

# Sinton High School



*Course Description Guide*  
*2018-2019*



PLEASE REFER TO THE WEBSITE COPY FOR UPDATES:

<http://www.sintonisd.net/counselors/>

*(It is important, to be aware that, because, this material is published early in the preceding school year some changes in procedure, policy or course offerings may be required.)*

**SINTON I.S.D. DOES NOT DISCRIMINATE ON THE BASIS OF RACE, COLOR, NATIONAL ORIGIN, SEX, HANDICAP, OR LIMITED ENGLISH PROFICIENCY.**



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# Foundation Plan

**Graduation requirements for students entering 9th grade in 2014-2015 school year and thereafter. (EOC) indicates courses with required tests for graduation.**

Total Credits = 22	Languages Other Than English = 2 credits
English = 4 credits	Physical Education = 1 credit
Math = 3 credits	Fine Arts = 1 credit
Science = 3 credits	Speech and Health = 0.5 credit each
Social Studies = 3 credits	Electives = 4 credits

## Suggested Course Sequence

9th Grade	10th Grade
English I (EOC)	English II (EOC)
Algebra I (EOC) or Geometry	Geometry, Math Models, or Algebra II
World Geography or World History	World Geography or World History
IPC or Biology (EOC)	IPC, Biology, Chemistry, Physics, or Aquatic Science
Spanish I or ASL I	Spanish II or ASL II
PE, Marching Band, Athletics, Cheerleading, or Introductory CTE course	Endorsement or Elective course
Art, Band, Choir, Floral Design, or Introductory CTE course	Endorsement or Elective course
Speech and Health	Endorsement or Elective course
11th grade	12th Grade
English III	College Preparatory Course English Language Arts, English IV, Advanced Journalism: Yearbook III or AP Literature and Composition
Endorsement or Elective courses	Endorsement or Elective courses
Math Models, Algebra II, Precalculus	College Preparatory Mathematics, Algebra II, Precalculus, Calculus, Endorsement or Elective courses
Physics, Aquatic Science, Earth and Space Systems, AP Biology, Food Science, or Aquatic Science	Anatomy and Physiology, Advance Animal Science, or Food Science
U.S. History (EOC)	Government and Economics

# Endorsements

**In addition to the Foundation Plan students earn endorsements in Science, Technology, and Engineering (STEM), Business and Industry, Public Service, Arts and Humanities, Multidisciplinary Studies. The specific courses needed depends on the endorsement. The additional credits are as follows.**

<p>Total Credits = 26 credits</p> <p>22 credits earned from Foundation Plan + 4 credits</p>	<p>Languages Other Than English = 2 credits earned under the Foundation Plan</p> <p>Some endorsements require more than 2 credits</p>
<p>English = 4 credits earned under the Foundation Plan</p> <p>Some endorsements require more than 4 credits</p>	<p>Physical Education = 1 credit earned under the Foundation Plan</p>
<p>Math = 3 credits Foundation Plan + 1 credit from Algebra II, Precalculus, AP Calculus, College Preparatory Mathematics</p> <p>Some endorsements require more than 4 credits</p>	<p>Fine Arts = 1 credit earned under the Foundation Plan</p> <p>Some endorsements require more than 1 credit</p>
<p>Science = 3 credits from Foundation Plan + 1 credit from Chemistry, Physics, Aquatic Science, Earth and Space Science, Advanced Animal Science, Food Science, Anatomy and Physiology</p> <p>Some endorsements require more than 4 credits</p>	<p>Speech and Health = 0.5 credits earned for each course under the Foundation Plan</p>
<p>Social Studies = 3 credits earned under the Foundation Plan</p> <p>Some endorsements require more than 3 credits</p>	<p>Electives to total 26 credits</p>

# How to earn a Science, Technology, Engineering, and Math (STEM) Endorsement

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- ❑ Courses leading to Science, Technology, Math, Engineering (STEM) endorsements all require Algebra II, Chemistry and Physics in addition to the following courses
  - ❑ STEM endorsement with 5 science credits
    - ❑ Biology
    - ❑ Chemistry
    - ❑ Physics
    - ❑ two more science credits from Aquatic Science, Earth and Space Science, Advanced Animal Science, Food Science, Anatomy and Physiology
  - ❑ STEM endorsement with 5 math credits
    - ❑ Algebra I
    - ❑ Geometry
    - ❑ Algebra II
    - ❑ two more math credits from Precalculus, Independent Study in Mathematics, AP Calculus, Math College Prep
  - ❑ STEM endorsement in engineering
    - ❑ Introduction to Engineering Design
    - ❑ Civil Engineering and Architecture
    - ❑ Principles of Engineering
    - ❑ Engineering Design and Development
  - ❑ STEM endorsement agricultural engineering
    - ❑ Introduction to Engineering Design and Principles of Agriculture, Food, and Natural Resources
    - ❑ Civil Engineering and Architecture and/or Agricultural Mechanics and Metal Technologies
    - ❑ Agricultural Power Systems
    - ❑ Principles of Engineering and/or Engineering Design and Development



# How to earn a Business and Industry Endorsement

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- ❑ To obtain an endorsement with Career and Technical Education (CTE) courses, a coherent sequence of courses for four or more credits in CTE must be completed using the following guidelines

**Requirement 1** - at least two courses in the same career cluster listed and

**Requirement 2** - at least one advanced course in a career cluster and

**Requirement 3** - the final course must be selected from career clusters below

- ❑ Agriculture, Food, and Natural Resources
  - ❑ Principles of Agriculture, Food and Natural Resources
  - ❑ Floral Design
  - ❑ Livestock Production
  - ❑ Wildlife, Fisheries and Ecology Management
  - ❑ Agricultural Mechanics and Metal Technologies
    - ❑ Advanced Courses
      - ❑ Veterinary Medical Applications
      - ❑ Advanced Animal Science
      - ❑ Agricultural Power Systems
      - ❑ Practicum in Agriculture, Food, and Natural Resources
- ❑ Business Management and Administration
  - ❑ Principles of Business, Marketing & Finance
    - ❑ Advanced Courses
      - ❑ Business Information Management
      - ❑ Business Information Management II
      - ❑ Practicum in Business Management
- ❑ Hospitality and Tourism
  - ❑ Principles of Hospitality and Tourism
  - ❑ Intro to Culinary Arts
  - ❑ Restaurant Management
    - ❑ Advanced Courses
      - ❑ Culinary Arts
      - ❑ Practicum in Culinary Arts I and II
      - ❑ Food Science

- Manufacturing
  - Welding
    - Advanced Course - Advanced Welding
  
- Four English elective credits by selecting three levels in one of the following areas
  - Advanced Broadcast Journalism I, II, III
  - Advanced Journalism: Yearbook I, II, and III

# How to earn an endorsement in Arts and Humanities

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- ❑ Course leading to an Arts and Humanities endorsements\*
  - ❑ Five social studies credits (total credits must equal 5)
    - ❑ World Geography (1 credit)
    - ❑ World History (1 credit)
    - ❑ U.S. History or Dual Credit U.S. History 1302 (1 credit)
    - ❑ Government or Dual Credit Government (0.5 credits)
    - ❑ Economics or Dual Credit Economics (0.5 credits)
    - ❑ additional credits to total five credits from Dual Credit U.S. History 1301 (0.5 credits), Dual Credit Psychology (0.5 credits), Dual Credit Sociology (0.5 credits)
  - ❑ Four credits in a language other than English
    - ❑ American Sign Language I and II
    - ❑ Spanish I and II
  - ❑ Four Fine Arts credits
    - ❑ Art I, II, III, and IV
    - ❑ Band I, II, III, and IV
    - ❑ Choir I, II, III, and IV
  - ❑ Four English credits by selecting from the following
    - ❑ English IV
    - ❑ Independent Study in English
    - ❑ Humanities
    - ❑ AP English Literature and Composition

\*With parental permission, a student can substitute an English Language Arts, Social Studies, Languages other Than English, or Fine Arts for the fourth science credit if not being used to satisfy a specific graduation requirement.

# How to earn a Multidisciplinary Endorsement

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- Courses leading to Multidisciplinary Studies endorsements
  - Four advanced credits from one endorsement area or among endorsement areas
  - Four credits in each of the four foundation areas of
    - English to include English IV
    - Mathematics
    - Science to include Chemistry and/or Physics
    - Social Studies
  - Four credits in advanced placement or dual credit selected from
    - English
    - Mathematics
    - Science
    - Social Studies/Economics
    - Languages other than English
    - Fine arts

# Distinguished Level of Achievement

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- ❑ Must be achieved to be eligible for top 10% automatic admission, by successfully completing:
  - ❑ a total of four credits in mathematics, which must include Algebra II
  - ❑ a total of four credits in science
  - ❑ the remaining curriculum requirements for the Foundation Plan
  - ❑ the curriculum requirements for at least one endorsement

# Performance Acknowledgements

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- ❑ Can be earned in for exemplary performance in
  - ❑ dual credit coursework
  - ❑ bilingualism and biliteracy
  - ❑ AP tests
  - ❑ in PSAT, the ACT-Plan, the SAT, or the ACT
  - ❑ for earning a nationally or internationally recognized business or industry certification or license

## ADDITIONAL INFORMATION

### **COLLEGE DAYS**






Two excused absences for college visits are provided for juniors and seniors to visit college campuses. The only college days that will be approved are those arranged in advance through the counselor's' office. Those students that are approved must secure a college day card from the counselor's' office, which must be presented to, and signed by a college representative. These cards are to be returned to the attendance clerk when returning to school the next day. Approved, documented college days do not count against a student for perfect attendance.

### **DUAL CREDIT (Online Instruction)**

Sinton ISD, in conjunction with the Texas Virtual School Network (TxVSN), Del Mar College, and other institutions of higher education will provide online, high school dual credit courses to students that meet the eligibility requirements. Many of the credits earned through this program are transferable to any state university in Texas. These credits are also accepted at many other private and out of state institutions. Students must meet with their counselor for current eligibility requirements. If students do not complete the course and/or pass with a 70, parents, guardians and student will be responsible for paying for the full cost of the course and books.

