

# **CRANDALL HIGH SCHOOL**

## **2019-2020**

# **COURSE GUIDE**



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# LANGUAGE ARTS

## COURSE SEQUENCES:

The graduation requirements for four years of English can be met through two different sequences of English.

### Regular Sequence

English I, II, III and IV are the English courses designed for the on-grade level or below grade level student and meet the requirements for the Minimum, Recommended, or Distinguished Achievement transcript.

### Advanced Sequence

HONORS English I, II, AP and/or Dual Credit English III and IV are designed for the student who is performing above grade level.

**Recommended** criteria include:

- a. **A grade of 90+ in a previous English Course.**
- b. **Advanced performance on the Reading portion of the STAAR test.**
- c. **Parent approval.**
- d. **Teacher recommendation.**
- e. **Dual credit students must pass the reading and writing portions of the TSI**

## ENGLISH I

1 Credit            Grade 9

**Prerequisites:**    Credit in 8<sup>th</sup> grade English

Literature and grammar are taught all year. Literature will be the study of literary forms with an emphasis on the literary techniques used by writers of short stories, dramas, and other genres, as well as the concepts and terminology needed for knowledgeable discussion of literature. Students will also examine how a number of writers treat a given theme in different ways.

Grammar and composition include practice in informative, literary, and persuasive writing, development of compositions from topic and sentence outlines, and organization of compositions of more than one paragraph. This course will also include the study of the grammatical structure of sentences, good usage, and library skills. Preparation for the STAAR ENGLISH 1 EOC (END OF COURSE) EXAM will be an integral part of English I.

## ENGLISH I HONORS

1 Credit            Grade 9

**Prerequisites:**    Credit in 8<sup>th</sup> grade English

**Recommendation:** 90% or above in 8<sup>th</sup> grade English and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in English I HONORS.

English I HONORS is a cumulative and sequential program that emphasizes grammar, mechanics, usage, and composition skill at a more advanced level. It also emphasizes the development of critical thinking skills. It exceeds the traditional course by including advanced topics related to research skill, oral language development, literature concepts and skills, literary appreciation, and a variety of types of compositions. A study of additional major literary works is required in this course. The primary purpose and goal of this course is to help students be prepared to take the English Advanced Placement exam during their junior and/or senior year. Preparation for the STAAR ENGLISH I EOC (END OF COURSE) EXAM will be an integral part of English I HONORS.

**Summer reading assignment is required.**

## ENGLISH II

1 Credit            Grade 10

**Prerequisites:** English I credit

Grammar and literature will be taught all year. The grammar and composition will include grammatical structures of sentences, the writing process, and composition development. The student will study form and function of the parts of speech, appropriate English usage, and library skills. The course will include study of paragraph development with a higher degree of complexity than English I. The student will continue to develop compositions including informative, literary, and persuasive writing. Literature will be the continued study of literary techniques and terminology while developing increasingly abstract concepts. Preparation for the STAAR ENGLISH II EOC (END OF COURSE) EXAM will be an integral part of English II

## ENGLISH II HONORS

1 Credit            Grade 10

**Prerequisites:** English I credit

**Recommendation:** English I credit with credit in English I HONORS highly recommended and strongly encouraged and desirable. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in English II HONORS.

English II HONORS integrates grammar, literature, and composition. The course is designed for the student showing an advanced understanding of language concepts and skills and wishing to make an in-depth study of writing and literature. The content exceeds the traditional course by including advanced topics related to research skills, oral language development, literary elements, literary appreciation, and a variety of compositions. A study of additional major literary works is required. The primary purpose and goal of this course is to help students be prepared to take the English Advanced Placement Exam during their junior and/or senior year. Preparation for the STAAR ENGLISH II EOC (END OF COURSE) EXAM will be an integral part of English II HONORS.

**Summer reading assignment is required.**

## ENGLISH III

1 Credit            Grade 11

**Prerequisites:** English II credit

Literature and grammar are both taught all year. American Literature will be the study of United States Literature from the early Colonial settlements to the present. Literary genre will include poetry, short stories, drama, the novel, and non-fiction. Grammar and composition will focus on an analysis of discourse, the editing and revision process, and development of mature grammatical and stylistic features. The students will practice informative, persuasive, literary, and creative writing with emphasis on informative and persuasive. The course work will include at least one fully documented library research paper.

## ENGLISH III AP

1 Credit            Grade 11

**Prerequisites:** English II credit

**Recommendation:** English II credit with credit in English II HONORS highly recommended and strongly encouraged and desirable. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in English III AP.

English III AP is essentially a college preparatory course and is designed to prepare junior students for success at the college level. This course integrates reading and language skills, composition, literature, and vocabulary development. The course includes representative writers, the social thought, and the genres of the major periods of American and World literature. The student is given the opportunity to develop knowledge of syntax, semantics, and rhetoric and to use this knowledge in the writing of various types of literary and informative discourse. The course work includes at least one fully documented library research paper in which literary criticism is incorporated into an extended literary analysis. A study of additional major literary works is required in this course.

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take a 180-minute examination in **English Literature and Composition**. Both are 60-75 minutes of objective questions, and 105-120 minutes of essays. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. *Students should check with individual colleges for their AP credit policies.*

**Summer assignment is required.**

## DUAL CREDIT ENGLISH III ENGLISH 1301 ENGLISH COMPOSITION RHETORIC

½ Credit for High School / 3 college hours            Grade 11

Prerequisite: English II credit with credit in English II HONORS highly recommended and student must pass TSI requirements for Reading and Writing.

**\*\*\*Tuition Fee and book costs required for Dual Credit through TVCC\*\*\***

English 1301, the first half of freshman college English, aims to help the student produce effective writing, which observes the conventions of Edited American English – i.e., writing which is acceptable in the academic and professional world. The student will be encouraged to find and improve his or her own writing style while being guided through the composition process.

**Summer assignment is required.**

## **DUAL CREDIT ENGLISH III ENGLISH 1302 ENGLISH COMPOSITION AND LITERATURE**

½ Credit for High School / 3 college hours

Grade 11

**Prerequisite:** English 1301

**\*\*\*Tuition Fee and book costs required for Dual Credit through TVCC\*\*\***

English 1302 is a continuation of English 1301 with emphasis on the study and critical evaluation of modern literature, primarily from American writers of fiction, poetry, and drama. Extensive writing assignments are required.

**Summer assignment is required.**

## **ENGLISH IV**

1 Credit

Grade 12

**Prerequisites:** English III credit

Literature and grammar are taught all year. British Literature from its origins to the present is the major area of study of English IV literature. The literature is arranged according to historical time periods. Literary genre will include poetry, short stories, drama and non-fiction. Grammar and composition will focus on the development of mature grammatical and stylistic features and the editing and revising process.

## **COLLEGE PREPARATORY ENGLISH**

1 Credit

Grade 12

**Prerequisites:** English III credit

This course is designed to increase the college readiness of current high school students in English Language Arts. This course covers the ten Student Learning Objectives (SLO's) as defined by the state of Texas for indicating college readiness in English (Integrated Reading and Writing). In addition, this course aligns with the Texas College and Career Readiness Standards (CCRS) in the areas of writing, reading, and research. This course is also in compliance with multiple Texas Essential Knowledge and Skills (TEKS) for English Language Arts and Reading, specifically English III and English IV. This course provides the foundation work in the areas of reading and writing for the student who intends to advance to college level work.

## ENGLISH IV AP

1 Credit            Grade 12

**Prerequisites:** English III credit

**Recommendation:** English III credit with credit in English III AP highly recommended and strongly encouraged and desirable. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in English IV AP.

English IV AP is essentially a college preparatory course and is designed to prepare senior students for success at the college level. English IV AP meets the essential elements of regular English IV Academic, which includes the study of British literature. In addition, the student will engage in oral and written communication, original research, and critical evaluation of selected readings in fiction, poetry, drama, and non-fiction, poetry, drama, and non-fiction at the college level of difficulty.

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take a 180-minute examination in **English Language and Composition**. Both are 60-75 minutes of objective questions, and 105-120 minutes of essays. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. Students should check with individual colleges for their AP credit policies.

**Summer assignment is required.**

## DUAL CREDIT ENGLISH IV ENGLISH 2322 SURVEY OF BRITISH LITERATURE I

½ Credit High School / 3 college hours            Grade 12

**Prerequisite:** English 1302 credit.

**\*\*\*Tuition Fee and book costs required for Dual Credit through TVCC\*\*\***

English 2322 is a study of British literature from the middle Ages through the Restoration and the 18th Century with selections from but not limited to Malory, Marlowe, Chaucer, and Shakespeare. A fully documented research paper is required as part of the course work.

## DUAL CREDIT ENGLISH IV ENGLISH 2323 SURVEY OF BRITISH LITERATURE II

½ Credit for High School / 3 college hours            Grade 12

**Prerequisite:** English 1302 credit and student must meet dual credit requirements

**\*\*\*Tuition Fee and book costs required for Dual Credit through TVCC\*\*\***

Beginning with the Romantics, this course continues the study of British masterworks through the 19th and 20th centuries to the present including but not limited to selections from Blake, Wordsworth, Byron Shelley, Keats, and Conrad. A fully documented research paper or a critical analysis of one or more of the poets from the Romantic era will be required.

**Summer assignment is required.**



# **SPEECH**

## **PROFESSIONAL COMMUNICATIONS**

½ Credit      Grades 9-12

**Prerequisites:** None

*This course meets a graduation requirement.*

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

## **DEBATE I, II, III**

1 Credit      Grades 10-12

Students will learn the skills of analysis, logical and critical thinking, and research skills. Debate formats for Lincoln-Douglas and Cross-Exam Debate will be strongly emphasized. Students will be provided opportunities to compete in tournaments and compete at the UIL level. Debate class is structured around a competitive environment. Students in debate I will be required to participate in one out of town Saturday speech/debate competition per semester. Debate II and III students must compete in two out of town speech tournaments a semester. Students must also participate in the fall and spring Crandall Speech and Debate Tournaments held on a Saturday.

