



## Health Science

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.



### Program of Study: Nursing Science (KNIT Program)

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.

#### Courses

<b>9<sup>th</sup> Grade</b>	Principles of Health Science
<b>10<sup>th</sup> Grade</b>	Medical Terminology Health Science Theory
<b>11<sup>th</sup> Grade</b>	Anatomy and Physiology @ San Jacinto College Psychology @ San Jacinto College Humanities @ San Jacinto College
<b>12<sup>th</sup> Grade</b>	Medical Microbiology @ San Jacinto College English IV @ San Jacinto College Human Growth and Development @ San Jacinto College

#### Aligned Advanced Academic Course(s)

- AP Biology
- AP Chemistry

#### Work-Based Learning/Expanded Learning Opportunities

<b>Work-Based Learning Activities</b>	Volunteer at a community wellness center, hospital, assisted living center, or nursing home.
<b>Expanded Learning Opportunities</b>	<ul style="list-style-type: none"> <li>• Health Occupation Students of America (HOSA)</li> <li>• Earn dual credit hours</li> </ul>



#### 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%

Successful completion of this program of study will fulfill requirements of the Public Services endorsement or the STEM endorsement if the math and science requirements are met.

Approved Statewide Program of Study. C. E. King High School – 2024-25



## Nursing Science (KNIT Program) Course Information

### Level 1

#### Principles of Health Science

13020200

**Grade: 9-10**

**Credit: 1**

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

### Level 2

#### Medical Terminology

13020300

**Grade: 10-12**

**Credit: 1**

The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

### Level 3

#### Health Science Theory

13020400

**Grade: 10-12**

**Credit: 1**

*Prerequisite: Biology*

The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

#### Anatomy and Physiology @ San Jacinto College

13020600

**Grade: 11-12**

**Credit: 1**

**GPA: 6.0**

*Prerequisite: 1 credit in Biology AND 1 credit in Chemistry, IPC, or Physics*

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

### Level 4

#### Medical Microbiology @ San Jacinto College

13020700

**Grade: 11-12**

**Credit: 1**

*Prerequisite: Biology and Chemistry*

The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases

#### Human Growth and Development @ San Jacinto College

13014300

**Grade: 10-12**

**Credit: 1**

*Recommended Prerequisite: Principles of Education and Training*

Human Growth and Development is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.