

# Health Science



## For Students Interested in Healthcare

There are several paths depending on the student's interest and career goal. Each path has specific requirements that are listed below.

### Possible Careers

Registered Nurse Doctor CNA  
Pharmacy Technician Respiratory Therapist  
Phlebotomy Patient Care Technician  
Radiology Technician

## Student Organization

**HOSA is a student organization designed to empower future health professionals to become leaders in the global health community through education, collaboration, and experience.**



**Courses Offered at Clover High School**  
(course descriptions can be found on the following pages)

Health Science 1  
Health Science 2  
Health Science 3

Anatomy 1H can be substituted for HS 3

Health Science Completer with Certifications Earned:  
BLS CPR/AED  
National Health Science Assessment

Spring Semester Seniors can earn EMT certification via York Technical College

Health Science Clinical Studies including Dual Credit:  
AHS 117: The Care of Patients  
AHS 120: Responding to Emergencies

Health Science Completer with Certifications Earned:  
BLS CPR/AED  
National Health Science Assessment  
**Certified Nursing Assistant**

Dual Credit courses with York Technical College beginning 11th grade

BIO 112: Intro to Anatomy & Physiology  
AOT 105: Keyboarding  
COL 101: College Orientation  
AHS 116: Patient Care Relations  
AHS 102: Medical Terminology  
AHS 117: The Care of Patients  
AHS 120: Responding to Emergencies  
AHS 145: Electrocardiography  
AHS 176: Patient Care Clinical Principles  
AHS 141: Phlebotomy for the Healthcare Provider

Health Science Completer with Certifications Earned:  
BLS CPR/AED  
National Health Science Assessment  
**Patient Care Technician**

**Pharmacology for Careers**

Health Science Completer with Certifications Earned:  
BLS CPR/AED  
National Health Science Assessment  
**Pharmacy Technician Certification**

**AHS 102 Medical Terminology (Dual Credit)**

Health Science Completer with Certifications Earned:  
BLS CPR/AED  
National Health Science Assessment

## Health Science Course Descriptions

### Health Science 1 - 1 Unit - Grades 9-10

*College Preparatory Prerequisite: None*

Health Science 1 is the first of four courses offered to students interested in pursuing a career in the healthcare field. Students are introduced to healthcare history, careers, law and ethics, cultural diversity, healthcare language & math, infection control, professionalism, communication, basics of the organization of healthcare facilities, and types of healthcare insurance. Students get a good grasp of where healthcare has been, where it's going, and how professionalism and personal characteristics impact their success. The skills and knowledge that students learn in Health Science 1 serve to prepare them for future clinical experiences such as job shadowing or internships as they advance in the Health Science courses. [555000CW]

### Health Science 2 - 1 Unit - Grades 10-11

*College Preparatory Prerequisites: Health Science 1*

Health Science 2 applies the knowledge and skills that were learned in Health Science 1 while further challenging the students to learn more about the healthcare field. The course will include a more advanced study of infection and infection control which will better familiarize students with OSHA, HIPPA, and the CDC. Students will also learn how to take vital signs, record them, and learn what the data means. Students will learn about the stages of life and Maslow's Hierarchy of needs and how law and ethics are applied in the healthcare setting. Medical terminology, medical math, and pharmacology are incorporated throughout the lessons being taught. Students will be certified in First Aid and CPR in this course. This course provides a foundation for further advancement in Health Science. It is recommended that students should score an 80% or higher in this course to advance to Health Science 3 and Clinical Studies. [555100CW]

### Health Science 3 - 1 Unit - Grades 10-12

*Honors Prerequisites: Health Science 2*

Health Science 3 acquaints students with basic anatomy and physiology of the human body. Students learn how the human body is structured and the function of each of the 12 body systems. They will study the relationship that body systems have with disease from the healthcare point of view. This is a very "hands on" course and students will learn through projects and activities in the classroom. Students will also participate in teamwork activities that will enhance understanding of the healthcare field. This course does not count as a lab science. [555200HW]

