

University of Indianapolis – Shaheen College of Arts & Sciences
2024-2025 Curriculum Guide for Human Biology Majors (HBIO)
 Bachelor of Arts or Bachelor of Science

Freshman Year

Semester I:

- **BIOL 159** Introduction to Ecology and Evolution (4)
- **CHEM 150** General Chemistry I (3) and **CHEM 151** General Chemistry Lab I (1)

Semester II:

- **BIOL 165** Introduction to Cell Biology (4)
- **CHEM 160** General Chemistry II (3) and **CHEM 161** General Chemistry Lab II (1)

Sophomore Year

- **BIOL 225** Introduction to Genetics (4)
- **BIOL 290** Biology Seminar (1)
- Take TWO (2) of the following THREE (3) courses:
 - **BIOL 260** Biodiversity (4)
 - **BIOL 265** Ecology (4)
 - **BIOL 280** Evolution (4)
- **ANTH 100** Cultural Anthropology (3)
- **MATH ELEC** (MATH 190 recommended) (4)
- **MATH ELEC** (MATH 245 recommended) (4)

Junior and Senior Years

- **PHYS 150** General Physics I (4) **OR**
- **PHYS 153** General Physics I, Calculus-Based (4)
- **PHYS 160** General Physics II (4) **OR**
- **PHYS 163** General Physics II, Calculus-Based (4)
- **Human Bio Core Area A Courses (see below)** (8 hours required)
- **Human Bio Core Area B Courses (see below)** (8 hours required)
- **BIOL 305** Human Functional Anatomy (4)
- **BIOL 330** Biomedical Physiology (4)
- Capstone:
 - **BIOL 495** Biology Capstone (3) **OR**
 - **BIOL 496** Biology Capstone: Research Experience (1) **AND**
 - **BIOL 490** Independent Research (1) **AND**
 - **BIOL 490** Independent Research (1)

CORE AREAS:

(A) Human Biology Core Area A (complete at least 7 hours):

- **BIOL 220** General Microbiology (4)
- **BIOL 235** Animal Development (4)
- **BIOL 240** Vertebrate Anatomy (4)
- **BIOL 305** Human Functional Anatomy (4)
- **BIOL 310** Vertebrate Histology (4)
- **BIOL 325** Advanced Genetics (4)
- **BIOL 390** Molecular Biology (4)
- **BIOL 440/441** Cancer Biology and Lab (5)
- **BIOL 460** Topics in Biology (1-4)
- **BIOL 490** Independent Research (1-4)
- **ANTH 430** Topics in Anthropology (1-4)

- **BIOL 235** Animal Development (4)

(B) Human Biology Core Area B (complete at least 7 hours):

- **BIOL 210** Human Biological Variation (3)
- **BIOL 280** Evolution (4)
- **BIOL 345** Human Evolution (3)
- **BIOL 370** Immunology (3)
- **BIOL 411** Evolutionary Medicine (3)
- **BIOL 425** Dental Science (3)
- **BIOL 435** Forensic & Historic DNA Analysis (3)
- **ANTH 201** Science, Technology, and Bioethics (3)
- **ANTH 211** Anthropology of Health (3)
- **ANTH 335** Global Health (3)
- **ANTH 420** The Enculture Body (3)

- At least two (2) courses from (A) and (B) combined (2 courses total) must include a substantive laboratory experience.

NOTE: A grade of C (2.0 on a 4.0 scale) or higher is required in all courses applying toward the Human Biology major.

- Math elective must be MATH 180 or greater.
- The Biology Capstone requirement may be fulfilled by taking this course (BIOL 495) **OR** by taking BIOL 490 / HONS 490: Independent Research and BIOL 496: Biology Capstone: Research Experience.

The Human Biology major requires a minimum of 73 hours.

The Bachelor of Science and Bachelor of Arts Degree require a minimum of 120 hours. See the College of Arts & Sciences General Education Core Guide/Bachelor of Arts or Science for additional course requirements.

Note regarding Biology electives: Many elective courses are offered every other year.

Note regarding early admission to professional programs: Human Biology majors planning to apply to a professional program (e.g., medical, dental, optometry, veterinary, physical therapy, or occupational therapy) may be eligible for admission to such a program after their junior year if (1) all liberal arts core requirements are met, and (2) a minimum of 94 undergraduate semester hours are completed, and (3) all major courses except the chemistry elective and 5 hours of biology elective have been satisfied.

REMEMBER: If you have any questions about the Human Biology major and its requirements contact the Department Chair, Dr. Sandy Davis (317-788-2400) or your academic advisor. Courses and requirements sometimes change so keep in touch with your advisor.