Not all Del Mar courses can be taken for high school credit. Therefore, all Del Mar courses require the review of the content area department, counselor, and curriculum director for coverage of Texas Essentials of Knowledge and Skills.

**The following forms must be completed and forwarded to the appropriate institution of higher education by the due date:**

-  **Apply to Del Mar College - Apply Texas**
-  **A Del Mar College registration form signed by student, parent, and counselor**
-  **A dual credit contract must be signed by student & parent; must also be notarized**
-  **Updated shot record - meningitis vaccine needs to be current**
-  **High school transcript**

### **EARLY GRADUATION**

Students wishing to complete high school at the end of any semester earlier than the spring semester of their fourth year of high school enrollment must have permission of their parents. The principal must be notified in writing by the parents one semester prior to the semester in which the student plans to finish coursework. The student must fulfill all requirements for graduation. Early graduation students will not be eligible for Valedictorian, Salutatorian or Honor Student. Students graduating early, who wish to participate in the graduation ceremony at the close of the spring semester, must notify the principal in writing no later than the beginning of the semester in which the ceremony is held.

### **EXAMINATION FOR CREDIT**

In accordance with board policy EHDC, students may use a Texas Tech University or University of Texas exam to gain credit for a subject or class in which the student has not received prior instruction. The student must score at least 80 on this examination in order to receive credit for the course. Grades earned from these examinations do not receive grade points. If a student plans to take an exam, the student (or parent) must register with the principal no later than 30 days prior to one of the four designated testing dates. With 30 days' notice, the District will honor a request by a parent to administer a test on a date other than the published dates

A student in any grade may use a state-approved examination to gain credit for a subject or class in which the student has received prior instruction. The student must score at least 70 on this examination in order to receive credit for the course. Grades earned from these examinations do not receive grade points. [For further information, see Local EIC].

## GRADE CLASSIFICATION

The grade level, or classification, of student depends upon the number of credits the student has earned. Classification is made on the following basis:

0 – 6.0	credits and promotion from middle school	= freshman	( 9 <sup>th</sup> )
6.5 – 12.5	credits and one year of attendance	= sophomore	(10 <sup>th</sup> )
13 – 19	credits and two years of attendance	= junior	(11 <sup>th</sup> )
19.5 or more	credits and three years of attendance or an approved early graduation plan	= senior	(12 <sup>th</sup> )

Grade classification is determined once a year prior to the beginning of school. Classification at the beginning of the school year is a student's classification for the entire year on official records with the exception of fourth year students classified as juniors. At midterm, those juniors who are candidates for the current year graduation will be reclassified as seniors and ranked accordingly provided they have at least 19.5 state credits.

## GRADING SCALE

- A 100-90
- B 89-80
- C 79-70
- F 69-0

## GRADUATION

The valedictorian, salutatorian, and honors graduates shall be students with the highest, second highest, and third highest ranking, as determined by the District's class-ranking procedure described in this policy and who complete the Recommended Program or the Distinguished Achievement Program. To be eligible for valedictorian, salutatorian, or honors graduate, a student must have been continuously enrolled in the District school for their entire junior and senior year. [For further information, see EIC].

## COLLEGE ADMISSION TESTS

Most colleges require an admissions test. The most common admission tests are the Texas Success Initiative (TSI), the American College Test (ACT) or the Scholastic Aptitude Test (SAT). Students must talk with the counselor during their sophomore or junior year to determine the appropriate exam to take. Sinton High School offers the ACT test on campus in **April**. Students that qualify for a "fee waiver" can apply it for this test.

## SCHEDULE CHANGES

To receive credit in a class, a student must attend at least 90% of the days the class is offered; therefore, schedule changes will be received up to and no later than the ninth day from the first day of each semester. The following steps should be taken:



- Pick up a schedule change form from the counselors' office**
- Fill out the information requested**
- Have your parent sign the change form**
- The teacher, coach or sponsor involved must also sign the change form**
- Return the change form to the counselors' office**

**Not all changes can be granted.** Availability of classes, class size and reason for the change are factors, which will be considered in granting these requests.

# ENGLISH LANGUAGE ARTS

(4 credits needed for the Foundation Plan)

## **ENGLISH I (Foundation Plan, required EOC)**

Grade Placement: 9

1 Credit

This course covers communication in reading, writing, speaking and listening. Students will study the various genres of literature, including short stories, novels, nonfiction prose, drama, and poetry. A major component of the English I curriculum is preparation for the End Of Course test administered in April each year. Students will begin a four-year vocabulary development program designed to strengthen skills and prepare students for college entrance exams. Students will develop stronger composition skills through the study of process writing, grammar, and a focus on mechanical skills.

## **ENGLISH I PRE-AP (Foundation Plan, required EOC)**

Grade Placement: 9 (weighted)

1 Credit

*Prerequisite: 8<sup>th</sup> Gr. Reading Teacher recommendation/signature; 65% correct on 8<sup>th</sup> Grade STAAR Reading*

This is an accelerated, literature-based curriculum. Students will study the various genres of literature, including short stories, novels, biography, autobiography, drama, and poetry. Skills emphasized include independent reading and study, higher level thinking skills, and research skills. This course requires extensive out-of-class reading, writing, and preparation time. This course will serve the needs of the Gifted and Talented students and will prepare students for the Dual Credit classes taken during their junior and senior years.

## **ENGLISH II (Foundation Plan, required EOC)**

Grade Placement: 10

1 Credit

This course covers communication in reading, writing, speaking and listening. A major component of English II is developing strong composition skills through the study of process writing in preparation for the English Language Arts End of Course test given in April each year. Students will study the various genres of literature, including short stories, novels, non fiction essays, drama, and poetry. Students will continue the four-year vocabulary development program designed to strengthen skills and prepare students for college entrance exams.

## **ENGLISH II PRE-AP (Foundation Plan, required EOC)**

Grade Placement: 10 (weighted)

1 Credit

*Prerequisite: English I Pre-AP/9<sup>th</sup> Gr. English teacher recommendation/signature; 65% correct on EOC ELA 1*

This is an accelerated, literature-based curriculum. Students will study the various genres of literature and read extensively in novels, short stories, poetry, drama, biography, and autobiography. Students will engage in independent reading and study, higher level thinking skills, and research skills. This course requires extensive out-of-class reading, writing, and preparation time. Students will write multiple expository, persuasive and argumentative essays. In this class, students are preparing for the Advanced Placement exams and Dual Credit classes taken during their junior and senior years. Summer reading is required. This course will serve the needs of Gifted and Talented students.

## **ENGLISH III (Foundation Plan)**

Grade Placement: 11

1 Credit

This course covers organized communication in the following strands: reading, where students read and understand a wide variety of literary and informational texts; writing, where students compose a variety of written texts with a clear controlling idea, coherent organization, and sufficient detail; research, where students are expected to know how to locate a range of relevant sources and evaluate, synthesize, and present ideas and information; listening and speaking, where students listen and respond to the ideas of others while contributing their own ideas in conversations and in groups; and oral and written conventions, where students learn how to use the oral and written conventions of the English language in speaking and writing. The course also focuses on the continuation of the four-year vocabulary development program designed to prepare students for college entrance exams.



**ENGLISH III AP LANGUAGE AND COMPOSITION (Foundation Plan)**

Grade Placement: 11 (weighted)

1 Credit

*Prerequisite: English I and II Pre-AP, 65% correct on EOC ELA 1 and 2*

This advanced placement class will emphasize college level analysis and composition skills in preparation for taking the College Board Advanced Placement test in Language and Composition offered by the College Board in May of each year. The course content includes the rhetorical analysis of prose passages from a variety of sources, with an emphasis on fiction, nonfiction, drama, and poetry written by American authors. Students will study rhetorical devices, language usage, and genre conventions. Students will write expository, argumentative, and synthesis essays in preparation for the AP test. This course requires extensive out-of-class reading, writing, and preparation time. Summer reading is required. This course will serve the needs of Gifted and Talented students.

**ENGLISH IV**

Grade Placement: 12

1 Credit

This course covers organized communication in the following strands: reading a wide variety of literary and informational texts; writing at the essay level using a clear controlling idea, coherent organization, sufficient detail, and the written conventions of the English language; listening and responding orally to the ideas of others while contributing their own ideas in conversations and in groups; and research using relevant sources and synthesizing and presenting ideas and information. This course is designed to prepare students for higher education either at a community college, a four-year university, or a technical school. During the first semester, students will complete college applications, prepare for college entrance exams, write several essays, prepare a resume, and write an MLA-formatted research paper focused on college and/or careers. The second semester of English IV is a survey of the major periods and works of British Literature. Students will study the history of the English language and continue the vocabulary development program designed to strengthen skills and prepare students for college entrance exams.

**ENGL 1301: COMPOSITION I (Dual Credit taught on campus by SHS Staff)**

Grade placement: 11 or 12 (weighted)

½ Credit

First semester of English III credit. 3 hours of college credit.

*Prerequisite: English II Pre- AP or AP English III (85 or above); 65% correct on English EOC I and II; Meet entrance requirements for Del Mar College (Assessment Levels: R3, E3, M0); Complete Del Mar College Application.*

This course provides students with an intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. The course places an emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. The course focuses on writing the multi page academic essay as a vehicle for learning, communicating, and critical analysis. In order to meet English III TEKS, the course also focuses on a study of American literature.

**ENGL 1302: COMPOSITION II (Dual Credit taught on campus by SHS Staff)**

Grade placement: 11 or 12 (weighted)

½ Credit

Second semester of English III credit. 3 hours of college credit.

*Prerequisite: Successful completion of ENGL 1301; Complete Del Mar application; Meet Del Mar College Assessment Levels: R3, E3, M0.*

This course is a continuation of ENGL 1301. This course provides students with an intensive study of and practice in strategies and techniques for developing research-based expository and persuasive texts. The course places an emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; the critical reading of verbal, visual, and multimedia texts; the systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. In order to meet English III TEKS, the course also focuses on a study of American literature.

