

COURSES

Principles of Health Science #8352

LEVEL 1

Medical Terminology #8358

LEVEL 2

Health Science Theory #8356
OR
Health Science Theory/Clinical (2CR) #8357

LEVEL 3

Practicum in Health Science - Phlebotomy & EKG (2CR) #8363

LEVEL 4

11th /12th Optional Science Courses:
Anatomy & Physiology OR Medical Micro



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 Endorsement.
Approved Statewide Program of Study - September 2019



Public Services Endorsement

Possible STEM - SBOE Decision



Health Science

Healthcare Diagnostics

(It is recommended students follow the program of study sequence level 1-4 as outlined by TEA.)

Principles of Health Science (10-12) #8352

This course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care 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

Medical Terminology (9) #8358

Medical Terminology Dual (11-12) #8359

(College credit course-Northwest Vista College)

This course introduces students to the structure of medical terms, medical abbreviations and acronyms. Students will achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

SEM: 2 CR: 1

Health Science Theory (11-12) #8356

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 skill development.

PR: Biology SEM: 2 CR: 1

Health Science Theory/Clinical (11-12) #8357

Course designed to develop health care specific knowledge and skills related to a variety of health careers. Students will have hands-on experiences by methods such as clinical rotation and career preparation learning. NISD Volunteer Background Check may be required.

PR: Biology

SEM: 2 CR: 2

Anatomy and Physiology (11-12) #8380

Anatomy and Physiology H (11-12) #8379

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.

PR: Biology & 2nd Science

SEM: 2 Science CR: 1

Medical Microbiology (11-12) #8361

Students explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases.

PR: Biology & Chemistry

SEM: 2 Science CR: 1

Practicum in Health Science - Phlebotomy & EKG (12) #8363

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 health care industry or continued education in health careers. NISD Volunteer Background Check may be required.

PR: Health Science Theory & Biology

SEM: 2 CR: 2

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11th /12th Optional Science Courses:
Anatomy & Physiology OR Medical Micro

LEVEL 4

Practicum in Health Science - Medical Assistant (2CR) #8373 OR
Practicum in Health Science - Patient Care Technician (2CR) #8369 OR
Pharmacology #8350



POSTSECONDARY OPTIONS

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
Registered Dental Assistant	Dental Assistant	Dental Hygienist		Dentist
Certified Patient Care Technician	Surgical Technologist			Physician Assistant
Certified Nurse Aide/Assistant	Medical Assistant	Medical/Clinical Assistant		Family and General Practitioners
Pharmacy Technician	Pharmacy Aides			Pharmacist

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OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Medical Assistants	\$29,598	8,862	30%
Surgical Technologists	\$46,310	1,150	21%
Dental Hygienists	\$73,507	1,353	38%
Physicians and Surgeons	\$213,071	1,151	30%
Dental Assistants	\$34,840	4,422	31%

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.

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 also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.



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Successful completion of the Healthcare Therapeutic program of study will fulfill requirements of the Public Service Endorsement. Approved Statewide Program of Study - September 2019



Public Services Endorsement

Possible STEM - SBOE Decision



Health Science

Healthcare Therapeutic

(It is recommended students follow the program of study sequence level 1-4 as outlined by TEA.)

Principles of Health Science (9-10) #8352

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PR: Biology & 2nd Science SEM: 2 Science CR: 1

Medical Microbiology (11-12) #8361

Students explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases.

PR: Biology & Chemistry SEM: 2 Science CR: 1

Practicum in Health Science - Medical Assistant (12) #8373

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 health care industry or continued education in health careers. NISD Volunteer Background Check may be required.

PR: Health Science Theory & Biology

SEM: 2 CR: 2

Practicum in Health Science - Patient Care Technician (12) #8369

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 health care industry or continued education in health careers. NISD Volunteer Background Check may be required.

PR: Health Science Theory & Biology

SEM: 2 CR: 2

Pharmacology (12) #8350

Pharmacology Dual (11-12) #8351

(College credit course-Northwest Vista College)

Students will study the classifications of drugs, drug actions, uses, and adverse reactions. In addition, they will study drugs in relation to treatment, care and restoration of health.

PR: Biology & Chemistry

SEM: 2 CR: 1