## **ORAL INTERPERTATION I, II, III**

1 credit      Grades 10-12

Audition required

Literature and its presentation are integral to understanding the cultural aspects of a society. Students in Oral Interpretation I, II, III will select, research, analyze, adapt, interpret, and perform literary texts as a communication art. Students focus on intellectual, emotional, sensory, and aesthetic levels of texts to attempt to capture the entirety of the author's work. Individual or group performances of literature will be presented and evaluated.

# MATHEMATICS

## COURSE SEQUENCES:

### Regular Sequence

Algebra I, Geometry, Algebra II and Pre-Calculus are the math courses designed for the on-grade level or below grade level student and meet the requirements for the Minimum, Recommended, or Distinguished Achievement transcript.

To be able to take Calculus, a student must take Algebra I in the 8<sup>th</sup> grade or take Geometry and Algebra II during their sophomore year.

### Advanced Sequence

HONORS Geometry, HONORS Algebra II, HONORS Calculus and AP Calculus are designed for the student who is performing above grade level.

**Recommended** criteria include:

- a. A grade of 90+ in a previous Math Course.
- b. Advanced performance on the Math portion of the STAAR test.
- c. Parent approval.
- d. Teacher recommendation.

## ALGEBRA I

1 Credit            Grades 9-12

**Prerequisites:** 8<sup>TH</sup> grade math or on grade level. Yearly average must be 70+ to advance to next math course.

Algebra I develops the study of real numbers as mathematical system. It develops basic concepts of logic and includes such topics as open sentences, linear equations and inequalities, polynomials, and quadratic relations. Preparation for the STAAR ALGEBRA I EOC (END OF COURSE) EXAM will be an integral part of Algebra I.

## GEOMETRY

1 Credit            Grades 10-12

**Prerequisites:** Algebra I

Geometry develops deductive, inductive, and creative thinking. It develops geometric concepts using undefined terms, postulates, and theorems. Included are solid, plane, and coordinate geometry.

# GEOMETRY HONORS

1 Credit            Grades 9-10

**Prerequisites:** Algebra I

**Recommendation:** 90% or above in Algebra I and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in Geometry HONORS.

This course includes solid, plane and coordinate geometry. Special emphasis is placed on real-world applications and Geometer's Sketchpad computerized learning. Our study includes inductive, deductive and creative reasoning as well as the utilization of undefined terms, postulates and theorems. Geometric concepts are enriched through proofs. Students should expect a high level of rigor, daily homework, and extensive memory work in this course.

# ALGEBRA II

1 Credit            Grades 10-12

**Prerequisites:** Algebra I

Algebra II extends the basic study of algebraic concepts to include the complex number system, relation, function, coordinate geometry, quadratic relations, sequences, and series.

# ALGEBRA II HONORS

1 credit            Grades 10-12

**Recommendation:** 90% or above in Geometry and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in Algebra II HONORS.

Topics covered in this class include polynomial functions, rational functions, logarithms, quadratic applications, and the complex number system. Also included are sequences, series, permutations and combinations. Advanced Placement enrichment material is used throughout the course to extend learning. Students should expect a high level of rigor and daily homework in this course.

# MATHEMATICAL MODELS W/APPLICATIONS

1 Credit            Grades 11-12

**Prerequisites:** Algebra I recommended

*This course MUST be taken prior to Algebra II.*

In Mathematical Models with Applications, students continue to build on the K-8 and Algebra I foundations as they expand their understanding through other mathematical experiences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, to model information, and to solve problems from various disciplines.

## PRE-CALCULUS

1 Credit            Grades 11-12

Requirements: Algebra I, Geometry, and Algebra II

Pre-Calculus is designed to prepare students for calculus. Included topics from trigonometry, analysis, and analytic geometry.

## PRE-CALCULUS HONORS

1 Credit            Grades 11-12

Requirements: Algebra I, Geometry, and Algebra II

**Recommendation:** 90% or above in HONORS Algebra II and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in HONORS Calculus.

HONORS Calculus is designed to prepare students for AP Calculus. Included topics from trigonometry, analysis, and analytic geometry.

## AP CALCULUS

1 Credit            Grades 11-12

**Recommendation:** 90% or above in HONORS Calculus and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Calculus.

AP Calculus begins the integrated study of analytic geometry and calculus. Topics covered include: limits, continuity differentiation and integration of algebraic and trigonometric functions, applications of differentiation and integration, differentiation and integration, logarithmic, exponential and hyperbolic functions, methods of integration, conic sections, polar coordinates and parametric curves.

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take the AP Calculus examination. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. Students should check with individual colleges for their AP credit policies.

## AP STATISTICS

1 Credit            Grades 11-12

Pre-requisites: Geometry, Algebra II

**Recommendation:** 90% or above in HONORS Geometry and HONORS Algebra II and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Statistics.

The purpose of the AP course in statistics 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: 1. Exploring Data: Describing patterns and departures from patterns 2. Sampling and Experimentation: Planning and conducting a study 3. Anticipating Patterns: Exploring random phenomena using probability and simulation 4. Statistical Inference: Estimating population parameters and testing hypotheses. (College Board AP Statistics Course Description)

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take the AP Statistics examination. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. Students should check with individual colleges for their AP credit policies.

## DUAL CREDIT COLLEGE ALGEBRA MATH 1314 COLLEGE ALGEBRA

½ Credit High School / 3 college hours            Grade 11 -12

Requirements: Algebra I, Geometry, and Algebra II, and student must pass TSI Math requirements.

**\*\*\*Tuition Fee and book costs required for Dual Credit through TVCC\*\*\***

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

## DUAL CREDIT PRE-CALCULUS MATH 2312 PRE-CALCULUS MATH

½ Credit High School / 3 college hours            Grades 11-12

Requirements: Algebra I, Geometry, and Algebra II, MATH 1314

**\*\*\*Tuition Fee and book costs required for Dual Credit through TVCC\*\*\***

Pre-Calculus is an in-depth combined study of algebra, trigonometry and other topics for calculus readiness. Begins with topics from plane trigonometry including circular functions, solutions of right triangles, graphs, identities, solving trigonometric

equations and the use of scientific calculators. Either a programmable or a non-programmable calculator is required. The course will include topics from analytical geometry.

## **COLLEGE PREPARATORY MATHEMATICS**

1 Credit            Grade 12

Prerequisites: Algebra II

Topics in this two-semester course include real numbers, symbolic representation, graphing linear equations, basic Geometry, rational expressions and equations, and functions. Successful completion of the course and the final examination will result in student readiness for entry-level college mathematics.

## **FINANCIAL MATHEMATICS**

1 Credit            Grades 11-12

Prerequisite: Algebra I

The mathematical process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

# SCIENCE

## COURSE SEQUENCES:

### Regular Sequence

Biology, Chemistry, AND/OR Physics, Environmental Systems, Anatomy & Physiology and Forensic Science are the Science courses designed for the on-grade level or below grade level student and meet the requirements for the Minimum, Recommended, or Distinguished Achievement transcript.

### Advanced Sequence

HONORS Biology, HONORS Chemistry, AND/OR HONORS Physics, AP Biology, AP Chemistry and AP Physics are designed for the student who is performing above grade level.

**Recommended** criteria include:

- a. A grade of 90+ in a previous Science Course.
- b. Advanced performance on the Science portion of the STAAR/EOC test.
- c. Parent approval.
- d. Teacher recommendation.

## BIOLOGY I

1 Credit          Grades 9-12

**Prerequisites:** None.

Biology is a laboratory-oriented course that is designed for the study of living things. It provides the student with opportunities for acquiring basic techniques, knowledge, and understanding necessary for special training in biology. The student is taught cellular biology as a basis for studying the plant and animal kingdom. Emphasis is placed on microscopic studies and comparative anatomy. Preparation for the STAAR BIOLOGY I EOC (END OF COURSE) EXAM will be an integral part of BIOLOGY I.

## BIOLOGY I HONORS

1 Credit          Grade 9

**Prerequisites:** None

**Recommendation:** 90% or above in 8<sup>th</sup> grade Science and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in HONORS Biology.

HONORS Biology I is a lab oriented course which prepares students for concepts that will be covered in AP Biology. It provides the student with opportunities for acquiring basic techniques, knowledge, and understanding necessary for advanced science study. The course sequence ranges from cellular study to the introduction of chemistry and genetics. Preparation for the STAAR BIOLOGY I EOC (END OF COURSE) EXAM will be an integral part of BIOLOGY I.

## AP BIOLOGY

1 Credit            Grades 11-12

**Recommendation:** 90% or above in Physics and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Biology. AP Biology prepares students for the AP Exam. This course is equivalent to a college freshmen biology class. It is designed for students to get a detailed understanding of biological concepts. Extensive lab work and individual reading will be required. The class will complete 12 required College Board labs. Topics to be covered are divided into 3 main categories: Molecules and Cells, Genetics and Evolution, and Organisms and Populations.

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take the AP Biology examination. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. **Upon completion of this course, students are expected to take the AP exam.** *Students should check with individual colleges for their AP credit policies.*

## INTEGRATED PHYSICS & CHEMISTRY

1 Credit            Grades 9-12

Integrated Physics & Chemistry is a laboratory oriented course. The student will be provided opportunities to demonstrate the safe use of physical science laboratory equipment and selected chemicals. They will use their senses to acquire data. The student will use classification skills in ordering and sequencing data and will use oral and written communication of data in the appropriate form. They will deal in concepts and skills of measurement using relationships to standards and acquire and use skills in drawing logical inferences, predicting outcomes, and forming generalized statements.