## **ENGLISH IV AP LITERATURE & COMPOSITION**

Grade Placement: 12 (weighted)

1 Credit

*Prerequisite: 11th Gr. English teacher/signature; 65% correct on EOC ELA 1 and 2*

This advanced placement class will emphasize college level analysis and composition skills in preparation for taking the College Board Advanced Placement test in Literature and Composition offered by the College Board in May of each year. The course content will include a survey of British and World literature from various time periods. Students will write literary analytical and argumentative essays in preparation for the AP test. This course requires extensive out-of-class reading, writing, and preparation time. Summer reading is required. This course will serve the needs of Gifted and Talented students.

## **COLLEGE PREPARATORY COURSE ENGLISH LANGUAGE ARTS**

Grade Placement: 12

1 Credit

*Prerequisite: English III*

This course is designed to prepare students for college-level courses. As such, students will learn to apply critical reading strategies for organizing, summarizing, analyzing, and evaluating college-level readings. Students will also learn to write effective, logical essays, utilizing textual support to develop reading comprehension strategies, and to analyze, synthesize, and make value judgments using critical thinking.

This course will be taught in two semesters (one academic year). To successfully pass this course, students must earn an average grade of 70 or higher (100-point scale). To achieve this grade, students must score a 70 or higher on the three required essays and each reading competency exam. Students will have multiple opportunities to achieve these measures throughout the course. Students who successfully pass may use this course to satisfy their high school curriculum Advanced English Language Arts component and will be exempt from the Texas Success Initiative (TSI) at any partnering institution, including Del Mar College, Coastal Bend College, TAMU-CC and TAMU-K.

## **ENGL 2332: WORLD LITERATURE I (Dual Credit taught on campus by SHS Staff)**

Grade Placement: 12 (weighted)

½ Credit

First semester of English IV credit. 3 hours of college credit.

This course will be taught in the fall semester.

*Prerequisite: Successful completion of ENGL 1301 and 1302 (complete Del Mar application; meet Del Mar College assessment levels R3, E3, M0)*

This course focuses on a survey of world masterpieces from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Attention is given to writing about literature. Students will read extensively and write multipage research-based literary analysis essays, documenting both primary and secondary sources.

TSI Assessment Levels: R3, E3, M0

## **ENGL 2322: BRITISH LITERATURE I (Dual Credit taught on campus by SHS Staff)**

Grade Placement: 12 (weighted)

½ Credit

Second semester of English IV credit. 3 hours of college credit.

This course will be taught in the spring semester.

*Prerequisite: Successful completion of ENGL 1301 and 1302; complete Del Mar application; meet Del Mar College assessment levels R3, E3, M1).*

This course focuses on a survey of the development of British literature from the Anglo-Saxon period to the eighteenth century. Students will study works of prose, poetry, drama and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Students will read extensively and write multipage research-based literary analysis essays, documenting both primary and secondary sources.

TSI Assessment Levels: R3, E3, M0

**READING I, II, III**

Grade Placement: 9-12

½ - 3 Credits

Reading I, II, III offers students reading instruction to successfully navigate academic demands as well as attain lifelong literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All of these strategies are applied in instructional-level and independent-level texts that cross the content areas. For high school students whose first language is not English, the students' native language serves as a foundation for English language acquisition and language learning.

**ENGLISH EOC**

Grade Placement: 10-12

½ - 1 Credit (local)

English EOC is a fast-paced course with a high emphasis on both English and testing strategies. This course is designed to allow the student to focus and analyze on their weaknesses in English, and then create a plan of attack to address these areas.

**ENGLISH I ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for English I and determined by the ARD committee to be a suitable substitute for English I.

**ENGLISH II ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for English II and determined by the ARD committee to be a suitable substitute for English II.

**ENGLISH III ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for English III and determined by the ARD committee to be a suitable substitute for English III.

**ENGLISH IV ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for English IV and determined by the ARD committee to be a suitable substitute for English IV.

**ENGLISH V ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course to develop or improve written communication skills. English elective as determined by ARD.

## ENGLISH LANGUAGE ARTS ELECTIVES

### **JOURNALISM**

Grade Placement: 9-12 (**fall semester only**)

**Maximum students = 22**

½ Credit

Students enrolled in Journalism write in a variety of forms for a variety of audiences and purposes. They are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. Writing, technology, visual, and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Journalism will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principles of traditional and electronic publishing. This semester-long course is a prerequisite for Advanced Journalism and must be taken with photojournalism.

### **PHOTOJOURNALISM**

Grade Placement: 9-12 (**spring semester only**)

**Maximum students = 22**

½ Credit

*Prerequisite: Must be enrolled in Journalism during the fall semester.*

The course will cover camera use and care, camera techniques, photo composition, and the appropriate use of Adobe Photoshop to prepare images for publication and personal portfolios. Students enrolled in Photojournalism communicate in a variety of forms for a variety of audiences and purposes and are expected to plan, interpret, and critique visual representations, carefully examining their product for publication. Students will become analytical consumers of media and technology to enhance their communication skills. Students will study the laws and ethical considerations that impact photography. Technology, visual, and electronic media are used as tools for learning as students create, clarify, critique, and produce effective visual representations. This semester-long course is a prerequisite for Advanced Journalism and must be taken with journalism.

### **ADVANCED JOURNALISM: YEARBOOK I, II & III**

Grade Placement: 10-12

1 Credit

*Prerequisite: Journalism & Photojournalism OR Principles of Arts, A/V Technology and Communications, and approval by adviser.*

Students enrolled in Advanced Journalism: Yearbook I, II & III communicate in a variety of forms for a variety of audiences and purposes. Students are expected to plan, draft, and complete written and/or visual communications on a regular basis, carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics of written English. In Advanced Journalism: Yearbook I, II & III, students are expected to become analytical consumers of media and technology to enhance their communication skills. In addition, students will learn journalistic ethics and standards. Writing, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Advanced Journalism: Yearbook I, II & III will refine and enhance their journalistic skills, research self-selected topics, and plan, organize, and prepare a project(s). In addition to planning and producing the Yearbook, Advanced Journalism students will also plan and produce a newsletter and an online newspaper.

### **ADVANCED BROADCAST JOURNALISM I, II & III**

Grade Placement: 10-12

1 Credit each

*Prerequisite: Journalism, Photojournalism, and approval by adviser.*

Students enrolled in Advanced Broadcast Journalism will apply and use their journalistic skills for a variety of purposes. Students will learn the laws and ethical considerations that affect broadcast journalism; learn the role and function of broadcast journalism; critique and analyze the significance of visual representations; and learn to produce by creating a broadcast journalism product. They will explore advanced elements of radio and television broadcasting. Those enrolled will videotape school activities. Students will learn advanced techniques in audio and video recording. Students will also become proficient in video editing. Students may also be required to do outside of school videotaping of school events using the school's equipment.

**DEBATE I, II, III**

Grade Placement: 10-12

1 Credit each

*Prerequisite: Approval by adviser*

Gaining a general understanding of the major forms of debate, studying logic and reasoning and learning to prepare and present actual debates, oratories, and extemporaneous speeches, are the objectives of this course in argumentation. Participation in competitive speech and debate events is encouraged for this class. Debate II-III build on the fundamentals and continue to develop speech and debate skills. Students must have the recommendation of the debate teacher to enroll in levels II and III. Courses must be taken in sequence.

**FUTURE PROBLEM SOLVING**

Grade Placement: 9-12 (weighted)

1 Credit

*Prerequisite: Must have passed previous STAAR or EOC English/Language Arts Test; English Instructor signature*

Future Problem Solving, a class geared for gifted/talented students, focuses on possible problems of the future and involves preparation for competition in the Texas Future Problem Solving Program. Students will research several global issues facing society today and will use the **6-step creative problem solving model** to solve different problems set in the future related to those topics. Students may also read and write futuristic short stories based on the FPS topics. This is an English Language Arts elective credit and is **reading, researching, and writing intensive**. Students will earn credit for Research and Technical Writing for FPS I; Practical Writing for FPS II; Independent Study in English for FPS III; and College Readiness and Study Skills for FPS IV.

## FINE ARTS

**(1 credit needed for the Foundation Plan)**

### **ART I (Foundation Plan)**

Grade Placement: 9-12

1 Credit

*Prerequisite: Teacher recommendation/signature*

Art I will provide a foundation in four strands: perception; creative expression/ performance; historical/ cultural heritage; and critical evaluation. Art I provides opportunities in two and three dimensional processes including drawing, painting, printmaking, and sculpture. The Art I student will work from direct observation as well as their imagination. Sketch journals will be used in and out of class for concept notes, sketching and brainstorming. Art I also provides a broad overview of significant artists, styles and periods in art. Students will learn to use critical analysis by discussing and writing about art works of self and others. Students will also use criteria for evaluation of traditional and contemporary styles and periods in art. *Fall semester should be taken prior to the spring semester.*

### **DRAWING I, II, III**

Grade Placement: 10-12

1 Credit

*Prerequisite: One credit of Art I for Drawing I, and previous level of Drawing for higher levels and Teacher recommendation/signature for all levels*

Drawing II, III, IV a student will continue developing drawing skills by the processes of observing, analyzing, interpreting visual references through practice. The student will use sketchbooks and journals to create exploratory studies and to process ideas; study structure in anatomy, organic and mechanical systems; Art II students will use purposeful decision-making to manipulate design concepts; and use a variety of drawing mediums. Students will study the impact of significant artists, discusses and write about the artworks of self and others. Student will use criteria for evaluation of traditional and contemporary styles Students will use specific criteria to select and collect artworks for a portfolios and student exhibitions.

### **PAINTING I, II, III**

Grade Placement: 10-12

1 Credit

*Prerequisite: One credit of Art I for Painting I, and previous level of Painting for higher levels and Teacher recommendation/signature for all levels*

Painting students will use a variety of painting mediums to create works in a wide range of subjects including still lifes, landscapes, portraits and conceptual paintings; uses sketchbooks and journals to create exploratory studies and to process ideas; uses purposeful decision making to manipulate design concepts and ideas. Students will study the impact of significant painters discuss and write about the artworks of self and others. Painting students cultivate critical analysis by discussing and compares criteria for evaluation of traditional and contemporary styles; emphasizes collaboration and use specific criteria to select and collect works for a portfolio and exhibition.

