

KELLER ISD HEALTH SCIENCE PROGRAMS 2024-2025



PROGRAM OPTIONS AND OVERVIEW

<u>For Juniors and/or Seniors</u>	<u>For Seniors Only</u>
Certified Nursing Assistant Practicum *CNA Practicum and A&P	Medical Assistant Practicum *Must have completed at least one of the following courses: Clinical Rotations, Certified Nursing Assistant, Pharmacology, Pathophysiology, Medical Microbiology, Kinesiology II
Clinical Rotations Practicum *Clinical Rotations Practicum and A&P	Patient Care Technician Practicum *Must have completed at least one of the following courses: Clinical Rotations, Certified Nursing Assistant, Pharmacology, Pathophysiology, Medical Microbiology, Kinesiology II
PRE - Pharmacy Technician *Pharmacology and A&P	Pharmacy Technician Practicum *Must have completed pharmacology in 11th grade
PRE - Emergency Medical Technician *Pathophysiology and A&P	Emergency Medical Technician Practicum *Pathophysiology must be taken as a prereq or a coreq
PRE - Medical Lab Assistant *Medical Microbiology and A&P	Exercise Science & Sports Medicine Practicum *Must have completed Kinesiology II in 11th grade
Exercise Science and Sports Medicine *Kinesiology II and A&P	Medical Lab Assistant Practicum *Must have completed Medical Microbiology

Pathway Electives

Anatomy and Physiology

Pathophysiology

Pharmacology

Medical Microbiology

Kinesiology I

Kinesiology II

*Must have completed Kinesiology I

CERTIFIED NURSING ASSISTANT (CNA)

A Certified Nursing Assistant helps nurses in medical facilities by giving basic care to patients. This type of care is vital in hospitals, long-term care facilities, and in-home health care environments. Duties often include helping patients with feeding and bathing, checking vital signs, and providing assistance with basic healthcare needs. In addition, Certified Nursing Assistants must also be able to offer encouragement and emotional support to their patients. Certified Nursing Assistants—also known as Nursing Aides—have an enormous impact on the day-to-day experience of the patients, helping them feel cared for and capable as they face medical challenges. Certified Nursing Assistants have become more respected over the years as it has become more obvious how important this type of care is. We highly recommend this course for students interested in pursuing any type of nursing career beyond high school.

Item	Cost	FAQ for this course	Answer
CNA Exam	\$125	Am I required to have reliable transportation?	Yes, by November 1, 2024
Cord/Pin	\$20	Is there a certification for this class?	Yes, Certified Nursing Assistant
Scrubs (2 pair)	\$100	Is there a clinical requirement?	Yes, 40 hours in a long-term care facility
TB Test	\$50	Informational video:	https://youtu.be/n_Ikbb9Z4J8
Flu Vaccine	Typically free	What grade level is this course designed for?	11 th or 12 th
CNA Workbook	\$20	If I take this course in 11 th grade, what are my options in 12 th grade?	PCT, MA, or any combination of health science electives

Program of Study Course Sequence	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Health Science: Certified Nursing Assistant (CNA)	Medical Terminology (1 credit)	Health Science Theory (1 credit)	Anatomy and Physiology (1 credit) AND Practicum in Health Science I: CNA (2 credits)	Practicum in Health Science II: PCT (2 credits) OR Practicum in Health Science II: CMA (2 credits)

CLINICAL ROTATIONS

Do you know you want to go into the medical field but aren't quite sure which area to pursue? If so, clinical rotations might be the perfect fit for you. Students will have the opportunity to do rotations at a hospital to observe the different specialties, or might get to intern at a dentist, optometrist, pediatrician, physical therapist, or other type of doctor's office. Practicum students will split their time between the classroom and the clinical facility.

