

# Health Science

## Health Science Degrees and Certificates

### Health Science, Associate in Science

The Health Science degree offers a variety of opportunities for the student interested in a healthcare career. The program offers the courses that meet the prerequisites for the Nursing A.A.S. and Radiologic Technology A.A.S. degrees. It also includes the foundation coursework for students who wish to transfer to a baccalaureate degree in a healthcare specialty such as Health Administration, Public Health, and post-RN nursing degrees. Since there are different academic and career options available in this program, it is strongly recommended that the student seek advisement.

#### **\*Licensed/Certified Healthcare Professionals**

The Health Science degree also provides an opportunity for eligible healthcare professionals to complete a college degree. Students who possess a current and unencumbered license or certificate in a healthcare field but have not previously earned a college degree or who are enrolled in a healthcare program which leads to licensing or certification but does not offer a college degree may be eligible. This includes students with certificates or licensing as Cardiopulmonary Technicians, Certified EKG Technicians, Certified Emergency Medical Technicians, Certified Home Health Aides, Certified Medical Assistants, Certified Nursing Assistants, Certified Patient Care Technicians, Certified Phlebotomy Technicians, Licensed Dental Assistants, Licensed Practical Nurses, Military Medics and graduates of hospital-based Nursing, Radiology, and Respiratory Therapy programs. Upon presentation of the appropriate evidence and completion of the degree course work with a GPA of 2.0 or better, students may receive up to 15 credits toward the Health Science degree for previously completed professional level education leading to licensing or certification. The remainder of the curriculum combines general education with a core of science and healthcare courses. For further information, contact dean, Myrna Morales Keklak at (609)343-5033 or [mkeklak@atlanticcape.edu](mailto:mkeklak@atlanticcape.edu).

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

- Accurately use medical science terminology to describe health-related concepts;
- Effectively and appropriately communicate current health-related ideas, arguments, and conclusions to a wide range of audiences;
- Demonstrate the effective problem-solving and critical thinking skills required for professional health science practices;
- Demonstrate knowledge of and the appropriate application of ethical standards of healthcare to all professional practices.

*(HESI-Fall 2024)*

## 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

# Mathematics-Science-Technology

Course #	Title	Credits
BIOL220	Human Anatomy and Physiology I	4
	Choose: CHEM100, CHEM110 or BIOL109 (4 credits)	4
	Choose: MATH122-College Algebra, MATH150-Precalculus or MATH220-Statistical Methods (4 credits)	4

# Social Science

Course #	Title	Credits
PSYC101	General Psychology	3
SOCL101	Principles of Sociology	3

# Humanities

Course #	Title	Credits
	Choose: HIST101, HIST102, HIST103 or HIST104 (3 credits)	3
BIOL/PHIL104	Bioethics: Realities of the New Millennium	3

# Program Courses

Course #	Title	Credits
HESC100	Introduction to Health Professions	3
HESC105	Introduction to Public Health	3
HESC108	Fundamentals of Nutrition	3
HESC110	Comprehensive Medical Terminology	3
HESC/HITT132	Basic Pharmacology	3

# Free Electives

Take 15 credits of Free Electives

Course #	Title	Credits
	Free Electives: Choose any college-level courses (15 credits)	15

# Technological Competency: 0-4 Credits

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

Total Credits	60
---------------	----

# Recommended Sequence of Courses

## First Semester

<b>Course #</b>	<b>Title</b>	<b>Credits</b>
ENGL101	Composition I	3
HESC100	Introduction to Health Professions	3
PSYC101	General Psychology	3
SOCL101	Principles of Sociology	3
	Choose: CHEM100, CHEM110 or BIOL109 (4 credits)	4

## Second Semester

<b>Course #</b>	<b>Title</b>	<b>Credits</b>
BIOL220	Human Anatomy and Physiology I	4
ENGL102	Composition II	3
HESC105	Introduction to Public Health	3
HESC108	Fundamentals of Nutrition	3

## Third Semester

<b>Course #</b>	<b>Title</b>	<b>Credits</b>
BIOL/PHIL104	Bioethics: Realities of the New Millennium	3
HESC110	Comprehensive Medical Terminology	3
HESC/HITT132	Basic Pharmacology	3
	Choose: HIST101, HIST102, HIST103 or HIST104 (3 credits)	3
	Choose: MATH122-College Algebra, MATH150-Precalculus or MATH220-Statistical Methods (4 credits)	4

## Fourth Semester

<b>Course #</b>	<b>Title</b>	<b>Credits</b>
	Free Electives: Choose any college-level courses (15 credits)	15

# Health Science Courses

## HESC/HITT132 : Basic Pharmacology

This course introduces the student to various drug classifications, their uses, actions, contraindications, and common side effects. The regulatory environment for the pharmaceutical industry will be discussed. Medication delivery methods, documentation requirements, and common drug-related abbreviations will also be discussed.

