       | 3 |  |
| PHIL | 478 Philosophy of Technology | 3 |  |

### **Computational**

|      |  |   |  |
|------|--|---|--|
| BIOL | 305 Biological Data Analysis               | 4 |  |
| PHYS | 412 Biophysical Systems and Modeling       | 3 |  |
| CPSC | 436 Biomedical Informatics and Computing   | 3 |  |
| PSYC | 450 Advanced Statistics in Psychology      | 3 |  |
| CPSC | 475 Speech and Natural Language Processing | 3 |  |

### **Behavioral**

|      |                                 |   |  |
|------|---------------------------------|---|--|
| PSYC | 305 Sensation and Perception    | 3 |  |
| PSYC | 310 Cognition                   | 3 |  |
| BIOL | 313 Animal Behavior             | 3 |  |
| PSYC | 315 Learning                    | 3 |  |
| SOCI | 354 Sociology of Mental Illness | 3 |  |
| PSYC | 364 Abnormal Child Psychology   | 3 |  |
| PSYC | 390 Psychopathology             | 3 |  |
| PSYC | 395 Clinical Neuropsychology    | 3 |  |