

KELLER COLLEGIATE ACADEMY



Keller Collegiate Academy provides pathways in:

Associate of Arts with Health Science certifications

Associate of Science with Health Science certifications

Associate of Applied Science, Surgical Technology
(selective admission through Tarrant County College)

Associate of Applied Science, Anesthesia Technology
(selective admission through Tarrant County College)

Level II Certification Licensed Vocational Nurse (LVN)

University of Texas at Arlington Nursing Academy
(selective admission through University of Texas Arlington Nursing Academy Partnership)

Keller Collegiate Academy - Associate of Arts

Subject Area	High School Course	Dual Credit Course	Subject Area	High School Course	Dual Credit Course
English (4.0)	Honors English I A		Math (4.0)	Honors Algebra I A	
	Honors English I B			Honors Algebra I B	
	Honors English II A			Honors Geometry A	
	Honors English II B			Honors Geometry B	
	English III A	ENGL 1301		Honors Algebra II	MATH 1314
	English III B	ENGL 1302		Statistics (1 Credit)	MATH 1342
	English IV A	ENGL 2332			
	English IV B	ENGL 2333			
Social Studies (4.0)	Honors World/ AP Human Geography A		Science (4.0)	Honors Biology A	
	Honors World/ AP Human Geography B			Honors Biology B	
	World History/ WHAP A			Honors Chemistry A	
	World History/WHAP B			Honors Chemistry B	
	US History A	HIST 1301		Honors Physics A or AP Physics I A	
	US History B	HIST 1302		Honors Physics B or AP Physics I B	
	Government	GOVT 2305		Anatomy & Physiology	BIOL 2401
	Economics / AP Economics			Anatomy & Physiology	BIOL 2402
World Languages (2.0)	Honors Spanish I A		AVID	AVID I A	
	Honors Spanish I B			AVID I B	
	Honors Spanish II A			AVID II A	
	Honors Spanish II B			AVID II B	
	Optional Honors Spanish III A			AVID III A	
	Optional Honors Spanish III B			AVID III B	
	Optional AP Spanish IV			AVID IV A	
				AVID IV B	
Speech (0.5)	Prof Comm	SPCH 1321			
Phys. Ed. (1.0)	HS PE	KINE 1164			
Fine Arts (1.0)	HS Honors Art	ARTS 1303	MISC	Certification	
				PCT	
Electives (5.5)				MED ASST	
				TESTS	
	General Psych	PSYC 2301		TSIA2	
	Med Term A			SAT/ACT	
	Dual Med Term B	HPRS 1206		PSAT	
	HS Health Science Theory A				
	HS Health Science Theory B				
	Special Topics in SS	GOVT 2306			
	Practicum in HST (PCT) A (1 credit)				
	Practicum in HST (PCT) B (1 credit)				
	Practicum in HST II (MED ASST) A (1.5 credits)				
	Practicum in HST II (MED ASST) B (1.5 credits)	HPRS 1202			
	Microbio (1 credit)	BIOL 2420			
Pharmacology	HPRS 2200				
Pathophysiology	HPRS 2201				

Keller Collegiate Academy - Associate of Science

Subject Area	High School Course	Dual Credit	Subject Area	High School Course	Dual Credit
English (4.0)	Honors English I A		Math (4.0)	Honors Algebra I A	
	Honors English I B			Honors Algebra I B	
	Honors English II A			Honors Geometry A	
	Honors English II B			Honors Geometry B	
	English III A	ENGL 1301		Honors Algebra II	MATH 1314
	English III B	ENGL 1302		Honors Pre Calculus	MATH 2412
	English IV A	ENGL 2332		Calculus I	MATH 2413
	English IV B	ENGL 2333		Calculus II	MATH 2414
Social Studies (4.0)	Honors World/ AP Human Geography A		Science (4.0)	Honors Biology A	
	Honors World/ AP Human Geography B			Honors Biology B	
	World History/ WHAP A			Honors Chemistry A	
	World History/ WHAP B			Honors Chemistry B	
	US History A	HIST 1301		Honors Physics A or AP Physics	
	US History B	HIST 1302		Honors Physics B or AP Physics	
	Government	GOVT 2305		Advanced Science IA	BIOL 1406
	Economics / AP Economics			Advanced Science IB	BIOL 1407
				Advanced Science IIA	CHEM 1411
				Advanced Science IIB	CHEM 1412
World Languages (2.0)	Honors Spanish I A		AVID	AVID I A	
	Honors Spanish I B			AVID I B	
	Honors Spanish II A			AVID II A	
	Honors Spanish II B			AVID II B	
	Optional Honors Spanish III A			AVID III A	
	Optional Honors Spanish III B			AVID III B	
	Optional AP Spanish IV			AVID IV A	
Speech (0.5)	Professional Communications	SPCH 1321		AVID IV B	
Phys. Ed. (1.0)	HS PE	KINE 1164	Certification		
Fine Arts (1.0)	Honors HS Art	ARTS 1303	PCT		
			MED ASST		
Electives (5.5)	General Psych	PSYC 2301			
	HS Med Term A				
	Med Term B	HPRS 1206			
	HS Hlth Sc Theory A				
	HS Hlth Sc Theory B				
	Special Topics in SS	GOVT 2306	TESTS		
	Practicum in HST (PCT) A (1 credit)		TSIA2		
	Practicum in HST (PCT) B (1 credit)		SAT/ACT		
	Practicum in HST II (MED ASST) A (1.5 credits)		PSAT		
	Practicum in HST II (MED ASST) B (1.5 credits)				

TCC Speech Communications

TCC SPCH 1321 Business and Professional Communications

TEDS: 13009900

KISD: 1461PD

Credit: .5

Grade: 9-12

Prerequisite: None

Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.