Item	Cost	FAQ for this course	Answer
Drug Screen	\$45	Am I required to have reliable transportation?	Yes, by September 1, 2024
TB Test	\$50	Is there a certification for this class?	No
Scrubs (2 pair)	\$100	Is there a clinical requirement?	Yes, the entire course is dedicated to clinical rotations
Flu Vaccine	Typically free	Informational video:	https://youtu.be/CnTRGf7oyZc
		What grade level is this course designed for?	11 th or 12 th
		If I take this course in 11 th grade, what are my options in 12 th grade?	PCT, MA, or any combination of Health Science electives

Program of Study Course Sequence	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Health Science: Clinical Rotations	Medical Terminology (1 credit)	Health Science Theory (1 credit)	Anatomy and Physiology (1 credit) AND Practicum in Health Science I: Clinical Rotations (2 Credits)	Practicum in Health Science II: PCT (2 credits) OR Practicum in Health Science II: CMA (2 credits)

EMERGENCY MEDICAL TECHNICIAN (EMT)

Calling all future paramedics or EMTs or anyone that has an interest in becoming an Emergency Physician, Trauma Surgeon or Emergency Room or ICU Nurse. In this pathway, you will learn emergency medical information related to signs/symptoms of trauma and its assessment, patient care skills, and appropriate treatment of emergent medical conditions. If you successfully complete the class, clinicals/ride alongs, and pass the National Registry exam, you would be eligible to work as an EMT right out of high school. The EMT program could be a step to becoming a firefighter/paramedic and is also good for someone who likes a challenge. KCAL will only have 26 seats (for seniors only) in the EMT Practicum for the 24-25 school year. Junior students are in the Pre-EMT classes (Patho and A&P) so that they may have a solid base for this challenging class.

EMT Practicum Fees	Cost	FAQ for this course	Answer
Uniform	\$125	Am I required to have reliable transportation?	Yes, by December 1, 2024 (Weekends/holidays only)
Drug Screen	\$10	Is there a certification for this class?	Yes, Emergency Medical Technician
TB Test	\$30	Is there a clinical requirement?	Yes, 36 hours in ER and 42 hours in ambulance
EMT Exam and Fees	\$160	Informational video:	https://youtu.be/4_ei2cINlJg
Liability Insurance	\$50	What grade level is this course designed for?	The practicum is only for 12 th graders; 11 th graders are enrolled in A&P and Pathophysiology
Fingerprinting	\$45	If I take pathophysiology in 11 th grade, what are my options in 12 th grade?	EMT Practicum, MA, PCT, or any combination of health science electives

Program of Study Course Sequence	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Health Science: Emergency Medical Technician (EMT)	Medical Terminology (1 credit)	Health Science Theory (1 credit)	Anatomy and Physiology (1 credit) AND Pathophysiology (1 credit)	Practicum in Health Science I: EMT (2 credits) OR Practicum in Health Science II: PCT (2 credits) OR Practicum in Health Science II: CMA (2 credits)

PHARMACY TECHNICIAN (CPHT)

The pharmacy industry is evolving. Many clinical duties have been extended to the pharmacy, which expands the role of both pharmacist and pharmacy technician. According to NHA's 2020 Industry Outlook, 40% of employers said pharmacy technicians have more responsibilities this year than last! Pharmacy technicians play a crucial role in providing safe and effective patient care, with duties including:

- Managing inventory
- Receiving prescription requests from patients and doctors' offices
- Accurately measuring medication amounts
- Establishing and maintaining patient records
- Accepting payment for prescriptions and processing insurance claims

Item	Cost	FAQ for this course	Answer
CPHT Exam	\$129	Am I required to have reliable transportation?	Yes, by October 1, 2024, in order to participate in clinicals
SPAT Exam	\$250	Is there a certification for this class?	Yes, Certified Pharmacy Technician AND Sterile Processing & Aseptic Technique
Scrubs (2 pair)	\$100	Is there a clinical requirement?	Not required but highly recommended
Drug Screen	\$45	Informational video:	
TB Test	\$50	What grade level is this course designed for?	The practicum is only for 12 th graders; 11 th graders are enrolled in A&P and Pharmacology
Flu Vaccine	Typically free		
License and Fingerprinting	\$100	If I take pharmacology in 11 th grade, what are my options in 12 th grade?	Pharmacy Practicum, PCT, MA, or any combination of health science electives

