## Biology, Associate in Science

This degree can lead to a baccalaureate degree in biology at accredited colleges and universities. It is appropriate for students interested in pre-professional programs, such as, biology, ecology, pharmacy, chiropractics, medical, dental, mortuary science, horticulture, veterinary and education. It may also apply to technician-level job opportunities when two years of academic preparation in biology are required. Electives should be selected based on the student's interest, the requirements of the transfer institution or technical-level vocation opportunities. It is strongly recommended that students entering the program have a minimum of one year of high school biology, chemistry and mathematics at an advanced level.

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

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

- Demonstrate safe and environmentally friendly practices in a laboratory setting;
- Apply the scientific method in experimentation, collection and interpretation of data;
- Demonstrate proper use of laboratory equipment to make observations and to obtain data;
- Learn proper handling of living and preserved specimens;
- Develop an in-depth understanding of the fundamentals of biology through a combination of lectures and laboratories.
(BIOG-Fall 2O22)


## General Education Courses

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

## Communication

| Course \# | Title | Credits |
| :--- | :--- | :---: |
| ENGL1O1 | Composition I | 3 |
| ENGL1O2 | Composition II | 3 |

## Mathematics-Science-Technology

| Course \# | Title | Credits |
| :--- | :--- | :---: |
| BIOL109 | General Biology I | 4 |
| MATH155 | Calculus I | 4 |
| CHEM110 | General Chemistry I | 4 |

## Social Science

| Course \# | Title | Credits |
| :--- | :--- | :---: |
|  | General Education Social Science Course (3 credits) | 3 |

## Humanities

| Course \# | Title | Credits |
| :--- | :--- | :---: |
|  | General Education Humanities Course (3 credits) | 3 |
|  | Choose: ARTS1O3, ARTS108, ARTS109, ARTS115, DANC170, MUSC10O or | 3 |
|  | THEA110 (3 credits) |  |

## General Education Elective

| Course \# | Title | Credits |
| :--- | :--- | :---: |
|  | General Education Course (3 credits) | 3 |
|  |  |  |
| Program Requirements |  |  |
|  |  | Credits |
| Course \# | Title | 4 |
| BIOL110 | General Biology II | 4 |
| CHEM111 | General Chemistry II | 4 |
| CHEM210 | Organic Chemistry I | 4 |

## Program Electives - Choose 18 credits from the following:

| Course \# | Title | Credits |
| :--- | :--- | :---: |
| PHIL/BIOL104 | Bioethics: Realities of the New Millennium | 3 |
| BIOL2O5 | Genetics | 4 |
| BIOL250 | Microbiology | 4 |
| CHEM211 | Organic Chemistry II | 4 |
| ENVL2O5 | Ecology | 4 |
| MATH152 | Linear Algebra | 4 |
| MATH156 | Calculus II | 4 |
| MATH255 | Calculus III | 4 |
| PHIL101 | Introduction to Logic | 3 |
|  | PHYS125 or PHYS225 (See advisor for best option. PHYS125 offered in fall | 4 |
|  | only) | PHYS126 or PHYS226 (See advisor for best option. Offered in spring only) |
|  |  |  |

## Technological Competency: 0-4 Credits

(Is fulfilled with CISM125 or CISM132, which may be taken as a General Education Elective, testing or reviewed departmental portfolio.)

## Total Credits

## Recommended Sequence of Courses

## First Semester

| Course \# | Title | Credits |
| :--- | :--- | :---: |
| BIOL1O9 | General Biology I | 4 |
| CHEM110 | General Chemistry I | 4 |
| ENGL101 | Composition I | 3 |
| MATH155 | Calculus I | 4 |

## Second Semester

| Course \# | Title | Credits |
| :--- | :--- | :---: |
| BIOL110 | General Biology II | 4 |
| CHEM111 | General Chemistry II | 4 |
| ENGL102 | Composition II | 3 |
|  | Program Elective Course (4 credits) | 4 |

## Third Semester

| Course \# | Title | Credits |
| :--- | :--- | :---: |
| CHEM210 | Organic Chemistry I | 4 |
|  | General Education Humanities Course (3 credits) | 3 |
|  | General Education Course (3 credits) | 3 |
|  | Program Elective Course (3 credits) | 3 |
|  | Program Elective Course (4 credits) | 4 |

## Fourth Semester

| Course \# | Title | Credits |
| :--- | :--- | :---: |
|  | Choose: ARTS103, ARTS108, ARTS109, ARTS115, DANC170, MUSC100 or | 3 |
| THEA110 (3 credits) |  |  |
| General Education Social Science Course (3 credits) | 3 |  |
| Program Elective Course (3 credits) | 3 |  |
| Program Elective Course (4 credits) |  | 4 |