### **SCULPTURE I, II, III**

Grade Placement: 10-12

1 Credit

*Prerequisite: One credit of Art I for Sculpture I, and previous level of Sculpture for higher levels and Teacher recommendation/signature for all levels*

The specific objectives of this course are to expose the student to a variety of materials and techniques that can be applied to sculpture. Students will be introduced to the styles and concepts of both past and contemporary three-dimensional work. The development of aesthetic ideals and concepts in application to the student's work will be stressed. Sketchbook ideas will be developed for use in artwork. The ability to self-criticize and verbalize about one's art and to understand criticism by others will also be stressed. Students will work in a variety of medium such as; paper, foam, wire wood, plaster, and found objects. This class will be limited to 20 students maximum. Students will be asked to furnish some supplies.

**STUDIO PORTFOLIO AP**

Grade Placement: 11-12 (weighted)

1 Credit

*Prerequisite: One credit of Art I or Art I Pre-AP; one credit of Drawing II, Painting II or Pre-AP II; Teacher recommendation/signature and portfolio review - student must be enrolled in 2 art classes.*

AP provides opportunities for the capable and highly motivated student to prepare a series of artworks employing a wide range of materials and methods and to demonstrate their ability to work on a wide range of problems. Work will be in the areas of color, design & drawing techniques, and a series of artworks concerning a selected concept. Class requires independent research and commitment to producing a large number of quality works both in and out of the classroom. AP emphasizes the preparation of a portfolio for critical review and for application to the College Board of college credit. Prepares the student for scholarship applications and for a career in the visual arts. All AP students are required to submit an AP portfolio.

**THEATRE ARTS I (Foundation Plan)**

Grade Placement: 9-12

1 Credit

This class provides an introduction to the fundamentals of acting. Emphasis is on performance, and every Theatre I student will participate in the cast or crew of the 2016 Fall Production. Students will also participate in Children's Theatre, Holiday-related programs and UIL contest preparations. Involvement with live performances helps build teamwork, problem-solving skills and social manners.

**THEATRE ARTS II-IV**

Grade Placement: 10-12

1 Credit

*Prerequisite: Theatre I and teacher recommendation/signature*

These classes tackle more complicated material through scene, monologue, prose and poetry studies. Advanced students will also participate in the 2016 Fall Production. Some evening or weekend performances may be required.

**THEATER PRODUCTION I-IV**

Grade Placement: 10- 12

1 Credit

*Prerequisite: Theatre I and teacher recommendation/signature*

Along with participation in the Fall Production, prose & poetry events, this class will be cast & crew for the Spring Contest Production; as well as one or more Speech Tournaments, and in the UIL (University Interscholastic League) Academic Tournament. More than any other class, Theater Production focuses on ALL aspects of the Production process. Rehearsal attendance at school and after-school rehearsals is required. Attendance at all school, after-school, and contest performances is mandatory. Students will travel to other schools, load & unload sets, set-up & strike all stage areas, maintain costumes & makeup, attend after-school rehearsals, and ultimately run the show backstage when the Director is not there. It is intense & highly rewarding.

**CHOIR I (Varsity Girls)****CHOIR II****CHOIR III****CHOIR IV**

1 Credit

*\*Prerequisite: Permission of Director.*

This is a year-long course offered to female students as continuation in the choral sequence. The core curriculum is a deeper exploration of vocal technique, music theory, and music history through the study of a wide variety of choral music written for WOMEN's voices. Students in Treble Chorus are expected to participate in one evening concert each quarter as a major part of their grade. Performances at UIL are auditioned and TMEA/local competitions are encouraged. Students enrolled in this course will demonstrate an understanding of choral music as performer, critic, and consumer.

**CHOIR I (Men's Chorus)      CHOIR II      CHOIR III      CHOIR IV** 1 Credit

*\*Prerequisite: Permission of Director.*

This is a year-long course offered to Male students as continuation in the choral sequence. The core curriculum is a deeper exploration of vocal technique, music theory, and music history through the study of a wide variety of choral music written for MEN's voices. Students in TENOR-BASS Chorus are expected to participate in one evening concert each quarter as a major part of their grade. Performances at UIL are auditioned and TMEA/local competitions are encouraged. Students enrolled in this course will demonstrate an understanding of choral music as performer, critic, and consumer.

**BAND I      BAND II      BAND III      BAND IV** ½ - 1 Credit

Grade Placement: 9-12

*Prerequisite: Director's signature required.*

Instrumental music instruction is the primary purpose of Band I-IV. Full band rehearsals are supplemented by technical instructions, marching drills, winter guard competition and concert performances. Participation in band is designed to develop leadership and responsibility cooperation, self-discipline, diligence and cultural awareness.

**MARIACHI ENSEMBLE I-IV**

Grade Placement: 9-12

½ - 1 Credit

*Prerequisite: Band Director's signature*

This course is for students wanting to learn the fundamentals of Mariachi music performance.

**STAGE BAND I-II**

Grade Placement: 9-12

½ - 1 Credit

*Prerequisite: Band Director's signature*

Stage band is the study and performance of the development of jazz and its various styles.

**APPLIED MUSIC/BAND**

Grade Placement: 9-12

½ - 1 Credit

*Prerequisite: Band Director's signature*

This course is for students wanting to receive individual instrumental lessons.

**RECREATION & LEISURE**

Grade Placement: 9-10

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course to address fine arts and speech (functional language skills) incorporated into an instructional program to develop or increase the ability to constructively use leisure time. By ARD determination only.



## HEALTH

**(0.5 credits needed for the Foundation Plan)**

### **HEALTH**

Grade Placement: 9-12 (Fall or Spring)

½ Credit

The primary objectives of the health program are to provide opportunities for the student to acquire facts, develop proper attitudes and establish practices and habits that will contribute to personal and community health.

### **PERSONAL HEALTH & HYGIENE**

Grade Placement: 9 - 13

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course that addresses basic skills necessary to maintain health and hygiene and determined by ARD committee to be a suitable substitute for Health.

## SPEECH

(0.5 credits needed for the Foundation Plan)

### **PROFESSIONAL COMMUNICATIONS**

*½ Credit*

*Grade Placement: 9-12*

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.

### **COMMUNITY SKILLS**

*Grade Placement: 12*

*Prerequisite: Eligible for LIFE placement/program by ARD.*

Coursework addresses speech (functional language skills) requirements that can be incorporated into a student's instructional program to develop or increase the ability to constructively communicate. This course is determined by ARD committee to be a suitable substitute for Communications Applications.

## LANGUAGES OTHER THAN ENGLISH

**(2 credits needed for the Foundation Plan)**

### **SPANISH I (Foundation Plan)**

Grade Placement: 9-12

1 Credit

This is an entry level course designed for the development of the four language skills: listening, speaking, reading and writing with emphasis on oral proficiency and an understanding of Hispanic culture.

### **SPANISH II (Foundation Plan)**

Grade Placement: 9-12

1 Credit

*Prerequisite: Spanish I*

Spanish II extends language competency in a proficiency-oriented curriculum through listening, speaking, reading, and writing. This course reviews and refines grammatical concepts and extends student knowledge of the culture and civilization associated with the Spanish language.

### **SPANISH III PRE-AP**

Grade Placement: 11-12 (weighted)

1 Credit

*Prerequisite: Spanish II; Teacher recommendation/signature.*

Spanish III Pre-A.P. promotes student understanding of the Spanish language at the intermediate proficiency level while sustaining more complex oral and written exchanges. Students are expected to read, write, present and interpret through the study of various themes. The students will continue their study of the culture and influences of the Spanish speaking countries as a way to gain an understanding of its people and language.

### **AP SPANISH IV**

Grade placement 11-12 (weighted)

1 Credit

*Prerequisite: Spanish III Pre-AP and Teacher recommendation/signature*

AP Spanish is designed to provide advanced high school students with a rich and rigorous opportunity to study the language and culture of the Spanish speaking world. This course is offered for the more highly motivated student who will commit the time to the study of the language in order to communicate at a more complex level through these forms of communication: interpersonal, presentational and interpretive. This course follows the AP curriculum and is the equivalent of an intermediate college or university Spanish course.

### **AMERICAN SIGN LANGUAGE I (Foundation Plan)**

Grade Placement: 9-12

1 Credit

This entry level course is designed for proficiency in the development of manual communication, deaf culture, deaf connections, as well as the comparisons within the communities involving the Deaf and Hearing worlds. In addition to the above, students are required to attend two contact events as part of the course.

### **AMERICAN SIGN LANGUAGE II (Foundation Plan)**

Grade Placement: 10-12

1 Credit

*Prerequisite: American Sign Language I*

This course extends the foundation that began in ASL I; focusing on communication, deaf culture and connections to real-world applications. Improving skills in expressive and receptive signing, new vocabulary and having a greater understanding of the grammar and nuances of the language of ASL as used by the Deaf Community. In addition to the above, students are required to attend two contact events as part of the course. At the end of this course, students have the opportunity to articulate their foreign language credit through Del Mar College.

**AMERICAN SIGN LANGUAGE III**

Grade Placement: 11-12 (weighted)

1 Credit

*Prerequisite: American Sign Language II Teacher recommendation/signature.*

ASL III provides advanced high school students with a rich and rigorous opportunity to study American Sign Language and its culture within the Deaf world. In a combination lecture/lab setting, with interactive explanations/modeling of the syntax, grammar and concepts of the language of Signs, students will develop their use of expressive/receptive skills with additional vocabulary, improve speed, fluency, and accuracy, incorporate more NMS (non manual signals) with signs. In addition to the above, students are required to attend two contact events as part of the course.

**COMMUNITY SKILLS**

Grade Placement: 9-11

*Prerequisite: Eligible for LIFE placement/program by ARD.*

Coursework addresses speech (functional language skills) requirements that can be incorporated into a student's instructional program to develop or increase the ability to constructively communicate. This course is determined by ARD committee to be a suitable substitute for Language Other Than English requirement.

