Diagnostic and Therapeutic Services

₩

Health Science Career Cluster

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

Big Spring High School Program of Study: Diagnostic and Therapeutic Services

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

Secondary Courses for High School Credit

Level 1

Level 2 • Medical Terminology

Level 3 • Anatomy and Physiology

Clinical Ethics

Health Science Theory

Health Science Theory + Health Science Clinical

Level 4 • Career Preparation for Programs of Study

Aligned Advanced Academic Courses

AP or IB

AP Biology IB Biology SL IB Biology HL AP Chemistry IB Chemistry SL IB Chemistry HL

Dual Credit

Dual credit offerings will vary by local education agency.

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility
- Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job

Expanded Learning Opportunities

- Participate in Health Occupation Students of America (HOSA) or SkillsUSA
- Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

Aligned Industry-Based Certifications

- Certified Nurse Aide (CNA)
- ECG Technician
- Patient Care Technician
- Phlebotomy Technician



Example Postsecondary Opportunities

Apprenticeships

Medical Assistant



Associate Degrees

- Emergency Medical Technology
- Radiologic Technology/Science

Bachelor's Degrees

- Emergency Medical Technology
- Medical Insurance Coding

Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy

Additional Stackable IBCs/License

Registered Diagnostic Medical Sonographer



Example Aligned Occupations

Medical Assistants

Median Wage: \$36,834 Annual Openings: 11,638 10-Year Growth: 29%

Dental Hygienists

Median Wage: \$79,663 Annual Openings: 1,352 10-Year Growth: 32%

Physician Assistants

Median Wage: \$127,332 Annual Openings: 974 10-Year Growth: 41%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit: https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources



Health Science Career Cluster

Statewide Program of Study: Diagnostic and Therapeutic Services

Course Information

Course Prerequisites | Corequisites Career Clusters

Course	Prerequisites Corequisites	Career Clusters
Medical Terminology* 13020300 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Course	Prerequisites Corequisites	Career Clusters
Anatomy and Physiology* 13020600 (1 credit)	Prerequisites: One credit in Biology and one credit in Chemistry, Integrated Physics and Chemistry, or Physics Corequisites: None Recommended Prerequisites: A course from the Health Science career cluster Recommended Corequisites: None	
Clinical Ethics* N1302121 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Nursing Science and Science of Nursing Recommended Corequisites: None	
Health Science Theory* 13020400 (1 credit)	Prerequisites: One credit in Biology and at least one credit in a course from the Health Science career cluster Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Health Science Theory + Health Science Clinical* 13020410 (2 credits)	Prerequisites: One credit in Biology and at least one credit in a course from the Health Science career cluster Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Continued on next page		

^{*} Indicates course is included in more than one program of study.

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit https://tea.texas.gov/cte





Level 4

Health Science Career Cluster

Statewide Program of Study: Diagnostic and Therapeutic Services

Course Information

Course	Prerequisites Corequisites	;	Career Clusters
Career Preparation for Programs of Study* First Time Taken: 12701121 (2 credits)	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None		



^{*} Indicates course is included in more than one program of study.