Seguin High School Course Descriptions 2019-2020

This document contains descriptions for all courses offered at Seguin High School, organized by content area. Please see the Seguin High School Course Catalog for complete information regarding course selection, graduation requirements, and specific programs available at the campus. The course catalog is available online at the Seguin ISD website.

ENGLISH LANGUAGE ARTS	2
MATHEMATICS	8
SCIENCE	12
SOCIAL STUDIES	16
PHYSICAL EDUCATION, ATHLETICS AND SPORTS MEDICINE	22
NAVAL JROTC	25
LANGUAGES OTHER THAN ENGLISH	26
FINE ARTS	28
ADDITIONAL COURSES	35
CAREER AND TECHNICAL EDICATION (CTE)	37



ENGLISH LANGUAGE ARTS

English 1 SISD Course Number: 1002

Credit: 1.0 Grade: 9

Prerequisite: None

Students will use a variety of strategies to comprehend and analyze literary genres including fiction, drama, poetry, and literary non-fiction, with informational and persuasive writing. Students will use their understanding of literary elements to make thematic connections within a diverse selection of texts. Students will use a process to create written products that communicate insightful ideas effectively using appropriate formats. Research techniques will be implemented throughout the year to expand understanding of topics and concepts. Vocabulary acquisition strategies leading to increasing reading levels will be instilled.

English 1 PreAP SISD Course Number: 1009

Credit: 1.0 Grade: 9

Recommended Prerequisite: Grade 8 Pre-AP ELAR

Students will work independently and within a learning community to critically analyze a variety of literary genres including fiction, drama, poetry, and literary non-fiction, with informational and persuasive writing. Students will use their understanding of literary elements to make thematic connections within a diverse and complex selection of texts. Students will articulate increasingly insightful ideas effectively utilizing more sophisticated and appropriate formats. A variety of research techniques will be taught to facilitate independent investigation of concepts and ideas. Vocabulary acquisition strategies leading to increasing comprehension of more complicated texts will be instilled.

English 1 SISD Course Number: 1002A

Credit: 1.0 Grade: 9
Prerequisite: Committee approval required for enrollment.

Students will develop skills in the areas of expressive, receptive, written and/or symbolic representations of language. Attention is given to the ability to communicate effectively within the range of the student's abilities (direct or through assistive devices). Students will integrate language in order to understand oral, written and/or symbolic communication. Oral, written and/or symbolic language will be used to express ideas, needs and inquiries. Communication will be examined in regard to social appropriateness, environmental cues and prompts, understanding generalizations in real life contexts, the responsibilities of independent living and participation in the community.

English 2 SISD Course Number: 1022

Credit: 1.0 Grade: 10

Prerequisite: None

Students will use a variety of strategies to comprehend and analyze literary genres including fiction, drama, poetry, and literary non-fiction, with informational and persuasive writing. Students will use their understanding of literary elements to make thematic connections within a diverse selection of texts that reflect a wide range of cultures and world experiences. Students will use a process to create written products that communicate insightful ideas effectively using appropriate formats. Research techniques will be implemented throughout the year to expand understanding of topics and concepts. Vocabulary acquisition strategies leading to increasing reading levels will be instilled.

Note: This course meets State graduation requirements for communication skills proficiency.

English 2 PreAP SISD Course Number: 1029

Credit: 1.0 Grade: 10

Recommended Prerequisite: English 1 PreAP

Students will work independently and within a learning community to critically analyze a variety of literary genres including fiction, drama, poetry, and literary non-fiction, with informational and persuasive writing. Students will use their understanding of literary elements to make thematic connections within a diverse and complex selection of texts that reflect a wide range of cultures and world experiences. Students will articulate increasingly insightful ideas effectively utilizing more sophisticated and appropriate formats. A variety of research techniques will be taught to facilitate independent investigation of concepts and ideas. Vocabulary acquisition strategies leading to increasing comprehension of more complicated texts will be instilled.

Note: This course meet State graduation requirements for communication skills proficiency.

English 2 SISD Course Number: 1022A

Credit: 1.0 Grade: 10 Prerequisite: Committee approval required for enrollment.

This course will assist students in developing skills in the areas of expressive, receptive, written and/or symbolic representations of language. Attention is given to the ability to communicate effectively within the range of the student's abilities (direct or through assistive devices). Students will integrate language in order to understand oral, written and/or symbolic communication. Oral, written and/or symbolic language will be used to express ideas, needs, and inquiries. Communication will be examined in terms of social appropriateness, environmental cues and prompts, understanding generalizations in real life contexts, the responsibilities of independent living and participation in the community.

Note: This course meet State graduation requirements for communication skills proficiency.

English 3 SISD Course Number: 1052

Credit: 1.0 Grade: 11

Prerequisite: None

Students will use a variety of strategies to comprehend and analyze a variety of genres with emphasis on American literature. Students will use their understanding of literary elements to make thematic connections within a diverse selection of texts and present their ideas articulately in a correct and appropriate written format. Students will continue to communicate more complex and insightful ideas effectively using appropriate formats. Vocabulary acquisition strategies leading to increasing reading levels will be instilled. Students will implement effective and thoughtful research strategies to produce a formal research paper with correct documentation of sources and format.

English 3 Advanced Placement SISD Course Number: 1069

Credit: 1.0 Grade: 11

Recommended Prerequisite: English 2 PreAP

Instruction is rigorous and is designed to prepare college-bound students. Students will work independently and within a learning community to critically analyze a variety of literary genres with emphasis on influential works of American literature. Students will use their understanding of rhetorical strategies and literary elements to analyze and evaluate complex literature. Students will articulate increasingly insightful ideas effectively utilizing more sophisticated and appropriate formats. Vocabulary acquisition strategies leading to increasing comprehension of more complicated texts will be instilled. Students will implement effective and thoughtful research strategies to produce research products with correct documentation of sources and format.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

English 3 Dual Credit SISD Course Number: 1080

Credit: 1.0 Grade: 11

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 6 credit hours from St. Philip's College for the following courses:

<u>ENGL 1301 – Composition 1 and ENGL 1302 – Composition 2</u>: Intensive study of and practice in writing processes and techniques for developing researched-based expository and persuasive texts. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. 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.

English 4 SISD Course Number: 1082

Credit: 1.0 Grade: 12

Prerequisite: None

Students will use a variety of strategies to comprehend and analyze a variety of genres with emphasis on British literature. Students will use their understanding of literary elements to make thematic connections within a diverse selection of texts and present their ideas articulately in a correct and appropriate written format. Students will continue to communicate more complex and insightful ideas effectively using appropriate formats. Vocabulary acquisition strategies leading to increasing reading levels will be instilled. Students will implement effective and thoughtful research strategies to produce a formal research paper with correct documentation of sources and format.

English 4 Advanced Placement (AP) SISD Course Number: 1099

Credit: 1.0 Grade: 12
Recommended Prerequisite: English 3 Advanced Placement

Instruction is rigorous and is designed to prepare college-bound students. Students will work independently and within a learning community to critically analyze a variety of literary genres with emphasis on influential works of British and American literature. Students will use their understanding of rhetorical strategies and literary elements to analyze and evaluate complex literature. Students will articulate increasingly insightful ideas effectively utilizing more sophisticated and appropriate formats. Vocabulary acquisition strategies leading to increasing comprehension of more complicated texts will be instilled. Students will implement effective and thoughtful research strategies to produce research products with correct documentation of sources and format.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

English 4 Dual Credit SISD Course Number: 1199

Credit: 1.0 Grade: 12

Prerequisite: Must meet TSI requirements

This is a college-level course that focuses on British Literature. A research paper is required which stresses methodology, organization, and techniques for effective written communication. Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 6 credit hours from St. Philip's College for the following courses:

<u>ENGL 2322: British Literature</u> I: A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

<u>ENGL 2323: British Literature II:</u> A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

College Prep ELA SISD Course Number: 1090

Credit: 1.0 Grade: 12

Prerequisite: Enrollment based on TSI results.

This is a college preparatory course designed to extend the understanding of English Language Arts concepts. The necessary components of grammar, persuasion, and argumentation needed for success in college are reviewed. Application of abstract and analytical thinking skills, advanced vocabulary, and writing skills are stressed. This is a fourth year course focused on those English Language Arts (ELA) skills necessary to pass the ELA placement tests at colleges, technical schools, and area community colleges. This course may satisfy TSI Reading and Writing College Readiness standards for any of the Alamo College at UTSA.

Note: This course does not fulfill state credit requirements for graduation.

Reading Seminar 1 SISD Course Number: 1618

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment.

This course uses Tier 3 reading intervention to help students further develop student reading skills. This course may be repeated for a maximum of three credits.

Note: This course does not fulfill state credit requirements for graduation.

Communications Applicatons Dual Credit SISD Course Number: 1910

Credit: 0.5 Grade: 9-12

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

SPCH 1311: Introduction to Speech Communication

This is a college-level course that focuses on theories and practice of communication in interpersonal, small group and public speech. Students learn about communication theory, improve skills in communication with others, and make formal oral presentations.

Note: This is a one semester course.

Debate 1-3 SISD Course Numbers: 1812, 1813, 1814

Credit: 1.0 Grade: 10-12

Prerequisite: None

Students in this course will develop the skills needed to participate in UIL debate events. Studies will include debate formats, logical/critical thinking, reading skills for research, briefing of arguments, interpreting resolutions, construction of affirmative and negative cases, listening to cross examination, evaluation arguments, and presenting debates. Students will be required to enter and attend interscholastic competitions and will be required to attend practice and research sessions outside of school time.

Literary Genres: Mythology SISD Course Number: 1760

Credit: 0.5 Grade: 11-12

Prerequisite: None

In this comprehensive course students read, write, discuss, research, and create projects in order to explore the patterns, messages, and implications of myths. This course examines the crucial centerpiece of the human quest for order, meaning and significance: myth. Beyond the thorough investigation of major mythic traditions

(Greek, Roman, Norse, Egyptian), careful attention is devoted to exploring a "reader's perspective" on myth (critical, "objective," or sympathetic) and major thematic elements. Students draw regular parallels to and applications from the myths of interest.

Note: Students must successfully complete both semester courses to earn 1.0 state credit of Literary Genres.

Literary Genres: Bible as Literature SISD Course Number: 1765

Credit: 0.5 Grade: 11-12

Prerequisite: None

The course approaches the study of the Hebrew Bible as literature, considering such topics as the history of the texts, imagery, wisdom literature, and various literary motifs such as the hero story, the journey, rite of passage, and reversal. The course will also consider the influence of the Bible in world literature and art. Note: Students must successfully complete both semester courses to earn 1.0 state credit of Literary Genres.

English for Speakers of Other Languages(ESOL)

English for Speakers of Other Languages (ESOL) is offered to assist students whose native language is not English in gaining a level of fluency which will enable their completion of a high school education. A maximum of two ESOL English credits may be applied to the 4-credit English requirement for graduation. Additional ESOL courses will be counted as elective credits.

English 1 Speakers of Other Languages (ESOL) SISD Course Number: 1011

Credit: 1.0 Grade: 9

Prerequisite: Placement based on the student's level of English proficiency.

This course teaches the same academic content as English I while supporting English Language Learners in developing interpersonal and academic vocabulary. Initial instruction focuses on listening and speaking, and reading and writing skills are developed simultaneously as the student comprehends and speaks more English.

English 1 Speakers of Other Languages (ESOL) SISD Course Number: 1011A

Credit: 1.0 Grade: 9

Prerequisite: Placement by committee based on the student's level of English proficiency.

This is a supportive functional reading course. Students apply the use of speaking, listening, reading, and writing strategies in order to enhance their knowledge and skills in the processes of reading. Relevant and meaningful applications are used in order to provide context for the use of reading in real life and practical situations.

English 2 Speakers of Other Languages (ESOL) SISD Course Number: 1031

Credit: 1.0 Grade: 10

Prerequisite: ESOL 1

This course teaches the same academic content as English 2 while supporting English Language Learners in developing interpersonal and academic vocabulary. This is a course dedicated to vocabulary development in content areas through whole language approach. Communicative skills are stressed.

English 2 Speakers of Other Languages (ESOL) SISD Course Number: 1031A

Credit: 1.0 Grade: 10

Prerequisite: Committee approval required for enrollment.

This is a supportive functional reading course. Students apply the use of speaking, listening, reading, and writing strategies in order to enhance their knowledge and skills in the processes of reading. Relevant and meaningful applications are used in order to provide context for the use of reading in real life and practical situations.

Newcomer English Language Development (NELD) A SISD Course Number: 1565

Credit: 1.0 Grade: 9

Prerequisite: Placement based on the student's level of English proficiency.

This course develops language, survival vocabulary, and the basic building blocks of literacy for secondary recent immigrant students with little or no English proficiency. The development of communicative competence occurs through targeted lessons based on students' needs with the goal of increasing proficiency in English in all four language domains. This course is taken in conjuction with ESOL 1.

Note: This is a one semester course.

