

# HEALTH SCIENCE, BACHELOR OF SCIENCE

**College:** College of Science and Health

**Department:** Biological Sciences

**Student Type:** Traditional Undergraduate

**Degree:** Bachelor of Science

**Campus:** Both Lisle Campus and Mesa Campus

## Progression in the Health Sciences Program

A student in Health Sciences major must complete:

Code	Title	Hours
BIOL 1195	Principles of Organismal Lab	1
BIOL 1197	Principles of Organismal Biology	3
BIOL 1198	Principles of Biology	3
CHEM 1108	Preparatory General Chemistry (if required based on placement)	3
CHEM 1113	General Chemistry I	3
CHEM 1123	General Chemistry II	3
<b>Total Hours</b>		<b>16</b>

with a grade of "C" or better in each of these courses and receiving no more than a total of three "W," "D," or "F" grades in these courses. The entire introductory sequence of BIOL 1195 Principles of Organismal Lab, BIOL 1197 Principles of Organismal Biology, BIOL 1198 Principles of Biology, CHEM 1113 General Chemistry I, and CHEM 1123 General Chemistry II must be completed prior to taking any 2000-level courses in BIOL. A transfer student must meet these requirements through equivalent transfer courses. Transfer students must complete their first two semesters with no more than two "W," "D," or "F" grades in College of Science and Health lecture courses in the degree program.

If it is determined at any time that a student cannot continue in the program or cannot graduate with a degree within the Biological Sciences programs, the student will be required to change their major and seek academic advising outside of that program.

## Requirements - Major

The minimum Health Science major requirements consist of 69 semester credit hours of coursework completed with grades of "C" or better. The health science major must complete:

Code	Title	Hours
BIOL 1195	Principles of Organismal Lab	1
BIOL 1197	Principles of Organismal Biology	3
or BIOL 2297	Honors Organismal Biology	
BIOL 1198	Principles of Biology	3
BIOL 1199	Principles of Biology Lab	1
BIOL 2250	Genetics	3
BIOL 3208	General Microbiology	4
BIOL 3203	Human Anatomy <sup>1</sup>	4
BIOL 3258	Human Physiology <sup>1</sup>	4
BIOL 4340	Cell Biology	3
BIOL 4393	Great Ideas in Biology and Medicine	1

or BIOL 4394	Nature Writing	
CHEM 1113	General Chemistry I	3
CHEM 1114	General Chemistry I Laboratory	1
CHEM 1123	General Chemistry II	3
CHEM 1124	General Chemistry II Laboratory	1
CHEM 2242	Organic Chemistry I	3
CHEM 2243	Organic Chemistry I Laboratory	1
CHEM 2247	Organic Chemistry II	3
CHEM 2248	Organic Chemistry II Laboratory	1
CHEM 3261	Principles of Biochemistry	3
or CHEM 4361	Biochemistry	
PHYS 1113	College Physics I	3
PHYS 1114	College Physics I Laboratory	1
PHYS 1118	College Physics II	3
PHYS 1119	College Physics II Laboratory	1
MATH 2229	Biostatistics	6
& MATH 1111	and College Trigonometry (proficiency or higher)	
2000 level or above Natural Science Electives		9
<b>Total Hours</b>		<b>69</b>

<sup>1</sup> Students associated with one campus may not enroll in the Anatomy and Physiology sequence required for the other campus (BIOL 3203/3258 vs. BIOL 3216/3217).

All majors must complete at minimum 6 credits in the major at the 4000 level or higher and 18 credits at the 3000 level or higher. Research in any College of Science department does not count toward the 3000 level requirement. CHEM 4361 Biochemistry is considered a 4000-level course, but not a science elective in this major. All Health Science majors are required to take the capstone writing intensive course, BIOL 4393 Great Ideas in Biology and Medicine or BIOL 4394 Nature Writing.

Practicum is considered a science elective and is strongly encouraged for students intending to attend professional schools. Approved Nutrition electives are:

Code	Title	Hours
NUTR 2200	Nutritional Science	3
or NUTR 2241	Nutrition through the Life Cycle	
NUTR 4345	Science of Nutrition and Fitness	3
NUTR 4371	Medical Nutrition Therapy I	4
NUTR 4390	Selected Topics	3

We encourage students to further their learning by assisting in labs. However, only two credits in BIOL 2292 Biology Teaching, CHEM 2295 Chemistry Teaching and PHYS 2296 Physics Teaching will count toward the Health Science major.

Transfer students who earn transfer credit for BIOL 1195 Principles of Organismal Lab, BIOL 1197 Principles of Organismal Biology, BIOL 1198 Principles of Biology and BIOL 1199 Principles of Biology Lab are required to take BIOL 2299 Quantitative Biology Laboratory for Transfer Students. BIOL 2299 Quantitative Biology Laboratory for Transfer Students will count as a 2000-level credit in the major. BIOL 3389 Biological Research and other 3000-level College of Science research classes do not count toward elective credit in the Health Sciences major.

A student majoring in Health Science may not earn a major in Biochemistry/Molecular Biology and Biology, or a minor in Biology.

## Objectives

Students who earn a B.S.in Health Science will achieve the following student learning outcomes (SLO):

Student Learning Outcome 1: Students will demonstrate biological knowledge required in professional settings

- University SLO: 1. Disciplinary Competence and Skills

Student Learning Outcome 2: Students will explain the structure and function of the human body across multiple scales

- University SLO: 1. Disciplinary Competence and Skills

Student Learning Outcome 3: Students will use scientific evidence to communicate biological concepts

- University SLO: 3. Communication Skills

Student Learning Outcome 4: Students will use quantitative reasoning to solve biological problems

- University SLO: 2. Critical and Creative Thinking Skills; 5. Analytical Skills

Student Learning Outcome 5: Students will relate biological sciences with other natural, physical, chemical, and mathematical sciences

- University SLO: 1. Disciplinary Competence and Skills

Student Learning Outcome 6: Students will discuss biological relevance to societal issues

- University SLO: 7. Civic Engagement and Social Responsibility; 8. Stewardship