COURSES

LEVEL 1

Principles of Health Science M #8533

LEVEL 2

Health Science Theory M #8536
AND
Anatomy & Physiology #8377
Anatomy & Physiology D #8376

LEVEL 3

Medical Microbiology M (Sem 1) #8337
AND
Pathohophysiology M (Sem 2) #8387

LEVEL 4

Practicum in Health Science - Medical Research M (2CR) #8396

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Limited Licensed Radiology Technologist	Medical Sonographer	Nuclear Medical Technology/ Technologist		Radiologist
EKG/ ECG Technician	Radiologic Technologist	Magnetic Resonance Imaging (MRI) Technology/ Technician	Medical Radiologic Technology/ Science Radiation Therapist	Radiologic Technology/ Science - Radiographer
Medical Laboratory Technician				
Phlebotomy Technician				

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Diagnostic Medical Sonographers	$69,909	495	35%
Phlebotomists	$30,597	1,442	36%
Nuclear Medicine Technologists	$75,962	91	13%
Radiologic Technologists	$55,494	1,196	19%
Magnetic Resonance Imaging Technologists	$68,661	217	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Health Occupation Students of America (HOSA)

Work Based Learning Activities:
Clinical rotations at a community wellness center, hospital, assisted living, nursing home

The Healthcare Diagnostics program of study introduces students to occupations and educational opportunities related to performing complex medical laboratory tests for the diagnosis, treatment, and prevention of disease. This program of study may also include exploration into the opportunities associated with blood laboratories as well as radiologic technology, and ultrasonic technology.

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.

Successful completion of the Healthcare Diagnostics program of study will fulfill requirements of the **Public Service or STEM Endorsement if the math and science requirements are met**. Revised- July 2020

Public Services Endorsement

Possible STEM - SBOE Decision

Health Science

Healthcare Diagnostics
Medical Research

Principles of Health Science M (9-10) #8533
This course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry. Students will identify employment opportunities, technology, and safety requirements of each system. A student who takes a full year of Principles of Health Science receives a waiver for Health.
SEM: 2 CR: 1

Health Science Theory M (10-12) #8536
This 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 skills development.
PR: Biology SEM: 2 CR: 1

Anatomy and Physiology (10-12) #8377
Students study the structure and function of the human body and the interaction of body systems for maintaining homeostasis. Students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students must meet the 40% laboratory and fieldwork requirement.
PR: Biology & 2nd Science SEM: 2 Science CR: 1

Medical Microbiology M (11-12) #8337
Students explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement.
PR: Biology & Chemistry SEM: 2 Science CR: 1

Pathophysiology M (11-12) #8387
Students focus on disease mechanisms and how they affect humans, as well as prevention and treatment of disease. Students will differentiate between normal and abnormal physiology at the cellular, organ and organism levels, identify changes that indicate diseases, factors contributing to disease, causes of disease and the body's response, and disease prevention and control. Students will conduct laboratory and field investigations using scientific methods, critical thinking and scientific problem solving. Students must meet the 40% laboratory and fieldwork requirement.
PR: Biology and Chemistry SEM: 2 Science CR: 1

Practicum in Health Science - Medical Research M (12) #8396
A course designed to give students practical application of previously studied knowledge and skills for certification or licensure in an allied health career. Students develop advanced clinical skills necessary for employment in the healthcare industry or continued education in health careers. NISD Volunteer Background Check may be required.
PR: Health Science Theory & Biology
SEM: 2 CR: 2

See Counselor for course availability