Diagnostic Services

Career Goal (O*NET Code): Cardiovascular Technologist (29-2031), Health Technologist and Technician (29-2099).

Cluster Overview: The Health Science cluster focuses on careers in planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

SUGGESTED COURSEWORK

High School

9th

Core Courses:
English I
Algebra I
Biology
World Geography
Languages other than English I
PE or Equivalent

Career-Related Electives:
Introduction to Health Science Technology AND Medical Terminology

10th

Core Courses:
English II
Geometry
Chemistry
World History
Languages other than English II
Technology Applications

Career-Related Electives:
Health Science Technology I***

11th

Core Courses:
English III
Algebra II
Physics
United States History
Communication Applications
PE or Equivalent

Career-Related Electives:
Health Science Technology II* or Anatomy and Physiology of Human Systems or Languages other than English III

12th

Core Courses:
English IV
AP Statistics
Scientific Research and Design
Government/Economics
Fine Arts

Career-Related Electives:
Health Science Technology III* or Pathophysiology or Independent Study or Languages other than English IV

Postsecondary

On-the-Job Training

Electrocardiographic Technician

NOTE: These experiences may be started and/or completed as part of the high school experience.

Certificates

Echocardiology
OSHA CareerSafe

NOTE: Students may earn all or part of these certificates as part of the high school experience.

Career Options:
Echocardiographer

Associate's Degrees

15 hours General Education Core including Anatomy & Physiology (BIOL 2X01/2X02)

Cluster Foundation

Medical Terminology I (HITT 1X05 **OR** MDCA 1X13 **OR** SRGT 1X01) **OR** Essentials of Medical Terminology (HPRS 1X06)

Essentials of Medical Law & Ethics (HPRS 1X05) **OR** Legal & Ethical Aspects of Health Information (HITT 1X53) **OR** Medical Law & Ethics (MDCA 1X05)

Introduction to Health Professions (HPRS 1X01) **OR** Basic Health Profession Skills (HPRS 1X04)

Pathophysiology (HPRS 2X01) **OR** Human Disease/Pathophysiology (MDCA 1X02)

Pharmacology (HPRS 2X00 **OR** HITT 1X49)

Wellness (HPRS 1X02)

POS Specific Courses

Biomedical Equipment Technology (BIOM 1X01)
Soldering Skills and Shop Safety (BIOM 1X05)
Applied Biomedical Equipment Technology (BIOM 1X09)
Medical Circuits and Troubleshooting (BIOM 1X41)
Introduction to Safety & Health (OSHT 1X01)
OSHA Regulations- Construction (OSHT 1X05) OR OSHA Regulations- General Industry (OSHT 2X01)
Medical Equipment I (BIOM 2X41)
Cooperative Education (BIOM XX8X)

Career Options:
Echocardiographer
Cardiovascular Technologist
Electroencephalographic Technologist
Electroneurodiagnostic Technologist

Certificates, Licenses & Credentials

International Certification Commissions Certified Biomedical Equipment Technician Exam

Bachelor's Degrees

Health Diagnostic/Treatment Technologies

Career Options:
Perfusionist
Healthcare Management

Graduate Degrees

Doctor of Medicine

Career Options:
Cardiovascular Surgeon
Researcher
Healthcare Administrator

EXTENDED LEARNING EXPERIENCES

Curricular Experiences:
Health Occupations Students of America
STARS Research Program
NASA Research Program

Career Learning Experiences:
Career Preparation (Paid/Unpaid)
Job Shadowing
Internship

Extracurricular Experiences:
National Youth Leadership Forum on Medicine
Medical Mission Trips
Special Olympics

Service Learning Experiences:
Community Service Volunteer

Professional Associations:
American Society of Electroneurodiagnostic Technologists
Alliance of Cardiovascular Professionals
American Board of Cardiovascular Perfusion

*** May substitute for the required credit for Physical Education**
**** Satisfies the required credit for Technology Applications**
***** May substitute for the required credit for Health Education**

Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses, if possible.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2007. All plans should meet high school graduation requirements as well as college entrance requirements. Students may select other courses for personal enrichment purposes.