## CHEMISTRY I

1 Credit            Grades 10-12

**Prerequisites:** Algebra I, Biology.

Chemistry I deals with chemical properties of matter as well as the ionic and atomic structure. Emphasis will be on the ionic forms. Forty percent of class time is spent in the laboratory. The second half of Chemistry will deal with organic chemistry, or living components. Practical and career oriented material will be presented.

## HONORS CHEMISTRY

1 Credit            Grades 10-12

**Prerequisites:** Algebra I, Biology



**Recommendation:** 90% or above in Biology and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in HONORS Chemistry.

HONORS Chemistry will be a preparatory course for students who plan on a career or college sequence which chemistry plays an important part. There will be an extensive laboratory progression with emphasis on qualitative and quantitative analysis. Lecture deals with stoichiometry, gas laws, and oxidation. Reduction and organic compounds, practical and career-oriented material will also be presented.

## AP CHEMISTRY

1 Credit            Grades 11-12

**Recommendation:** 90% or above in Physics and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Chemistry.

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, in their first year, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general Chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses.

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take the AP Biology examination. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. **Upon completion of this course, students are expected to take the AP exam.** Students should check with individual colleges for their AP credit policies.

## PHYSICS

1 Credit            Grades 10-12

**Prerequisites:** Biology I, Algebra I

Physics is devoted to the study of matter using scientific probes and technology. The study of Physics is an investigation into the interaction of matter in a variety of energy fields. This lab/project based course explores the application of mathematical principals.

## HONORS PHYSICS

1 Credit            Grades 10-12

**Prerequisites:** Biology I, Algebra I

**Recommendation:** 90% or above in Chemistry and teacher recommendation. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in HONORS Physics.

HONORS Physics is devoted to the study of the interaction of matter and energy. The study of physics includes gaining knowledge of Newtonian laws and their effect; momentum laws and their applications; knowledge of the concepts of work, power and energy; and conversions of one type of energy to another.

# AP PHYSICS

1 Credit            Grades 11-12

**Prerequisite:** Two science credits and pre-calculus or concurrent enrollment. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Physics.

AP Physics will prepare the student for the AP Physics exam. The curriculum is based on national standards set by The College Board. The course is designed for students who want a greater depth of understanding of physics concepts and who want more extensive laboratory experience. This college-level physics course will cover Newtonian mechanics, thermodynamics, waves, sound, optics, electricity, magnetism, atomic physics, nuclear physics, and relativity. Students will gain both a deeper appreciation of the concepts of Physics and additional problem solving skills. **Upon completion of this course, students are expected to take the AP exam.**

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. For a fee, the student may take the AP Physics examination. The student takes only one exam. Grades are reported on a 5-point scale, with a 5 representing extremely well qualified. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. Students should check with individual colleges for their AP credit policies.

# ANATOMY & PHYSIOLOGY

1 Credit            Grades: 11-12

**Prerequisites:** Biology and a Second Science credit

**Recommended Prerequisite:** A course from the Health Science Career Cluster

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

# DUAL CREDIT ANATOMY & PHYSIOLOGY BIOLOGY 2401 ANATOMY & PHYSIOLOGY 1

½ Credit / 3 College Hours                            Grades: 11-12

**Prerequisites:** Biology and a Second Science credit and student must pass TSI requirements in Reading and Writing.

**Recommended Prerequisite:** A course from the Health Science Career Cluster

**\*\*\*Fee required for Dual Credit through TVCC\*\*\***

In Dual Credit Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

# DUAL CREDIT ANATOMY & PHYSIOLOGY

## BIOLOGY 2402 ANATOMY & PHYSIOLOGY 2

½ Credit / 3 College Hours

Grades: 11-12

**Prerequisites:** Biology and a Second Science credit and student must pass TSI requirements in Reading and Writing.

**Recommended Prerequisite:** A course from the Health Science Career Cluster

**\*\*\*Fee required for Dual Credit through TVCC\*\*\***

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

## FORENSIC SCIENCE

1 Credit

Grade 11 or 12

Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology and procedures related to the search and examination of physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students will also learn the history and the legal aspects as they relate to each discipline of forensic science.

## EARTH AND SPACE SCIENCE

1 Credit

Grade 11 or 12

**Prerequisites:** 3 units of Science (1 can be concurrent), 3 units of Math (1 can be concurrent)

Earth and Space Science is a course designed to build on students' prior scientific and academic knowledge and skills to develop understanding of Earth's system in space and time. An Earth systems approach including the theme of Earth in space and time; how the origin and distribution of resources that sustain life on Earth are the result of interactions among Earth's subsystems over billions of years, the theme of solid Earth; how the geosphere is a collection of complex, interacting, dynamic subsystems linking Earth's interior to its surface, and fluid Earth; how the global ocean is the thermal energy reservoir for surface processes and, through interactions with the atmosphere, influences climate.

## ENVIRONMENTAL SYSTEMS

1 Credit

Grades 11-12

**Prerequisites:** Two credits of science

Environmental Systems is a second-year biology course, which concentrates on environmental issues. Students study a variety of topics that include biotic and a biotic factor in habitats; ecosystems and biomes; interrelationships among resources and an environmental system; sources and flow of and energy through an environmental system; relationship between carrying capacity and changes in populations and ecosystems; and changes in environments.

# SOCIAL STUDIES

## COURSE SEQUENCE:

World Geography, World History, United States History, Financial Literacy and Government/Economics are the Social Studies courses designed for each high school student, and meet the requirements for the Minimum, Recommended, or Distinguished Achievement transcript.

\*\*AP United States History will be offered to those students who are performing above grade level.

**Recommended** criteria include:

- a. A grade of 90+ in a previous Social Studies Course.
- b. Advanced performance on the Social Studies portion of the STAAR/EOC test.
- c. Parent approval.
- d. Teacher recommendation.

## WORLD GEOGRAPHY

1 Credit          Grades 9-12

**Prerequisites:** None

World Geography provides the student with the opportunity to study the interaction of peoples and cultures with their physical environments in the major areas of the world. Students explore various regions of the world while studying their governments, arts, and resources. Areas studied are physical geography, Western Europe, Eastern Europe, Middle East, Sub-Saharan Africa, Asia, and Latin America.

## WORLD HISTORY

1 Credit          Grades 9-12

**Prerequisites:** None

World History includes the study of the history and development of a variety of world cultures, past and present. Study will provide a basis for students to compare and analyze various ways of live and cultural patterns.

## WORLD HISTORY HONORS

1 Credit          Grades 9-12

**Recommendations:** 90 or above in previous social studies course. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in World History HONORS.

World History HONORS includes the study of the history and development of a variety of world cultures, past and present. Study will provide a basis for students to compare and analyze various ways of life and cultural patterns.

## UNITED STATES HISTORY

1 Credit            Grade 11

**Prerequisites:** None

United States History covers significant people, issues, and events after the Reconstruction, emphasizing present-day issues that have their roots in the past. Besides readings from the text, lecture and group discussion will be the primary tools of communication. Preparation for the STAAR US HISTORY EOC (END OF COURSE) EXAM will be an integral part of US HISTORY.

## AP UNITED STATES HISTORY

1 Credit            Grade 11

**Prerequisites:** None

Course Objectives: Advanced Placement U.S. History is a full-year college course covering the period from the first European explorations of the Americas to the present. It provides students with a learning experience equivalent to that obtained in most two-semester college introductory U.S. History courses. It is designed to help students acquire the analytical skills and factual knowledge needed to deal critically with a wide range of historical problems. Students will also learn to assess historical materials --- their relevance to a given issue, their reliability and their importance ---- and to weigh the evidence and interpretations presented in historical scholarship. The course will help the student to develop the skills necessary to arrive at conclusions based on informed judgment and to present reasons and evidence clearly and persuasively in essay form. Preparation for the STAAR US HISTORY EOC (END OF COURSE) EXAM will be an integral part of US HISTORY.

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. **Upon completion of this course, students are expected to take the AP exam.** *Students should check with individual colleges for their AP credit policies.*

## DUAL CREDIT UNITED STATES HISTORY HISTORY 1301 UNITED STATES HISTORY TO 1877

½ Credit for High School/ 3 College hours            Grade 11

**Prerequisite:** Student must pass TSI requirements in Reading and Writing.

**\*\*\*Fee required for Dual Credit through TVCC\*\*\***

A survey is made of the American colonies, their struggle for independence, the development of a political structure and the formative years, the westward movement, the growth of sectionalism, and the Civil War. The social, economic, and political trends are shown

# DUAL CREDIT UNITED STATES HISTORY HISTORY 1302 UNITED STATES HISTORY FROM 1877

½ Credit for High School/ 3 College hours

Grade 11

**Prerequisite:** History 1301 and student must pass TSI requirements in Reading and Writing.

**\*\*\*Fee required for Dual Credit through TVCC\*\*\***

This is a continuation of the history course surveying American growth, world conflicts, and the emergence of America as a world power. The social, economic, and political trends are shown.

## PSYCHOLOGY

½ Credit

Grades 11-12

Requirements: None

In Psychology, an elective course, students study the science of behavior and mental processes. Students examine the full scope of the science of psychology such as the historical framework, methodologies, human development, motivation, emotion, sensation, perception, personality development, cognition, learning, intelligence, biological foundations, mental health, and social psychology.

## SOCIOLOGY

½ Credit

Grades 11-12

Requirements: None

Sociology, an elective course, is an introductory study in social behavior and organization of human society. This course will describe the development of the field as a social science by identifying methods and strategies of research leading to an understanding of how the individual relates to society and the ever-changing world. Students will also learn the importance and role of culture, social structure, socialization, and social change in today's society.

