

BIOLOGY – PRE-PHYSICAL THERAPY (B.S.)

Student Learning Outcomes

1. Students will demonstrate knowledge of discipline- specific content related to macro- principles describing the 3 domains of biology and the molecular nature of life.
2. Students will use critical thinking by demonstrating the ability to recognize the components of a problem, formulate a strategy to solve the problem, apply comprehensive scientific knowledge to execute a solution and then evaluate the effectiveness of the solution.
3. Students will demonstrate communication skills reflective of professional standards consistent biology-related associations (i.e. FASEB).
4. Students will demonstrate discipline- specific core laboratory and calculation- based skills related to the characterization and classification of life forms, their components and habitats and in the molecular analysis of living species.
5. Students will demonstrate readiness for post-baccalaureate entry into a workforce or acceptance into graduate or professional programs in Biology and/or health professions.
6. Students will demonstrate global perspective in their understanding of how biological factors affect economics, health, technology and the environment.

Recommended

- A Global Learning (GL) experience (<http://catalog.walsh.edu/undergraduate/academic-services/#globallearning>)

Required

- General Education Requirements (<http://catalog.walsh.edu/undergraduate/general-education-curriculum/>)
- Internship

| Code | Title | Hours |
|--|--------------------------------|-------|
| Biology | | |
| BIO 101 | FD: T1:Principles of Biology I | 3 |
| BIO 101L | Principles of Biology I: Lab | 1 |
| BIO 102 | Principles of Biology II | 3 |
| BIO 102L | Principles of Biology II: Lab | 1 |
| BIO 206 | Microbiology | 3 |
| BIO 206L | Microbiology: Lab | 1 |
| BIO 209 | Anatomy/Physiology I | 3 |
| BIO 209L | Anatomy/Physiology I: Lab | 1 |
| BIO 210 | Anatomy/Physiology II | 3 |
| BIO 210L | Anatomy/Physiology II: Lab | 1 |
| BIO 309 | Human Physiology | 4 |
| BIO 390 | Biology Internship | 1-3 |
| Biology Electives | | |
| BIO Upper-Division Electives (300-level or higher) A maximum of 2 credits of BIO 411/412 may be taken. | | 7 |
| Chemistry | | |
| CHEM 101 | FD:T1:Princ of Chemistry I | 3 |
| CHEM 101L | Principles of Chemistry I: Lab | 1 |

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|-----------|--------------------------------|---|
| CHEM 102 | Principles of Chemistry II | 3 |
| CHEM 102L | Principles of Chemistry II:Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 201L | Organic Chemistry I: Lab | 1 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 202L | Organic Chemistry II: Lab | 1 |

Physics

| | | |
|-------------|-------------------------------|---|
| PHYS 101 | Principles of Physics I | 3 |
| or PHYS 201 | Physics with Calculus I | |
| PHYS 101L | Principles of Physics I: Lab | 1 |
| PHYS 102 | Principles of Physics II | 3 |
| or PHYS 202 | Physics with Calculus II | |
| PHYS 102L | Principles of Physics II: Lab | 1 |

Psychology

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| PSYC 120 | T1:FD: Principles of Psych * | 3 |
| PSYC 210 | T1:DV:FD: HumanDevelAcrossLife | 3 |

Mathematics

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|------------------------------|-----------------------------|-----|
| Select one of the following: | | 5-6 |
| MATH 155 | Elementary Functions I | |
| & MATH 156 | and Elementary Functions II | |
| or MATH 210A | and Calculus I | |
| & MATH 211 | and Calculus II | |
| MATH 221 | Statistics | 3 |

Other

| | | |
|---------|------------------------|---|
| EXS 381 | Physiology of Exercise | 3 |
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Total Hours 73-76

**Math and Science requirements in major also fulfill core requirements.*

All courses required in the major must be completed with a "C-" or better in order to satisfy the major. If a student places into MATH 156, then they only need to complete MATH 156 to fulfill the math requirement. If a student places into MATH 210A then they have completed the Math requirement for this major. If MATH 221 is required, it must still be taken. Incoming students need to place into MATH 104 in order to enroll in BIO 101 and MATH 155 to enroll in CHEM 101.