



HEALTHCARE THERAPEUTICS

Healthcare Therapeutics

Public Services Endorsement

The Healthcare Therapeutic program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study holds students to professional high standards needed in various healthcare. Students are required to purchase uniforms and some classes have fees associated with them. Please see the board approved the listing of fees for details. Students are encouraged to participate in Health Occupations Students of American (HOSA).



To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL/ PROFESSIONAL DEGREE	OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Registered Dental Assistant	Dental Assistant	Dental Hygienist		Dentist	Medical Assistants	\$29,598	8,862	30%
Certified Patient Care Technician	Surgical Technologist			Physician Assistant	Surgical Technologists	\$46,310	1,150	21%
Certified Nurse Aide/Assistant	Medical Assistant	Medical/ Clinical Assistant		Family and General Practitioners	Dental Hygienists	\$73,507	1,353	38%
Pharmacy Technician	Pharmacy Aides			Pharmacist	Physicians and Surgeons	\$213,071	1,151	30%
Additional industry based certification information is available from the TEA CTE website.					Dental Assistants	\$34,840	4,422	31%
For more information on postsecondary options for this program of study, visit TXCTE.org.					WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES			
					Exploration Activities: SkillsUSA Health Occupation Students of America (HOSA)	Work Based Learning Activities: Volunteer at a community wellness center, hospital, assisted living, or nursing home.		

Courses in this Program of Study

PRINCIPLES OF HEALTH SCIENCE

Course # 07226000

Prerequisite: None

Recommended Grade Placement 9

1 CREDIT

This course is designed to give students hands-on application in the Program of Study of Health Science which includes several various industries and certifications including as a Patient Care Technician, Medical Assistant, and Pharmacy Technician. Students learn leadership skills in the health industry. Students are encouraged to participate in Health Occupations Students of American (HOSA).

MEDICAL TERMINOLOGY

Course # 0722601

Recommended Grade Placement 9-11

1 CREDIT

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. Students are encouraged to participate in Health Occupations Students of American (HOSA).

ANATOMY AND PHYSIOLOGY (counts as a Science credit also)

Course # 03120900

Prerequisite: Biology and a second science credit

Recommended Grade Placement 10 - 12

1 CREDIT

This course will take an integrated approach to functional anatomy with emphasis on basic principles and physiological activities of different systems (skeletal, muscular, digestive, respiratory, cardiovascular, urinary, endocrine, reproductive) in mammals. Laboratory experiences will include extensive study and dissection of a mammal. The text, content, and labs are college-level and are designed for students planning to major in science in college. The goal of this course is to better prepare students for undergraduate work in life science majors such as pre-medical, pre-dental, pre-pharmacist, nursing, athletic trainers, and other healthcare professionals that require anatomy and physiology in college. Students are encouraged to participate in Health Occupations Students of American (HOSA).

PHARMACOLOGY

Course # 07226450

Prerequisite: Biology and Chemistry**Recommended Grade Placement 11-12****1 CREDIT**

The Pharmacology course is designed to study the top 250 drugs and how they affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. It is an ever-changing, growing body of information that continually demands greater amounts of time and education from healthcare workers. The text, contents, and labs are college level and are **designed for students preparing to take the Certified Medical Assisting exam or the Certified Pharmacy Technician exam**. The goal of this course is to prepare students for dispensing, administering, and understanding the use of drugs in various healthcare fields. The goal of this course is to better prepare students for undergraduate work in life science majors such as pre-medical, pre-dental, pre-pharmacist, nursing, and other healthcare professionals that require pharmacology in college. Students are encouraged to participate in Health Occupations Students of American (HOSA).

HEALTH SCIENCE THEORY

Course # 07226100

Prerequisite: Biology**Recommended Grade Placement 10-11****1 CREDIT**

A course designed to develop healthcare-specific knowledge and skills in professionalism, effective communications, ethical and legal responsibilities, client care, safety, first aid, and CPR. This class will introduce various healthcare jobs including phlebotomy technician, EKG technician, medical assistant, patient care technician and pharmacy technician. This course prepares the student for the transition to clinical or work-based learning experiences in healthcare with various hands-on skills and activities. This class is a prerequisite to take practicum in health science, where certifications including Certified Patient Care Technician, Certified Pharmacy Technician, and Certified Medical Assistant are earned. Students are encouraged to participate in Health Occupations Students of American (HOSA).

MEDICAL MICROBIOLOGY (approved by the State Board of Education for 4th science credit)

Course # 07226410

Prerequisite: Biology and Chemistry, Chemistry may be concurrent**Recommended Grade Placement 11 - 12****1 CREDIT**

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem-solving. Students will study the relationships of microorganisms to wellness and disease. They develop knowledge and skills related to disease prevention by learning the chain of infection, asepsis, and standard precautions. Pathogenic and nonpathogenic organisms will be identified to assist in the understanding of specific diseases, causative agents, and treatment options. The text, content, and labs are college-level and are designed for students planning to major in science in college. The goal of this course is to better prepare students for undergraduate work in life science majors such as pre-medical, pre-dental, pre-pharmacist, nursing, and other healthcare professionals that require medical microbiology in college. Students are encouraged to participate in Health Occupations Students of American (HOSA).

PATHOPHYSIOLOGY (approved by the State Board of Education for 4th science credit)

Course # 07226400

Prerequisite: Biology and Chemistry**Recommended Grade Placement 11 - 12****1 CREDIT**

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Students study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology. Students are encouraged to participate in Health Occupations Students of American (HOSA).

PRACTICUM IN HEALTH SCIENCE

Course # 07226500

Prerequisite: Health Science Theory and Biology

Recommended Grade Placement 11-12

2 CREDITS

The practicum course is a paid or unpaid capstone experience for students participating in the Health Science Program of Study. Students sit to rigorous pass national exams and become a Certified Patient Care Technician, Certified Pharmacy Technician, and Certified Medical Assistant. This is an internship program for specific health professions. Students participate in a clinical internship at local healthcare facilities. Students are encouraged to participate in Health Occupations Students of American (HOSA). **Students should be prepared to submit to an FBI criminal background check, random drug screening, TB testing, state fingerprint licensure, state or government-issued ID, and to present a proof of current immunizations and valid Social Security Card. Other stipulations may also be in place depending on internship requirements including but not limited to student dress and appearance.** A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

Recommended Sequence of Courses (Prerequisites noted in course descriptions)

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry Level Courses	Advanced Courses
Principles of Health Science	Health Science Theory
Medical Terminology	Anatomy & Physiology
	Pharmacology
	Medical Microbiology
	Pathophysiology
	Practicum of Health Science