TCC Algebra II

TCC MATH 1314 College Algebra

TEDS: 03100607

KISD: 2043PD

Credit: 1

Grade: 11-12

Prerequisite: TSI met in Algebraic Math pathway

In-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

TCC Precalculus

TCC Math 2412

TEDS: 03101100

KISD: 2314PD

Credit: 1

Grade: 11

Prerequisite: TCC Admission Standards

In depth combined study of algebra, trigonometry, and other topics for calculus readiness.

TCC Calculus I/Calculus II

TCC Math 2413 and Math 2414

TEDS: 03102500

KISD: 2322P

Credit: 1

Grade: 12

Prerequisite: TCC Admission Standards

Limits and continuity; the fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas. Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; and improper integrals.

TCC Statistics

TCC MATH 1342 Elementary Statistical Methods

TEDS: 03102530

KISD: 2414P

Credit: 1

Grade: 9-12

Prerequisite:

1. TSI Met in Reading and
2. TSI Met in Non-Algebraic Math pathway

Collection, analysis, presentation, and interpretation of data, and probability. The analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing. The use of appropriate technology is recommended.

TCC Biology (Scientific Research & Design)

TCC BIOL 1406 Biology for Science Majors and BIOL 1407 Biology for Science Majors 2

TEDS: 13037200

KISD: 8225P

Credit: 1

Grade: 11

Prerequisite: TCC Admission Standards

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

TCC Chemistry (Scientific Research & Design)

TCC CHEM 1411 General Chemistry and TCC Chem 1412 General Chemistry 2

TEDS: 13037210

KISD: 8226P

Credit: 1

Grade: 12

Prerequisite: TCC Admission Standards

Fundamental principles of chemistry in the sciences, health sciences, and engineering; topics include measurements, matter, chemical reactions, stoichiometry, periodicity of elemental properties, atomic and molecular structure, chemical bonding, solutions properties of gases, and an introduction to thermodynamics and descriptive chemistry. Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry.

TCC Anatomy and Physiology

TCC BIOL 2401 Anatomy and Physiology (Lecture and Lab)

TEDS: 13020600

KISD: 3203P

Credit: 1

Grade: 9-12

Prerequisite: TSI Met in Reading and Writing

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. Content may be either integrated or specialized. The lab provides a hands-on learning experience for

the exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses.

TCC BIOL 2402 Anatomy and Physiology II (Lecture and Lab)

Concurrent enrollment: This course will be for TCC credit only, but is required for KCA program of study

Grade: 9-12

Prerequisite: BIOL 2401 Anatomy and Physiology

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. The lab provides a hands-on learning experience for the exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics).

TCC Medical Microbiology

TCC BIOL 2420 Microbiology for Non-Science Majors (lecture and Lab)

TEDS: 13020700

KISD: 8121P

Credit: 1

Grade: 10-12

Prerequisite(s):

1. TSI Met in Reading and
2. TSI Met in Non-Algebraic Math pathway

Prerequisite: MATH 1314

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health.

TCC Pathophysiology Honors

TCC HPRS 2201 Pathophysiology

TEDS: 13020800

KISD: 82822

Credit: 1

Grade: 11-12

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

TCC Special Topics in Social Studies

TCC GOVT 2306 Texas Government

TEDS: 03380001

KISD: 1204P

Credit: .5

Grade: 11

Prerequisite: TCC Admission Standards

Origin and development of the Texas Constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.

TCC Government

TCC GOVT 2305 Federal Government

TEDS: 03330100

KISD: 4304PD

Credit: .5

Grade: 12

Prerequisite: ENGL 1301 with a grade of C or TSI-compliant in Reading

Origin and development of the U.S. Constitution, structure, and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties, and civil rights.

TCC Psychology

TCC PSYC 2301 General Psychology

TEDS: 03350100

KISD: 4402PD

Credit: .5

Grade: 9-12

Prerequisite: TSI Met in Reading

A survey of the major psychological topics, theories, and approaches to the scientific study of behavior and mental processes.

TCC Art

TCC ARTS 1303 Art History I/

Art Appreciation

TEDS: 03500110

KISD: 7543PD

Credit: 1

Grade: 10-12

Prerequisite: None

This full year advanced course will explore a chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century and beyond. Students will explore a variety of art methods and materials utilized by different civilizations throughout history. It will provide hands-on art making experiences in addition to lectures and high-level discussions. Students will earn .5 TCC dual credit during the first semester and .5 high school fine arts credit during the second semester. Students are required to enroll in this art course for the entire school year.

TCC Physical Education

TCC KINE 1164 Introduction to Physical Fitness and Wellness

TEDS: PES00051

KISD: 5041P

Credit: 1

Grade: 10-12

Prerequisite: None

This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Includes:

1. Scientific information concerning values and preventive medical benefits of exercise.
2. Individual (personal) evaluations and experiments to determine the present health and fitness status.
3. Development of a personal exercise program based on the student's needs.

TCC Medical Terminology

TCC HPRS 1206 Essentials of Medical Terminology

TEDS: 13020300

KISD: 8181PB

Credit: .5

Grade: 9-12

Prerequisite: None

A study of medical terminology, word origin, structure, and application.

TCC Pharmacology

TCC HPRS 2200 Pharmacology

TEDS: 13020950

KISD: 8188P

Credit: 1

Grade: 11-12

Prerequisite: None

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages.