

Pathways in Technology: Health Science

Program of Choice Hightower High School

The Pathways in Technology Program exists to engage students interested in earning up to 60 dual credit hours toward an Associate in Applied Science degree at no cost to students, obtain industry certification, increase college readiness, provide rigorous instruction and coursework and provide academic and social support.

Opportunities Include:

- Associate of Applied Science in Histotechnology
- Associate of Applied Science in Health Informatics
- Industry certifications
- Up to 60 hours of college credit to be used towards a bachelor's degree

Requirements of Early College High School:

- Pass the Texas Success Initiative Assessment (TSIA) test
- Pass all grade levels
- Participate in sequenced Houston Community College courses

SAMPLE High School Plan: variations such as involvement in athletics, fine arts and summer courses taken will affect the actual high school plan for each student. Courses that are in **BOLD** are requirements for Early College High School. Students are cohorted in their English, math, science, and social studies courses at the AAC and AP level.

Associates of Allied Health A.A.S.

	9th Grade	Summer	10th	Summer II	11th	Summer III	12th
1	ENG 1 AAC	Health	ENG II AAC	Basic Health Profession Skills (HPRS 1304)	ENG III AAC	Medical Law & Ethics (MDCA 1205)	COMP I & II (ENGL 1301, 1302)
2	BIO AAC	Professional Comm.	CHEM AAC		Anatomy & Physiology I&II Lab/Lecture (BIOL 2301, 2101, 2302, 2102)	Medical Records for Scribe (MDCA 1372)	Procedures in Clinical Settings (MDCA 1417)
3	ALG 1 AAC/GEO AAC		ALG II AAC/GEO AAC		US History to 1877 (HIST 1301)		Medical ASSIST Exam Review (MDCA 1254)
4	W.GEO AAC		Intro to Health Pro-fessions (HPRS 1201)		US History II (HIST 1302)		Practicum (MDCA 1265)
5	AVID I		Integrated Software App I (ITSC 1309)		Medical Insurance (MDCA 1343)		Medical ASSIST Lab (MDCA 1352)
6	PE		Medical Terminology (MDCA 1313)		A&P for Medical Assistants (MDCA 1409)		
7	Foreign Language I		AVID II		Pharmacology (MDCA 1448)		
8	Fine Art		Foreign Language II		MED ASSIST INTER Skills (MDCA 1210)		
					ADMIN Procedures (MDCA 1321)		

For more information, please visit www.fortbendisd.com/p-tech.

P-Tech at Hightower HS Early College High School Specialized Courses

College Transition Dual Credit

EDUC 1300: Learning Framework

Course Number: LP111

Offered In: 9–10

Credits: .5

Level: Dual Credit

Prerequisites: Take the TSIA test

Description: This course covers skills needed for a successful transition to a college level course by learning different models in learning strategies, strategic learning, cognition, and motivation.

Health Professions— Dual Credit

HPRS 1201: Introduction to Health Professions Dual Credit

Course Number: CHS01P

Offered In: 10

Credits: .5

Level: Dual Credit

Prerequisites: Pass the TSI

Description: This course provides an overview of various roles in the health care system, education requirements, and issues of delivering health care.

Integrated Software Applications— Dual Credit

ITSC 1309 - Integrated Software Applications I

Course Number: CST1PA

Offered In: 10

Credits: 3

Prerequisites: Pass the TSI

Description: Integration of applications from popular business productivity software suites. Instruction in embedding data, linking, and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Emphasis is on developing end-user proficiency skills for the workplace.

Medical Terminology— Dual Credit

MDCA 1313 - Medical Terminology

Course Number: CHS02P

Offered In: 10

Credits: 3

Prerequisites: Pass the TSI

Description: A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms.

Basic Health Profession Skills— Dual Credit

HPRS 1304 - Basic Health Profession Skills

Course Number: CHS01P

Offered In: Summer II

Credits: 3

Prerequisites: Pass the TSI

Description: A study of concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring and health documentation. Includes: emergency preparedness and response to basic medical emergencies.

Anatomy and Physiology I— Dual Credit

BIOL 2301/2101: Anatomy and Physiology I plus Lab

Course Number: CHO7PA

Offered In: 11

Credits: .5

Level: Dual Credit

Prerequisites: Pass the Math TSI and be enrolled in the P-TECH program at Hightower HS or the ECHS program at Marshall HS. Must have passed ENGL 1301 (or higher) or take ENGL 1301 as a corequisite.