**MATHEMATICS****(3 credits needed for the Foundation Plan)****ALGEBRA I (Foundation Plan)**

Grade Placement: 9

1 Credit

*Prerequisite: Mathematics, Grade 8*

In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations. Throughout the course, students learn to use basic algebraic tools to represent problem situations and to solve important classical problems. Students need to have the sound understanding of functions and their multiple representations that they gain from a strong Algebra course. **Algebra is an essential foundation for higher mathematics.** An important part of this course is the use of a TI-Nspire handheld device.

**ALGEBRA I PRE-AP (Foundation Plan)**

Grade Placement: 9 (weighted)

1 Credit

*Prerequisite: Mathematics, Grade 8. Teacher recommendation/signature, 65% correct on the 8th grade math EOC test*

In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical

expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and 24

two variables and will create new functions through transformations Throughout the course, students learn to use basic algebraic tools to represent problem situations and to solve important classical problems. Students need to have the sound understanding of functions and their multiple representations that they gain from a strong Algebra course. **Algebra is an essential foundation for higher mathematics.** Students are encouraged to use higher level thinking skills for application, analysis and synthesis of the mathematics concepts in a self-discovery approach. An important part of this course is the use of a TI-Nspire handheld device. Algebra I Pre-AP will serve the needs of the Gifted and Talented student.

### **GEOMETRY (Foundation Plan)**

Grade Placement: 9-12

1 Credit

*Prerequisite: Algebra I*

Geometry is a course, which unifies plane geometry and coordinate geometry in a one-year course. The course includes a development of the nature of geometry, fundamental concepts and terminology of plane geometry, basic constructions, reasoning and limited proof. Topics include tools of geometry reasoning and proof; parallel and perpendicular lines, triangle properties, congruence & similarity of polygons, right triangles including special and trigonometry, circles, polygons, polyhedrons, area, volume and logic. Technology is incorporated in the course through the TI-Nspire handheld devices and computers.

### **GEOMETRY PRE-AP (Foundation Plan)**

Grade Placement: 9-12 (weighted)

1 Credit

*Prerequisite: Algebra I; Teacher recommendation/signature, 65% correct on the Algebra 1 EOC*

Geometry is a course, which unifies plane geometry and coordinate geometry in a one-year course. The course includes a development of the nature of geometry, fundamental concepts and terminology of plane geometry, basic constructions, reasoning, and limited proof. Topics include tools of geometry reasoning and proof; parallel and perpendicular lines, triangle properties, congruency and similarity of polygons, right triangles including special and trigonometry, circles, polygons, polyhedrons, area, volume and logic. Technology is incorporated in the course through TI-Nspire handheld devices and computers. Students are encouraged to use higher level thinking skills for application, analysis and synthesis of the mathematics concepts in a self-discovery approach. Algebra is used extensively in this course. Geometry Pre-AP is an enriched course of study and will serve the needs of the Gifted & Talented student.

### **ALGEBRAIC REASONING**

Grade Placement: 10-12

1 Credit

*Prerequisite: Algebra I*

In Algebraic Reasoning, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses. Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets.

### **FINANCIAL MATHEMATICS**

Grade Placement: 10-12

1 Credit

*Prerequisite: Algebra 1*

Financial Mathematics is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. It focuses on planning, services for financial and investment planning, banking, insurance, and business financial management. Financial Mathematics will integrate career and postsecondary education planning into financial decision making. Students are encouraged to

participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

### **MATHEMATICAL MODELING (Foundation Plan)**

Grade Placement: 10 -12

½ -1 Credit

*Prerequisite: Algebra I*

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. Students use mathematical methods to model and solve real-life applied problems involving money, data, chance patterns, music design, and science. Students use mathematical models from algebra, geometry, probability, and statistics and connections among these to solve problems from a wide variety of advanced applications in both mathematical and nonmathematical situations. Students use a variety of representations (concrete, pictorial, numerical, symbolic, graphical and verbal), tools, and technology (including but not limited to calculators with graphing capabilities, data collection devices, and computers) to solve applied problems.

### **ALGEBRA II (Foundation Plan)**

Grade Placement: 9-12

1 Credit

*Prerequisite: Algebra I*

This course is a continuation of algebraic and geometric concepts developed in Algebra I and Geometry. Students will review solving equations, inequalities, and graphing functions. Students develop continued proficiency with algebraic expressions including linear, quadratic, exponential, logarithmic, and polynomial functions. The students will continue their foundation of functions, use symbol and manipulation to simplify and solve, connect algebra and geometry, study conic sections, work different methods for solving system of equations, matrices, quadratic, square root, rational, exponential and logarithmic functions. Students will also focus on inverse functions, cubic and cube functions and describe their attributes as the functions are transformed on the coordinate plane. Students will continue to build on this foundation as they expand their understanding through other mathematical experiences. These are used as tools for understanding real-world applications of advanced mathematics.

### **ALGEBRA II PRE-AP (Foundation Plan)**

Grade Placement: 10-12 (weighted)

1 Credit

*Prerequisite: Algebra I Pre-AP, current Teacher recommendation/signature, and 65% on EOC Algebra 1*

Algebra II Pre-AP is an accelerated Algebra II class designed for more capable math students. This course is a continuation of algebraic and geometric concepts developed in Algebra I and Geometry. Students will review solving equations, inequalities, and graphing functions. Students develop continued proficiency with algebraic expressions including linear, quadratic, exponential, logarithmic, and polynomial functions. The students will continue their foundation of functions, use symbol and manipulation to simplify and solve, connect algebra and geometry, study conic sections, work different methods for solving system of equations, matrices, quadratic, square root, rational, exponential and logarithmic functions. Students will continue to build on this foundation as they expand their understanding through other mathematical experiences. These are used as tools for understanding real-world applications of advanced mathematics. Students planning to take Pre-Calculus, Dual Credit Algebra, or Calculus classes should enroll in this class.

### **PRECALCULUS**

Grade Placement: 11-12

½ -1 Credit

*Prerequisite: Successful completion of courses in Algebra I, Algebra II, and Geometry, current Teacher recommendation/signature, and Passing scores on EOC Algebra 1*

Precalculus is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations,

and use technology to build understanding, make connections between representations, and provide support in solving problems.

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### **PRECALCULUS PRE-AP**

Grade Placement: 11-12 (weighted)

½ -1 Credit

*Prerequisite: Successful completion of Pre-AP courses in Algebra I, Algebra II, and Geometry, current Teacher recommendation/signature, and Passing scores on EOC Algebra 1*

Precalculus is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems. Precalculus Pre-AP will serve the needs of the Gifted and Talented student.

### **CALCULUS AB: ADVANCED PLACEMENT**

Grade Placement: 12 (weighted)

1 Credit

*Prerequisite: Precalculus AP, current Teacher recommendation/signature, and **passing scores of EOC Algebra 1***

This advanced math course studies the concepts and skills associated with the following: functions and graphs, limits and continuity, differential calculus, and integral and calculus. Application of calculus to special functions is also addressed. Calculus will serve the needs of the Gifted and Talented student. Students enrolled in AP Calculus may request that their course be counted as non-GPA.

### **COLLEGE PREPARATORY MATHEMATICS (Foundation Plan)**

Grade Placement: 12

1 Credit

*Prerequisites: To be eligible for course participation, students must demonstrate successful completion of Algebra I, Geometry, and one additional foundation mathematics credit and meet the passing standard on the Algebra I EOC. Algebra II is highly recommended. With principal approval, Grade 11 students who have met the above requirements may enroll in the course.*

College Preparatory Mathematics is a full credit course designed for students at the Grade 12 level whose performance on an end-of course assessment instrument or coursework, a college entrance examination, or a Texas Success Initiative assessment instrument, indicate that the student is not ready to perform entry-level college coursework. In accordance with TAC, 74.26 and local district policies, students who are able to successfully complete only one semester of a two-semester course can be awarded credit proportionately. Consequently, a student may be awarded a half credit for successful completion of half of the college preparatory course. This half credit, when paired with another half credit from the list of allowable advanced mathematics courses, may satisfy the advanced mathematics requirement for students pursuing an endorsement. State credit will be awarded for students on foundation plan only. Local credit will be awarded for students on recommended or distinguished plan.

### **COLLEGE ALGEBRA (DUAL CREDIT)**

Grade Placement: 11-12

Credit: High School credit for Independent Study in Math

1 Credit

*Prerequisite: TSI Assessment Levels: R3, E3, M3*

Fundamentals of algebra, including inequalities, functions, quadratic equations, exponential and logarithmic functions, systems of equations, determinants and instructor option of binomial theorem or progressions (or both).

### **COLLEGE PLANE TRIGONOMETRY (DUAL CREDIT -- ONLINE)**

Grade Placement: 11-12

Credit: High School Independent Study in Math

½ - 1 Credit

*Prerequisite: College Algebra*

Trigonometric functions, identities, height and distance, equations involving trigonometric functions, solutions of triangles, area, vectors and their basic applications, DeMoivre's Theorem and its basic applications and inverse functions.

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**ALGEBRA 1 SUCCESS INITIATIVE:**

Grade Placement: 9 and by Grade Placement Committee

1 Credit

Credit: Local

Taken concurrently with Algebra 1 and designed to reinforce the math skills necessary for success in Algebra 1.

**ALGEBRA 1 EOC**

Grade Placement: 11-12

½ - 1 Credit

Algebra 1 EOC is a fast-paced course with a high emphasis on both Algebra 1 and testing strategies. This course is designed to allow the student to focus and analyze on their weaknesses in Algebra, and then create a plan of attack to address these areas.

**ALGEBRA I ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for Algebra I and determined by the ARD committee to be a suitable substitute for Algebra 1.

**GEOMETRY ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for Geometry and determined by the ARD committee to be a suitable substitute for Geometry.

**MATH MODELS ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for Math Models and determined by the ARD committee to be a suitable substitute for Math Models.

