

# 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.

## Statewide Program of Study: **Nursing Science**

The Nursing Science program of study focuses on occupational and educational opportunities associated with patient care. This program of study includes the practice of caring for patients, performing routine procedures such as monitoring vital signs, developing, and implementing care plans, maintaining medical records, and managing disease or pain.

### Secondary Courses for High School Credit

- Level 1**
  - Principles of Health Science
  - Principles of Nursing Science

---

- Level 2**
  - Science of Nursing
  - Medical Terminology

---

- Level 3**
  - Health Science Theory
  - Health Science Theory + Health Science Clinical
  - Anatomy and Physiology
  - Medical Microbiology
  - Leadership and Management in Nursing
  - Clinical Ethics

---

- Level 4**
  - Pathophysiology
  - Pharmacology
  - Practicum in Nursing
  - Practicum in Health Science
  - Practicum in Health Science + Extended Practicum in Health Science
  - Career Preparation for Programs of Study
  - Career Preparation for Programs of Study + Extended Career Preparation

### Aligned Advanced Academic Courses

<b>AP or IB</b>	<ul style="list-style-type: none"> <li>AP Biology</li> <li>IB Biology SL</li> <li>IB Biology HL</li> </ul>	<ul style="list-style-type: none"> <li>AP Chemistry</li> <li>IB Chemistry SL</li> <li>IB Chemistry HL</li> </ul>
<b>Dual Credit</b>	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

<b>Work-Based Learning Activities</b>	<ul style="list-style-type: none"> <li>• Intern with a medical assistant at a community clinic, hospital, or assisted living facility</li> <li>• Conduct informational interviews with nurses in different departments and healthcare settings</li> </ul>
<b>Expanded Learning Opportunities</b>	<ul style="list-style-type: none"> <li>• Volunteer at community clinics, hospitals, assisted living and long-term care facilities</li> <li>• Participate in HOSA or SkillsUSA</li> </ul>

### Aligned Industry-Based Certifications

- Certified Clinical Medical Assistant
- Certified Nurse Aide (CNA)
- Licensed Vocational Nurse
- Medical Assistant
- Patient Care Technician
- Phlebotomy Technician
- Registered Nurse



### Example Postsecondary Opportunities

#### Apprenticeships

- Registered Nurse Resident

#### Associate Degrees

- Medical Assisting
- Vocational Nursing

#### Bachelor's Degrees

- Registered Nursing
- Nursing Administration

#### Master's, Doctoral, and Professional Degrees

- Nursing Administration
- Nursing Science

#### Additional Stackable IBCs/License

- Certified Emergency Nurse

### Example Aligned Occupations

#### Nursing Assistants

Median Wage: \$30,856  
Annual Openings: 10,936  
10-Year Growth: 15%

#### Licensed Practical and Licensed Vocational Nurses

Median Wage: \$50,913  
Annual Openings: 6,865  
10-Year Growth: 17%

#### Registered Nurses

Median Wage: \$79,831  
Annual Openings: 16,207  
10-Year Growth: 17%

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: *Nursing Science*

### Course Information

	Course	Prerequisites   Corequisites	Career Clusters
Level 1	Principles of Health Science* 13020200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
	Principles of Nursing Science N1302109 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Level 2	Science of Nursing N1302129 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Nursing Science or Principles of Health Science Recommended Corequisites: None	
	Medical Terminology* 13020300 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Level 3	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	
	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	

*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](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



# Health Science Career Cluster

## Statewide Program of Study: *Nursing Science*

### Course Information

	Course	Prerequisites   Corequisites	Career Clusters
Level 3	<b>Medical Microbiology*</b> 13020700 (1 credit)	<b>Prerequisites:</b> One credit in Biology, one credit in Chemistry, and at least one credit in a course from the Health Science career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
	<b>Leadership and Management in Nursing</b> 13021225 (1 credit)	<b>Prerequisites:</b> One credit in Biology, one credit in Chemistry, and at least one credit in a course from the Health Science career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Science of Nursing <b>Recommended Corequisites:</b> None	
	<b>Clinical Ethics*</b> N1302121 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Principles of Nursing Science and Science of Nursing <b>Recommended Corequisites:</b> None	
Level 4	<b>Pathophysiology*</b> 13020800 (1 credit)	<b>Prerequisites:</b> One credit in Biology, one credit in Chemistry, and at least one credit in a Level 2 or higher course from the Health Science career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Anatomy and Physiology <b>Recommended Corequisites:</b> None	
	<b>Pharmacology*</b> 13020950 (1 credit)	<b>Prerequisites:</b> One credit in Biology, one credit in Chemistry, and at least one credit in a Level 2 or higher course from the Health Science career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> 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](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



[LEA name] does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: [title], [address], [telephone number], [email]. Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).



# Health Science Career Cluster

## Statewide Program of Study: *Nursing Science*

### Course Information

Level 4

Course	Prerequisites   Corequisites	Career Clusters
<b>Practicum in Nursing</b> 13021230 (2 credits)	<b>Prerequisites:</b> One credit in Biology, one credit in Chemistry, and at least one Level 2 or higher course in the Nursing Science program of study <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Science of Nursing, Medical Terminology, and Anatomy and Physiology <b>Recommended Corequisites:</b> None	
<b>Practicum in Health Science*</b> First Time Taken: 13020500 (2 credits) Second Time Taken: 13020510 (2 credits)	<b>Prerequisites:</b> Health Science Theory and Biology <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Practicum in Health Science + Extended Practicum in Health Science*</b> First Time Taken: 13020505 (3 credits) Second Time Taken: 13020515 (3 credits)	<b>Prerequisites:</b> Health Science Theory and Biology <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Career Preparation for Programs of Study*</b> First Time Taken: 12701121 (2 credits)	<b>Prerequisites:</b> At least one Level 2 or higher CTE course <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
<b>Career Preparation for Programs of Study + Extended Career Preparation*</b> First Time Taken: 12701141 (3 credits)	<b>Prerequisites:</b> : At least one Level 2 or higher CTE course <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	

\* 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](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>