

Health Science Pathway Courses

High School CTE Course Pathway

Course Titles & Module Topics

■ Introduction to Health Science & Careers

18 Weeks

This semester course is designed to create an awareness of career possibilities within the five designated CTE career clusters in health care and inform students of the educational options available for health science and health technology programs.

- **Module 1** - What is Health Science?
- **Module 2** - Discover Career Pathways
- **Module 3** - Human Anatomy
- **Module 4** - Medical Mathematics
- **Module 5** - Communication & Medical Terminology
- **Module 6** - Healthcare Delivery Systems
- **Module 7** - Employability Skills
- **Module 8** - Healthcare Law & Ethics
- **Module 9** - Safety Practices
- **Module 10** - Healthcare Teams
- **Module 11** - Health Maintenance Practices
- **Module 12** - Technical Skills & IT in Healthcare
- **Module 13** - Optional Industry Exam (700)

Industry Exam Provided by YouScience - information [here](#).

Aligns to [NCHSE Standards](#) and [Health Science CTE Career Cluster](#) standards.

■ Health Science Technology Exploration

18 Weeks

This course is designed to expose students to the technologies utilized across the diagnostics/patient care, biotechnology/lab, and health informatics career clusters. Throughout the semester, students will gain hands-on experience with these tools and better understand their interests to complete their coursework in a specialized career cluster area - patient care, lab tech, or health informatics.

- **Module 1** - Intro to Health Science Technology
- **Module 2** - Appointments, Scheduling, & Management
- **Module 3** - Patient & Internal Communication
- **Module 4** - Vitals Signs & Measurement Devices
- **Module 5** - Surgical Technologies & Infection Control
- **Module 6** - Lab Protocol & Technologies
- **Module 7** - Medical Records & Coding Systems
- **Module 8** - Pharmacology Tech & Safety
- **Module 9** - Health Science Career Exploration
- **Module 10** - Optional Industry Exam (705)

Industry Exam Provided by YouScience - information [here](#).

Aligns to [NCHSE Standards](#) and [Health Science CTE Career Cluster](#) standards.

■ Patient Care & Diagnostics Capstone

1-2 Semesters

This course is designed to have students focus on the patient care side of the healthcare system and its associated procedures and technologies. Students will gain hands-on and simulated experience from start to finish of the patient care experience. An optional second semester would include hands-on industry capstone work and career shadowing.

- **Module 1** - Introduction to Health Care
- **Module 2** - Medical Administrative Practices
- **Module 3** - Patient History & Interaction
- **Module 4** - Physical Examination & Vitals
- **Module 5** - Diagnostic Services
- **Module 6** - Pharmacology Principles & Medication
- **Module 7** - Clinical Skills & Practices
- **Module 8** - Treatment Planning & Communication
- **Module 9** - Keeping Patient Records
- **Module 10** - Emergency Response
- **Module 11** - Clinical Portfolio Project
- **Module 12** - Optional Industry Exams (710) (716)

Industry Exam Provided by YouScience - information [here](#) and [here](#).

Aligns to [NCHSE Standards](#) and [Health Science CTE Career Cluster](#) standards.

■ Biotechnology & Lab Science Capstone

1-2 Semesters

This course is designed to have students focus on the biotechnology and lab tech side of the health science field. Students will gain hands-on experience with various laboratory protocols, technologies, and research practices associated with this career cluster. An optional second semester would include hands-on industry capstone work and career shadowing.

- **Module 1** - Introduction to Biotechnology
- **Module 2** - Tools, Technologies, & Safety
- **Module 3** - Laboratory Skills & Techniques
- **Module 4** - Clinical Chemistry & Lab Math
- **Module 5** - Bacterial Identification & Cultures
- **Module 6** - Immunology & Molecular Diagnostics
- **Module 7** - Hematology & Hemostasis
- **Module 8** - Urinalysis & Body Fluids
- **Module 9** - DNA Technologies
- **Module 10** - Optional Industry Exam (708)

Industry Exam Provided by YouScience - information [here](#).

Aligns to [NCHSE Standards](#) and [Health Science CTE Career Cluster](#) standards.

■ Health Informatics & IT Capstone

1-2 Semesters

This course is designed to have students focus on the applications of today's information technology in health information management, which includes management of patient data, financial information, and computer applications related to health care processes and procedures. An optional second semester would include hands-on industry capstone work and career shadowing.

- **Module 1** - Principles in Health Informatics
- **Module 2** - Communication & Confidentiality
- **Module 3** - Health Information Systems
- **Module 4** - Electronic Medical Records Applications
- **Module 5** - Documentation & Storage
- **Module 6** - Health Data Research & Analysis
- **Module 7** - Internal & External Operations
- **Module 8** - Health Informatics Career Capstone
- **Module 9** - Optional Industry Exam (712)

Industry Exam Provided by YouScience - information [here](#).

Aligns to [NCHSE Standards](#) and [Health Science CTE Career Cluster](#) standards.