## PSYCHOLOGY HONORS

½ Credit

Grades 11-12

**Recommendation:** 90 or above in previous social studies course. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Psychology.

Students will be introduced to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and the phenomena associated with each of the major sub fields within psychology. They also learn about the methods psychologists use in their science practice. Enrollment in this class will prepare students to be successful in the AP Psychology class the following semester.

## AP PSYCHOLOGY

½ Credit      Grades 11-12

**Recommendation:** 90 or above in previous social studies course. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Psychology.

Students will be introduced to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and the phenomena associated with each of the major sub fields within psychology. They also learn about the methods psychologists use in their science practice. Enrollment in this class will prepare students to be successful on the AP Examination for psychology. **Upon completion of this course, students are expected to take the AP exam.**

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. Students should check with individual colleges for their AP credit policies.

## UNITED STATES GOVERNMENT

½ Credit      Grade 12

**Prerequisites:** World Geography, U.S. History, World History

U. S. Government (Civics) is the study of such topics as: Principles and concepts of American democracy; U. S. and state constitution; civil liberties and legal rights; economic systems; branches of the national government; and an introduction to state and local government. Emphasis is placed on political participation, decision-making, and the right and responsibilities of American citizenship.

## AP GOVERNMENT

½ Credit      Grade 12

**Recommendation:** World Geography, U.S. History, World History. Both the student and parent(s) are requested to attend the AP Orientation presentation during the semester preceding the student's enrollment in AP Government.

U. S. Government (Civics) is the study of such topics as: Principles and concepts of American democracy; U. S. and state constitution; civil liberties and legal rights; economic systems; branches of the national government; and an introduction to state and local government. Emphasis is placed on political participation, decision making, and the right and responsibilities of American citizenship. **Upon completion of this course, students are expected to take the AP exam.**

In March of the academic year, the AP student decides whether to take the Advanced Placement examination in May. More than 1300 participating colleges usually honor a grade of 3 or above in granting college credit or advanced standing. Students should check with individual colleges for their AP credit policies.

# ECONOMICS

½ Credit      Grade 12

**Prerequisites: None**

Emphasis is placed on the essentials and benefits of the American economic system. Students are expected to gain the knowledge, skills, and attitudes, which will enable them to contribute to and maintain the system.

# DUAL CREDIT ECONOMICS ECONOMICS 2301 PRINCIPLES OF MACROECONOMICS

**Prerequisite:** Student must pass TSI requirements in Reading and Writing.

**\*\*\*Fee required for Dual Credit through TVCC\*\*\***

This course will include a study of economic problems such as inflation, unemployment, and economic stabilization by monetary and fiscal policy. Macroeconomic concepts of total spending, total output and income, money and banking, and the Keynesian and monetary approaches to national income analysis are discussed.



# FOREIGN LANGUAGE

## SPANISH I

1 Credit            Grades 7-11

**Prerequisites:** None

Spanish I is designed to develop the student's ability to read, write, and speak Spanish. Conversational expressions and basic grammar will be stressed. The course will also include a basic study of composition, reading and Hispanic cultures. This course is a prerequisite to Spanish II.

## SPANISH 1 HONORS

1 Credit            Grades 9 -11

This course covers everything in Spanish I, and conforms to AP standards. Students will use learning strategies to complete tasks that are aligned with AP goals and mirror tasks asked on AP exams.

## SPANISH II

1 Credit            Grades 9 - 12

Spanish II is a continuation of the language skills introduced in Spanish I. Basic grammar and additional vocabulary are added to the fundamentals of speaking, reading, and writing a second language. Spanish II is required for all transcripts excluding Minimum.

## SPANISH II HONORS

1 Credit            Grades 9 – 12

**Prerequisites:** Spanish I credit

This course covers everything in Spanish II, and conforms to AP standards. Students will use learning strategies to complete tasks that are aligned with AP goals and mirror tasks asked on AP exams.

## **SPANISH III - HONORS**

1 Credit            Grades 10-12

**Prerequisites:** Spanish I and II.

This is a college level course. The third year of the study of Spanish will continue to emphasize vocabulary expansion, grammatical concepts, oral and written skills, a degree of fluency in silent reading and expression in oral reading. Students will also acquire cultural data, insights, and an appreciation of Hispanic history and art. Completion of 3 years fulfills foreign language requirements for a Distinguished Achievement Transcript. If graduating on the Distinguished Achievement Transcript, Spanish III may not be taken Pass/Fail.

## **SPANISH IV SPANISH LANGUAGE & COMPOSITION AP**

1 Credit            Grades 11-12

**Prerequisites:** Spanish II and III.

Fluency in speaking and in understanding Spanish at an advanced level is developed through group discussion and analysis of advanced placement testing materials. Both reading and writing skills are strengthened through intense grammatical review. This course provides a full academic year of advanced study. Opportunities for media interaction are included. Upon completion of this course, students are expected to take the AP exam.

# FINE ARTS

## ART I

1 Credit      Grades 9-12

**Prerequisites:** None

Students will learn to appreciate art and practice artistic skills throughout the year. Students will be exposed to terminology that will enhance their ability to discuss artistic form. Many different art projects will be completed during the course. Some of the areas of skill will include drawing, painting, design and sculpture. Students will gain valuable insight and experience in the world of art.

## ART II: CERAMICS

1 Credit      Grades 10-12

**Prerequisites:** Art I

CERAMICS is a course focusing on building with clay. Emphasis will be placed on the design elements; line, shape, texture, color, and form. Focus will be on the hand building techniques: pinch, coil and slabs. Functional as well as sculptural applications will be explored. Introduction to traditional and historical ceramic arts will be incorporated into projects. Students will be introduced to the craft of wheel thrown pottery on a limited basis. Various glaze and decoration techniques for finishing work will be introduced. Individual creativity will be emphasized.

## ART III: 2D ART AND DESIGN

1 credit      Grades 10-12

**Prerequisites:** Art I

2D ART & DESIGN familiarizes students with the elements and principles of design. This will be accomplished through the application of art theory to specific assigned problems. While exploring various media, students will learn specific ways to think creatively and develop original, innovative ideas. The assignments in this course will involve specific aspects of design and will teach students both the vocabulary and concepts of 2-dimensional design.

## ART III: AP ART HISTORY

1 credit      Grades 11-12

**Prerequisites:** NONE

The AP Art History course welcomes students into the global art world to engage with its forms and content as they research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the students develop in-depth, holistic understanding of the history of art from a global perspective. Students learn and apply skills of

visual, contextual, and comparative analysis to engage with a variety of art forms, developing understanding of individual works and interconnections across history.

## **ART IV: AP ART AND DESIGN**

1 Credit      Grades: 11 - 12

**Prerequisites:** 2 LEVELS OF ART

The AP Art and Design program consists of three different courses and AP Portfolio Exams—AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing—corresponding to college and university foundations courses. Students may choose to submit any or all of the AP Portfolio Exams. Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. Students may choose to submit any or all of the AP Portfolio Exams.

## **DRILL TEAM I, II, III, IV**

½ - 1 Credit      Grades 9-12

**Prerequisites:** Must pass a series of qualifying auditions.

The girl's drill team is a precision dance and drill team. Activities include performing at extra-curricular activities. The estimated student expenses are made available at tryouts. The first year of drill team can fulfill the PE requirement.

## **JV BAND I, II, III, IV**

½ - 1 Fine Arts Credit      Grades 9-12

**Prerequisites:** Audition for Placement. One-Day Spring Band Camp.

Concert band is the featured performance ensemble for instrumental music in the spring. This group works on music from the prescribed music list of the University Interscholastic League. Emphasis is placed on sight-reading and characteristic sound. The group participates in UIL and invitational concert contest as well as taking a band trip each spring. Students are encouraged to participate in UIL Solo and Ensemble at both the Region and State levels.

## **Varsity Band I, II, III, IV**

½ Fine Arts Credit – ½ P.E. Credit

**Prerequisites:** Recommendation by middle school band director or audition.

Marching band is the featured performance ensemble for instrumental music in the fall. This group performs at all football games and pep rallies throughout the season as well as competes in UIL and invitational marching contest. The group participates in local parades and plays a concert for the Winter Arts Festival at the end of the fall semester. Members of the group specialize in wind instruments, drum-line, pit percussion, or color guard. Special rehearsal times are scheduled for

various groups within the organization. Students are encouraged to participate in All-State band auditions as well as auditions for leadership positions within the organization.

## **JAZZ BAND I, II, III**

½ - 1 Fine Arts Credit per year      Grades 9-12

**Prerequisites:** Audition for Placement

Jazz Band places an emphasis on modern music with several specialty groups covering music from big band to rock in an instructional lab environment. The first half hour is spent in the study of music theory for the fall or music history in the spring. The “Jazz Band” consists of up to 18 instrumentalists (saxophones, trombones, trumpets, and rhythm section) but does allow for some substitutions.

## **ROCK BAND I, II, III, IV**

½ - 1 Fine Arts Credit per year

**Prerequisites:** Audition for Placement

The “Cover Band” ensemble is made up of keyboard, rhythm and lead guitars, bass, and drums combined with up to 8 vocalists (usually double SATB in voicing) This group performs at various events throughout the year and participates in UIL and invitational contest. There are also opportunities for a percussion ensemble in this class if there is enough interest. Students involved in the CHS musical will also be in this class.

## **AP MUSIC THEORY**

1 Fine Arts Credit

**Prerequisites:** Placement Exam

AP Music theory involves an in-depth study of the fundamentals of music with a focus on rhythmic and melodic dictation, four-part harmony, writing for voices and instruments, as well as advanced study in 12 tone series and 20th century music techniques. This class will be taught using the AP exam for Music Theory as a syllabus.