**Credits** 3

**Lecture Hours** 3

**Lab/Clinical/Field Study Hours** 0

**Prerequisites**

HESC110 and BIOL220 with a grade of C or better.

## HESC100 : Introduction to Health Professions

This course will introduce students to a variety of professions and career choices available within the United States healthcare system. Students will explore health career options by developing an understanding of the professional tasks, skills, work environments, and educational and legal requirements needed to work in each of these professions. Through the Interprofessional Collaborative Practice (IPEC) framework students will also be introduced to the core competencies for interprofessional collaborative practice and gain a basic understanding of how they are incorporated throughout the health professions to provide a team-based approach to patient care.

**Credits** 3

**Lecture Hours** 3

**Lab/Clinical/Field Study Hours** 0

**Prerequisites**

ENGL101 with a grade of C or better

## HESC105 : Introduction to Public Health

Introduction to public health as a profession. Survey of selected major topics within the field of public health are provided and include historical perspectives, public health settings, social deterrents to health, community health, epidemiology, communicable and infectious diseases, chronic diseases, behavioral health and substance abuse, primary care, maternal and child health, environmental public health, and public health preparedness. The role of the public health workforce will be explored together with the future of public health practice.

**Credits** 3

**Lecture Hours** 3

**Lab/Clinical/Field Study Hours** 0

**Prerequisites**

ENGL080 with a grade of C or better

## HESC108 : Fundamentals of Nutrition

Introduction to human nutrition, including classes, sources and functions of nutrients; digestion, absorption and metabolism with application to normal developmental and therapeutic nutritional needs. Topics include the sources and function of the macro and micronutrients needed to promote health, well-being, and aid in disease prevention and treatment. Students will explore how cultural influences, attitudes, and behavior affect nutrition status and how to incorporate and utilize information technology and computer applications to assess and improve nutritional health.

**Credits** 3

**Lecture Hours** 3

**Lab/Clinical/Field Study Hours** 0

## HESC110 : Comprehensive Medical Terminology

Study of English meanings of common basic words and phrases used in the medical field. Includes spelling, prefixes, suffixes, word roots, derivations and usage, and the meanings of common words and phrases. Supplemental topics: pathological conditions, diagnostic procedures, documentation, life span considerations, pathogenesis, and nutrition.

**Credits** 3

**Lecture Hours 3**

**Lab/Clinical/Field Study Hours 0**

## HESC120 : Medical Assistant Office Procedures

Introduces the profession of clinical medical assisting including the duties of the medical assistant. Course topics include professionalism, life-long learning, medical law and ethics, multidisciplinary teamwork, safety, and communication. Concepts of accurate medical documentation with regard to patient records and other healthcare documentation are introduced. A review of the Microsoft Word and Excel products as used in Healthcare is provided. 15 classroom lecture hours, 45 laboratory skill practice and skill testing hours, Total – 60 hours

**Credits 2**

**Lecture Hours 1**

**Lab/Clinical/Field Study Hours 3**

**Prerequisites**

ENGL080, MATH074, and HESC110 with grades of C or better

## HESC130 : Medical Assistant Clinical Procedures

Course expands on topics and concepts introduced in HESC120. Content to be covered includes Patient History, Assisting with Exams, Basic Anatomy & Physiology, Microbiology, Medical Laboratory, Vital Signs, Blood and Urine Specimen Collection and Processing, Cardiovascular and Pulmonary Function Testing, Basic Pharmacology, Introduction to Medication Administration and Injections, Minor Office Surgery, and Billing, Coding, and the Electronic Medical Record. Includes an internship in which medical assisting practices will be implemented and evaluated in the in-person patient care environment. 75 classroom lecture hours, 75 laboratory skill practice and skill testing hours, 105 in-person internship hours, Total – 255 hours

**Credits 9**

**Lecture Hours 5**

**Lab/Clinical/Field Study Hours 12**

**Prerequisites**

HESC120 with a Grade of C or better, and AHA-BLS (CPR) certification

## HESC140 : Fundamentals of Phlebotomy

Course provides students with the skills required for blood collection and the handling, transporting, and processing of blood specimens for analysis. Learning experiences include classroom instruction, laboratory practice, and clinical experiences at area healthcare facilities. Students completing all classroom and clinical requirements will be eligible to sit for the National Healthcareer Association Phlebotomy (CPT) certification examination. 15 classroom lecture hours, 45 laboratory skill practice and skill testing hours, 45 internship hours, Total – 105 hrs

**Credits 3**

**Lecture Hours 1**

**Lab/Clinical/Field Study Hours 6**

**Prerequisites**

ENGL080, MATH074, and HESC110 with grades of C or better