Program of Study Course Sequence	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Health Science: Pharmacy	Medical Terminology (1 credit)	Health Science Theory (1 credit)	Anatomy & Physiology (1 credit) AND Pharmacology (1 credit)	Practicum in Health Science I: Pharmacy (2 credits), OR Practicum in Health Science II: PCT (2 credits) OR Practicum in Health Science II: CMA (2 credits)

EXERCISE SCIENCE AND SPORTS MEDICINE

Find your niche in the health and wellness arena. This pathway is for students interested in future careers that provide a service to help others with their overall health and wellness such as: athletic trainer, personal trainer, physical therapist, nutritionist, orthopedic surgeon, coaches. Students obtain their First Aid and CPR certification and learn about the body's development, dynamic movement, injuries, nutrition, strength and conditioning through interactive labs and activities.

Item	Cost	FAQ for this course	Answer
Certification Exam	\$249	Am I required to have reliable transportation?	Yes, by September 1, 2024, in order to participate in clinicals
Certification Prep Materials	\$0	Is there a certification for this class?	Yes, Certified Personal Trainer
Uniform	\$25-\$100	Is there a clinical requirement?	Yes, students will have the opportunity to intern at related medical offices (dependent on clinic availability)
TB Test	\$50	Informational video:	
Flu Vaccine	Typically Free	What grade level is this course designed for?	The practicum course is only for 12 th graders; 11 th graders will take the Kinesiology II course
		If I take Kinesiology II in 11 th grade, what are my options in 12 th grade?	Sports Medicine Practicum, MA, PCT, or any combination of health science electives

Program of Study Course Sequence	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Health Science: Exercise Science and Sports Medicine	Medical Terminology (1 credit)	Health Science* Theory (1 credit) AND Kinesiology I* (1 credit)	Anatomy and Physiology (1 credit) AND Kinesiology II (1 credit)	Practicum in Health Science I: Exercise Science (2 credits), OR Practicum in Health Science II: PCT (2 credits) OR Practicum in Health Science II: CMA (2 credits)

* Students **fully committed** to the Exercise Science pathway as their program of study can opt to only take Kinesiology I during their 10th grade year. Students wanting to keep their options open for other health science programs should take Health Science theory and Kinesiology I in 10th grade.

MEDICAL LAB ASSISTANT

Medical Laboratory Assistants are healthcare professionals who can be found working both on the frontlines and behind the scenes. Medical Lab Assistants typically work in lab settings such as those within a hospital, physician's office, or urgent care facility. The work they do is important for both patients and the healthcare field overall. Their duties may include:

- Drawing blood from patients (also called phlebotomy)
- Properly labeling and handling samples ahead of lab tests
- Preparing lab equipment for tests and research
- Using various pieces of lab equipment such as microscopes
- Performing lab tests
- Reporting test results to doctors or other healthcare personnel

Required Prerequisite Course: Medical Microbiology

Item	Cost	FAQ for this course	Answer
Scrubs (2 pair)	\$100	Am I required to have reliable transportation?	No
CPT Exam Prep Materials	\$0	Is there a certification for this class?	Yes, Certified Phlebotomy Technician
CPT Exam	\$125	Is there a clinical requirement?	No
Cords/Pins	\$25	What grade level is this course designed for?	12 th

Program of Study Course Sequence	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Health Science: Medical Lab Assistant	Medical Terminology (1 credit)	Health Science Theory (1 credit)	Medical Microbiology (1 credit) AND Anatomy and Physiology (1 credit)	Practicum in Health Science : Medical Lab Assistant, OR Practicum in Health Science II: PCT (2 credits) OR Practicum in Health Science II: CMA (2 credits)

CLINICAL MEDICAL ASSISTANT (CCMA)

