South Carolina Health Science Education Overview

The mission of South Carolina secondary health science education programs is to prepare high school students with broad foundational knowledge and skills needed by all healthcare professionals. Programs are tailored to meet the needs of individual students and postsecondary education requirements. Through HOSA Future Health Professionals, a career and technical student organization that supports the health science career cluster, students have opportunities to develop their leadership skills, participate in community service, and apply for scholarship awards. Community resources and healthcare industry partnerships strengthen the delivery of the health science program of study that integrates academics, specific health science courses, and portfolio development, along with a variety of work-based learning opportunities. Work-based learning experiences may include job shadowing, internships, and other clinical experiences that allow students to observe and learn from healthcare professionals. Students enrolled in a health science program of study leave high school better prepared for further education and/or immediate employment in the healthcare field.

Programs are required to have an advisory committee to bring together business and industry, teachers, parents, students, and counselors to collaborate and develop effective health science programs that meet workforce and student needs. These stakeholders are invited to advise local administrators and teachers as to the community workforce needs. They are also needed to endorse and recommend additions to the health science state/industry course standards that are revised/revisited on a five-year frequency or whenever national standards have updates.

South Carolina health science courses are based on the National Health Science Standards. Health science standards combine classroom instruction and work-based learning experiences with an emphasis on the healthcare foundation standards. The core is a set of broad standards that serve as a foundation and functions across health sciences. These standards specify core knowledge and skills needed by healthcare professionals and were developed and validated by the National Consortium for Health Science Education: www.healthscienceconsortium.org.

The National Health Science Standards provide a clear and consistent understanding of industry and post-secondary expectations for health science teachers and students. These standards are designed to provide the essential knowledge common across health professions to prepare and increase the number of students that are college and career ready. The core standards without objectives are:

Foundation Standard 1: Academic Foundation

Understand human anatomy, physiology, common diseases and disorders, and medical math principles.

Foundation Standard 2: Communications

Demonstrate methods of delivering and obtaining information, while communicating effectively.

Foundation Standard 3: Systems

Identify how key systems affect services performed and quality of care.

Foundation Standard 4: Employability Skills

Utilize employability skills to enhance employment opportunities and job satisfaction.

Foundation Standard 5: Legal Responsibilities

Describe legal responsibilities, limitations, and implications on healthcare worker actions.

Foundation Standard 6: Ethics

Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.

Foundation Standard 7: Safety Practices
Identify existing and potential hazards to clients, co-workers, and self. Employ safe work practices and follow health and safety policies and procedures to prevent injury and illness.

**Foundation Standard 8: Teamwork**
Identify roles and responsibilities of individual members as part of the healthcare team.

**Foundation Standard 9: Health Maintenance Practices**
Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.

*Foundation Standard 10: Technical Skills*
Apply technical skills required for all career specialties and demonstrate skills and knowledge as appropriate.

**Foundation Standard 11: Information Technology Applications**
Utilize and understand information technology applications common across health professions.

Health science certified teachers are certified, licensed, or registered healthcare professionals who have transitioned from the workplace to the high school classroom. There is a statewide curriculum that teachers are expected to deliver. Each course is complete with a set of minimum standards. It is NOT the intent of the high school health science program to be career specific, but yet to expose young people to the many career opportunities in healthcare. In the technical skills area, students are taught CPR and first aid concepts and how to measure vital signs. It is not uncommon for students to practice some of these skills on each other. Students are prepared for work-based learning experiences with a thorough knowledge of confidentiality and HIPPA regulations, standards precautions, and proper handling of blood and body fluids.

The 340 health science teachers in South Carolina represent many different health professions: registered nurses, certified athletic trainers, paramedics, dental hygienists, respiratory therapists, radiology technologists, nurse practitioners, exercise physiologists, clinical lab scientists, chiropractors, certified health education specialists, and others. Teachers tend to teach to their strengths and do have flexibility to teach beyond the minimum standards. Throughout our state, in the technical skills area, teachers vary in the skills taught. To mention a few, some programs focus on nurse aide skills, some on emergency response skills, some on sports medicine skills, and others.

Through SC health science education programs, students are provided with knowledge and skills that prepare them to be better students at the postsecondary level or to enter the workplace directly. These programs are unique and valuable in providing experiences and real-world application to healthcare. Our hope is that students completing these programs have a better understanding of expectations and requirements of healthcare professionals.