

BS: Applied Biology: Human Biology & Health Sciences

The Human Biology & Health Sciences concentration in Applied Biology prepares students for health-related careers, employment with biomedical science companies, or graduate studies in health sciences. Students select a "tool" in GIS, Commerce, Data Intelligence or Forensic Investigation and earn numerous certifications.

Department of Biological Sciences

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Tutoring and Learning Center (TLC)

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513-727-3440

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Career Services & Professional Development

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Plan Recommendation Chart

| | Hours | Course Number or Related Information |
|--|--------------|--|
| Perspectives Area: Formal Reasoning and Communication | 9 | |
| Mathematics and Formal Reasoning | 3 | STA261 Statistics or MTH151 Calculus |
| English Composition | 3 | ENG 111 English Composition or ENG 109 |
| Advanced Writing | 3 | Choice |
| Perspectives Area: Science and Society | 15-16 | |
| Social Sciences #1 | 3 | Choice (PSY111 Intro to Psychology recommended) |
| Social Sciences #2 | 3 | Choice |
| Natural Science #1 | 4 | BIO115 Biological Concepts |
| Lab | 2 | CHM144 College Chemistry Lab |
| Natural Science #2 | 3-4 | CHM141/CHM141R College Chemistry |
| Perspectives Area: Arts and Humanities | 6 | |
| Creative Arts | 3 | Choice |
| Humanities | 3 | Choice |
| Perspectives Area: Global Citizenship | 12 | |
| Ethical Citizenship and Leadership | 3 | Choice |
| Intercultural Consciousness | 3 | Choice |
| Global Inquiry | 3 | Choice |
| Intercultural or Global | 3 | Choice – any Miami Plan Global Inquiry OR Intercultural Consciousness |
| Signature Inquiry | 9 | |
| Signature Inquiry #1 | 3 | Choice |
| Signature Inquiry #2 | 3 | Choice |
| Signature Inquiry #3 | 3 | Choice |
| Knowledge in Action | 3+ | |
| Senior Capstone | 3 | Choice – see faculty advisor |
| Experiential Learning | 0+ | BSC 321/340 - see faculty advisor |

2025-26 Applied Biology-Human/Health Plan of Study

Year One

| Fall Semester | Hours | Spring Semester | Hours |
|--|--------------|---|-----------|
| ENG111 College Composition | 3 | BIO116 Bio Concepts: Structure, Function, Cell | 4 |
| BIO115 Bio Concepts: Eco, Evo, Genetics | 4 | STA261 Statistics or MTH151 Calculus | 4 |
| CHM141/R College Chemistry I | 3-4 | CHM142 College Chemistry II | 3 |
| CHM144 College Chemistry Lab I | 2 | CHM145 College Chemistry Lab II | 2 |
| PA Creative Arts | 3 | PA Global Citizenship | 3 |
| UNV101 I am MIAMI | 1 | | |
| Total | 16-17 | Total | 15 |

Year Two

| Fall Semester | Hours | Spring Semester | Hours |
|--|--------------|---|-----------|
| BIO203 Intro to Cell Biology | 3 | BIO206 Evolutionary Biology or BIO209 Fundamentals of Ecology | 3 |
| CHM241/244 Organic Chemistry I w/Lab or CHM231 Fundamentals of Organic Chemistry | 3-4 | CHM242/245 Organic Chemistry II w/Lab or ELECTIVE (if CHM231 is taken) | 5 |
| BSC292 Applied Bio Sophomore Seminar | 3 | MAJOR Tool Course | 3 |
| MAJOR Tool Course | 3 | PA Global Citizenship | 3 |
| Total | 14-15 | Total | 15 |

Year Three

| Fall Semester | Hours | Spring Semester | Hours |
|---|-----------|---|-----------|
| BIO201 Human Anatomy | 4 | BIO342 Genetics | 3 |
| PHY161 Physics for Life Sciences I w/lab | 4 | CHM332/332L Outlines of Biochemistry w/Lab | 4 |
| MAJOR Professional Course | 3 | PA Humanities | 3 |
| PA Social Science (PSY111 recommended) | 3 | MAJOR Tool Course | 3 |
| PA Advanced Writing | 3 | MAJOR Tool Course | 3 |
| Total | 17 | Total | 16 |

Year Four

| Fall Semester | Hours | Spring Semester | Hours |
|----------------------------------|-----------|--|-----------|
| BIO305 Human Physiology | 4 | BSC492 Applied Bio Senior Seminar | 1 |
| MAJOR Tool Course | 3 | MAJOR Tool Course | 3 |
| MAJOR Professional Course | 3 | CAPSTONE (if not completed by Professional Course) or ELECTIVE | 3 |
| PA Global Citizenship | 3 | MAJOR Tool Course | 3 |
| PA Social Science | 3 | PA Global Citizenship | 3 |
| Total | 16 | Total | 13 |

There is a minimum of 124 hours required to graduate
To finish in eight semesters, take Major or PA courses that also complete the Signature Inquiry requirement (SI).

For advising questions, please contact your assigned advisor (see Navigate) or Regional Academic Advising at regadvising@MiamiOH.edu or 513-727-3440



COLLEGE OF LIBERAL ARTS
AND APPLIED SCIENCE