## **THEATRE ARTS I**

1 Credit Grades 9-12

**Prerequisites:** None

This course is opened to all interested students and is an introductory course to the world of theatre. Please note, this is a participation course and students will be expected to fully take part in all class activities every day. Speaking, acting, rehearsing, memorization, and performing in front of others are all key components of this course. Students in this course must use their imagination and creativity daily. Students will also improvise, practice physical and vocal warm up drills, explore

dramatic structure, technical theatre, and develop an appreciation of theatre. Students will be provided with opportunities to participate in school productions.

## **THEATRE ARTS II**

1 Credit Grades 10-12

**Prerequisites:** Must have successfully completed Theatre Arts I and teacher approval.

Students will learn advanced characterization skills, explore contemporary and classical theatre, auditioning, and realize career opportunities. They also explore performance criticism. Activities will include various theatrical venues including mime, children's theatre, puppetry, and theatre productions.

## **TECHNICAL THEATRE I, II, III, IV**

½ - 1 Credit Grades 9-12

**Prerequisites:** None

In this course students learn about the different areas of technical theatre including set design, lighting design, costuming, sound design, makeup design, and stage management. Students will learn technical terminology, do work related to the theatre's productions, and will do design projects for class and competition.

## **JV THEATRE PRODUCTION I, II, III, IV**

1 Credit Grades 9-12

**Prerequisites:** Student must pass a qualifying audition for the course and teacher approval.

The basic purpose of this course is to give students a beginning experience in theatrical production. Students selected to participate in this course do so with the understanding that they may be working in an acting or technical position on every production put up for the semester. Students will keep production notebooks and will have analytical and evaluative projects to complete as part of the course. Students also understand that due to the nature of this course, they will be required to attend rehearsals extending past the regular school day. Students are expected to adjust their schedule and time accordingly.

## **THEATRE PRODUCTION I, II, III, IV**

1 Credit Grades 9-12

**Prerequisites:** Student must pass a qualifying audition for the course and teacher approval.

The basic purpose of this course is to give student experience in theatrical production. Students selected to participate in this course do so with the understanding that they may be working in an acting or technical position on every production put up for the semester. Students will keep production notebooks and will have analytical and evaluative projects to complete as part of the course. Students also understand that due to the nature of this course, they will be required to attend rehearsals extending past the regular school day. Students are expected to adjust their schedule and time accordingly.

# HEALTH, P.E. AND ATHLETICS

## HEALTH EDUCATION

½ Credit      Grades 9-12

**Prerequisites:** None

Health Education is a state required course for graduation and provides coverage of ten health concepts recommended for comprehensive health instruction. This course includes instruction in environment and community health; consumer health; care of the human body; nutrition; mental health; substances that modify behavior; prevention of diseases; chronic health conditions; accident prevention; first aid; emergency care and family life education.

## PHYSICAL EDUCATION I, II, III, IV

1 Credit      Grades 9-12

**Prerequisites:** None

Foundations of Personal Fitness represents a new approach in physical education and the concept of personal fitness. The basic purpose of this course is to motivate students to strive for lifetime personal fitness with an emphasis on the health-related components of physical fitness. The knowledge and skills taught in this course include teaching students about the process of becoming fit as well as achieving some degree of fitness within the class. The concept of wellness or striving to reach optimal levels of health is the corner stone of this course and is exemplified by one of the course objectives – students designing their own personal fitness program.

## OUTDOOR EDUCATION

1 Credit      Grades 9-12

**Prerequisites:** None

Students enrolled in adventure outdoor education are expected to develop competency in outdoor education activities that provide opportunities for enjoyment and challenge. Emphasis is placed upon student selection of activities that also promote a respect for the environment and that can be enjoyed for a lifetime

## CHEERLEADING

1 Credit      Grades 9-12

**Prerequisites:** Must be a member of the Freshmen, Junior Varsity or Varsity cheerleading squads.

The cheerleading class will consist of physical fitness activities, dance routines, and gymnastics. Activities include performing at extra-curricular activities.

# ATHLETICS

½ - 1 Credit      Grades 9-12

**Prerequisites:** pass a physical examination, and have the approval of the coach.

Athletics provides a series of competitive games scheduled during the year.

The sports offered for boys during the athletic period are:

Football  
Basketball  
Tennis  
Soccer  
Baseball  
Cross-Country  
Track  
Power Lifting

The sports offered for girls during the athletic period are:

Volleyball  
Basketball  
Softball  
Tennis  
Soccer  
Cross-Country  
Track  
Power Lifting

# ATHLETIC TRAINER

1 Credit      Grades 9-12

**Prerequisites:** Instructor approval, students must be able to stay before and/or after school for practices and attend summer training.

This course provides an opportunity for the study and application of the components of sports medicine. It will include administrative duties in sports medicine, prevention of athletic injuries, recognition, evaluation and immediate care of athletic injuries, rehabilitation and management skills, taping and wrapping techniques, emergency procedures, sports psychology, and therapeutic exercise.

# SPORTS MEDICINE I

1 Credit      Grades 9-12

This course provides an opportunity for the study and application of the components of sports medicine including sports medicine, concepts of sports injury, athletic healthcare team, sports injury law, sports injury prevention, sports psychology, nutrition, recognition of injuries, emergency action plan and initial injury evaluation, first aid/CPR/AED, the injury process, immediate care of athletic injuries of specific body areas, skin conditions in sports, blood borne pathogens, thermal injuries, and special medical concerns of the adolescent athlete.



# TECHNOLOGY APPLICATION COURSES

## Digital Communications in the 21<sup>st</sup> Century

1 Credit      Grades 10-12

Prerequisite: BIM

Digital Communications in the 21st Century will prepare students for the societal demands of increased civic literacy, independent working environments, global awareness, and the mastery of a base set of analysis and communication skills. Students will be expected to design and present an effective product based on well-researched issues to thoughtfully propose suggested solutions to authoritative stakeholders. The outcome of the process and product approach is to provide students an authentic platform to demonstrate effective application of multimedia tools within the contexts of global communication and collaborative communities and appropriately share their voices to affect change that concerns their future.

## Digital Video and Audio Design

1 Credit      Grades 10-12

Prerequisite: BIM

The student understands the post-production process and can select the appropriate evaluation and delivery formats such as a product evaluation rubric, job performance critique, and client and audience feedback. Skills are used to deliver a product in a variety of media forms such as social networks, collaborative workspaces, and cloud environments.

## Digital Art and Animation

1 Credit      Grades 10-12

Prerequisite: BIM

Digital Art and Animation consists of computer images and animations created with digital imaging software. Digital Art and Animation has applications in many careers, including graphic design, advertising, web design, animation, corporate communications, illustration, character development, script writing, storyboarding, directing, producing, inking, project management, editing, and the magazine, television, film, and game industries. Students in this course will produce various real-world projects and animations.

## Web Design

1 Credit      Grades 10-12

Prerequisite: BIM

The student uses digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning experience of others. The student applies digital tools to gather, evaluate, and use information, and understands human, cultural, and societal issues related to technology and practices legal and ethical behavior.

## **COMPUTER SCIENCE I (03580200)**

1 Credit            Grades 10-12

Computer Science I will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. 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. By using computer science 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 learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts.

## **COMPUTER SCIENCE II (03580300)**

1 Credit            Grades 11-12

Computer Science II will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. 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. By using computer science 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 learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of computer science through the study of technology operations, systems, and concepts.

## **COMPUTER SCIENCE III (03580350)**

1 Credit            Grade 12

Computer Science III will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. 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. By using computer science 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 learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of advanced computer science data structures through the study of technology operations, systems, and concepts.

# LOCALLY DEVELOPED CORE CURRICULUM

## ENGLISH I ALTERNATIVE

1 Credit      Grade 9

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by ARD committee.

Applied English I will focus on developing skills in the areas of expressive, receptive, written, and/or symbolic representations of language. Attention is given to effective communication. Students will begin learning survival-reading vocabulary.

## ENGLISH I MODIFIED

1 Credit      Grade 9

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by ARD committee.

Literature and grammar are taught through a modified, general education curriculum that addresses the individual needs of students through Individual Education Plans. Literature will be the study of a variety of genres and the concepts and terminology needed for knowledgeable discussion of literature.

Grammar will include the study of the grammatical structure of sentences and the development and organization of compositions.

## ENGLISH II ALTERNATIVE

1 Credit      Grade 10

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Applied English II will focus understanding social and environmental cues, and the social appropriateness of communication. Students will continue to learn survival reading vocabulary.

## ENGLISH II MODIFIED

1 Credit      Grade 10

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by ARD committee.

Literature and grammar are taught through a modified, general education curriculum that addresses the individual needs of students through Individual Education Plans. Literature will continue to be the study of literary techniques and terminology. Students will use oral and written language to respond to literature.

Grammar will focus on the writing process and composition development. Students will plan, draft, and complete written compositions, including informative, literary and persuasive writing.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## ENGLISH III ALTERNATIVE

1 Credit            Grade 11

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Applied English III will focus on independent living skills directly related to employment. Students will continue to learn survival-reading vocabulary.

## ENGLISH III MODIFIED

1 Credit            Grade 11

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by ARD committee.

Literature and grammar are taught through a modified, general education curriculum that addresses the individual needs of students through Individual Education Plans. Literature will focus on American Literature. The students will learn poetry, short stories, the novel and non-fiction.