### Clinical Studies (The Care of Patients (AHS117) & Responding to Emergencies (AHS120)- 1 Unit - Grade 12

*Dual Enrollment Prerequisite: Completion of Health Science 3 and successful program application.*

Clinical Studies is designed to give students clinical experience in a real healthcare setting toward earning their nurse aide certification. Students will spend class time learning and reviewing the necessary skills and qualities needed to complete a 40-hour clinical experience in a long-term care facility. Students are taught to perform nursing-related services to patients and residents in hospitals or long-term care facilities, under the direction and supervision of a registered nurse. School-based and long-term care facility training is provided to assure students' eligibility for the South Carolina Department of Health and Human Services nurse aide certification. CPR for the Healthcare Provider and First Aid certifications are earned in this course. Students interested in Clinical Studies must follow a registration process toward admission; information regarding the registration process is provided at the completion of Health Science 1. **Dual Credit weighting is applied to this course. Students must achieve a successful college placement test score (or equivalent SAT/ACT) or have a 3.0 or higher GPA. Students can earn college credit from York Technical College upon successful completion with a "B" average or higher and teacher recommendation. Tuition fees and textbook fees may apply. Parent permission is required.** [854000EH, 854100EH]

### Pharmacology for Medical Careers - 1 Unit - Grade 12

*Honors prerequisite: Successful completion of Health Science 3 and/or Medical Terminology and application accepted.*

This course is designed to educate students about pharmacology in the medical field and prepare them for success as pharmacy technicians. Students are exposed to the many benefits from pharmacology as well as pharmacy careers. Learning standards related to math and science are integral in this course. Teachers are encouraged to promote student work-based learning opportunities in local pharmacies to help students gain practical experience. Most of the course content is delivered via the PassAssured online program which prepares students to sit for the Pharmacy Technician Certification Board (PTCB) examination. [557000HW]

## Additional Elective

### Emergency Medical Services (EMS) 1 - 1 Unit - Grades 9-12

*College Preparatory Prerequisite: None*

EMS1 is designed to teach students about emergencies and how to respond appropriately in emergency situations. The curriculum includes instruction in areas of legal and ethical issues, safety, infection control, healthy lifestyles, medical terminology, disaster preparedness, and injury prevention. Skills will include vital signs, adult/infant cardiopulmonary-resuscitation (CPR), and adult/child automated external defibrillation (AED). [553100CW]

## **Courses Required for Patient Care Technician Certification**

(courses will be offered either on CHS campus OR at York Technical College)

### **Middle College Application required**

#### **BIO 112: Introduction to Anatomy & Physiology**

This course is a basic integrated study of the structure and function of the human body.

#### **AOT 105: Keyboarding**

This course focuses on the mastery of touch keyboarding and basic formatting principles.

#### **COL 101: College Orientation**

This course may include selected topics such as career planning, study skills, stress management, tutoring, group guidance, and other subjects to facilitate student success.

#### **AHS 116: Patient Care Relations**

This course includes a study of the psychological and emotional effect of illness, hospitalization and recuperation upon the patient, others, and health care providers.

#### **AHS 102: Medical Terminology**

This course covers medical terms, including roots, prefixes, and suffixes, with emphasis on spelling, definition, and pronunciation.

#### **AHS 117: The Care of Patients**

This course includes a study of concepts required to assist in the care of patients.

#### **AHS 120: Responding to Emergencies**

This course is a study of emergency care procedures utilizing first aid and cpr principles

#### **AHS 145: Electrocardiography**

This course provides the basic skills necessary to perform ECGs in a hospital, physician's office or other health care setting. The student will be able to perform and interpret basic ECGs.

#### **AHS 176: Patient Care Clerical Principals**

This course provides a study of the practical applications related to receptionist and patient care clerical duties such as data entry, transferring physician orders, and coordinating unit communications in a variety of health care settings.

#### **AHS 141: Phlebotomy for the Healthcare Provider**

This course contains the essential theory, skills, and special procedures required to meet the venipuncture needs in hospitals, clinics, and other health care settings.