

# Biomedical Science, Associate in Science

This degree is designed for students who wish to transfer to an accredited college or university to complete a Bachelor of Science degree, and eventually a master's and/or a doctorate degree, in fields such as human medicine, veterinary medicine, chiropractic, physician assistant, dentistry, physical therapy, occupational therapy, podiatry, optometry, medical technology, or pharmacy. It is strongly recommended that students entering the program have at least one year of high school biology, chemistry, and mathematics at an advanced level.

Students should consult their advisor and their desired transfer institution regarding which program electives would best suit their career interests.

For additional information, please contact department chair, Kenneth Cabarle at (609)343-5128 or [kcabarle@atlanticcape.edu](mailto:kcabarle@atlanticcape.edu).

## Upon completion of this program students will be able to:

- Utilize critical thinking and reasoning to comprehend, apply and competently communicate knowledge regarding the world around them;
- Apply ethical reasoning to evaluate ethical dilemmas and make sound decisions;
- Demonstrate correct use of laboratory equipment and supplies in a safe, skilled manner;
- Correctly explain and apply the scientific method, and competently analyze data;
- Utilize information technology to obtain scientific literature that they can both interpret and analyze;
- Utilize appropriate language to explain the fundamental chemical and biological processes of living organisms;
- Correctly interpret, utilize and apply mathematical principles.

(BIOM-Fall 2022)

## General Education Courses

When a course is not specified, refer to the list of approved General Education courses.

### Communication

Course #	Title	Credits
ENGL101	Composition I	3
ENGL102	Composition II	3
COMM120	Public Speaking	3

### Mathematics-Science-Technology

Course #	Title	Credits
BIOL109	General Biology I	4
BIOL220	Human Anatomy and Physiology I	4
CHEM110	General Chemistry I	4

### Social Science

Course #	Title	Credits
PSYC101	General Psychology	3

## Humanities

Course #	Title	Credits
PHIL110	Introduction to Ethics	3
	Choose: ARTS103, ARTS108, ARTS109, ARTS115, DANC170, HIST101, HIST102, HIST103, HIST104, MUSC100 or THEA110 (3 credits)	3

## Program Requirements

Course #	Title	Credits
BIOL110	General Biology II	4
BIOL250	Microbiology	4
CHEM111	General Chemistry II	4
	Choose: MATH155 or MATH220 (4 credits)	4

## Program Electives

Choose a minimum of 14 credits from the following:

Course #	Title	Credits
PHIL/BIOL104	Bioethics: Realities of the New Millennium	3
BIOL221	Human Anatomy and Physiology II	4
BIOL205	Genetics	4
CHEM210	Organic Chemistry I	4
CHEM211	Organic Chemistry II	4
CISM135	Computer Programming-C++	4
MATH155	Calculus I	4
MATH156	Calculus II	4
MATH220	Statistical Methods	4
PHIL101	Introduction to Logic	3
	PHYS125 or PHYS225 (See advisor for best option. PHYS125 offered in fall only)	4
	PHYS126 or PHYS226 (See advisor for best option. Offered in spring only)	4

## Technological Competency: 0-4 Credits

(Is fulfilled with CISM125, CISM132, testing or reviewed departmental portfolio.)

<b>Total Credits</b>	<b>60</b>
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## Recommended Sequence of Courses

### First Semester

Course #	Title	Credits
BIOL109	General Biology I	4
CHEM110	General Chemistry I	4
ENGL101	Composition I	3
	Choose: MATH155 or MATH220 (4 credits)	4

## Second Semester

Course #	Title	Credits
BIOL110	General Biology II	4
CHEM111	General Chemistry II	4
ENGL102	Composition II	3
	Program Elective Course (3 credits)	3
	Choose: ARTS103, ARTS108, ARTS109, ARTS115, DANC170, HIST101, HIST102, HIST103, HIST104, MUSC100 or THEA110 (3 credits)	3

## Third Semester

Course #	Title	Credits
BIOL220	Human Anatomy and Physiology I	4
PHIL110	Introduction to Ethics	3
	Program Elective Course (3 credits)	3
	Program Elective Course (4 credits)	4

## Fourth Semester

Course #	Title	Credits
BIOL250	Microbiology	4
COMM120	Public Speaking	3
PSYC101	General Psychology	3
	Program Elective Course (4 credits)	4