Newcomer English Language Development (NELD) B SISD Course Number: 1566

Credit: 1.0 Grade: 10

Prerequisite: NELD A, Placement based on the student's level of English proficiency.

NELD-B is a second semester course designed to provide educational opportunities for immigrants who have limited experience in the American school system. More rigorous than NELD-A, this course prepares students for a smooth transition and success with the ESOL/ELPS, and ELA TEKS leading to the College & Career Readiness Standards. Students are challenged to apply higher-order thinking skills and have access to curriculum that covers reading, writing, listening, speaking, and second language acquisition. This course is taken in conjuction with ESOL 1.

Note: This is a one semester course.

Reading ESOL 2 SISD Course Number: 1611

Credit: 1.0 Grade: 10

Prerequisite: Placement based on the student's level of English proficiency.

This beginner through intermediate-level ESOL course focuses on understanding and interpreting reading selections related to a thematic unit covered in ESOL-2, which is taken in conjunction with this course, to develop reading skills necessary for basic skill test and mainstream course work. Research projects and development of study skills are important aspects of this course.

MATHEMATICS

Algebra 1 SISD Course Number: 2003

Credit: 1.0 Grade: 9-12

Prerequisite: None

Algebra I provides students insights through the content strands of liner functions, equations, and inequalities, quadratic functions and equations, exponential functions and equations, and number and algebraic methods. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations.

Algebra 1 SISD Course Number: 2003A

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment.

This course is designed to reinforce math operations using a variety of practical, real life situations that facilitate the understanding of using mathematics in daily living exercises. Emphasis is on applying mathematics in the use of money, personal financial situations and solving home and work problems by using the concepts of fundamental mathematics. Students practice these strategies within the context of simulations designed to reinforce the understanding of basic operations, as well as the application of these operations within technological tools that enhance understanding and accuracy.

Geometry SISD Course Number: 2023

Credit: 1.0 Grade: 9-12

Prerequisite: Algebra I

In Geometry, students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Within the course, students will begin to focus on more precise terminology, symbolic representations, and the development of proofs.

Geometry PreAP SISD Course Number: 2029

Credit: 1.0 Grade: 9-12

Prerequisite: Algebra I

This course provides a more in-depth experience in the concepts of Geometry. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability

Algebra 2 SISD Course Number: 2053

Credit: 1.0 Grade: 9-12

Prerequisite: Algebra I

In Algebra 2, students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods.

Algebra 2 PreAP SISD Course Number: 2059

Credit: 1.0 Grade: 9-12

Prerequisite: Algebra I

This course provides a more in-depth experience in the concepts of Algebra 2. In Algebra 2, students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods.

Math Models SISD Course Number: 2061

Credit: 1.0 Grade: 11-12

Prerequisite: Algebra I

In mathematical models with applications, students will use a mathematical modeling cycle to analyze problems, understand problems better, and improve decisions. Students will also learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions.

Advanced Quantitative Reasoning (AQR) SISD Course Number: 2018

Credit: 1.0 Grade: 11-12

Prerequisite: Geometry and Algebra 2

Advanced Quantitative Reasoning includes the analysis of information using statistical methods and probability, modeling change and mathematical relationships, and spatial and geometric modeling for mathematical reasoning. Students will develop and apply reasoning, planning, and communication to make decisions and solve problems in applied situations involving numerical reasoning, probability, statistical analysis, finance, mathematical selection, and modeling with algebra, geometry, trigonometry, and discrete mathematics.

Precalculus SISD Course Number: 2062

Credit: 1.0 Grade: 11-12

Prerequisite: Algebra 1, Geometry, and Algebra 2

Precalculus is designed to provide a firm foundation for high-level mathematics courses. Topics in this college-preparatory course include functions and their graphs, conics, trigonometric identities and equations, vectors, periodic functions, trigonometric and analytic applications, concept of infinity and limit, concepts of reasoning, and logic for use with proofs.

Precalculus PreAP SISD Course Number: 2064

Credit: 1.0 Grade: 11-12

Prerequisite: Algebra 1, Geometry, and Algebra 2

This course provides more in-depth experience in the concepts of Precalculus. Precalculus is designed to provide a firm foundation for high-level mathematics courses. Topics in this college-preparatory course include functions and their graphs, conics, trigonometric identities and equations, vectors, periodic functions, trigonometric and analytic applications, concept of infinity and limit, concepts of reasoning, and logic for use with proofs. The next course is usually Calculus.

Calculus AB Advanced Placement (AP) SISD Course Number: 2099

Credit: 1.0 Grade: 11-12

Prerequisite: Precalculus

This course is designed to form a solid mathematics foundation that students will need as they enter college. In this course, students will study four major areas during the year: limits, derivatives, indefinite integrals, and definite integrals. As students develop the concepts, they will learn how the mechanics go along with the topics.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Statistics Advanced Placement (AP) SISD Course Number: 2098

Credit: 1.0 Grade: 10-12

Recommended Prerequisite: Geometry, Algebra II

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Computer Science A Advanced Placement (AP) SISD Course Number: 2122

Credit: 1.0 Grade: 11-12

Prerequisite: Algebra II or co-enrollment in Algebra II Recommended Prerequisite: Computer Science 1

Students will use the Java programming language to solve problems from a variety of different subject areas. Students will also learn basics of computer hardware and software, as well as responsible use of these systems. Due to the extensive use of computers that is required, students will need to have access to a computer outside of regular school hours.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Independent Studies In Mathematics 1 (YR) Dual Credit: SISD Course Number: 2068

College Algebra Grade: 11-12

Credit: 1.0

Prerequisite: Algebra II, must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

MATH 1314: College Algebra

This is a college-level course that provides an in-depth study and application 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.

Independent Studies In Mathematics 1 or 2 (YR) SISD Course Number: 2070/2071

Dual Credit: Precalculus Grade: 11-12

Credit: 1.0

Prerequisite: Algebra II, must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 6 credit hours from St. Philip's College for the following courses:

MATH 1414: College Algebra (Precal Track) and MATH 2412: Precalculus

This two-course sequence includes in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices, as well as a combined study of algebra, trigonometry, and other topics for calculus readiness.

Math College Prep SISD Course Number: 2090

Credit: 1.0 Grade: 12

Prerequisite: Enrollment based on TSI results.

This course addresses a variety of mathematical topics needed to prepare students to be successful in college-level mathematics. Students will connect and use multiple strands of mathematics in situations and problems, as well as other disciplines. This is a fourth year course focused on those Math skills necessary to pass the Math placement tests at colleges, technical schools, and area community colleges. This course may satisfy TSI Reading and Writing College Readiness standards for any of the Alamo College at UTSA.

Algebraic Reasoning SISD Course Number: 2007

Credit: 1.0 Grade: 9-12

Prerequisite: Algebra I

This course builds on the knowledge and skills for mathematics leading up to and including Algebra I, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses. Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets.

SCIENCE

Integrated Physics And Chemistry SISD Course Number: 3022

Credit: 1.0 Grade: 9-10

Prerequisite: None

In IPC, students conduct laboratory and field investigations, use scientific method during investigations, and make informed decisions using critical thinking and scientific problem solving. This course integrates the concepts of physics and chemistry using practical applications relating to topics such as: force, motion, energy, and matter.

Note: This course does not count towards a STEM endorsement.

Biology SISD Course Number: 3002

Credit: 1.0 Grade: 9-12

Prerequisite: None

This course provides a study of life including origin, structure, reproduction, growth, and development of living organisms. Areas of study will include the structure and functions of cells, microorganisms, and plants; animal observation, measurement, classification, prediction, and reporting skills will be emphasized. Additionally, students will receive instruction in cardiopulmonary resuscitation (CPR) as outlined in Texas Education Code §74.38. Dissections may be a part of the curriculum.

Biology PreAP SISD Course Number: 3009

Credit: 1.0 Grade: 9-12

Prerequisite: None

This advanced version of Biology I includes all elements of that course. Instruction is at a faster pace, which permits investigation of topics at a greater depth. Six major out-of-class projects will be required. Analysis questions will be included on all tests. Dissections may be a part of the curriculum. Additionally, students will receive instruction in cardiopulmonary resuscitation (CPR) as outlined in Texas Education Code §74.38.

Biology SISD Course Number: 3002A

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment.

The Alternate Science course studies science-based concepts related specifically to independent daily living and employment. Attention is given to relating science to home and job practices that foster the understanding of students' roles and responsibilities in the care and operation of both facilities. Activities are "hands-on" experiences with an emphasis on cooperative learning strategies. Additionally, students will receive instruction in cardiopulmonary resuscitation (CPR) as outlined in Texas Education Code §74.38.

Chemistry SISD Course Number: 3042

Credit: 1.0 Grade: 10-12

Prerequisite: Biology, Algebra I, Geometry or concurrent enrollment in Geometry

This course covers the study of matter in a traditional manner. Topics include the properties of matter, atomic structure, chemical bonding, stoichiometry, and quantum mechanics with an emphasis on high level math. Laboratory procedures, classification and measurement skills, predicting outcomes, and applications of chemistry in daily life will be emphasized. This fulfills one credit of the science requirement for all graduation plans and for college.

Chemistry PreAp SISD Course Number: 3049

Credit: 1.0 Grade: 10-12

Prerequisite: Biology or Pre-AP Biology, Algebra I, Geometry or concurrent enrollment in Geometry or

Algebra 2

This preparation course for Chemistry AP includes all the elements of Chemistry I as well as prepares the student for Chemistry AP and/or a rigorous college-level chemistry course. Instruction is at a faster pace, which permits investigation of topics at a greater depth. In addition, major emphasis will be placed on an independent research project, which includes project selection, literature search, experimental design, data collection, data analysis, and presentation of findings.

Physics SISD Course Number: 3072

Credit: 1.0 Grade: 11-12
Prerequisite: Algebra II or concurrent enrollment in Algebra II

This course provides an in-depth investigation of the relationship between matter and energy. Students will perform calculations and laboratory investigations on topics including motion, forces, work, waves, sound, light, and electrical and nuclear energy. The course is math intensive.

Physics PreAP SISD Course Number: 3079

Credit: 1.0 Grade: 11-12
Prerequisite: Algebra II or concurrent enrollment in Algebra II

The advanced version of Physics I includes all the elements of that course. Emphasis will be placed on the formulation of models used to solve problems. In addition, major emphasis will be placed on an independent research project which includes project selection, literature search, experimental design, data collection, data analysis, and presentation of findings.

Chemistry Advanced Placement (AP) SISD Course Number: 3069

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Chemistry or Chemistry PreAP, Algebra II or concurrent enrollment in Algebra II

This course is comparable to a first-year college-level chemistry course. Students use a college text and perform advanced laboratory investigations. The curriculum includes topic such as: kinetics, reaction equilibrium, intermolecular forces, chemical reactions, and more complex laboratory experiences.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Biology Advanced Placement (AP) SISD Course Number: 3001

Credit: 1.0 Grade 11-12

Recommended Prerequisite: Biology or Biology PreAP, Chemistry or Chemistry AP

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Earth and Space Science SISD Course Number: 3004

Credit: 1.0 Grade: 11-12

Prerequisite: Biology, IPC/Chemistry and one advanced Science that can be taken concurrently AND Algebra I, Geometry and Math Models/Algebra II that can be taken concurrently.

This course is designed to build students' prior scientific and academic knowledge and skills to develop an understanding of Earth's system in space and time. Students will investigate Earth through each of its spheres

and then investigate space in relation to Earth. Topics include Earth's 5 spheres, plate tectonics, the fossil record, natural resources, the solar system, and the universe. Students will be required to complete various projects, class presentations, work individually, and work in teams.

Environmental Systems SISD Course Number: 3023

Credit: 1.0 Grade: 11-12

Prerequisite: Biology, Chemistry/Physics or IPC.

This science course will introduce students to major ecological concepts and environmental problems that affect the world in which they live. The course is designed as a fourth-year science course. Topics include: history of environmental systems, earth systems, resources, population dynamics, ecosystem changes, and ethics. Field trips may require payment of fees. College level text is utilized.

Environmental Science Advanced Placement (AP) SISD Course Number: 3025

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Algebra I, two years of high school laboratory science including one year of life science and one year of physical science.

Advanced Placement (AP) Environmental Science is the equivalent to a college environmental science course. The course covers earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change. Focuses on advanced inquiry-based laboratory investigations to apply scientific principles, concepts, and methodologies in order to better understand our understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply..

Scientific Research and Design: Epidemiology SISD Course Number: 3143

Credit: 1.0 Grade: 11-12

Prerequisite: One year of high school science (Biology and Chemistry recommended)

This course introduces the basic principles and methods of epidemiology, with an emphasis on critical thinking and analytical skills and carries potential applications to clinical practice and research. Topics include active monitoring of public health issues, quantitative study design, outcome measures, data analysis methods, adherence to ethical research guidelines, and methods of intervention. Students will be eligible to compete in the HOSA Emergency Preparedness competition. Students will also be required to research, design, and conduct their own epidemiological study of the population of Seguin High School, analyze their data, draw conclusions, and develop intervention strategies based on their data and population. Final projects will be reviewed by a panel of professionals from the local community.