**APPLIED COMPUTER SKILLS**

Grade Placement: 12-13

*Prerequisite: Eligible for LIFE placement/program by ARD*

Coursework focuses on development and improvement of application of math skills in daily living. Individualized as determined by IEP.

**PHYSICAL EDUCATION**  
**(1 credit needed for the Foundation Plan)**

**ATHLETICS I-IV/ P. E. Equivalent**

SEE REGISTRATION FORM

Grade Placement: 9-12

½ Credit

**\*Coach's signature is required.**

Students participate in the school's various athletic programs. The purposes of these programs are to develop high moral character and leadership skills, to teach self-discipline, responsibility and to promote school spirit and sportsmanship.



**CHEERLEADING I-IV**

Grade Placement: 9-12 (P.E. Equivalency)

½ - 1 Credit

*Prerequisite: 80 average (excluding band, athletics, PE, office aide, library aide); students elected to the squad will have mandatory enrollment for first semester.*

Provides an opportunity to develop physical, behavioral, social, and creative skills in performance at athletic events. Attendance required at school functions other than athletics. Promotes the development of leadership, cooperation, self-confidence, self-discipline, responsibility, and poise.

**AEROBIC ACTIVITIES**

Grade Placement: 9-12

½ Credit

In Physical Education, students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically active lifestyle. The student exhibits a physically active lifestyle and understands the relationship between physical-activity and health throughout the lifespan. Students in aerobic activities are exposed to a variety of activities that promote health-related fitness. A major expectation of this course is for the student to design a personal fitness program that uses aerobic activities as a foundation.

**INDIVIDUAL SPORTS**

Grade Placement: 9-12

½ Credit

Students in Individual Sports are expected to participate in a wide range of individual sports that can be pursued for a lifetime. The continued development of health-related fitness and the selection of individual sport activities that are enjoyable is a major objective of this course.

**TEAM SPORTS**

Grade Placement: 9-12

½ Credit

Students enrolled in Team Sports are expected to develop health-related fitness and an appreciation for teamwork and fair play. Like the other high school physical education courses, Team Sports is less concerned with the acquisition of physical fitness during the course than reinforcing the concept of incorporating physical activity into a lifestyle beyond high school.

## SCIENCE

**(3 credits needed for the Foundation Plan)**

### **INTEGRATED PHYSICS AND CHEMISTRY (Foundation Plan)**

Grade Placement: 9-10

1 Credit

In Integrated Physics and Chemistry, students conduct laboratory and field investigations, use scientific methods during investigation, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter.

### **BIOLOGY I (Foundation Plan)**

Grade Placement: 9-11

1 Credit

In Biology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Biology is a course that examines the structure, function, growth, origin, evolution and distribution of living things, both past and present. It classifies and describes the various forms of organisms, how organisms function, how species come into existence, and the interactions they have with each other and with the natural environment.

### **BIOLOGY I PRE-AP (Foundation Plan)**

Grade Placement: 9-11 (weighted)

1 Credit

*Prerequisite: Teacher recommendation/signature Must have 65% correct on the 8th grade science STAAR and reading scores will be examined.*

In Biology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Biology is a course that examines the structure, function, growth, origin, evolution and distribution of living things, both past and present. It classifies and describes the various forms of organisms, how organisms function, how species come into existence, and the interactions they have with each other and with the natural environment. Biology I Pre-AP is an enriched and accelerated course of study, will require extra commitment from the student and serves the needs of the Gifted and Talented student.

### **BIOLOGY EOC**

Grade Placement: 10-12

½ or 1 Credit

*Prerequisite: Biology 1 or Pre AP Biology; Needs both science department and counselors recommendations*

Biology EOC is a fast-paced course with a high emphasis on both science and testing strategies. This course is designed to allow the student to focus and analyze on their weaknesses in biology, then create a plan of attack to address these areas.

### **CHEMISTRY I (Foundation Plan)**

Grade Placement: 10-12

1 Credit

*Prerequisite: Biology and Algebra I (Suggested prerequisite: completion of or concurrent enrollment in a second year of math).*

In Chemistry, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Chemistry I Pre-AP students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry.

### **CHEMISTRY I PRE-AP (Foundation Plan)**

Grade Placement: 10-12 (weighted)

1 Credit

*Prerequisite: Biology I & Algebra I 65% correct on the Biology EOC.*

In Chemistry, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Chemistry I Pre-AP students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry.

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Chemistry Pre-AP is an enriched and accelerated course of study, will require extra commitment from the student and serves as preparation for Chemistry AP or a college chemistry course.

### **PHYSICS (Foundation Plan)**

Grade Placement: 11-12

1 Credit

*Prerequisite: Algebra I and Geometry is suggested as a prerequisite or co-requisite*

In Physics, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include laws of motion; changes within physical systems and conservation of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students who successfully complete Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical thinking skills.

### **PHYSICS PRE-AP (Foundation Plan)**

Grade Placement: 11-12 (weighted)

1 Credit

*Prerequisite: Algebra 1, Geometry, Pre-AP Biology, Pre-AP Chemistry.*

In Pre-AP Physics, students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include laws of motion; changes within physical systems and conservation of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students in Pre-AP Physics are in an enriched, accelerated course of study, which will require extra commitment and serves the needs of the Gifted and Talented student. Students who successfully complete Pre-AP Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical thinking skills.

### **PRINCIPLES OF ENGINEERING (POE)**

Grade Placement: 11-12 (*weighted*) Must be taken as 3<sup>rd</sup> or 4<sup>th</sup> year science

1 Credit

*Prerequisite: IED, completed or concurrently enrolled in Alg. II or higher level math*

Principles of Engineering (POE) exposes students to some of the major concepts that one might encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and are introduced into the areas of mechanisms (simple machines, gears, pulley systems), thermal energy transfer, electrical circuits, machine control/robotics through programming with ROBOTC, fluid power (hydraulics/pneumatics), statics, material properties/testing, statistics and projectile motion. POE challenges students to continually hone their interpersonal skills, creative abilities, and problem-solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

### **AQUATIC SCIENCE**

Grade Placement: 10-12

1 Credit

*Prerequisite: Biology and suggested prerequisite of Chemistry or concurrent enrollment in Chemistry*

In Aquatic Science, students study the interactions of biotic and abiotic components in aquatic environments, including impacts on aquatic systems. Investigations and field work in this course may emphasize freshwater or marine aspects of aquatic science depending primarily upon the natural resources available for study near the school. Students who successfully complete Aquatic Science will acquire knowledge about a variety of aquatic systems, conduct investigations and observations of aquatic environments, work collaboratively with peers, and develop critical-thinking and problem-solving skills.

### **ANATOMY AND PHYSIOLOGY**

Grade Placement: 11–12

1 Credit

*Prerequisite: Biology and a second science credit*

This laboratory-oriented course deals with the structure and function of human body systems. The study of the 12 human body systems and their functions will be the main focus of the course. The course of study will include laboratory dissection of mammalian specimens along with lecture and discussion of the comparative anatomy of humans. 31

Students will be introduced to fields and professions related to anatomy and science, such as nursing, athletic training, physical therapy, veterinary medicine, and human medicine. This will be done to encourage students to pursue a profession in science or a related medical field that would require some type of training and education after high school.

## **EARTH AND SPACE SCIENCE**

Grade Placement: 11-12

1 Credit

*Prerequisite: three credits of science one of which can be taken concurrently and three units of math one of which can be taken concurrently;*

Physical Earth and Space Science I is a course focusing on the study of the Earth's lithosphere, atmosphere, hydrosphere, and its celestial environment. Students enrolled in this course analyze and describe Earth's interconnected systems and how they are changing due to natural processes and human influence. Topics covered include rocks, minerals, natural resource management, sculpturing of Earth's surface, plate tectonics, earthquakes, volcanoes, geologic history, the atmosphere, weather, and climate, history of astronomy, the solar system, stars, and galaxies.

## **BIOLOGY ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for Biology and determined by the ARD committee to be a suitable substitute for Biology.

## **INTEGRATED PHYSICS AND CHEMISTRY ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for IPC and determined by the ARD committee to be a suitable substitute for IPC.

## **APPLIED ENVIRONMENTAL AWARENESS**

Grade Placement: 11-13

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for science and determined by the ARD committee to be a suitable substitute for science.

# **SOCIAL STUDIES**

**(3 credits needed for the Foundation Plan)**

## **WORLD GEOGRAPHY**

Grade Placement: 9-12

1 Credit

This course is a study of the characteristics of particular places in our contemporary world, things that make one place different from or similar to another and the meaning of likeness and differences among areas on the face of the earth. The course continues to help students become spatially oriented, develop their sense of time and understand the world is constantly changing.

**WORLD GEOGRAPHY PRE-AP**

Grade Placement: 9-12 (weighted)

1 Credit

This course is a study of the characteristics of particular places in our contemporary world, things that make one place different from or similar to another and the meaning of likeness and differences among areas on the face of the earth. The course continues to help students become spatially oriented, develop the sense of time and understand the world is constantly changing. World Geography Pre-AP is an enriched course of study and will serve the needs of the Gifted and Talented student.

**WORLD HISTORY**

Grade Placement: 10-12

1 Credit

This course is designed to give the students an understanding of the changing world in which they live through an examination of cultures, their problems and achievements from earliest times.

**WORLD HISTORY PRE-AP**

Grade Placement: 10-12 (weighted)

1 Credit

This course is designed to give the students an understanding of the changing world in which they live through an examination of cultures, their problems and achievements from earliest times. World History Honors offers an enriched and accelerated course of study will require extra commitment by the student and serves the needs of the Gifted and Talented student.

**UNITED STATES HISTORY**

Grade Placement: 11

1 Credit

The purpose of this course is to provide the students an understanding of the problems that have grown out of events in the nation's history, of the forces that have helped to shape our political, social and economic institutions and of the ways, each generation approached solutions to problems.

**UNITED STATES HISTORY AP**

Grade Placement: 11 (weighted)

1 Credit

AP U.S. History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials - their relevance to a given interpretive problem, reliability, and importance - and to weigh the evidence and interpretations presented in historical scholarship. This course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. AP U.S. History will serve the needs of the Gifted and Talented student.