Grammar will focus on the editing and revision process and the development of mature grammatical and stylistic features. Course work will include a research paper.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## ENGLISH IV ALTERNATIVE

1 Credit            Grade 12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Applied English IV will continue to develop communication skills to be successful in job setting. Oral and written language skills will be developed to express ideas, needs and to make inquiries. Reading skills will continue to focus on developing survival-reading vocabulary.

## ENGLISH IV MODIFIED

1 Credit            Grade 12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Literature and grammar are taught through modified, general education curriculum that addresses the individual needs of students through Individual Education Plans. Literature will focus on British literature. The students will complete a research paper.

Grammar will focus on developing a mature writing style.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **READING IMPROVEMENT I, II, III**

½ - 1 Credit      Grades 9-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Reading Improvement is designed to improve the student's reading skills within a variety of genres, including poetry, text books, plays, news articles, and pleasure reading. Students will receive instruction in word recognition, comprehension strategies, and vocabulary. Reading in the content area will also be developed.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **BASIC COMMUNICATION APPLICATIONS**

½ Credit      Grades 9-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by ARD committee.

This course of study will help students develop and strengthen interpersonal communication skills. Students will develop skills involved in sending and receiving messages, understanding and using nonverbal communication, and listening for a variety of purposes. The student will be observed in a variety of settings and activities.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **PERSONAL HEALTH**

½ Credit      Grades 9-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performances, and approval ARD committee.

This course is designed to develop personal health awareness and practices. The focus is on personal health and hygiene, importance of lifetime exercise, diet and nutrition, and growth and development.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **ALGEBRA I MODIFIED**

1 Credit      Grades 9-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by the ARD committee.

Basic Algebra I provides a concrete foundation in basic algebra concepts. Students learn algebraic and symbolic reasoning to study relationships among quantities, define relationships between functions and equations, and to set up and solve problems. Calculator skills are emphasized.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## ALGEBRA 1 ALTERNATIVE

1 Credit      Grade 9

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Math applications focuses on developing fundamental operational skills as applied to daily life and career goals.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## GEOMETRY MODIFIED

1 Credit      Grades 10-12

**Prerequisites:** Basic Algebra I or Algebra I

Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by the ARD committee.

Basic Geometry teaches geometric concepts and develops deductive, inductive and creative thinking skills. The course emphasis is on real world applications. The students will demonstrate a basic understanding of geometric relationships and spatial reasoning.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## GEOMETRY ALTERNATIVE

1 Credit      Grade 10

**Prerequisites:** Math Applications I, Basic Algebra I, Algebra I

Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Activities develop independent living math skills. Money, banking, time skills, and problem solving strategies are stressed.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## MATH APPLICATIONS III

1 Credit      Grade 11

**Prerequisites:** Math Applications I and II, Basic Algebra I, Algebra I, Basic Geometry or Geometry

Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Students develop skills related to independent consumer skills, including purchasing goods, services, and general money management.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **BASIC MATH APPLICATION III**

1 Credit          Grade 11

**Prerequisites:** Basic Algebra I or Algebra I Alternative. Basic Geometry or Geometry Alternative

Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by the ARD committee.

Basic Math Application is used to solve real life applied problems. Algebraic, graphical and geometric reasoning are used to solve real life problems involving money, data, percent, proportional relationships, statistical probability, patterns, design and science.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **MATH APPLICATIONS IV**

1 Credit          Grade 12

**Prerequisites:** Math Applications I, II and III, Basic Algebra I, Algebra I, Basic Geometry or Geometry

Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Students develop skills related to independent consumer skills, including purchasing goods, services, and general money management.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **BASIC MATH APPLICATION IV**

1 Credit          Grade 12

**Prerequisites:** Algebra I Modified or Algebra I Alternative, Geometry Modified or Geometry Alternative, Basic Math Application III

Admission is based on evaluation, review of present levels of academic achievement and functional performance and approval by the ARD committee.

Basic Math Application is used to solve real life applied problems. Algebraic, graphical and geometric reasoning are used to solve real life problems involving money, data, percent, proportional relationships, statistical probability, patterns, design and science.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **BIOLOGY MODIFIED**

1 Credit          Grade 9

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Basic Biology is modified curriculum that begins with a study of the scientific process. The students will study cell structure and the functions of systems in organisms.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **BASIC IPC**

1 Credit            Grades 10-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

This course focuses on the study of Chemical and Physical laws, concepts, and properties. The students will use hands on activities to incorporate science into practical applications, projects, and experiences.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **WORLD GEOGRAPHY MODIFIED**

1 Credit            Grades 9-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

The students will study the major geographic regions of the world. They will learn how geography will affect history and economic systems. They will explore the interdependency of people, places and environments.

## **WORLD HISTORY MODIFIED**

1 Credit            Grades 10-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Basic World History focuses on the development of human culture from prehistoric times to modern times. Students will study the major world events, political institutions, technological and scientific discoveries, and the role of the family in other cultures.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **UNITED STATES HISTORY MODIFIED**

1 Credit            Grades 10-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Students will study the social, cultural, economic, and political developments of the United States of America from 1870 to the present time. Current events will be utilized to improve student's understanding of the relationship of past and present.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*



## GOVERNMENT MODIFIED

½ Credit      Grade 12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Students will study the roles of local, state and national governments. They will also learn the rights and responsibilities of a citizen. They will also study present day government activities through the newspapers and TV.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law*

## ECONOMICS MODIFIED

½ Credit      Grade 12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval by the ARD committee.

Students will develop a basic understanding of the US monetary system and uses of money. They will learn the roles and responsibilities of consumers in the free enterprise system. They will learn the basics of earning, spending, saving and investing. Basic consumer rights will also be addressed.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## CAREER DEVELOPMENT PREPARATION

½ - 1 Credit      Grades 9-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval of the ARD committee.

This course is designed to expose students to the many adult responsibilities they will face both on and off the job. Students will be exposed to the wide variety of topics they will face as they begin making career choices. Examples of topics covered in VAC include money management, co-worker relationships, teamwork, personal health and safety, adult living, career matching, career training programs, job searches, computer skills, creating resumes, interview procedures, and numerous other career related topics.

## CAREER DEVELOPMENT I, II

1 Credit      Grades 11-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval of the ARD committee.

See work program handbook for the entire list of requirements.

Vocational Adjustment Coordination is a program to help students prepare for the world of work and develop the necessary skills to enter a post-secondary school or training program. Out-of-school placement is a unique part of the program, which allows for realistic on the job experience. Students are responsible for turning in a weekly job report every week, an evaluation completed by supervisor every six weeks and a copy of their check stub every three weeks.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **CAREER AWARENESS I**

1 Credit      Grade 10

**Prerequisites:** Admission is based on evaluation, review of present levels of performance, and approval of the ARD committee.

This course is designed to develop the skills necessary for employability. Students will explore finding a job, maintaining a job, and resigning from a job. They will also explore career choices.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

## **CAREER EXPLORATION I & II**

1 Credit (each)    Grades 11-12

**Prerequisites:** Admission is based on evaluation, review of present levels of academic achievement and functional performance, and approval of the ARD committee.

Career Exploration provides opportunities for students to learn about employment through job experiences at various job sites in the community or by participating in campus directed programs. Job sites will be selected to allow for a variety of job experiences.

*This course is a locally defined skills class and is not subject to highly qualified requirements of the No Child Left Behind law.*

# LOCAL CREDIT COURSES

## OFFICE AIDE I, II

Grades 11-12

**Prerequisites:** Application

Students implement personal and interpersonal skills to strengthen individual performance in the workplace. Students apply technical skills to assist teachers and administrators throughout the district. Students learn how to take direction from others while working and completing tasks under their assigned supervisor.

This class is ONLY available to juniors and seniors. Students may have only office Aide class per year. Office Aide is taken pass/fail. GPA points are not awarded for this class.

An application for office aide must be submitted in the spring of the preceding academic year. Applications will require teacher recommendations along with the evaluation of the student's discipline records. Students placed at the discipline alternative school campus, or ISS, or suspended or expulsion cannot participate in this program. Principals will have the final approval of Office Aides.

# **CAREER AND TECHNICAL EDUCATION**

# CAREER AND TECHNICAL EDUCATION

Technological advances and global competition have transformed the nature of work. Tomorrow's jobs will require more knowledge, better skills and more flexible workers than ever before. Tomorrow's workers must be prepared to change jobs and careers several times, continually updating their knowledge and skills. To prepare today's students for tomorrow, schools are working to help students achieve in challenging subjects.

The importance of and need for Career and Technical education grows as the American workplace becomes increasingly global. The Crandall ISD Career & Technical Education Program allows students to get experience and training in a variety of skills and careers. Career and Technical Education also presents students with the opportunity to learn and practice other critical workplace characteristics: critical thinking, problem solving, team building, communication, and leadership. In an increasingly competitive job market, Crandall ISD's Career and Technical programs can provide the extra step needed toward a secure future.

Achieve Texas is a state initiative to implement the U. S. Department of Education's 16 career clusters. Career pathways within each cluster will help students plan their educational experience by combining rigorous academics and relevant career education. Crandall High School Career and Technical Education programs offer courses from the Achieve Texas clusters. The purpose of Career Clusters and Career Pathways is to provide curricula and instruction that enables students to select courses within a career cluster / pathway that:

- prepares them to enter the workforce upon graduation, or to
- continue their education in an advanced technical or academic field of study.

Career Clusters identify pathways from secondary school to two- and four-year colleges, graduate school, and the workplace, so students can learn in school and what they can do in the future. This connection to future goals can motivate students to work harder and enroll in courses that are more vigorous. Crandall High School articulates with programs at TVCC and Navarro to facilitate career goals of students. Additional information on career clusters can be found at [www.achievetexas.org](http://www.achievetexas.org).

The 16 clusters are listed below. For additional information, go to [www.careerclusters.org](http://www.careerclusters.org).