Anatomy & Physiology SISD Course Number: 80831

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Biology and Chemistry

Anatomy and Physiology is an advanced science course designed to extend the concepts of biology to a study of human anatomy and physiology. The course will be laboratory oriented. A college-level textbook is used in the course.

Medical Microbiology SISD Course Number: 3024

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Biology and Chemistry

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

Pathophysiology SISD Course Number: 3026

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Biology and Chemistry

In Pathophysiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in this course study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will also differentiate between normal and abnormal physiology.

Forensic Science SISD Course Number: 81223

Credit: 1.0 Grade: 11-12

Prerequisite: Biology, Chemistry

This course uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis.

Scientific Research and Design Dual Credit: SISD Course Number: 3144

Biology for Science Majors Grade: 11-12

Credit: 1.0

Prerequisite: One year of high school science (Biology and Chemistry recommended); must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 6 credit hours per semester from St. Philip's College for the following courses:

BIOL 1406 and 1407: Biology for Science Majors I&II: This course covers the fundamental principles of living organisms including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of reproduction, genetics, ecology, and the scientific method are included. Learning outcomes include the history and philosophy of the science of biology, basic chemistry, cellular structure and function, energetics, genetics, evolution, taxonomy and survey of the kingdoms is covered. Laboratory exercises will complement lecture topics.

Note: Students must take both semesters to earn 1.0 high school science credit.

Anatomy & Physiology (YR) Dual Credit SISD Course Number: 3031

Credit: 1.0 Grade: 12

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 6 credit hours per semester from St. Philip's College for the following courses:

<u>BIOL 2401 and 1402: Human Anatomy & Physiology I & II:</u> This two-course sequence involves the study of the structure and function of the human body. Including cells, tissues, organs, and the following systems: endocrine, digestive, respiratory, cardiovascular, lymphatic, genitourinary and reproductive.

SOCIAL STUDIES

World Geography Studies SISD Course Number: 4022

Credit: 1.0 Grade: 9

Prerequisite: None

This course introduces the physical and cultural geography of the earth and its impact on historical and contemporary events. Students will explore the five major geographic themes, geographic terminology, the physical setting of the earth, and the world's regions and cultures. Primary and secondary source materials, reading and writing skills, technology, and critical thinking will be used to acquire and apply information.

World Geography Studies PreAP SISD Course Number: 4029

Credit: 1.0 Grade: 9
Recommended Prerequisite: Pre-AP US History Grade 8

Pre-AP World Geography Studies extends the regular World Geography Studies course by including a more in-depth study of physical, cultural, and political geography. Students will analyze information from a variety of primary and secondary sources to draw conclusions as to how geography influences the political, social, and economic structures within each country and region studied.

Human Geography Advanced Placement (AP) SISD Course Number: 4023

Credit 1.0 Grade: 9

Recommended Prerequisite: Pre-AP US History Grade 8

The AP Human Geography course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

World History Studies SISD Course Number: 4032

Credit: 1.0 Grade: 10

Prerequisite: None

This course provides students an overview of the history of humankind. Traditional historical points of reference in World History are identified as students analyze important events and issues from earliest times to the present using primary and secondary source materials, reading and writing skills, technology, and critical thinking.

World History Advanced Placement (AP) SISD Course Number: 4039

Credit: 1.0 Grade: 10

Recommended Prerequisite: Pre-AP World Geography

Advanced Placement World History covers the major themes of world history from Ancient Greece to the Twentieth Century, tracing the historical development of human cultures. This is an advanced level course that requires outside reading, writing and research and emphasizes critical thinking skills, SAT vocabulary, and analytical reading.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

United States History Since 1877 SISD Course Number: 4002

Credit: 1.0 Grade: 11

Prerequisite: None

This course traces the emergence and growth of the United States following Reconstruction to the present Topics include the emergence of the U.S. as a world power, geographical influence on historical events, the economic growth and development of the U.S., social and cultural developments within the country, and the evolution of political processes since the Civil War. Primary and secondary source materials, reading and writing skills, technology, and critical thinking will be used to acquire and apply information.

United States History Since 1877 SISD Course Number: 4002A

Credit: 1.0 Grade: 1° Prerequisite: Committee approval required for enrollment.

This course focuses on U.S. history from Reconstruction to the present. Students analyze major themes and events in U.S. history, leaders, economic and political institutions, technological innovations, and the philosophies that affect the United States today.

United States History Dual Credit SISD Course Number: 4190

Credit: 1.0 Grade: 11

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 6 credit hours from St. Philip's College for the following courses:

<u>HIST 1301: US History I and HIST 1302: US History II:</u> This is a survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the present. Themes that may be addressed include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.

United States History Advanced Placement (AP) SISD Course Number: 4019

Credit: 1.0 Grade: 11

Recommended Prerequisite: World History Advanced Placement (AP)

Advanced Placement (AP) U.S. History is a fast-paced history class that covers the following eight historical periods: Revolution and Constitution, the Jacksonian Era, the Civil War and Reconstruction, the Populist and Progressive Movements, World War I, the Great Depression and the New Deal, World War II, and International and Domestic Developments in the post-World War II Era. This is an advanced level course that requires outside reading, writing and research and emphasizes critical thinking skills, SAT vocabulary, and analytical reading.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

United States Government SISD Course Number: 4052

Credit: 0.5 Grade: 12

Prerequisite: None

This course is designed to provide an understanding of the functions of federal, state, and local governments. Major focus is placed on the Constitution and its influence on all governmental levels and the rights and responsibilities of American citizenship.

Note: This is a one semester course.

United States Government Dual Credit SISD Course Number: 4198

Credit: 0.5 Grade: 12

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's for the following course:

<u>GOVT 2305: Federal Government:</u> This college level course focuses on the following aspects of United States government: 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.

Note: This is a one semester course.

U.S. Government and Politics SISD Course Number: 4069

Advanced Placement (AP) Grade: 12

Credit: 0.5

Recommended Prerequisite: US History Dual Credit or US History Advanced Placement (AP)

This course offers an analytical perspective on government and politics in the United States, involving the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. political reality. This class requires extensive outside reading, research and writing.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply. This is a one semester course.

Economics with Emphasis on the Free Enterprise SISD Course Number: 4072

System and Its Benefits Grade: 12

Credit: 0.5

Prerequisite: None

This course focuses on the basic principles concerning production, consumption, and distribution of goods and services in the United States and a comparison with those in other countries around the world. Students will use primary and secondary source materials, technology, and critical thinking skills to better understand the free enterprise system and its benefits.

Note: This is a one semester course.

Economics Dual Credit SISD Course Number: 4199

Credit: 0.5 Grade: 12

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

ECON 2301: Principles of Macroeconomics: This college-level course is a survey of microeconomic and macroeconomic principles for non-business majors. Microeconomic topics will include supply and demand, consumer behavior, price and output decisions by firms under various market structures, factor markets, market failures, international trade, and exchange rates. Macroeconomic topics will include national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. Students use the tools and methods of economic analysis, data analysis, and formal research and writing projects.

Note: This is a one semester course.

Macroeconomics Advanced Placement (AP) SISD Course Number: 4092

Credit: 0.5 Grade: 12

Recommended Prerequisite: US History Advanced Placement (AP) or United States History Dual Credit

The purpose of this course is to provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers--consumers and producers--within the larger economical system. It places primary emphasis on the nature and function of product markets and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. This class requires extensive outside reading, research and writing.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply. This is a one semester course.

Psychology SISD Course Number: 4125

Credit: 0.5 Grade: 11-12

Prerequisite: None

In this course, students will learn the basic terms, methods, and applications of psychology. They will have opportunities to study the historical development of the field of psychology; consider the development of the individual and personality; and to study various topics including emotion, motivation, learning and dysfunctional behavior.

Note: This is a one semester course.

Psychology Advanced Placement (AP) SISD Course Number: 4126

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Previously taken Advanced Placement (AP) or Dual Credit Social Studies course

In this course, students will survey and develop an understanding of the major topics of psychology. Topics to be studied will include: learning, thinking, motivation, emotion, personality, the senses, perception, and the form and functions of the nervous system. This class requires extensive outside reading, research and writing.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Psychology Dual Credit SISD Course Number: 4128

Credit: 0.5 Grade: 11-12

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

<u>PSYC 2301: General Psychology:</u> This college credit elective course provides a survey of major topics in psychology and introduces the study of behavior and the factors that determine and affect behavior and mental processes. Students will identify various research methods and their characteristics used in the scientific study of psychology along with the historical influences and early schools of thought that shaped the field of psychology. Students will also identify terminology unique to the study of psychology and understand accepted approaches and standards in psychological assessment and evaluation as well as identify factors in physiological and psychological processes involved in human behavior.

Note: This is a one semester course.

Sociology SISD Course Number: 4124

Credit: 0.5 Grade: 11-12

Prerequisite: None

This elective course is designed to provide an introduction to the structure, attitudes, and behavior of social groups and institutions. Emphasis is placed on contemporary social problems and their effects on people and cultures. Using case studies, current events, research, and primary documents, students will study components of culture, history of sociology, research methods, social structure, stratification, the socializing process, deviational social control, and social movements.

Note: This is a one semester course.

Personal Financial Literacy SISD Course Number: 4123

Credit: 0.5 Grade: 10-12

Prerequisite: None

This elective course is designed to develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility. This course is designed to be an interactive and research-based course and includes instruction in methods of paying for college and other postsecondary education and training along with completing the application for federal student aid provided by the U.S. Department of Education (FAFSA).

Note: This is a one semester course.

Special Topics in Social Studies 1 Dual Credit: SISD Course Number: 4086

Social Psychology Grade: 11-12

Credit: 0.5

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

<u>PSYC 2319: Social Psychology:</u> This course includes the study of individual behavior within the social environemnt. May include topics such as the socio-psychological process, attitude formation and change, interpesonal relations, and group processes.

Note: This is a one semester course.

Social Studies Research Methods 1 Dual Credit: SISD Course Number: 4081

Texas Government Grade: 12

Credit: 1.0

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following courses:

<u>GOVT 2306: Texas Government:</u> This course will address the 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.

Special Topics in Social Studies 1 Dual Credit: SISD Course Number: 4085

Western Civilizations Grade: 11-12

Credit: 1.0

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 6 credit hours from St. Philip's College for the following courses:

<u>HIST 2311&2312: Western Civilization I&II:</u> This course will provide a survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the modern era.

PHYSICAL EDUCATION, ATHLETICS, AND SPORTS MEDICINE

Physical Education (PE) Requirements

The physical education curriculum operates under specific state (Texas Education Code 28.002) and local guidelines, outlined below:

- Each student is required to complete one (1.0) credit of physical education to meet State graduation requirements.
- General Physical Education courses may be taken only once and students may be enrolled in only one Physical Education course per semester.
- Additional PE courses may be taken for elective credit, for a maximum of 4.0 credits
- Physical Education substitutions allow a student to use approved physical activities to meet the state physical education graduation requirement.
- Courses that are substituted for physical education may NOT also be counted to meet other graduation requirements
- All students must be assessed on their physical fitness based on their Physical Education Classification using the FITNESSGRAM Assessment.

General Physical Education Courses

Foundations of Personal Fitness: Cross Training SISD Course Number: 5003

Credit: 0.5 Grade: 9-12

Prerequisite: None

This course is designed to motivate students to strive for lifetime personal fitness with an emphasis on health and wellness. Students improve their fitness within the class and learn the process of becoming fit and staying fit. This class will specifically focus on Cross-Training and weights as a life-long form of physical activity. Students will have the opportunity to experience workouts using various equipment such as Swiss Balls, resistance bands, free weights, medicine balls, and jump ropes during the semester.

Note: This is a one semester course.

Individual Sports SISD Course Number: 5006

Credit: 0.5 Grade: 9-12

Prerequisite: None

Students enrolled in the Individual Sports course will improve their health and fitness while developing competency in Bowling, Table Tennis, Badminton, Disc Golf, and other activities as available. Individual Sports focuses on incorporating wellness into an active lifestyle beyond high school.

Note: This is a one semester course.

Adventure/Outdoor Education SISD Course Number: 5115

Credit: 1.0 Grade: 10-12

Prerequisite: None

This course provides an introduction to a variety of lifetime outdoor activities including canoeing, camping, backpacking, firearm safety, rappelling, bicycling, archery, ropes course, rock climbing, and outdoor cooking.

Note: Parent permission is required to participate in this course.

Athletics

Seguin High School offers a variety of competitive sports for both girls and boys. Athletic activities are operated under guidelines of the University Interscholastic League (UIL). Participation requires approval of the head coach of the respective sport(s), parent permission, a physical examination by a licensed physician, and maintenance of a satisfactory academic record.