**UNITED STATES HISTORY I DUAL CREDIT Spring**

Grade Placement: 11-12 (weighted) 3 college hours

½ Credit

Credit: High School Special Topics in Social Studies

Assessment Levels: R3, E3, M1

Survey of the nation's colonial background, the struggle for independence, and the emergence of political parties; emphasis on individualism, westward expansion, social reform, and sectionalism.

U.S. History dual credit is an enriched course of study and will serve the needs of the Gifted and Talented student.

**UNITED STATES HISTORY II DUAL CREDIT Fall****Del Mar College (Online Instruction)**

Grade Placement: 11-12 (weighted) 3 college hours

1 Credit

Credit: High School US History

Assessment Levels: R3, E3, M1

Survey of Reconstruction; the impact of industrialization, urbanization, and immigration; the rise of America as a world power; the quest for economic security and for social justice.

U.S. History dual credit is an enriched course of study and will serve the needs of the Gifted and Talented student.

**ECONOMICS-FREE ENTERPRISE**

Grade Placement: 12

½ Credit

Economics is a study of the American free enterprise system. The course focus is on the basic principles concerning production, consumption, and distribution of goods and services (the problem of scarcity) in the United States and a comparison with those in other countries around the world. Students analyze the interaction of supply, demand, and price. Students will investigate the concepts of specialization and international trade, economic growth, key economic measurements, and monetary and fiscal policy. Students will study the roles of the Federal Reserve System and other financial institutions, government, and businesses in a free enterprise system. Types of business ownership and market structures are discussed. The course also incorporates instruction in personal financial literacy. Students apply critical-thinking skills using economic concepts to evaluate the costs and benefits of economic issues.

**US GOVERNMENT**

Grade Placement: 12

½ Credit

In United States Government, the focus is on the principles and beliefs upon which the United States was founded and on the structure, functions, and powers of government at the national, state, and local levels. Students learn major political ideas and forms of government in history. A significant focus of the course is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created. Students analyze major concepts of republicanism, federalism, checks and balances, separation of powers, popular sovereignty, and individual rights and compare the U.S. system of government with other political systems. Students identify the role of government in the U.S. free enterprise system and examine the strategic importance of places to the United States. Students analyze the impact of individuals, political parties, interest groups, and the media on the American political system, evaluate the importance of voluntary individual participation in a constitutional democratic republic society, and analyze the rights guaranteed by the U.S. Constitution. Students examine the relationship between governmental policies and the culture of the United States. Students identify examples of government policies that encourage scientific research and use critical-thinking skills to create a product on a contemporary government issue.

**PRINCIPLES OF MACROECONOMICS (DUAL CREDIT)**

Grade Placement: 12 3 college hours (weighted)

½ Credit

Assessment Levels: R3, E3, M3

*Online course dual credit course.*

Overview of the American economy, including structure and function of economics system, and a comparison with alternative economic systems; study of the measurement and determination of national income in the U.S.; the nature and role of money in modern society; and the use of monetary and fiscal policy in the economy. This course will serve the needs of the Gifted and Talented student.

**AMERICAN GOVERNMENT I: FEDERAL & TEXAS CONSTITUTIONS (DUAL CREDIT)**

Grade Placement: 12 3 college hours (weighted)

½ Credit

*Prerequisite: ENGL 1301, 1302 (or concurrently enrolled)*

Assessment Levels: R3, E3, M1

*Online course dual credit course.*

United States and Texas constitutions; federalism; civil liberties and rights; political socialization and public opinion; political parties; interest groups; political participation, including voting; electoral processes; the media. This course is equivalent to a one-semester college course in United States Government and Politics and will serve the needs of the Gifted and Talented student.

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### **GENERAL PSYCHOLOGY DUAL CREDIT**

Grade Placement: 11-12

½ Credit

*Prerequisites: Assessment Levels: R3, E3, M1*

Survey of major topics in psychology. Introduces the study of behavior and the factors that determine and affect behavior. This course is not exempt from “No pass – No play”.

### **INTRO TO SOCIOLOGY DUAL CREDIT**

Grade Placement: 11-12

½ Credit

*Prerequisites: Assessment Levels: R3, E3, M1*

Introduction to the concepts and principles used in the study of group life, social institutions, and social processes.

### **WORLD GEOGRAPHY ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for World Geography and determined by the ARD committee to be a suitable substitute for World Geography.

### **WORLD HISTORY ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for World History and determined by the ARD committee to be a suitable substitute for World History.

### **U.S. HISTORY ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for U.S. History and determined by the ARD committee to be a suitable substitute for U.S. History.

### **GOVERNMENT ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned with the Texas Essential Knowledge and Skills for Government and determined by the ARD committee to be a suitable substitute for Government (½ credit).

### **ECONOMICS ALTERNATIVE**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course aligned **with** the Texas Essential Knowledge and Skills for Economics and determined by the ARD committee to be a suitable substitute for Economics (½ credit).

### **COMMUNITY CITIZENSHIP**

*Prerequisite: Eligible for LIFE placement/program by ARD.*

This is a locally designed course that develops or improves the student’s knowledge civic rights, responsibilities within the school and community. Concepts such as voting, laws, unlawful behavior, volunteerism, rules, and regulations will be addressed individually as determined by student’s IEP.

## TECHNOLOGY APPLICATIONS

### **Fundamentals of Computer Science (One-Half Credit) Paired with Touch System Data Entry (One-Half Credit)**

Grade Placement: 9-12

*Prerequisite: Tech Apps proficiency in Grades 6 - 8*

½ credit

The technology applications curriculum has six strands based on the National Educational Technology Standards for Students (NETS•S) and performance indicators developed by the International Society for Technology in Education (ISTE): creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and technology operations and concepts.

Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. 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 and concepts.

### **COMPUTER SCIENCE I**

Grade Placement: 10-12

*Prerequisite: Algebra I , Fundamentals of CS OR Touch Systems Data Entry OR BIM*

1 Credit

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.

### **WEB DESIGN**

Grade Placement: 9-12

*Prerequisite: Fundamentals of CS OR Touch Systems Data Entry OR BIM*

1 Credit

This is an introductory course. The technology applications curriculum works with students' creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving and decision making; digital citizenship; and technology operations and concepts. The integration of the global society and the exchange of information through innovative and diverse media that require the effective communication of multiple data elements to display use of high quality and complex media that is created with the dynamic end-user expectations. Therefore, as we focus our insightful vision to the future, student are presented with courses that follow various challenges and changing trends in their productive capacity.

### **ROBOTICS PROGRAMMING AND DESIGN**

Grade Placement: 10-12

*Prerequisite: Tech Apps proficiency in Grades 6 - 8, Fundamentals of CS OR Touch Systems Data Entry OR BIM*

1 Credit

Robotics Programming and Design will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful robotic programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve problems in designing and programming robots. Through data analysis, students will identify task requirements, plan search strategies, and use robotic concepts to access, analyze, and evaluate information needed to solve problems. By using robotic 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 robotics through the study of physics, robotics, automation, and engineering design concepts.



**GAME PROGRAMMING AND DESIGN**

Grade Placement: 10-12

1 Credit

*Prerequisite - Algebra I, Fundamentals of CS OR Touch Systems Data Entry OR BIM*

Game Programming & Design will foster student creativity and innovation by presenting students with 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 gaming problems. Through data analysis, students will include the identification of task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games. By acquiring programming knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will create a computer game that is presented to an evaluation panel.

**ACTIVITIES OF DAILY LIVING**

Grade Placement: 9-12

*Prerequisite: Eligible for LIFE placement/program by ARD.*

Coursework designed to develop or increase self-help skills necessary for success in life. Can be a suitable substitute for technology requirements as determined by ARD committee.

**BUSINESS MANAGEMENT AND ADMINISTRATION****Touch System Data Entry (One-Half Credit) paired with Fundamentals of Computer Science (One-half credit)**

Grade Placement: 9-12

In Touch System Data Entry, students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students will need to apply touch system data entry for production of business documents. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

**PRINCIPLES OF BUSINESS, MARKETING & FINANCE**

Grade Placement: 9-11

1 Credit

Students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. Students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

**BUSINESS INFORMATION MANAGEMENT I (Advanced CTE course)**

Grade Placement: 9-12

*Recommended Prerequisites: Touch Systems Data Entry and/or Principles of Business, Marketing & Finance* 1 Credit  
Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software

**BUSINESS INFORMATION MANAGEMENT II (Advanced CTE course)**

Grade Placement: 10-12

1 Credit

*Prerequisite - Business Information Management I*

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

**PRACTICUM IN BUSINESS MANAGEMENT (Advanced CTE course)**

Grade Placement: 11-12

*Recommended prerequisites: Touch System Data Entry and Business Management or Business Information Management II*

2 Credits

*Prerequisite: Teacher recommendation/signature*

The Practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economical, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

## INFORMATION TECHNOLOGY

### **PRINCIPLES OF INFORMATION TECHNOLOGY**

Grades: 9-10

1 Credit

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

### **DIGITAL MEDIA**

Grade Placement: 9-12

1 Credit

This class develops proficiencies in designing, importing, and manipulation advanced text, graphics, audio, and video used in presentation management, multimedia productions, publishing systems, and emerging technologies. Course can count for one credit of technology applications.

### **WEB TECHNOLOGY (Advanced CTE course)**

Grade Placement: 10-12

1 Credit

*Prerequisite: Principles of Information Technology*

This course is designed to teach the student basic web page design. The student will gain knowledge of and use of hardware/software as well as improve data input skills. Study will include laws regarding compliance and how to acquire information from electronic sources. In addition, students will use time wisely in creating new products electronically in a variety of media.

## SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

### **Robotics I**

Grade Placement: 9-10

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.



# AGRICULTURE, FOOD & NATURAL RESOURCES

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

Grade Placement: 9-12

1 Credit

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.

## **AGRICULTURAL MECHANICS AND METAL TECHNOLOGIES**

Grade Placement: 10-12

1 Credit

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

To be prepared for careers in agricultural power, structural, and technical systems, students need to attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, 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. This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques. Class sizes should not exceed 15 students.