Medical assistants (MAs) are critical members of healthcare teams in a variety of medical settings. As an MA, you are often the first and last person a patient interacts with, making a lasting impact on the patient experience. MAs are flexible, performing a variety of tasks such as:

- Taking patient vital signs
- Basic Patient Care
- Assisting providers with exams and procedures
- Administering injections or medications
- Performing EKG, phlebotomy and other essential laboratory procedures
- Checking patients in and out upon arrival and departure
- Answering phone calls and questions
- Updating and maintaining electronic health records (EHR)

Required Prerequisite Options: Must have completed at least one of the following courses: Clinical Rotations, Certified Nursing Assistant, Pharmacology, Pathophysiology, Medical Microbiology, or Kinesiology II

Item	Cost	FAQ for this course	Answer
MA Exam	\$160	Am I required to have reliable transportation?	Yes, by January 1, 2025, in order to participate in clinicals
MA Exam Prep Materials	\$0	Is there a certification for this class?	Yes, Certified Clinical Medical Assistant
Scrubs (2 pair)	\$100	Is there a clinical requirement?	Not required, but highly recommended
Stethoscope	\$10	Informational video:	https://youtu.be/lrpuqx5Py1E
Cords/Pins	\$25	What grade level is this course designed for?	12 th
Drug Screen	\$45		
TB Test	\$50		

PATIENT CARE TECHNICIAN (PCT)

Doctors, nurses and other healthcare professionals rely on patient care technicians to assist with the critical day-to-day care some patients require. They provide hands-on assistance to serve patients' basic needs, which greatly impacts the lives of their patients and their patients' families. As a patient care tech, you may be able to perform some or all of the following tasks:

- Provide basic patient care — bathing, feeding, catheter care, etc.
- Acquire, distribute and administer patient care supplies
- Perform safety checks and ensure cleanliness in patient rooms
- Accommodate any additional patient needs
- Obtain EKG readings and monitor vital signs
- Perform phlebotomy procedures
- Provide emotional support to patients and families, particularly coping with grief and death

Required Prerequisite Options: Must have completed at least one of the following courses: Clinical Rotations, Certified Nursing Assistant, Pharmacology, Pathophysiology, Medical Microbiology, or Kinesiology II

Item	Cost	FAQ for this course	Answer
PCT Exam	\$160	Am I required to have reliable transportation?	Yes, by January 1, 2025, in order to participate in clinicals
PCT Exam Prep Materials	\$0	Is there a certification for this class?	Yes, Patient Care Technician
Scrubs (2 pair)	\$100	Is there a clinical requirement?	Not required, but highly recommended
Cords/Pins	\$25		
Drug Screen	\$45	Informational video:	https://www.youtube.com/watch?v=Kt27RDHKIUA
TB Test	\$50	What grade level is this course designed for?	12 th

COURSE REQUEST PROCESS

In order to be eligible for any of the 11th or 12th grade health science programs, you are required to complete this course request process. All students will be placed into a health science program but may not receive their 1st or 2nd choice program due to limited availability of these popular programs.

Steps to submit your course request

1. Complete the YouTube video and short answer essay
2. 3 Teacher Recommendations
 1. You must have three teachers complete the teacher recommendation Google Form by Jan 31, 2024.
 2. It is your responsibility to ensure teachers get the link and complete the form.
 3. A periodic update of completed recommendations will be sent to your Health Science teacher.
3. Complete Student Course Request Google Form (Deadline: January 31, 2024)
4. Complete interview (if needed; program dependent) in February
 1. More details to come at a later date

Links and Resources

- Student Course Request Form: <https://forms.gle/iYjLtnG5sLhNPM3Y8>
- Teacher Recommendation Form: <https://forms.gle/3maGKmApXy9bNDqFA>
- Scoring Rubric: [Spring 2024 Health Science Scoring Rubric.pdf](#)

Contact Information

For questions or assistance please reach out to your Health Science teacher or the CTE Coordinator for Health Science, Debby Schneemann, at debra.schneemann@kellerisd.net or 817-743-8043