Tennis I-IV SISD Course Number: 5226, 5236, 5286, 5296

Credit: 1.0 Grade: 9-12

Cross Country I-IV SISD Course Number: 5213, 5253, 5263, 5273

Credit: 1.0 Grade: 9-12

Golf I-IV SISD Course Number: 5214, 5254, 5264, 5274

Credit: 1.0 Grade: 9-12

Boys Soccer I-IV SISD Course Number: 5215, 5255, 5265, 5275

Credit: 1.0 Grade: 9-12

Girls Soccer I-IV SISD Course Number: 5216, 5256, 5266, 5276

Credit: 1.0 Grade: 9-12

Baseball I-IV SISD Course Number: 5212, 5252, 5262, 5272

Credit: 1.0 Grade: 9-12

Softball I-IV SISD Course Number: 5210, 5220, 5230, 5250

Credit: 1.0 Grade: 9-12

Football I-IV SISD Course Number: 5222, 5227, 5242, 5292

Credit: 1.0 Grade: 9-12

Volleyball I-IV SISD Course Number: 5223, 5233, 5243, 5293

Credit: 1.0 Grade: 9-12

Boys Basketball I-IV SISD Course Number: 5224, 5234, 5244, 5294

Credit: 1.0 Grade: 9-12

Girls Basketball I-IV SISD Course Number: 5225, 5235, 5245, 5295

Credit: 1.0 Grade: 9-12

Swimming SISD Course Number: N/A

Credit: N/A Grade: 9-12

Note: This course meets outside regular school hours. Interested students should meet with the head coach.

Freshman Cheerleaders SISD Course Number: 5306

Credit: 1.0 Grade: 9

Prerequisite: Freshman Cheerleaders are selected by a panel of judges.

Freshman cheerleaders perform at freshman sporting events and represent SHS in competition.

Note: Parent permission and fees of approximately \$600 are required. Students may earn 1.0 credit of PE

Substitution Cheerleading to meet State graduation requirements.

Junior Varsity (JV) Cheerleaders SISD Course Number: 5305

Credit: 1.0 Grade: 10-11

Prerequisite: Junior Varsity Cheerleaders are selected by a panel of judges.

Cheerleaders perform at most sporting events and represent SHS in competition with other 5A schools. **Note:** Parent permission and fees of approximately \$600 are required. Students may earn 1.0 credit of PE Substitution Cheerleading to meet State graduation requirements. Additional credits will count as elective credit.

Varsity Cheerleaders SISD Course Number: 5304

Credit: 1.0 Grade: 11-12
Prerequisite: Varsity Cheerleaders are selected by a panel of judges.

Cheerleaders perform at most sporting events and represent SHS in competition with other 5A schools.

Note: Parent permission and fees of approximately \$600 are required. Students may earn 1.0 credit of PE Substitution Cheerleading to meet State graduation requirements. Additional credits will count as elective

credit.

Sports Medicine Courses

Sports Medicine courses do NOT count as the physical education requirement for State graduation.

Sports Medicine I SISD Course Number: 5246

Credit: 1.0 Grade: 10-12

Prerequisite: Prior approval by the Athletic Trainer

Recommended Prerequisite: Medical Terminology and Principles of Health Science

This course is an introduction to athletic training. It includes the basics of athletic training procedures, first aid

and CPR.

Sports Medicine II SISD Course Number: 5247

Credit: 1.0 Grade: 10-12
Prerequisite: Sports Medicine I, prior approval by the Athletic Trainer

This course is an in-depth study and application of the components of athletic training. It includes hands-on practice, time working with the sports team and after school practice time. Prior approval is needed by the

Athletic Trainer to be in this course.

Sports Medicine III SISD Course Number: 5248

Credit: 1.0 Grade: 10-12
Prerequisite: Sports Medicine II, prior approval by the Athletic Trainer

This course includes clinical rotation with advanced hands-on experience in preparation for university athletic training or medical field programs.

NAVAL JUNIOR ROTC (NJROTC)

Naval Science I SISD Course Number: 5401

Credit: 1.0 Grade: 9-12

Prerequisite: None

This course introduces students to the responsibilities of citizenship, the elements of leadership, and the value of scholarship in attaining life goals. The course is designed to develop an appreciation for American heritage and traditions, with recognition of the historically significant role that sea power plays in determining America's future. Topics are presented at a fundamental level.

Naval Science II SISD Course Number: 5402

Credit: 1.0 Grade: 9-12

Prerequisite: One-year in JROTC or Naval Science I

This course addresses the same topics that were introduced in Naval Science I, with greater emphasis on practical application of leadership and management theory. Technical subjects are covered in greater detail and working models of concepts introduced in NSI are applied to practical situations. This course also addresses the Navy's role in American History and the effect it had around the world.

Naval Science III SISD Course Number: 5403

Credit: 1.0 Grade: 10-12

Prerequisite: Two years in JROTC or Naval Science II

This course is a continuation of applied leadership concepts and more in-depth investigation of technical subjects. Leadership skills will be exercised on a daily basis. Cadets will begin to assume responsibility for the organization and operations of the Corps of Cadets.

Naval Science IV SISD Course Number: 5404

Credit: 1.0 Grade: 12-12

Prerequisite: Two years in JROTC, permission from Senior Naval Science Instructor or Naval Science 3 This course provides practical experience in planning, organizing, and executing theories of group dynamics as leaders of the SHS Corps of Cadets. Classroom training and research projects are designed to complement and reinforce the application of leadership theories and techniques learned in previous NJROTC courses.

LANGUAGES OTHER THAN ENGLISH (LOTE)

French I SISD Course Number: 1502

Credit: 1.0 Grade: 9-12

Prerequisite: None

This is an introductory course to French culture and language, with emphasis on developing the four basic international language skills of listening, speaking, reading, and writing in French. Students will learn the basic structure of the written and spoken language and be introduced to the cultures of the French-speaking countries.

French II SISD Course Number: 1512

Credit: 1.0 Grade: 9-12

Prerequisite: French 1 or passing score on district administered Credit-by-Exam

In this course, the students will further develop an appreciation of French culture and continue to refine their French speaking skills. Additional emphasis will be placed on reading and writing skills and more advanced grammar.

French III SISD Course Number: 1519

Credit: 1.0 Grade: 9-12

Prerequisite: French 2 or passing score on district administered Credit-by-Exam

This is an enriched course with emphasis on advanced vocabulary, grammar, and literature, in addition to the reading, writing, listening, and speaking. A strong foundation is laid in grammar, and the students continue to learn more about the culture of the French-speaking world.

French IV SISD Course Number: 1520

Credit: 1.0 Grade: 10-12

Prerequisite: French 3 or passing score on district administered Credit-by-Exam

This course is a continuation of French 3 with emphasis on student performance/production in the target language and with greater emphasis on literature. Oral proficiency will be emphasized.

Spanish I SISD Course Number: 1562

Credit: 1.0 Grade: 9-12

Prerequisite: None

This course covers the skills of listening, speaking, reading, and writing in Spanish. Emphasis is on understanding common expression, greetings, questions, commands, and simple conversation. The ability to give an appropriate oral response and participate in elementary conversation is stressed. Culture and language learning techniques are also an integral part of the course.

Spanish II SISD Course Number: 1573

Credit: 1.0 Grade: 9-12

Prerequisite: Spanish I or passing score on district administered Credit-by-Exam

A study of the grammatical construction of the language is continued by an extensive review of concepts learned in Spanish I. The focus is on oral reading, reading comprehension, expanding vocabulary and writing brief compositions. The ability to give an appropriate oral response and participate in simple conversation is stressed. Culture and language learning techniques are also an integral part of the course.

Spanish II PreAP SISD Course Number: 1574

Credit: 1.0 Grade: 9-12

Prerequisite: Spanish I or passing score on district administered Credit-by-Exam

Spanish II curriculum presented with an intense approach in vocabulary (enrichment) and faster pace in grammar. Opportunity for advanced preparation in writing skills and higher level reading comprehension activities would be implemented. Instruction will be conducted fully in Spanish to increase and sharpen listening, oral, comprehension, expression, interpretation as well as writing skills.

Spanish III SISD Course Number: 1579

Credit: 1.0 Grade: 9-12

Prerequisite: Spanish II or passing score on district administered Credit-by-Exam

A study of the grammatical construction of the language is continued by an extensive review of concepts learned in Spanish II. This course is primarily conducted in Spanish with a focus on language learning techniques and expanding vocabulary through listening and speaking activities. Reading comprehension and writing composition is increased through short stories, and current events.

Spanish III Dual Credit SISD Course Number: 1577

Credit: 1.0 Grades: 10 – 12

Prerequites: Spanish II; must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College. Students who successfully complete this course receive 4 credit hours per semester from St. Philip's College for the following courses:

SPAN 1411: Elementary Spanish I and SPAN 1412: Elementary Spanish II

Students will be introduced to the college level fundamentals of the Spanish Language and culture in order to develop listening, speaking, reading, and writing skills.

Note: Students must take both semesters to earn 1.0 high school LOTE credit.

Spanish IV SISD Course Number: 1599

Credit: 1.0 Grade: 10-12

Prerequisite: Spanish III or passing score on district administered Credit-by-Exam

This course is intended for students who are English dominant speakers with a high ability to function in the foreign language. Spanish will be used for active communication. Students will work to increase conversational skills, to socially integrate in the community, and the job force area, and to connect to real world events. Cultural awareness, history and current events related to Latin American countries will play an integral part.

Spanish Language 4 Advanced Placement (AP) SISD Course Number: 1598

Credit: 1.0 Grade: 9-12

Recommended Prerequisite: Three credits in Spanish

This course is intended for students who use Spanish for active communication. Students enrolled in this course will develop their proficiency in all four language skills: aural/oral, reading comprehension, advanced grammar structure and composition. Emphasis will be placed on a selection of Latin American writers, with a focus on extensive reading and writing.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

FINE ARTS

Visual Arts

Art I SISD Course Number: 7102

Credit: 1.0 Grade: 9-12

Prerequisite: None

Art I is the foundation level for art study throughout high school. The course emphasizes the elements of art and principles of design, color theory, vocabulary, art criticism, art history, and safety in the art room with a strong foundation in design, drawing and vocabulary. This course fulfills the prerequisite for all Art 2 courses.

Art Appreciation I Dual Credit SISD Course Number: 0513

Credit: 1.0 Grade: 1012

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

ARTS 1301: Art Appreciation

This course presents an introduction to the exploration of purposes and processes in the visual arts, including evaluation of selected works. Included is the study of art history, including major artists and works.

Note: This is a semester course.

Art II Drawing SISD Course Number: 7122

Credit: 1.0 Grade: 10-12

Prerequisite: Art I

Student will express ideas through original art works using a variety of drawing media. They will be able to apply design skills using practical applications. The students will study historical periods as well as critique art work.

Art II Sculpture SISD Course Number: 7124

Credit: 1.0 Grade: 10-12

Prerequisite: Art I

Student will further development skills that were introduced in Art I in relation to 3D media. Students will explore additive and subtractive processes using a variety of techniques and materials such as wire, plaster, clay, wood, and other media. Art appreciation is an integral part of this course.

Art II Ceramics SISD Course Number: 7125

Credit: 1.0 Grade: 10-12

Prerequisite: Art I

Student will focus on planning, design, and clay construction techniques and procedures. Students will be able to apply design skills in creating both functional and mal-functional pieces.

Art III Drawing SISD Course Number: 7152

Credit: 1.0 Grade: 11-12

Prerequisite: Art II Drawing

This course explores a variety of techniques and visual solutions dealing with drawing issues. Students will gain expertise in the handling of various drawing media as well as develop a mature sense of visual communication. The class is intended for those who wish to enter the AP program and pursue artistic course work in college.

Art III Sculpture SISD Course Number: 7154

Credit: 1.0 Grade: 11-12

Prerequisite: Art II Sculpture

Students entering Sculpture 3 will advance and improve three-dimensional conceptual and building skills. Students will be expected to work independently while maturing under different and challenging project assignments. Plaster, clay, wood, and other materials will be used in the class. This class is intended for those who wish to enter the AP Studio Art class.

Art IV Drawing SISD Course Number: 7182

Credit: 1.0 Grade: 12

Prerequisite: Art III Drawing

Students in Art 4 Drawing operate on a contract basis in which they select the projects they wish to pursue each six weeks period. Strong emphasis is placed on the student's creativity and ability to choose projects that challenge the student's talent.

Art IV Sculpture SISD Course Number: 7184

Credit: 1.0 Grade: 12

Prerequisite: Art III Sculpture

Students in Art IV Sculpture operate on a contract basis in which they select the projects they wish to pursue each six weeks period. Strong emphasis is placed on the student's creativity and ability to choose projects that challenge the student's talent

Art History Advanced Placement (AP) SISD Course Number: 7199

Credit: 1.0 Grade: 10-12

Prerequisite: None

This course will enable the high school student to enter college with a heightened appreciation for history and its art. The chief goal of this course is to increase understanding of key examples of architecture, sculpture, and paintings as historical documents. Students will develop skills necessary for recognizing and critically evaluating and comparing major art works.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Studio Art: Drawing Advanced Placement (AP) SISD Course Number: 7189

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Art II

This course will enable the high school student to earn college credit through the submission of a portfolio of 24 pieces of artwork to the AP Board. Students can choose any approach to drawing issues, which include traditional drawing materials, painting, printmaking and mixed media.

