



9th Principles of Health Science

10th Medical Terminology
Pathophysiology

11th Anatomy and Physiology
Practicum in Health Science

12th Practicum in Health Science

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

Occupations	Median Wage	Annual Openings	% Growth
Medical Assistants	\$29,598	8,862	30%
Surgical Technologists	\$45,032	1,150	20%
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:	Work Based Learning Activities:
SkillsUSA Health Occupation Students of America (HOSA)	Volunteer at a community wellness center, hospital, assisted living, or nursing home.

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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.



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 Therapeutic program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020



COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Health Science	13020200 - 1 credit	None	9
Medical Terminology	13020300 - 1 credit	PREQ Principles of Health Science	10-11
Pathophysiology	13020800 - 1 credit	PREQ Principles of Health Science	10-11
Anatomy & Physiology	13020600 - 1 credit	PREQ: Biology and Pathophysiology	10-11
Practicum in Health Science	13020505 - 3 credits - 1st time 13020515 - 3 credits - 2nd time	PREQ Anatomy & Physiology & Pathophysiology	11-12

Collin College Medical Assistant Course Crosswalk

COURSE CODE	COLLEGE COURSE	HIGH SCHOOL COURSE	SEMESTER	YEAR (Recommended)
HPRS 1201	Introductions to Health Professions	Principles of Health Science	Fall/Spring	9th
HITT 1305	Medical Terminology	Medical Terminology	Fall	10th
HPRS 2301	Pathophysiology	Pathophysiology	Spring	10th
MDCA 1309	Anatomy and Physiology for Medical Assistants	Anatomy and Physiology	Fall	11th
MDCA 1417	Procedures in a Clinical Setting	Practicum in Health Science I	Fall	11th
MDCA 1321	Administrative Procedures		Spring	11th
MDCA 1448	Pharmacology & Administration of Meds.		Spring	11th
MDCA 1452	Medical Assistant Laboratory Procedures	Practicum in Health Science II	Fall	12th
HPRS 2321	Medical Law and Ethics for Health Professionals		Fall	12th
MDCA 1154	Medical Assisting Credentialing Exam Review		Spring	12th
MDCA 1360	Clinical-Medical/Clinical Assistant		Spring	12th

Dual Credit Introduction to Health Professions & Principles of Health Science (HPRS 1201)

Recommended Grade Placement: 9

Credit(s): 1 (non-weighted)

Prerequisite: Dual Credit Admission Criteria

This course provides an overview of the roles of various members of the health care system, therapeutic, diagnostic, health informatics, support services and biotechnology research and development systems of the healthcare industry. This particular course is primarily a survey course and is non-weighted.

Dual Credit Medical Terminology (HITT 1305)

Recommended Grade Placement: 10

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties.

Dual Credit Pathophysiology (HPRS 2301)

Recommended Grade Placement: 10

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries.

Dual Credit Anatomy and Physiology for Medical Assistants (MDCA 1309)

Recommended Grade Placement: 11

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Emphasis on structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology.

Dual Credit Procedures in a Clinical Setting (MDCA 1417)

Recommended Grade Placement: 11

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Emphasis on patient assessment, examination, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for ambulatory care settings.

Dual Credit Administrative Procedures (MDCA 1321)

Recommended Grade Placement: 11

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Medical office procedures including appointment scheduling, medical records creation and maintenance, interpersonal communications, bookkeeping tasks, coding, billing, collecting, third party reimbursement, credit arrangements, and computer use in the medical office.

Dual Credit Pharmacology & Administration of Medications (MDCA 1448)

Recommended Grade Placement: 11

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant.

Dual Credit Medical Assistant Laboratory Procedures (MDCA 1452)

Recommended Grade Placement: 12

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Application of governmental health care guidelines. Includes specimen collection and handling, quality assurance and quality control in performance of Clinical Laboratory Improvement Amendments (CLIA)-waived laboratory testing.

Dual Credit Medical Law and Ethics for Health Professionals (HPRS 2321)

Recommended Grade Placement: 12

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

Principles, procedures, and regulations governing the legal and ethical relationships among physicians, patients, and health care professionals. Includes current ethical issues related to the various healthcare professions and patient confidentiality.

Dual Credit Medical Assisting Credentialing Exam Review (MDCA 1154)

Recommended Grade Placement: 12

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

A preparation for one of the National Commission for Certifying Agencies (NCCA) recognized credentialing exams.

Dual Credit Clinical-Medical/Clinical Assistant (MDCA 1360)

Recommended Grade Placement: 12

Credit(s): 1

Prerequisite: Collin College & Dual Credit Admission Criteria

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

WORK BASED LEARNING & PRACTICUM EXPERIENCES

A paid work-based learning instructional arrangement in Career-Technical Education for students who, through written training agreements between the school and the employer (training sponsor), receive instruction by study in school with on-the-job training in an approved program area for paid employment. Paid work experiences build upon the academic and occupational competencies previously developed through a student's general education courses and other components of a program of study in Career-Technical Education.

Farmersville High School offers a practicum experience in each career and technical education program of study. Additionally, students may choose to enroll in Career Preparation during the 11th and/or 12th grade if they meet prerequisite and enrollment requirements.

Career Preparation I, II

Recommended Grade Placement: 11-12

Credit(s): 3

Prerequisite: Instructor Approval and verified employment averaging no less than 15 hours weekly

The Career Preparation course provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.