Description: Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

Anatomy and Physiology II — Dual Credit

BIO 2302/2102: Anatomy and Physiology II plus Lab

Course Number: CHO7PB

Offered In: 11

Credits: .5

Level: Dual Credit

Co-requisite: Enrollment in BIO 2301

Prerequisites: Pass the Math TSI and be enrolled in the P-TECH program at Hightower HS or the ECHS program at Marshall HS. Successful completion of BIO 2301 and 2101

Description: Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

United States History 1301 & 1302— Dual Credit

HIST 1301: United States History to 1877/ HIST 1302: United States History after 1877

Course Number: SS43D1/SS43D2

Offered In: 11

Credits: 1

Level: Dual Credit

Prerequisites: Meet TSIA requirements and complete an HCC application.

Description: History 1301: The study of the history of the United States from English Colonization through the Reconstruction. History 1302: The study of the history of the United States from the end of the Reconstruction era to the present.

Medical Insurance — Dual Credit

MDCA 1343 - Medical Insurance

Course Number: CHS31P

Offered In: 11

Credits: .5

Level: Dual Credit

Description: Emphasizes medical office coding procedures for payment and reimbursement by patient or third-party payers for ambulatory care settings.

Anatomy and Physiology for Medical Assistants— Dual Credit

MDCA 1409 - Anatomy and Physiology for Medical Assistants

Course Number: CST1P

Offered In: 11

Credits: .5

Level: Dual Credit **Description:** Emphasis on normal human anatomy and physiology of cells, tissues, organs, and systems with overview of common pathophysiology.

Pharmacology and Administration of Medications— Dual Credit

MDCA 1448 - Pharmacology and Administration of Medications

Course Number: CHS11P

Offered In: 11

Credits: .5

Level: Dual Credit

Description: 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.

Medical Assistant Interpersonal and Communication Skills— Dual Credit

MDCA 1210 - Medical Assistant Interpersonal and Communication Skills

Course Number: SS513

Offered In: 11

Credits: .5

Level: Dual Credit

Description: Emphasis on the application of basic psychological principles and the study of behavior as they apply to special populations. Topics include procedures for self-understanding and social adaptability in interpersonal communication with patients and coworkers in an ambulatory care setting.

Administrative Procedures— Dual Credit

MDCA 1321 - Administrative Procedures

Course Number: CBUP1

Offered In: 11

Credits: .5

Level: Dual Credit

Description: 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.

Medical Law and Ethics— Dual Credit

MDCA 1205 - Medical Law and Ethics

Course Number: SS581P

Offered In: Summer III

Credit: .5

Level: Dual Credit

Description: Instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants in ambulatory care settings.

Electronic Medical Record Documentation for Scribes— Dual Credit

MDCA 1372 - Electronic Medical Record Documentation for Scribes

Offered In: Summer III

Credit: .5

Level: Dual Credit

Description: This course addresses the basics of history and physical documentation in the electronic medical record. Provides practical application utilizing dictation and/or activities developed for the scribe industry in an ambulatory care setting. Topics include fundamentals of the Electronic Medical Record related to billing and coding. The course prepares students for hands-on skills of medical scribing.

English Composition I & II — Dual Credit

ENGL 1301 - Composition I

Course Number: EL64D1

Offered In: 12

Credit: .5

Level: Dual Credit

Prerequisite: Prerequisite(s): Appropriate score on TSI/ACT/SAT/STAAR, INRW 0420, Grade of C or better in ELA College Prep course from participating ISDs with lower scores on these placement exams, this course (ENGL 1301) can be taken concurrently with the INRW 0300 or ESOL 0370.

Description: Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing academic essays as a vehicle for learning, communicating, and critical analysis. Note: ENGL 1301 is a pre-requisite for all 2000-level literature courses.

ENGL 1302 - Composition II

Course Number: EL64D2

Offered In: 12

Credit: .5

Level: Dual Credit

Prerequisite(s): ENGL 1301 or its equivalent

Description: Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.

Procedures in a Clinical Setting — Dual Credit

MDCA 1417 - Procedures in a Clinical Setting

Course Number: CHS41P

Offered In: 12

Credit: .5

Level: Dual Credit

Description: Emphasis on patient-centered 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 the ambulatory care settings.

Medical Assisting Credentialing Exam Review— Dual Credit

MDCA 1254 - Medical Assisting Credentialing Exam Review

Course Number: CHS42P

Offered In: 12

Credit: 5

Level: Dual Credit

Description: Preparation for one of the National Commission for Certifying Agencies (NCCA) recognized credentialing exams.

Practicum Medical/ Clinic Assistant— Dual Credit

MDCA 1265 - Practicum (or Field Experience) Medical/Clinical Assistant

Course Number: CHS8PA

Offered In: 12

Credit: .5

Level: Dual Credit

Description: Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

Medical Assistant Laboratory Procedures — Dual Credit

MDCA 1352 - Medical Assistant Laboratory Procedures

Course Number: CHS8PB

Offered In: 12

Credits: .5

Level: Dual Credit

Description: 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.