Note: Students are required to submit an Advanced Placement portfolio in May and exam fees apply.

Studio Art: 2-D Design Advanced Placement (AP) SISD Course Number: 7186

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Art II

Studio Art AP 2-D Design will enable the high school student to earn college credit through the submission of a portfolio of 24 pieces of artwork to the AP Board. Students can use any 2-d media such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, painting and printmaking.

Note: Students are required to submit an Advanced Placement portfolio in May and exam fees apply.

Studio Art: 3-D Design Advanced Placement (AP) SISD Course Number: 7187

Credit: 1.0 Grade: 11-12

Recommended Prerequisite: Art II

Studio Art AP 3-D Design will enable the high school student to earn college credit through the submission of a portfolio of 20 pieces of artwork to the AP Board. Students can use any 3-d approach such as figurative or non-figurative sculpture, architectural models, metal work, ceramics, glasswork, installation, assemblage and 3-d fabric/ fiber arts.

Note: Students are required to submit an Advanced Placement portfolio in May and exam fees apply.

Theatre Arts

Theatre Art I SISD Course Number: 7203

Credit: 1.0 Grade: 9-12

Prerequisite: None

This elective course is an introduction to theatre that requires the expressive use of body and voice in interpreting and performing dramatic literature. Concepts and skills in areas of acting and theatre history will be emphasized. Specific topics include pantomime, stage movement, improvisation, monologue and duet acting performance, and evaluation of theatrical experiences.

Note: Performance of scenes and monologues is the main focus of this course as well as performance in a one-act play.

Advanced Theatre Arts II SISD Course Number: 7204

Credit: 1.0 Grade: 10-12

Prerequisite: Theatre Arts 1

This Performance course further refines concepts and skills of acting. An integral part of this course is the performance of scenes and plays with costumes, make-up and scenery.

Advanced Theatre Arts III-IV SISD Course Number: 7205, 7206

Credit: 1.0 Grade: 11-12

Prerequisite: Audition and Theatre Arts II

This performance course allows the actor to refine concepts and skills through public performance.

Note: Participation in at least one after-school performance per semester is required.

Musical Theatre I-III SISD Course Number: 7212, 7213, 7214

Credit: 1.0 Grade: 10-12

Prerequisite: Audition and Theatre Arts I

This performance course is designed for 10-12 grade students interested in musical theatre. This class will develop each student's acting, dance, and vocal technique through the rehearsal and performance of musical theatre selections. Students will also gain directing experience as they choreograph and direct fellow students in their performance pieces. Students will perform for the public.

Technical Theatre I SISD Course Number: 7207

Credit: 1.0 Grade: 10-12

Prerequisite: Audition and Theatre Arts I

This is an activities-centered course combining theories of theatre safety, design, research and stage craft with the construction of technical elements of theater including make-up, costumes, props, lighting and sound.

Advanced Technical Theatre II-IV

Credit: 1.0 Grade: 10-12

Prerequisite: Audition and Technical Theatre I

This course builds on the stage craft skills and concepts developed in Technical Theatre I. Skills in designing sets will be stressed and applied for use in the three school productions. Recognition of career opportunities in theatre will be stressed.

SISD Course Number: 7208, 7209, 7210

Note: Working at least on after-school production per semester is required.

Theatre Production I-III SISD Course Number: 7215, 7216, 7217

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

Theatre Production I-III provides practical hands- on experiences in acting and stage craft through the preparation and public performance of plays.

Note: Students must be in the company for each after-school production (three a year). Students are required to submit portfolios in conjunction with school productions.

Dance

Dance I SISD Course Number: 7007

Credit: 1.0 Grade: 9-12

Prerequisite: None

This is an introduction to the terminology and general principles of dance. Students learn how to perform beginning and intermediate movements in a variety of dance styles. They will also study choreography and develop artistic judgment as well as self-discipline. Students will learn basic dance and kick movements, stretching techniques, and participate in individual and group routines and projects. There will be at least one required performance during the course. Dance class uniform is required.

Dance Team Training SISD Course Number: 7009

Credit: 1.0 Grade: 9-11

Prerequisite: None

Dance team training class is specifically designed to prepare students for auditions for Dance Team. Class will focus on flexibility, high kick and basic dance technique required for dance team auditions. Students will perform in the spring semester during the Starstepper Spring Showcase. Dance class uniform is required.

Dance Team I-IV SISD Course Number: 5112, 5307, 5308, 5309

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

The Dance Team performs at selected school functions and represents SHS in competition with other 5A schools. Members are selected by audition before a panel of judges. Parent permission and team fees between \$250 - \$500 are required.

Note: This is an activity-based course that counts as a Physical Education substitution in the fall semester.

Choral Music

Matador Varsity Choir I-IV SISD Course Number: 7303, 7304, 7305, 7306

Credit: 1.0 Grade: 9-12

Prerequisite: Audition and Interview

This is the auditioned Varsity mixed choir class that will be chosen according to vocal and music reading abilities. This group will be required to participate in concerts and UIL activities such as Concert & Sight-reading Contest, Solo and Ensemble Contest, and All-Region Choir auditions.

Non Varsity Choir I-IV SISD Course Number: 7381, 7382, 7385, 7384

Credit: 1.0 Grade: 9-12

Prerequisite: Audition and Interview

This is a mixed choir for newer singers who wish to continue working on their vocal and sight-reading skills. This group will be required to participate in concerts and some UIL activities, such as Concert & Sight-reading and Solo & Ensemble.

Women's Choir I-IV SISD Course Number: 7307, 7308, 7309, 7335

Credit: 1.0 Grade: 9-12

Prerequisite: Audition and Interview recommendation from middle-school teacher

This is an auditioned choir that will be chosen according to vocal and sight-reading abilities. This group will be required to participate in concerts and UIL activities such as Concert and Sight-reading, Solo and Ensemble, and Region Treble Choir auditions.

Music Theory Advanced Placement (AP) SISD Course Number: 7301

Credit: 1.0 Grade: 10-12

Prerequisite: Prior music experience and Interview

This course is an advanced theory class.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Music Theory 1 Dual Credit SISD Course Number: 7319

Credit: 1.0 Grade: 9-12

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

MUSI 1306: Music Theory

Understanding music through the study of cultural periods, major composers, and musical elements. This course is supported with audio recordings and live performances.

Note: This is a semester course.

Music Composition I and II SISD Course Number: 7224, 7225

Credit: 1.0 Grade: 9-12

Prerequisite: None

This class explores the creative process of writing music by developing basic tools that composers use to construct music. The students will create, perform, critique, discuss and revise their own and others' work in a supportive, constructive environment.

Instrumental Music

Wind Ensemble I-IV SISD Course Number: 7341, 7342, 7343, 7344

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

The Wind Ensemble is the most advanced level of band at Seguin High School. The class consists primarily of upperclassmen. Advanced fundamentals and advanced levels of high school music are the focus of the class. Students are placed in this band through audition and director recommendation. Activities include marching band, parades, concert, solos and ensemble, region band, marching and concert contests, community performances, and music theatre productions.

Note: This is an activity-based course that counts as a Physical Education substitution in the fall semester.

Wind Symphony I-IV SISD Course Number: 7331, 7332, 7333, 7334

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

The Wind Symphony is the second most advanced level of band at Seguin High School. The class consists of students from all grade levels and focuses on advanced fundamentals and a wide variety of music. Students are placed in this band through audition and director recommendation. Activities include marching band, parades, concert, solos and ensemble, region band, marching and concert contests, and community performances.

Note: This is an activity-based course that counts as a Physical Education substitution in the fall semester.

Symphonic Band I-IV SISD Course Number: 7312, 7322, 7323, 7324

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

The Symphonic Band is the the third most advanced level of band at Seguin High School. The class consists of students from all grade levels and focuses on fundamental skills and a variety of music. Students are placed in this band through audition and/or director recommendation. Activities include marching band, parades, concert, solos and ensemble, region band, marching and concert contests, and community performances.

Note: This is an activity-based course that counts as a Physical Education substitution in the fall semester.

Concert Band I-IV SISD Course Number: 7390, 7391, 7392, 7393

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

The Concert Band is the entry level of band at Seguin High School. The class consists of students from all grade levels and focuses on fundamental skills and a variety of music. Students are placed in this band through audition and/or director recommendation. Activities may include marching band, parades, concert, solos and ensemble, region band, marching and concert contests, and community performances.

Note: This is an activity-based course that counts as a Physical Education substitution in the fall semester.

Instrumental Ensemble I-IV SISD Course Number: 7311, 7325, 7313, 7326

Credit: 1.0 Grade: 9-12

Prerequisite: Audition, Concurrent enrollment in a performance band class

The Instrumental Ensemble course is designed for more in-depth study of instrumental music performance. The course offers individualized and differentiated instruction to students seeking extra music instruction beyond the band class. The course utilizes instrumental method books, band class selections, TMEA All-State Band audition music, and UIL Solo and Ensemble repertoire as the basis for individualized instruction.

Percussion I-IV SISD Course Number: 7351, 7352, 7353, 7354

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

All band students who play percussion must enroll in this class. Fundamental skills and a wide variety of music are the focus of this class. Activities include marching band, parades, concert, solos and ensemble, region band, marching and concert contests, percussion ensemble, and community performances.

Beginner Guitar SISD Course Number: 7321

Credit: 1.0 Grade: 9-12

Prerequisite: None

Guitar class is open to all students. Students will learn beginning acoustic guitar techniques, strumming and melodic playing techniques, as well as reading music and tablature. Students must provide their own guitar (electric or acoustic) to practice on in class and at home. Students will also be required to purchase the beginning guitar book which they will keep. Students must be willing/able to work in a large group setting and perform in public. The beginning guitar student will need to practice 20-40 minutes daily to achieve success. Anything less will achieve limited results.

Color Guard I-IV SISD Course Number: 7405, 7406, 7407, 7408

Credit: 1.0 Grade: 9-12

Prerequisite: Audition

This class is designed for all students who are members of the Seguin High School Color Guard. Anyone who does not play an instrument but is a member of the guard must be enrolled in the class. Students are placed in the guard through audition held in the spring. The SHS Color Guard is an integral part of the Seguin High School Matador Band, and is an expression of music through dance and guard equipment (flags, rifles, sabers). The guard continues in the spring semester as a competitive unit called Winter Guard, allowing the students to develop their skills throughout the spring semester. Dance skills are taught from a basic level to advanced skills focusing on modern dance and ballet. Attendance at all marching band and Winter Guard performances is required.

Note: This is an activity-based course that counts as a Physical Education substitution in the fall semester.

Mariachi Band I-IV SISD Course Number: 7420, 7421, 7422, 7423

Credit: 1.0 Grade: 9-12

Prerequisite: Audition for director

This course is designed for those interested in continued study of learning and playing the folk music of Mexico. Students will study mariachi music through instrumental and vocal performance. Students who are instrumentalists must provide an instrument (guitar or violin) for refining instrumental performance skills. This is not a beginner mariachi class and previous experience is required.

ADDITIONAL COURSES

Student Aide: First Semester/Second Semester SISD Course Number: 0652/0654

Credit: 0.5 Grade: 12

Prerequisite: Counselor and/or administrator approval

Students with passing grades and/or excess credits for graduation who have no disciplinary infractions may apply to serve as a student aide in the school office, attendance office, or library. This course provides life experiences as students learn to be prompt, dependable and efficient. Students will receive training in communication skills, time management, and organizational skills.

Note: This is a local credit course that is not averaged into GPA or class ranking.

Senior Release: First Semester/Second Semester SISD Course Number: 0660A/0660B

Credit: N/A Grade: 12

Senior Release is available for Seniors who have earned at least 20 credits towards graduation and have passed the 5 required STAAR EOC exams.

NOTE: Campus administration approval AND parent permission is required. Please see campus counselor for required paperwork to submit for approval.

College Transition SISD Course Number: 0770

Credit: 0.5 Grade: 11-12

Recommended Prerequisite: Students preparing to take the ACT and/or SAT

College Transition course is designed to equip students with the knowledge, skills, and abilities necessary to be active and successful learners both in high school and in college. Students examine numerous research-based learning strategies that are proven to lead to academic success such as goal-setting, effective time management, handling stress, note-taking, active reading, test-taking strategies, and conducting research to name just a few. The College Transition course provides the means and training for students to research financial scholarships and grant opportunities, complete applications, and explores technical schools, colleges and universities.

Note: This is a semester course.