- Agriculture, Food & Natural Resources\*\*
- Architecture & Construction\*\*
- Arts, A/V & Communications\*\*
- Business Management & Administration\*\*
- Education & Training\*\*
- Finance\*\*
- Government & Public Administration
- Health Science\*\*
- Hospitality and Tourism\*\*
- Human Services\*\*
- Information Technology\*\*
- Law, Public Safety, & Security\*\*
- Manufacturing
- Marketing, Sales & Services
- Science, Technology, Engineering & Mathematics\*\*
- Transportation, Distribution & Logistics

\*\*Currently offered at Crandall High School

Enrollment in Career and Technical Education courses is open to all students without regard to race, color, creed, religious affiliation, sex or handicapping conditions.

# **AGRICULTURE, FOOD, & NATURAL RESOURCES CAREER CLUSTER / ANIMAL SCIENCE**

## **PRINCIPLES OF AGRICULTURE, FOOD, AND NATURAL RESOURCES**

1 Credit            Grades: 9-12

**Prerequisites:** None.

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings, the course examines Leadership Principles, recordkeeping, SAEP's, Contest, Woodworking, Breeds of Livestock, and Oxy-acetylene metal cutting, and shop procedures.

## **LIVESTOCK PRODUCTION**

½ Credit            Grades 10-12

**Prerequisites:** Principles of Agriculture, Food, and Natural Resources

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. Animal species to be addressed in this course may include, but are not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry.

## **VETERINARY MEDICAL APPLICATIONS**

1 Credit            Grades 10-12

**Prerequisites:** Principles of Agriculture, Food, and Natural Resources, Biology or Chemistry, and either Equine Science, Small Animal Management or Livestock Production

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

# FLORAL DESIGN

1 Credit

Grade 9-12

**Prerequisite:** None

Floral Design develops a student's ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. This Career and Technical Education class offers hands-on lab experiences for building skills as well as opportunities to sketch and evaluate designs. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills. To prepare for careers in floral design, students will also acquire technical knowledge and skills related to horticultural systems, career opportunities, entry requirements, and industry expectations.

# ADVANCED FLORAL DESIGN

1 Credit

Grade 10-12

**Prerequisite:** Floral Design

In this course, students build on the knowledge from the *Floral Design* course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event.

# **AGRICULTURE, FOOD, & NATURAL RESOURCES CAREER CLUSTER / AG. MECHANICS**

## **PRINCIPLES OF AGRICULTURE, FOOD, AND NATURAL RESOURCES**

1 Credit            Grade 9 or first year AG

**Prerequisites:** None.

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings, the course examines Leadership Principles, recordkeeping, SAEP's, Contest, Woodworking, Breeds of Livestock, and Oxy-acetylene metal cutting, and shop procedures.

## **AGRICULTURAL MECHANICS AND METAL TECHNOLOGIES**

1 Credit            Grades 10-12

**Prerequisites:** Principles of Agriculture, Food, and Natural Resources

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce experience, apply, and transfer their knowledge and skills in a variety of settings. A \$15.00 lab fee will be assessed.

## **AGRICULTURAL STRUCTURES DESIGN AND FABRICATION**

1 Credit            Grades 11-12

**Prerequisite:** Agricultural Mechanics and Principles of Agriculture

To be prepared for careers in mechanized agriculture and technical systems, students attain knowledge and skills related to agricultural facilities design and fabrication. Students explore career opportunities, entry requirements, and industry expectations. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings. A \$15.00 lab fee will be assessed.



# **PRACTICUM IN AGRICULTURE, FOOD & NATURAL RESOURCES**

2 Credits

Grade 12

**Prerequisite:** Student participation in a coherent sequence of 2 or more credits in the Agriculture, Food, and Natural Resources cluster.

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 independent study, internships, assistantships, mentorships, etc.

# ARCHITECTURE AND CONSTRUCTION CLUSTER / HVAC / PLUMBING

## PRINCIPLES OF AGRICULTURE, FOOD, AND NATURAL RESOURCES

1 Credit            Grade 9 or first year AG

**Prerequisites:** None.

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings, the course examines Leadership Principles, recordkeeping, SAEP's, Contest, Woodworking, Breeds of Livestock, and Oxy-acetylene metal cutting, and shop procedures.

## HEATING, VENTILATION, AND AIR CONDITIONING TECHNOLOGY I

1 credit            Grade 10-12

**Prerequisite:** Principles of Ag or Principles of Construction and Plumbing Technology I

In Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology I, students will gain knowledge and skills needed to enter the industry as technicians in the HVAC and refrigeration industry or building maintenance industry, prepare for a postsecondary degree in a specified field of construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, principles of HVAC theory, use of tools, codes, and installation of HVAC and refrigeration equipment.

## HEATING, VENTILATION, AND AIR CONDITIONING TECHNOLOGY II

2 credits            Grade 11-12

**Prerequisite:** Principles of Ag or Principles of Construction and HVAC I

In Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II, students will gain advanced knowledge and skills needed to enter the industry as HVAC and refrigeration technicians or building maintenance technicians or supervisors, prepare for a postsecondary degree in a specified field of construction or construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, use of tools, codes, installation of commercial HVAC equipment, heat pumps, troubleshooting techniques, various duct systems, and maintenance practices.

# ARCHITECTURE AND CONSTRUCTION CLUSTER / INTERIOR DESIGN

## ART I

1 Credit            Grades 9-12

**Prerequisites:** None

Students will learn to appreciate art and practice artistic skills throughout the year. Students will be exposed to terminology that will enhance their ability to discuss artistic form. Many different art projects will be completed during the course. Some of the areas of skill will include drawing, painting, design and sculpture. Students will gain valuable insight and experience in the world of art.

Fee: \$10.00

## FLORAL DESIGN

1 Credit            Grade 9-12

**Prerequisite:** None

Floral Design develops a student's ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. This Career and Technical Education class offers hands-on lab experiences for building skills as well as opportunities to sketch and evaluate designs. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills. To prepare for careers in floral design, students will also acquire technical knowledge and skills related to horticultural systems, career opportunities, entry requirements, and industry expectations.

## INTERIOR DESIGN

1 Credit            Grades 10-12

**Prerequisite:** Algebra I, English I

Interior Design is a technical course that addresses psychological, physiological and sociological needs of individuals by enhancing the environment in which they live and work. Individuals use knowledge and skills related to interior and exterior environments, construction, and furnishings to make wise consumer decisions, increase productivity, and compete in industry.

## INTERIOR DESIGN II

2 Credits            Grades 11-12

**Prerequisites:** English II, Geometry, and Interior Design I

Advanced Interior Design is a technical laboratory course that includes the knowledge of the employability characteristics, principles, processes, technologies, communication, tools, equipment, and materials related to interior spatial design.

# ARTS, A/V, TECHNOLOGY, & COMMUNICATIONS CAREER CLUSTER

## DIGITAL AUDIO TECHNOLOGY I

1 Credit          Grade 10-12

**Prerequisites:** BIM or Digital Media

Digital Audio Technology I provides learning experiences for students who are interested in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound, and additional opportunities and skill sets. Students will learn the theory and history of radio production as well the production processes involved in commercial production, scripting, news writing and reporting, audio editing, remote production, and radio programming.

## ANIMATION

1 credit          Grades 9 – 12

**Prerequisites:** None

This course is the study of all aspects of motion graphics. Professional communication strategies, information technology applications, career readiness skills, components of animation, sound editing and the various formats of media will be explored.

## AUDIO/VIDEO PRODUCTION I

1 Credit Grades 9-12

**Prerequisites:** BIM and Digital Audio Technology

**Requirements:** Application; signed releases (allowing students' works and likenesses to be shown to the public); and parental agreement to provide financial responsibility.

Activities and projects will include, but not be limited to: Multimedia presentations to be shown on Pirate TV, YouTube and other websites; presentations to be distributed by DVD and/or other portable media; Film Festivals and competitions; and direct experience with equipment, computers and software. Students will be expected to participate in Pirate Radio and on-camera in Pirate TV productions.

## AUDIO/VIDEO PRODUCTION II

1 Credit          Grades 10-12

**Prerequisites:** BIM, Audio/Video Production I

**Requirements:** Application; signed releases (allowing students' works and likenesses to be shown to the public); and parental agreement to provide financial responsibility.

Activities and projects will include, but not be limited to: Multimedia presentations to be shown on Pirate TV, YouTube and other websites; presentations to be distributed by DVD and/or other portable media; Film Festivals and competitions; and direct experience with equipment, computers and software. Students will be expected to participate in Pirate Radio and on-camera in Pirate TV productions. Additionally, students at this level will be required to write and produce video projects on a regular basis.

## **AUDIO/VIDEO PRODUCTION I/II LAB**

1 Credit            Grades 10-12

**Prerequisites:** BIM, Audio/Video Production I

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 industry with a focus on pre-production, production, and post-production audio and video products. Requiring a lab co-requisite for the course affords necessary time devoted specifically to the production and post-production process.

## **COMMERCIAL PHOTOGRAPHY**

1 Credit            Grades 10-12

**Prerequisites:** NONE

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing 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 commercial photography industry with a focus on creating quality photographs.

# **BUSINESS MANAGEMENT & ADMINISTRATION/FINANCE CAREER CLUSTER**

## **PRINCIPLES OF BUSINESS, MARKETING & FINANCE**

1 Credit      Grades 9-12

**Prerequisites:** none

Students are introduced to knowledge and skills of economics and private enterprise systems, impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles.

## **BUSINESS INFORMATION MANAGEMENT I (BIM 1)**

1 Credit      Grades 9-12

**Prerequisites:** None

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make successful transition to the workforce and post-secondary education. Students will apply technical skills through word-processing, spreadsheet, database, and electronic presentation software.