Advancement Via Individual Determination SISD Course Number: 81751, 81752, 81753, 81754

(AVID) I-IV Grade: 9-12

Credit: 1.0

Prerequisite: None

AVID is a series of academic, regularly scheduled elective classes that focus on learning, inquiry, and collaboration. The three main components of the AVID program are academic instruction (AVID curriculum), tutorial support and motivational activities. The mission of the AVID program is to ensure that all students are capable of completing a college-preparatory path, have a chance to succeed and enroll in four-year colleges and universities.

Note: All Associate Degree Pathway students are enrolled in AVID classes.

Methodology for Academic and Personal SISD Course Number: 4121

Success (MAPS) Dual Credit Grade: 10-12

Credit: 0.5

Prerequisite: Must meet TSI requirements

Students enrolled in this course are dually enrolled at St. Philip's College upon completion of the required college paperwork. Students who successfully complete this course receive 3 credit hours from St. Philip's College for the following course:

<u>EDUC 1300: Learning Framework:</u> This courses focus on the skills and strategies necessary for students to make a successful transition into high school and an academic career. Students will explore the options available in high school, higher education, and the professional world in order to establish both immediate and long-range personal goals. Overall, the course provides a study of the research and theory in the psychology of learning, cognition, and motivation; the factors that impact learning and application of learning strategies.

Academic Skills I-IV SISD Course Number: 9990, 9991, 9992, 9993

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment

This course is designed to provide direct instruction to students daily in the areas of academic preparation, organization, note taking, and test taking as well as have time to complete academic assignments.

Activities of Daily Living I-IV SISD Course Number: 9388, 9389, 9390, 9391

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment

This course is designed to provide instruction to students in real time as need arises in the areas of basic hygiene, grooming, cooking skills, household living, household cleaning, self-help skills, etc., in the classroom as well as in the community. There is no formal outline or syllabus.

Occupational Preparation I-IV SISD Course Number: 9387, 9392, 9393, 9394

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment

Job skills needed for employability are taught in the classroom and on the job training sites, including administrative skills, secretarial skills, food service, retail and child care.

Recreation and Leisure I-IV SISD Course Number: 9994, 9995, 9996, 9997

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment

This course is designed to provide instruction to students in the areas of lifelong recreational skills and activities including art, painting, crafts, exercising and recreational games (indoors and outdoors).

Vocational Experience I-IV SISD Course Number: 9340,9341, 9342, 9343

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment

This course is designed to provide instruction to students in employment skills while exploring realistic vocational goals. Students will receive direct instruction on campus and support at places of employment to improve empolyability.

18+ Transition I-IV SISD Course Number: 9344, 9345, 9346, 9347

Credit: 1.0 Grade: 9-12

Prerequisite: Committee approval required for enrollment

This course is designed to provide instruction to students in real time as situation and needs arise personally and in the community in the areas of employment, vocational training, continuing and adult education, access to adult services, independent living, community participation and social/recreation/leisure, and other important life considerations that address student interest, preferences and needs for this ages 18-21 population.

CAREER AND TECHNICAL EDUCATION (CTE)

CTE course descriptions are organized by program. For more information on endorsements and CTE program options, see the Seguin High School Course Catalog.

Introductory Level Courses

The courses listed below offer a survey of the field or industry that relates to multiple CTE programs and serve as a preview of the material to come in later courses. These courses will focus on workplace skills, career survey education, and post-secondary readiness.

Principles of Applied Engineering SISD Course Number: 81568

Credit: 1.0 Grade: 9-11

Prerequisite: None

This course provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects.

Principles of Manufacturing SISD Course Number: TBD

Credit: 1.0 Grade: 9-10

Prerequisite: None

In Principles of Manufacturing, students are introduced to the knowledge and skills used in the proper application of principles of manufacturing. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities. Students will gain an understanding of what employers require to gain and maintain employment in manufacturing careers.

Computer Science I SISD Course Number: 7603

Credit: 1.0 Grade: 9-12

Prerequisite: Algebra 1

This is an introductory course in the concepts and skills of computer science and computer programming. Students will use problem-solving strategies to design solutions to stated problems, break down the solutions into tasks, write programming code to perform the tasks, and test and debug the created code. Students will also explore computer hardware and computer ethics, including current laws and regulations and responsible digital citizenships.

Principles of Agriculture, Food, and SISD Course Number: 80101

Natural Resources Grade: 9-12

Credit: 1.0

Prerequisite: None

This hands-on interactive introductory course provides students with opportunities to learn basic knowledge and skills in many facets of the Texas Agriculture Industry: plant production, swine, cattle, sheep, goats, poultry and Agriculture Mechanics. Additionally, students will learn about the FFA Organization and opportunities for supervised agriculture work experiences.

Business Information Management 1

Credit: 1.0 Grade: 9-12

Prerequisite: None

Business Information Management 1 (BIM) prepares students to apply technology skills to personal/workplace business situations. This course provides training in word processing, spreadsheet, database, telecommunications, desktop publishing, presentation management, and emerging technologies. Students complete the course with intermediate skill levels in word processing, spreadsheet, presentation management and database applications using Microsoft Office. Students will have the opportunity to study for and take the Microsoft Office Specialist certification tests in Word, Excel, PowerPoint, and Access.

SISD Course Number: 80424

Computer Programming 1 SISD Course Number: 81176

Credit: 1.0 Grade: 9-12

Prerequisite: None

Students acquire knowledge of structured programming techniques and concepts appropriate to developing executable programs and creating appropriate documentation. Students analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as it relates to computer programming. Students apply technical skills to address business applications of emerging technologies such as video game design.

Principles of Law, Public Safety, Corrections SISD Course Number: 81201

and Security Grade: 9-11

Credit: 1.0

Prerequisite: None

Principles of Law, Public Safety, Corrections and Security is the introductory course in the Criminal Justice/Law Enforcement sequence. It introduces students to the professions in law enforcement, security, corrections, and fire and emergency management services. Students will examine the roles and responsibilities of law enforcement agencies, the court systems, and the correctional systems. The student will acquire the basic introductory skills necessary for a possible career in law enforcement, public safety, corrections or the private security industry.

Principles of Arts, A/V, and Technology SISD Course Number: 81180

Credit: 1.0 Grade: 9-11

Prerequisite: None

Careers in the Arts, Audio/Video Technology, and Communications require, in addition to creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this Program and the knowledge, skills, and educational requirements for those opportunities. The journalistic focus of the course prepares students for continued involvement in media, producing the Matcast, newspaper, or yearbook.

Principles of Health Science SISD Course Number: 80801

Credit: 1.0 Grade: 9-12

Prerequisite: None

This course is designed to provide an opportunity for understanding the concepts and skills necessary for entering the health care field. Essential elements included in this course are current events in health care, medical terminology, anatomy and physiology, human growth and development, CPR, first aid, basic concepts of illness and wellness, medical communications skills, and interpersonal relationships.

Science, Technology, Engineering, and Math (STEM) Program

Robotics 1 SISD Course Number: 81569

Credit: 1.0 Grade: 9-11

Prerequisite: Principles of Applied Engineering

In this course, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry

Robotics 2 SISD Course Number: 81570

Credit: 1.0 Grade: 10-11

Prerequisite: Robotics 1

In Robotics II, students will build on skills learned in Robotics I and explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs.

Engineering Design and Presentation 1 SISD Course Number: TBD

Credit: 1.0 Grade: 10-11

Prerequisite: Principles of Applied Engineering

Engineering Design and Presentation I is a continuation of knowledge and skills learned in Principles of Applied Engineering. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

Practicum in STEM SISD Course Number: TBD

Credit: 2.0 Grade: 12

Prerequisite: Robotics 2

The Practicum in STEM course is a capstone course designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Computer Science 2 SISD Course Number: 2152

Credit: 1.0 Grade: 10-12

Prerequisite: Algebra 1, Computer Science 1

This is an intermediate course in the concepts and skills of computer science and computer programming. Students will extend the skills and concepts from Computer Science I to larger and more complex problems, with greater emphasis on inheritance, visual interfaces, and black-box design.

Computer Science 3 SISD Course Number: 2153

Credit: 1.0 Grade: 10-12

Prerequisite: Computer Science II

Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will gain an understanding of advanced computer science data structures through the study of technology operations, systems, and concepts.

Game Programming and Design SISD Course Number: 81572

Credit: 1.0 Grade: 10-12

Prerequisite: Computer Science II

Students will collaborate with one another, their instructor, and various electronic communities to solve gaming problems. Through data analysis, students will include the identification of task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games. By acquiring programming knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will create a computer game that is presented to an evaluation panel.

Computer Science Principles SISD Course Number: 2123

Advanced Placement (AP) Grade: 9-11

Credit: 1.0

Prerequisite: None

In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Computer Science A Advanced Placement (AP) SISD Course Number: 2122

Credit: 1.0 Grade: 11-12

Prerequisite: Computer Science Principles AP or Computer Science 1

Recommended Prerequisite: Computer Science 1

See page 10 for Course Description.

Note: Students are required to take the Advanced Placement exam in May and exam fees apply.

Agriculture Program

Agricultural Mechanics and Metal Technologies SISD Course Number: 80116

Credit: 1.0 Grade: 10-12 Prerequisite: Principles of Agriculture, Food, and Natural Resources

This hands on, lab oriented class will stress safety in the work place while allowing students to prepare for careers in agricultural power, structural, and technical systems, as well as gain knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques.

Agricultural Structures Design and Fabrication SISD Course Number: 80127

Credit: 1.0 Grade: 12
Prerequisite: Agricultural Mechanics and Metal Technologies

Agricultural Structures Design and Fabrication is a capstone course in the Agricultural mechanics program where students will demonstrate their skills through the production of resources and projects that provide benefit the agricultural industry in some way. Students will explore career opportunities, entry requirements, and industry expectations.

NOTE: This is a 1-period course and should only be taken by senior students who do not have a 2 period block available to take the Agricultural Structures Design and Fabrication with Lab course.

Equine Science SISD Course Number: 80112

Credit: 0.5 Grade: 9-12

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

This is a hands-on course that allows students to gain knowledge and skills pertaining to nutrition, reproduction and health management in horses, donkeys and mules. This includes evaluation and selection of horses, nutrition and management; issues affecting the equine industry; participation in youth leadership activities, and study of related careers and employability characteristics of a successful employee.

Note: This is a one semester course.

Small Animal Management SISD Course Number: 80114

Credit: 0.5 Grade: 9-12

Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course exposes students to the small animal industry, and may include, but is not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats. Students will study the issues and importance of the small animal industry, safe handling and management of small animals; identifying diseases that can be transmitted from animals to humans, and preventing the spread of diseases: safe and correct handling of hazardous chemicals and laboratory equipment; identifying different breeds or types of each species studied, habitat, housing and equipment for each species, nutritional requirements, health maintenance, and basic grooming procedures. Students will study related careers and opportunities in the small animal industry, and employability characteristics of a successful employee.

Note: This is a one semester course.

Livestock Production SISD Course Number: 80111

Credit: 1.0 Grade: 10-12 Prerequisite: Principles of Agriculture, Food, and Natural Resources

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep,

goats, and poultry To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Wildlife, Fisheries, and Ecology Management SISD Course Number: 80115

Credit: 1.0 Grade: 10-12
Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course prepares students for careers in natural resource systems. This course examines the management of game and non-game wildlife species, fish, and aqua-crops and their ecological needs as related to current agricultural practices. This course is designed to examine the importance of wildlife and outdoor recreation with emphasis on using wildlife and natural resources wisely. The student will study the scientific basis for wildlife management, game and non-game species, management of wildlife populations, diseases impacting plans and animals, interrelationships between various aspects of wildlife and outdoor public use, laws and regulations regarding the use of wildlife resources, landowner and property rights, security issues, legal issues, apply cartographic skills to natural resource activities, monitor natural resource status, and other related topics.

Advanced Animal Science SISD Course Number: 80132

Credit: 1.0 Grade: 10-12

Prerequisite: Principles in Agriculture, Food and Natural Resources, Equine Science/ Small Animal Management; 90% attendance for previous year; credit for Biology and Chemistry or concurrent enrollment in Chemistry

Advanced Animal Science provides opportunities for students to develop knowledge and skills pertaining to production, harvesting, and marketing of livestock. Students will apply scientific principles, scientific inquiry, science and social ethics, safe laboratory practices, scientific methods and equipment used during field and laboratory investigations; use critical thinking, scientific reasoning and problem solving; apply principles of molecular genetics and heredity, examine and compare animal anatomy and physiology in livestock species; Identify nutritional requirements of ruminant and non-ruminant animals; evaluate animal diseases and parasites, and other related topics. Study of study of related careers and employability characteristics of successful employees is also included.

Veterinary Medical Applications SISD Course Number: 80122

Credit: 1.0 Grade: 11-12

Prerequisite: Advanced Animal Science, Biology, Chemistry; 90% attendance previous year

Veterinary Medical Applications provides instruction in veterinary practices as they relate to both large and small animal species. This includes knowledge and skills in ethics of veterinary medicine, veterinary hospital management and marketing, medical terminology, anatomical structures and body systems, medical terms related to diagnosis, pathology and treatment of animals, identification of parasites, animal identification, characteristics, and behavioral temperament, mathematical calculations used in veterinary medicine, procedures for clinical examination and diagnosis, care, use and maintenance of equipment and instruments found in a veterinary clinic, and other related topics. Students will also investigate related veterinary careers and study employability characteristics of a successful employee.

Practicum in Agriculture, Food, and SISD Course Number: 80141

Natural Resources Grade: 12

Credit: 2.0

Prerequisite: Veterinary Medical Applications; 90% attendance for previous year.

The practicum is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. A research project is

required. This course is recommended for students in Grade 12. The practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Program

Trades Program

Construction Technology 1 SISD Course Number: 80214

Credit: 2.0 Grade: 9-12

Prerequisite: Algebra I; Principles of Applied Engineering

In Construction Technology, students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

Construction Technology 2 SISD Course Number: 80224

Credit: 2.0 Grade: 10-12

Prerequisite: Geometry; Construction Technology.

Advanced Construction Technology is an activity-based laboratory and construction site course with job-specific training for entry-level employment in trades related to construction careers: framing and finish carpentry, painting, installation and repair of drywall, and understand application of metal framing. Students will be expected to learn blueprint reading for residential and commercial buildings. Students are expected to complete a 10-hour OSHA safety course and they will receive a 10 hour OSHA card. A study of entrepreneurship, leadership, and career opportunities is included.

Practicum in Construction Technology SISD Course Number: 80244

Credit: 2.0 Grade: 11-12

Prerequisite: Construction Technology 2

The Practicum in Construction Technology class is an advanced course designed to provide classroom technical instruction or on-the-job training experiences. Students will be challenged with the application of gained knowledge and skills from Construction Technology I and II. Students will have opportunities to demonstrate their knowledge and skills in construction technology in a paid or unpaid job setting or be involved in locally approved projects. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom.

Business Management and Administration Program

Human Resources Management SISD Course Number: 80403

Credit: 0.5 Grade: 10-12 Recommended Prerequisite: Business Information Management 1

Human Resources Management is designed to familiarize students with the concepts related to human resource management, including legal requirements, recruitment and employee selection methods, and emplyee development and evaluation. Students will also become familiar with compensation and benefits programs as well as workplace safety, employee-management relations, and global impacts on human resources.

Note: This is a one semester course.

Virtual Business SISD Course Number: 80427

Credit: 0.5 Grade: 9-12 Recommended Prerequisite: Business Information Management 1

Virtual Business is designed for students to start a virtual business by creating a web presence, conducting online and off-line marketing, examining contracts appropriate for an online business, and demonstrating project-management skills. Students will also demonstrate bookkeeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business.

Note: This is a one semester course.

Business Management SISD Course Number: 80428

Credit: 1.0 Grade: 10-12

Prerequisite: Business Information Management 1

Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills. Students are encouraged to participate in extended learning experiences such as the Business Professionals of America (BPA) and other leadership or extracurricular organizations.

Accounting 1 SISD Course Number: 80615

Credit: 1.0 Grade: 10-12

Prerequisite: Business Information Management 1

In Accounting I, students will investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will formulate and interpret financial information for use in management decision making.

Accounting 2 SISD Course Number: 80621

Credit: 1.0 Grade: 10-12

Prerequisite: Accounting 1

In Accounting II, students will continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in various managerial, financial, and operational accounting activities. Students will formulate, interpret, and communicate financial information for use in management decision- making. Students will use equations, graphical representations, accounting tools, spreadsheet software, and accounting systems in real-world situations to maintain, monitor, control, and plan the use of financial resources. This course will be offered beginning with the 2018-2019 school year.

Entrepreneurship SISD Course Number: 81416

Credit: 1.0 Grade: 10-12
Recommended Prerequisite: Business Information Management 1

Students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students understand the capital required, the return on investment desired, and the potential for profit.

Money Matters SISD Course Number: 80610

Credit: 1.0 Grade: 09-12
Recommended Prerequisite: Business Information Management 1

In Money Matters, sdudents will investigate money manegement from a personal financial perspective. Students will apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to establish short-term and long-term financial goals and will examine various methods of achieving their goals such as investing, tax planning, asset allocating, risk management, retirement planning, and estate planning.

Health Informatics SISD Course Number: 80444

Credit: 1.0 Grade: 11-12

Prerequisite: Business Information Management 1 and Medical Terminology

The Health Informatics course is designed to provide knowledge of one of the fastest growing areas in both academic and professional fields. This course addresses the high demand for information and health professionals who can effectively design, develop, and use technologies such as electronic medical records, patient monitoring systems, and digital libraries, while managing the vast amount of data generated by these systems.

Practicum in Business Management SISD Course Number: 80443

Credit: 2.0 Grade: 12

Prerequisite: Business Information Management 1

The practicum is designed to give students supervised practical application of previously studied knowledge and skills in a variety of locations appropriate to the nature and level of experience. In this course, students will use personal and interpersonal skills to strengthen performance in the workplace. They will also apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

Practicum in Business Management: SISD Course Number: 80443

Health Information Grade: 11-12

Credit: 2.0

Prerequisite: Health Science; Medical Terminology; 90% attendance for prior year; Business Information Management 1 recommended

The Health Information Practicum is designed to prepare students for careers in the medical and insurance fields of billing and coding. Students will learn current programs and systems for electronic health records. Through classroom and laboratory work, students will learn the business, healthcare, and ethical implications of accurate medical recordkeeping. Students will be able to seek industry certification in the Medical Billing and Coding Industry.

Career Prep SISD Course Number: 81302

Credit: 2.0 Grade: 11-12

Career Preparation 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.

Manufacturing Program

Welding 1 SISD Course Number: 81312

Credit: 2.0 Grade: 9-12

Prerequisite Principles of Applied Engineering; Algebra I

Welding I provides the knowledge, skills, and technologies required for employment in metal technology systems. Students will develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will be exposed to different types of welding and oxy fuel cutting. Students will be expected to identify types of welds including fillet welds, groove, spot, plug, flanged, and be able to identify welding symbols and read blueprints. Students are also expected to work independently and fabricate with minimal assistance as well as learn the different types of gases used in the welding field. During this time the student will also demonstrate proper knowledge in electrical theory as it applies to welding machinery and equipment such as AC/ DC heat transfer and polarity.

Note: Students who do not demonstrate required knowledge of safety and equipment skills during the first three weeks of this course may be dropped from the class.

Welding 2 SISD Course Number: 81322

Credit: 2.0 Grade: 10-12 Prerequisite: Welding; Geometry, 90% attendance for previous year.

Welding 2 builds on knowledge and skills developed in Welding. Students will apply academic skills to the requirements of welding, including estimation of costs, accurate reading of measurement instruments to project costs, selecting appropriate tools to make accurate measurements, computing measurements such as area, surface area, volume, and perimeter. The student is expected to learn and be able to demonstrate the function and application of welding tools, equipment, technologies, and materials used in welding, and to be able to read and interpret blueprints and welding symbols. The student will perform advanced welding procedures including cutting, shielded metal arc welding, advanced oxy-fuel processes, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding using a variety of metals. Students are expected to be able to appraise and evaluate welding projects, be knowledgeable about all federal, state, and local safety regulations and practices.

Practicum In Manufacturing SISD Course Number: 76040

Credit: 2.0 Grade: 12

Prerequisite: Advanced Welding

The Practicum in Manufacturing course is designed to give students supervised practical application of previously studied knowledge and skills in Welding I and Welding II. Students will continue to master practical skills and have an opportunity to prepare for industry approved certification or licensure. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

Advanced Technology and Manufacturing SISD Course Number: 81361 A/B, 81362 A/B

Academy Dual Credit, Year 1 and 2 Grade: 11-12

Credit: 3.0

Prerequisite: Complete all enrollment requirements of CTTC, Principles of Applied Engineering and Welding recommended

The Seguin Economic Development Corporation, in partnership with the Central Texas Technology Center and St. Philip's College of San Antonio, independent school districts, and the Alamo Community College District created a dual credit Manufacturing Technology Academy targeting high school juniors and seniors. The program introduces students to the technologies involved in manufacturing while imparting important work place habits. Students also participate in a summer internship between the junior and senior year in high school. Students in the program earn college credit for the manufacturing technology courses taught by St.

Philip's College instructors at the Central Texas Technology Center. Local business partners assisted the community college district in creating a curriculum reflecting the needs of our diverse manufacturing community. Counselors can guide the students through the process of application, entrance exam and registration procedures. For a complete listing of courses taken at CTTC, see the Seguin High School Course Catalog.

NOTE: This is a two-year sequence of courses taught at Central Texas Technology Center (CTTC), for two periods a day, five days per week, transportation provided by SISD, bus departs daily at 7:30 AM.

Technology Program

Computer Programming 2 SISD Course Number: 81177

Credit: 1.0 Grade: 10-12

Prerequisite: Computer Programming 1

In Computer Programming II, students will expand their knowledge and skills in structured programming techniques and concepts by addressing more complex problems and developing comprehensive programming solutions. The focus of tasks and problems issued in the course will revolve around the theme of Video Game Design. Students will analyze the social responsibility of business and industry regarding the significant issues relating to environment, ethics, health, safety, and diversity in society and in the workplace as related to computer programming. Students will apply technical skills to address business applications of emerging technologies, such as video game design.

Digital Media SISD Course Number: 81113

Credit: 1.0 Grade: 9-12

Prerequisite: Computer Programming 1 or Business Information Management 1

Digital and Interactive Multimedia is a survey of the theories, elements, and hardware/ software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, and interactive presentations. Emphasis is on conceptualizing and producing effective multimedia presentations. Software used in the course is the Adobe Creative Suite of media products.

Video Game Design SISD Course Number: TBD

Credit: 1.0 Grade: 10-12

Prerequisite: Computer Programming 2

Video Game Design will allow students to explore one of the largest industries in the global marketplace and the new emerging careers it provides in the field of technology. Students will learn gaming, computerized gaming, evolution of gaming, artistic aspects of perspective, design, animation, technical concepts of collision theory, and programming logic. Students will participate in a simulation of a real video game design team while developing technical proficiency in constructing an original game design. Please note that this course is an immersed study into the theory and practical back-end construction and development of video games. The focus of this course will not be that of game-playing or beta testing new games.

Animation 1 SISD Course Number: 80324

Credit: 1.0 Grade: 10-12

Prerequisite: Digital Media

In Animation I with Lab, students will learn the history of Animation, principles of Animation and the various forms of Animation, specifically 2D and 3D Animation. Students will use Autodesk Maya and the Adobe Creative suite to create 3D animation models and produce short films. Careers in animation span all aspects of motion graphics. Within this context, in addition to developing technical knowledge and skills needed for

success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the history and techniques of the animation industry.

NOTE: This is a 1-period course and should only be taken by third year students who do not have a 2-period block available to take the Animation 1 with Lab course.

Animation 2 with Lab SISD Course Number: 80327

Credit: 2.0 Grade: 10-12

Prerequisite: Animation I or Animation I with Lab

In Animation II, students will build upon the knowledge and skills of the animation courses and continue to delve deeper into the 2D and 3D fields of Animation to including rigging character models, developing backgrounds and environments and producing completed animation products. Careers in animation span all aspects of motion graphics. The instruction also assists students seeking careers in the animation industry. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Graphic Design and Illustration 1 SISD Course Number: 81193

Credit: 1.0 Grade: 10-12

Prerequisite: Digital Media

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design. Students will utilize software programs, such as Adobe Illustrator to create digital vector files for purposes of publication and promotion. All aspects of the design cycle will be studied to produce works of digital creation.

Graphic Design and Illustration 2 SISD Course Number: 81195

Credit: 2.0 Grade: 10-12

Prerequisite: Graphic Design and Illustration 1

Students will continue to expand upon their knowledge and skills of the graphic design and illustration courses through demonstrated performance in executing course tasks and through the creation of digital portfolio productions. Students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills.

AV Production 1 SISD Course Number: 81194

Credit: 1.0 Grade: 10-12

Prerequisite: Digital Media

Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production of audio and video products. Students will be expected to create original short works or film projects. This course may provide training for a locally-approved work opportunity, The Seguin ISD Matador Stadium Video Board. Students will be able to utilize course knowledge and practical skills on the State's largest LED Video Board here in Seguin, TX. Students will also learn production videography and photography as well as the live production skills necessary for a successful audio/video entertainment product.

AV Production 2 SISD Course Number: 81196

Credit: 2.0 Grade: 10-12

Prerequisite: AV Production 1

Students will continue to expand upon their knowledge and skills of the video production courses through demonstrated performance in executing course tasks and through the creation of digital portfolio productions.

Students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video products. Students will have opportunities for necessary time devoted specifically to the production and post-production process of deeper and higher quality productions. This course may provide training for a locally-approved work opportunity, The Seguin ISD Matador Stadium Video Board. Students will be able to utilize course knowledge and practical skills on the State's largest LED Video Board here in Seguin, TX. Students will also learn production videography and photography as well as the live production skills necessary for a successful audio/video entertainment product.