## **BUSINESS INFORMATION MANAGEMENT II (BIM II)**

1 Credit      Grades 11-12

**Prerequisites:** BIM I

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and post-secondary education. Students will apply complex technical skills through word-processing and spreadsheet, and developing electronic presentations using multimedia software.

## **ENTREPRENEURSHIP HONORS**

1 Credit      Grades 10-12

**Prerequisites:** Principles of Business, Marketing, Finance, BIM 2, Business Law

In Entrepreneurship, 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 will understand the capital required, the return on investment desired, and the potential for profit while they have hands-on experience coming up with a product to solve a problem, developing that idea, and presenting it to potential investors to make the product design a reality.

## **FINANCIAL MATHEMATICS**

1 Credit            Grades 11-12

Prerequisite: Algebra I

The mathematical process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

## **MONEY MATTERS**

1 Credit            Grades 11-12

Prerequisite: Principles of Business Marketing and Finance

In Money Matters, students will investigate money management 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. Students will examine various methods of achieving short-term and long-term financial goals through various methods such as investing, tax planning, asset allocating, risk management, retirement planning, and estate planning.

# EDUCATION AND TRAINING CLUSTER

## HUMAN GROWTH AND DEVELOPMENT

1 Credit      Grades 10-12

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.

## INSTRUCTIONAL PRACTICES

2 Credits      Grades 11-12

**Prerequisites:** 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 early childhood education 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.

## PRACTICUM IN EDUCATION AND TRAINING

2 Credits      Grades 11-12

**Prerequisites:** Two credits from Education Cluster

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators 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, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.



# HEALTH SCIENCE CAREER CLUSTER

## PRINCIPLES OF HEALTH SCIENCE

1 Credit      Grades 9 – 11

**Prerequisites:** None.

The Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment. *Students in the Health Science Endorsement pathway, may upon successful completion of this course, request for it to be used to satisfy the local health course requirement. The student is responsible for contacting their counselor to receive credit.* A \$5.00 lab fee may be assessed.

## MEDICAL TERMINOLOGY

1 Credit      Grades 9 – 12

**Prerequisites:** Principles of Health Science

This course provides students who are interested in a medical career the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

## HEALTH SCIENCE THEORY

1 Credit      Grades 10 – 12

**Prerequisites:** Principles of Health Science and Biology

The Health Science course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development. A \$5.00 lab fee may be assessed.

## HEALTH SCIENCE CLINICAL

2 Credits      Grades 10 – 12

**Prerequisites:** Principles of Health Science and Biology

The Health Science course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences at a local hospital for continued knowledge and skill development. A \$5.00 lab fee may be assessed.

# ANATOMY AND PHYSIOLOGY

1 Credit

Grade 12

**Prerequisites:** Three credits of science.

Anatomy and Physiology is an advanced level science class where students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis. A \$15.00 lab fee will be assessed.

# HOSPITALITY AND TOURISM / CULINARY ARTS CLUSTER

## INTRODUCTION TO CULINARY ARTS

1 Credit            Grades 9 – 12

**Prerequisites:**    None.

This laboratory course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, or high-demand human services careers. A \$10.00 lab fee will be assessed.

## CULINARY ARTS

2 Credits            Grades 11-12

**Prerequisites:**    Principles of Human Services and Lifetime Nutrition and Wellness

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification, a Texas culinary specialist certification, or any other appropriate industry certification. This course may be offered as a laboratory-based or internship course. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

## ADVANCED CULINARY ARTS

2 Credits            Grade 12

Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by infusing high-level, industry-driven content to prepare students for success in higher education, certifications and/or immediate employment.

## PRACTICUM IN CULINARY ARTS

2 Credits            Grade 12

**Prerequisites:**    Principles of Human Services, Culinary Arts and Advanced Culinary Arts

This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace

# **INFORMATION TECHNOLOGY CAREER CLUSTER**

## **DIGITAL MEDIA**

1 Credit            Grades 10-12

**Prerequisites:** BIM

Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and critical thinking and apply them to the information technology environment.

## **PRINCIPLES OF INFORMATION TECHNOLOGY**

1 Credit            Grades 9-10

Students develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

## **WEB TECHNOLOGIES**

1 Credit            Grades 10-12

**Prerequisites:** Principles of Information Technology.

Through the study of web technologies and design, students learn to make informed decisions and apply the decisions to the field of information technology. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and critical thinking and apply them to the information technology environment.

# JOURNALISM

## JOURNALISM I

½ - 1 Credit      Grades 9-12

**Prerequisites:** None

The course will be an overview of the field of journalism. Specifically, the student will study the history of the mass media, newspapers, news writing, newspaper layout, advertising, and public relations. The course will end with a study of newspaper production, magazine publications, photography, and broadcasting.

## NEWSPAPER PRODUCTION I, II, III

1 Credit              Grades 10-12

**Prerequisites:** Completed application, sponsor approval, and either success in Journalism I or English teacher recommendation.

This class is responsible for producing *THE PIRATE PRESS*, a monthly student newspaper. Students practice journalistic style of writing, computer research, layout and design, and advertising selling and design. This class is limited to 20 students and is recommended for responsible students who like to write. Some outside class time is required.

## YEARBOOK PRODUCTION I, II, III

½ - 1 Credit      Grades 10-12

**Prerequisites:** Yearbook sponsor approval. (Limited to 15 students)

This course offers practical experience in public relations, advertising, layout design, photography, writing copy, and other basic journalistic techniques required in yearbook production. Students will produce *THE PIRATE* and *LITTLE PIRATE* yearbooks.

# LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

## PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

1 Credit      Grades 9-12

**Prerequisites:** None

Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, protective services, corrections, firefighting, and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, protective services, and corrections.

## LAW ENFORCEMENT I

1 Credit      Grades 10-12

**Recommended Prerequisites:** Principles of Law, Public Safety, Corrections and Security

Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

## LAW ENFORCEMENT II

1 Credit      Grades 10-12

**Recommended Prerequisites:** Principles of Law, Public Safety, Corrections and Security, Law Enforcement I

Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. Students will understand ethical and legal responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony.

## FORENSIC SCIENCE

1 Credit      Grade 11 or 12

Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology and procedures related to the search and examination of physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students will also learn the history and the legal aspects as they relate to each discipline of forensic science.

# SCIENCE, TECHNOLOGY, MATH AND ENGINEERING CAREER CLUSTER

## PHYSICS

1 Credit      Grades 10-12

**Prerequisites:** Biology I, Algebra I

Physics is devoted to the study of matter using scientific probes and technology. The study of Physics is an investigation into the interaction of matter in a variety of energy fields. This lab/project based course explores the application of mathematical principles.

## PRINCIPLES OF APPLIED ENGINEERING

1 Credit      Grades 9-12

Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will understand the various fields and will be able to make informed decisions regarding a coherent sequence of subsequent courses. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

## ENGINEERING DESIGN AND PRESENTATION I

1 Credit      Grades 10-12

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.

## ENGINEERING DESIGN AND PROBLEM SOLVING

1 Credit      Grade 11-12

Engineering design is the creative process of solving problems by identifying needs and then devising solutions. Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems with real-world application. Students apply critical-thinking skills to justify a solution from multiple design options. Additionally, the course promotes interest in and understanding of career opportunities in engineering. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions.

# **ROBOTICS I**

1 Credit

Grade 12

In Robotics I, 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.



# CTE COURSES FOR ACADEMIC CREDIT

## PROFESSIONAL COMMUNICATIONS

½ Credit      Grades 9-12

**Prerequisites:** None.

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

## FINANCIAL MATHEMATICS

1 Credit      Grade 12

**Prerequisite:** Algebra I, Geometry and Algebra II

The mathematical process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

## FORENSIC SCIENCE

1 Credit      Grade 11 or 12

Forensic Science is a course that introduces students to the application of science to connect a violation of law to a specific criminal, criminal act, or behavior and victim. Students will learn terminology and procedures related to the search and examination of physical evidence in criminal cases as they are performed in a typical crime laboratory. Using scientific methods, students will collect and analyze evidence such as fingerprints, bodily fluids, hairs, fibers, paint, glass, and cartridge cases. Students will also learn the history and the legal aspects as they relate to each discipline of forensic science.

# ANATOMY AND PHYSIOLOGY

1 Credit            Grade 12

**Prerequisites:** Three credits of science.

Anatomy and Physiology is an advanced level science class where students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis. A \$15.00 lab fee will be assessed.

# BUSINESS INFORMATION MANAGEMENT I (BIM 1)

1 Credit            Grades 9-12

**Prerequisites:** None

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make successful transition to the workforce and post-secondary education. Students will apply technical skills through word-processing, spreadsheet, database, and electronic presentation software.

# FLORAL DESIGN

1 Credit            Grade 9-12

**Prerequisite:** None

Floral Design develops a student's ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. This Career and Technical Education class offers hands-on lab experiences for building skills as well as opportunities to sketch and evaluate designs. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills. To prepare for careers in floral design, students will also acquire technical knowledge and skills related to horticultural systems, career opportunities, entry requirements, and industry expectations.

# DIGITAL MEDIA

1 Credit            Grades 10-12

**Prerequisites:** BIM

Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a

technology-driven society. Students enhance reading, writing, computing, communication, and critical thinking and apply them to the information technology environment.

## **GENERAL EMPLOYABILITY SKILLS**

1 Credit          Grades 10-12

**Prerequisites:** BIM

This course will provide instruction in general employability skills as well as the pre-requisite skills for general employability. Employability skills are the skills and attitudes that allow employees to get along with their co-workers, make important work-related decisions and become strong members of the work team.