Practicum in Information Technology SISD Course Number: TBD

Credit: 2.0 Grade: 12

Prerequisite: Web Technologies or Video Game Design

In the Practicum in Information Technology, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an industry mentor, as an unpaid or paid internship, as part of a capstone project, or as career preparation. Projects will focus on topics such as Web Design, Mobile Applications and Video Game Design.

Advanced Journalism: Newspaper 1 SISD Course Number: 1123

Credit: 1.0 Grade: 9-12 Recommended Prerequisite: Principles of Media: Journalism

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art, photography, and design demonstrated through the production of the school newspaper.

Advanced Journalism: Newspaper 2 SISD Course Number: 1128

Credit: 1.0 Grade: 9-12

Prerequisite: Advanced Journalism: Newspaper 1

In addition to developing advanced technical knowledge and skills, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills while producing the school newspaper.

Advanced Journalism: Newspaper 3 SISD Course Number: 1129

Credit: 1.0 Grade: 12

Prerequisite: Advanced Journalism: Newspaper 2

Students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction will be delivered through lab-based classroom experiences as the students refine skills developed in previous courses and take leadership roles as editors of the school newspaper.

Graphic Design: Yearbook 1 SISD Course Number: 81184

Credit: 1.0 Grade: 9-12
Recommended Prerequisite: Principles of Media: Journalism

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art, photography, and design demonstrated through the production of the school yearbook.

Graphic Design: Yearbook 2 SISD Course Number: 81185

Credit: 1.0 Grade: 11-12

Prerequisite: Graphic Design: Yearbook 1

In addition to developing advanced technical knowledge and skills, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills while producing the school yearbook.

Graphic Design: Yearbook 3 SISD Course Number: 81186

Credit: 1.0 Grade: 12

Prerequisite: Graphic Design: Yearbook 2

Students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction will be delivered through lab-based classroom experiences as the students refine skills developed in previous courses and take leadership roles as editors of the school yearbook.

Audio/Video Production: Matcast 1 SISD Course Number: 81187

Credit: 1.0 Grade: 9-12 Recommended Prerequisite: Principles of Media: Journalism

Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career Program, students will an understanding of the industry with a focus on pre-production, production, and post-production audio and video activities through production of the weekly Matcast.

Audio/Video Production: Matcast 2 SISD Course Number: 81188

Credit: 1.0 Grade: 11-12

Prerequisite: Audio/Video Production: Matcast 1

Students continue developing an advanced understanding of the industry while refining their pre-production, production, and post-production activities. This course may be implemented in an advanced audio format or an advanced format, including both audio and video with a weekly Matcast production. This course may provide paid-training for a locally-approved work opportunity, The Seguin ISD Matador Stadium Video Board. Students will be able to utilize course knowledge and practical skills on the State's largest LED Video Board here in Seguin, TX. Students will also learn production videography and photography as well as the live production skills necessary for a successful audio/video entertainment product.

Practicum in Audio/Video Production: Matcast 3 SISD Course Number: 81189

Credit: 1.0 Grade: 12

Prerequisite: Audio/Video Production: Matcast 2

While developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career Program, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video activities in a studio environment. Students in Matcast 3 are expected to demonstrate the skills developed in previous years and take leadership roles as producers of the programs created for and through the class. This course may provide paid-training for a locally approved work opportunity, The Seguin ISD Matador Stadium Video Board. Students will be able to utilize course knowledge and practical skills on the State's largest LED Video Board here in Seguin, TX. Students will also learn production videography and photography as well as the live production skills necessary for a successful audio/video entertainment product.

Information and Technology Security SISD Course Number: 81166 A/B, 81167 A/B1/B2

Academy Dual Credit, Year 1 and 2 Grade: 11-12

Credit: 3.0

Prerequisite: Complete all enrollment requirements of CTTC, Telecommunications and Networking

recommended

The Seguin Economic Development Corporation, in partnership with the Central Texas Technology Center and St. Philip's College of San Antonio, independent school districts, and the Alamo Community College District created a dual credit Information Technology and Security Academy targeting high school juniors and seniors. The program introduces students to the technologies involved in the Information Technology Security field while imparting important work place habits. Students also participate in a summer internship between the junior and senior year in high school. Students in the program earn college credit and high school credit for the ITSA courses. Counselors can guide the students through the process of application, entrance exam and registration procedures. For a complete listing of courses taken at CTTC, see the Seguin High School Course Catalog.

NOTE: This is a two-year sequence of courses taught at Central Texas Technology Center (CTTC), for two periods a day, five days per week, transportation provided by SISD, bus departs daily at 7:30 AM.

Public Service Program

Human Growth and Development SISD Course Number: 80511

Credit: 1.0 Grade: 9-11

Prerequisite:

Human Growth and Development is an examination of human development across the lifespan with emphasis upon research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.

Instructional Practices in Education and Training SISD Course Number: 80521

Credit: 2.0 Grade: 11-12

Prerequisite: Human Growth and Development

Instructional Practices in Education and Training is a field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of instructional strategies and exemplary educators or trainers in direct instructional roles with elementary, middle school, and high school aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel. Transportation to education sites provided.

Practicum In Education and Training SISD Course Number: 80562

Credit: 2.0 Grade: 12
Prerequisite: Instructional Practices in Education and Training

This is a field-based internship practicum that provides students with background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course will work closely with veteran educators modeling instructional best practices. The teaching roles and assignments of these exemplary educators will vary from elementary, middle school, and high school-aged

students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel. Transportation to educational sites provided.

Principles of Cosmetology Design and SISD Course Number: 81020

Color Theory Grade: 9-11

Credit: 1.0

Prerequisite: None

Students will develop knowledge and skills regarding various cosmetology design elements such as form, lines, texture, structure and illusion or depth as they relate to the art of cosmetology. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the TDLR requirements for licensure upon passing the state examination.

Cosmetology 1 SISD Course Number: 81023

Credit: 2.0 Grade: 9-11

Prerequisite: Parent permission; parent and student attendance at the informational meeting is required; Students must pay a fee deposit of \$100 by June 1, and the remaining first year fees of \$200 by the first day of school. Fees are paid to the Cosmetology Instructor.

Academic as well as career and technical knowledge and skills are integrated in this laboratory-based course designed to provide job-specific training for employment in cosmetology careers. The course is a mix of classroom instruction and lab-based activities. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care. Analysis of career opportunities, requirements, employer and job expectations, and development of workplace skills are also addressed in the course. Cosmetology is a planned 1000-clock hour course that meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students are required to register with the Texas Department of Licensing and Regulation, purchase a kit and lab jacket, etc.

Note: Course Fees are \$300 for the first year of the program. No refund is given after items have been ordered.

Cosmetology 2 with Lab SISD Course Number: 81032

Credit: 3.0 Grade: 11-12

Prerequisite: Cosmetology 1; Parent permission; Students must pay a fee deposit of \$100 by June 1, and the remaining second year fees of \$100 by the first day of school. Fees are paid to the Cosmetology Instructor.

In Cosmetology 2 students review extended academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills in a variety of settings and problems. This course preps students for the cosmetology operators licensing exam for the state. Students are required by the state to have a high school diploma in order to receive a Cosmetology License.

Note: Course Fees are \$200 for the second year of the program. No refund is given after items have been ordered. In order to meet the requirement of 1000-clocked hours, students will attend class until 4:30 in the afternoons, Monday-Thursday. Transportation is available with written request.

Criminal Investigations SISD Course Number: 81222

Credit: 1.0 Grade: 9-12

Prerequisite: Principles of Law, Public Safety, Corrections and Security

Criminal Investigation is a course that introduces students to the profession of criminal investigations. Students will understand basic functions of criminal investigations and procedures and will learn how to investigate or follow up during investigations. Students will learn terminology and investigative procedures related to criminal investigation, crime scene processing, evidence collection, fingerprinting, and courtroom presentation.

Law Enforcement 1 SISD Course Number: 81211

Credit: 1.0 Grade: 10-12

Prerequisite: Principles of Law, Public Safety, Corrections and Security

Law Enforcement 1 is an overview of the history, organization, and functions of local, state, and federal law enforcement agencies. The student will explore how constitutional law affects law enforcement procedure, functions, and daily patrol procedures. The student will be exposed to law enforcement terminology, the classifications of criminal behaviors, the theories of criminal behaviors, and the processing of a crime scene.

Forensic Science SISD Course Number: 81223

Credit: 1.0 Grade: 11-12

Prerequisite: Biology, Chemistry

This course uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis.

Law Enforcement 2 SISD Course Number: 81221

Credit: 1.0 Grade: 11-12

Prerequisite: Law Enforcement 1

This course offers students opportunities to further prepare for a career in law enforcement. Students will learn how to use telecommunications equipment, testify in courtroom proceedings, manage crisis situations, handle domestic violence cases, implement crowd management strategies, protect against terroristic threats, interview and interrogate individuals ensuring the protection of their constitutional rights, process various crime scenes, demonstrate the use of force with the application of various restraints, process someone in custody, and be able to explain the education and training needed for a career in law enforcement and the state mandate to continue getting more education as technologies emerge in this field.

Health Science Program

Medical Terminology SISD Course Number: 80812

Credit: 1.0 Grade: 9-11

Prerequisite: None

Medical Terminology is designed to develop a working knowledge of the language of medicine. Students acquire word-building skills by learning prefixes, suffixes, roots and abbreviations, and by relating terms to body systems. Students identify proper use of words in a medical environment. Knowledge of medical

terminology enhances the student's ability to successfully secure employment or pursue advanced education in health care.

Health Science Theory SISD Course Number: 80811

Credit: 1.0 Grade: 10-12

Prerequisite: Medical Terminology

Health Science Theory is designed to provide development of advanced knowledge and skills related to a wide variety of health careers. Students will apply academic skills with hands-on experience, implement the knowledge and skills of a health science professional in the clinical setting, evaluate ethical behavioral standards and legal responsibilities, assesses wellness strategies for the prevention of disease and other related topics. Entry-level skills will be developed for taking vital signs, using medical terminology, providing CPR and other skills needed to work in the health care field.

Pharmacology SISD Course Number: 80813

Credit: 1.0 Grade: 11-12

Prerequisite: Health Science Theory

The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care.

Practicum in Health Science: SISD Course Number: 80842

Certified Nursing Assistant (CNA) Grade: 11-12

Credit: 2.0

Prerequisite: Health Science; must pass a criminal background check; must complete an application for CNA; must have at least 90% attendance for the previous year.

Other Requirements:

- Must attend a student/parent meeting prior to the beginning of school and an evening meeting in April.
- Must submit completed application for the Certified Nurse Assistant Program by May 1
- Must pass a TB skin test and provide results to SHS CTE office by August 1 of the school year
- Must have a flu shot
- Must purchase set of scrubs by October 1; color TBD by instructor
- Course Fees: Nurse Aide State Certification Exam \$83

 must be paid to SHS by November 1

The Certified Nurse Assistant course is designed for the student interested in a nursing or health careers. The course goal is for the student to become a Certified Nurse Assistant (CNA) and to pass the state licensing exam. The program is a combination of classroom, laboratory, and clinical learning that will introduce the student to all facets of the Nurse Assistant field. Content of the course includes the role and function of the CNA, anatomy and physiology, and basic patient care skills. Course instruction prepares students to qualify for the Texas Nurse Aide Competency Evaluation Exam for certification.

Practicum in Health Science: SISD Course Number: 80843

Pharmacy Tech Grade: 12

Credit: 2.0

Prerequisite: Health Science; must pass a criminal background check/fingerprinting check; have at least 90% attendance for the previous year

Other Requirements:

- Must attend a parent meeting prior to the beginning of school
- Must submit application for Pharmacy Tech by May 1
- Must purchase a set of scrubs to wear in internship by Nov. 1; color TBD by the instructor
- Must have a flu shot

Course Fees:

- Registration fee with the State Board of Pharmacy as Trainee \$53 Must be paid to SHS by June 1.
- Fingerprinting and background check \$45 must be completed by Aug.1; records must be brought to the CTE office and be on file by Aug. 1.
- Pharmacy Technician Certification Board Exam \$129 must be paid to SHS by Feb. 1 (If the student passes the Sterile Products Exam, the school will pay for the Pharmacy Technician Certification Board Exam)

Pharmacy Tech is an occupationally specific course designed to prepare students to enter the pharmacy field and take the state Pharmacy Technician Certification Board's PTCB exam. Technicians work in hospitals, community pharmacies and other health care settings under the supervision of a registered pharmacist. Course content includes medical terminology specific to pharmacy, reading and interpreting prescriptions and defining drugs by generic and brand names. Students will learn dosage, calculations, IV flow rates, drug compounding, dose conversions, medication, preparation for dispensing, preparing unit dose medications, inventory control and billing.