## **Agricultural Equipment Design and Fabrication (ADVANCED CTE COURSE)**

Grade Placement: 11-12

1 Credit

*Prerequisite: Agricultural Mechanics and Metal Technologies*

To be prepared for careers in agricultural power, structural, and technical systems, students should attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students should have opportunities to learn, reinforce, apply, and transfer their knowledge and technical skills in a variety of settings. This course is designed to develop an understanding of construction plans, material selection, maintain agriculture enclosures, agriculture equipment, construction techniques, and knowledge of laws related to construction. Class sizes should not exceed 15 students.

## **AGRICULTURAL POWER SYSTEMS (ADVANCED CTE COURSE)**

Grade Placement: 11-12

2 Credits

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

To be prepared for careers in agricultural power, structural, and technical systems, students should attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. To prepare for success, students should have opportunities to learn, reinforce, apply, and transfer their knowledge and technical skills in a variety of settings. This course is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery. Class sizes should not exceed 15 students.

**LIVESTOCK PRODUCTION**

Grade Placement: 10-12 Recommended

*Prerequisite: Principles of Ag*

1 Credit

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 (ADVANCED CTE COURSE)**

Grade Placement: 11-12

*Prerequisite: Livestock Production or Small Animal Management*

1 Credit

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.

**ADVANCED ANIMAL SCIENCE (ADVANCED CTE COURSE)**

Grade Placement: 11 or 12

1 Credit

*Prerequisite: Biology and Chemistry or IPC, Algebra I and Geometry, Livestock Production and Veterinary Medical Applications*

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 develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply and transfer their knowledge and skills in a variety of settings. This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. To receive credit in science, students must meet the 40% laboratory and fieldwork requirement identified in §74.3(b) (2) (C) of this title (relating to Description of a Required Secondary Curriculum).

**PRACTICUM IN AGRICULTURE, FOOD, AND NATURAL RESOURCES (ADVANCED CTE COURSE)**

Grade Placement: 11-12

2 Credits

*Prerequisite: a minimum of one credit from the courses 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 employment, independent study, internships, assistantships, mentorships or laboratories. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster.

**WILDLIFE, FISHERIES AND ECOLOGY MANAGEMENT**

Grade Placement: 9-12

1 Credit

To be prepared for careers in natural resource systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to natural resources 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. This course examines the management of game and nongame wildlife species, fish and aqua crops and their ecological needs as related to current agricultural practices.

**FLORAL DESIGN (FINE ART CREDIT)**

Grade Placement: 9-12

1 Credit

To be prepared for careers in floral design, students need to attain academic skills and knowledge as well as technical knowledge and skills related to horticultural systems 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 and technologies in a variety of settings. This course is designed to develop students' 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. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

**HOSPITALITY AND TOURISM****PRINCIPLES OF HOSPITALITY AND TOURISM**

Grade Placement: 9-12

1 Credit

This course is an overview of the hospitality and tourism industry, which encompasses lodging; travel and tourism; recreation, amusements, attractions, and resorts; and restaurants and food beverage service. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students use knowledge and skills that meet industry standards to function effectively in various positions within this multifaceted industry. This course is the first one in the culinary pathway and is mostly classroom based. Labs are minimal.

**INTRODUCTION TO CULINARY ARTS**

Grade Placement: 9-10

1 Credit

*Recommended Prerequisite: Principles of Hospitality and Tourism*

Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the foodservice industry. This course is offered as a classroom and laboratory-based course.

**CULINARY ARTS (ADVANCED CTE COURSE)**

Grade Placement: 10-12

2 Credits

*Prerequisite: Principles of Hospitality and Tourism or Introduction to Culinary Arts or Lifetime Nutrition and Wellness or Food Science.*

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 ServSafe Allergens, Texas Food Guard, National Prostart Certificate of Achievement, TABC To Go. This course is offered as a classroom and laboratory-based course.

**PRACTICUM IN CULINARY ARTS (ADVANCED CTE COURSE)**

Grade Placement: 11-12

2 Credits

*Prerequisite: 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, career, and technical education; provides more interdisciplinary instruction; and supports strong partnerships to their schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace. Students are taught employability skills, which include job-specific skills. Possible certifications - ServSafe Allergens, Texas Food Guard, National Prostart Certificate of Achievement, TABC To Go. This course is offered as a classroom and laboratory-based course.

**FOOD SCIENCE (ADVANCED CTE COURSE)**

1 Credit

Grade Placement: 11-12 (Can be 4th science for 11 or 12th graders)

*Prerequisite: Three units of Science INCLUDING chemistry AND biology; Recommended Prerequisite: Principles of Hospitality and Tourism; or Intro to Culinary Arts*

In Food Science, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Although the course involves some cooking, this course is *not* a cooking class. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public.

## HUMAN SERVICES

**INTEGRATED FUNCTIONAL SKILLS**

Grade Placement: 10-12

*Prerequisite: Eligible for LIFE placement/program by ARD. Description:*

Designed for students who have completed state credit requirements for graduation but continue to need special education services for the transition to life after high school. Specific coursework is designed around student's needs and IEP goals and objectives. Coursework address functional skills in English, math, science, social studies, and community environments that are necessary for the transition to life after high school.



## ENGINEERING AND INDUSTRIAL TECHNOLOGY CAREERS

### **“Craft Training Center”**

#### **NCCER CORE / PRINCIPLES OF ARCHITECTURE & CONSTRUCTION**

**PEIMS#13004200**

Grade Placement: 10

1 Credits

The emphasis of this course is on Career Awareness utilizing Math and Science skills in the following areas: Safety Applications, Industrial Career Exploration, Scaffold Building, Instrumentation, Pipe Fitting, Hand Tools, Power Tools, Construction Drawing (Blueprints), and Welding, Plumbing, and Electrical crafts. Utilizing the National Center for Construction Education & Research (NCCER) curriculum, the students will receive instruction in the Core Curriculum for these introductory craft skills and will secure an NCCER card at the end of the first year of instruction

#### **ELECTRICAL Level 1 - (Year 1)**

**PEIMS#13005600**

Grade Placement: 10-12

2 Credits

*Upon successful completion of ALL written and performance modules, the student will be awarded NCCER Electrical Level 1 and Core Completion Certificates.* This NCCER Electrical Level One course is combined with the Core Curriculum and takes the new electrical craft worker through the first level of electrical training. Topics include: Electrical Safety; Hand Bending; Fasteners and Anchors; Electrical Theory One and Two; Electrical Test Equipment; Introduction to the National Electrical Code; Raceways; Boxes and Fittings; Conductors; Electrical Blueprints; Commercial, Industrial and Residential Wiring. Core Curriculum topics include: Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Blueprints; Basic Rigging; Basic Communication Skills; Basic Employability Skills.

#### **ELECTRICAL LEVEL 2 - (Year 2)**

**PEIMS#13005700**

Grade Placement: 11-12

2 Credits

*Upon successful completion of all written and performance modules, the student will be awarded an Instrumentation Level 1 and Core Completion Certificates from the NCCER.* This NCCER course is combined with the Core Curriculum and takes the student through the first level of training. Topics include: Hand Tools for Instrumentation; Electrical Safety; Power Tools for Instrumentation; Electrical Systems for Instrumentation; Metallurgy for Instrumentation; Fasteners; Instrument Drawings & Documentations – Part One; Gaskets and Packing; Lubricants, Sealants & Cleaners; Flow, Pressure, Level & Temperature; Tubing; Piping – 2” & Under; Hoses. Core curriculum topics include Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Blueprints; Basic Rigging; Basic Communication Skills; Basic Employability Skills.

#### **SMAW WELDING – (Year 1 )**

**PEIMS#13003230**

Grade Placement: 10-12

2 Credits

This NCCER course takes the student through the first level of training. This course is combined with the Core Curriculum topics: Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Basic Rigging. Welding topics include Welding Safety, Oxyfuel Cutting, SMAW – Equipment & Set-up, and SMAW – Beads & Fillet Welds.

#### **SMAW WELDING – (Year 2 )**

**PEIMS#13003240**

Grade Placement: 11-12

2 Credit

*Upon successful completion of all written and performance modules, the student will be awarded NCCER Pipefitting Level 1 and Core Certificates of Completion.* This NCCER course is combined with the Core Curriculum and takes the student through the first level of training. Topics include Orientation to The Trade; Pipefitting Hand Tools; Pipefitting Power Tools; Oxyfuel Cutting; Ladders and Scaffolds; Motorized Equipment. Core topics include Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Blueprints; Basic Rigging; Basic Communication Skills; Basic Employability Skills.

## ENGINEERING ELECTIVES

### INTRODUCTION TO ENGINEERING DESIGN

**PEIMS# N12372T1**

Grade Placement: 9–12 (weighted)

1 Credit

Using 3D computer modeling software, students learn the design process and solve design problems for which they develop, analyze, and create product models. IED is an introductory course, which develops student problem solving skills, with emphasis placed upon the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes. The rigorous and relevant curriculum will help any student build strong study, teamwork, and communication skills, which create a solid foundation for success in any college major or career. A student may be awarded articulated credit and weighted GPA upon successful completion of the college level end of course exam.

### CIVIL ENGINEERING AND ARCHITECTURE (CEA)

Grade Placement: 10-12 (weighted)

1 Credit

*Prerequisite: IED*

Civil Engineering and Architecture (**CEA**) is the study of the design and construction of residential and commercial building projects. The course includes an introduction to building components and systems, structural design, stormwater management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Students will use industry standard 3-D architectural modeling software (REVIT) to **create 3-D drawings** that facilitate site and building design and technical documentation. The major focus of CEA is to expose students to the design and construction practices of residential and commercial building projects, design teams and teamwork, communication methods, building codes and ordinances, engineering design calculations, technical documentation and encourage students to become independent learners.

**CEA** is a high school level course that is appropriate for 10<sup>th</sup>- or 11<sup>th</sup>- grade students interested in careers related to civil engineering and architecture. Students should be concurrently enrolled in college preparatory mathematics and science courses.

### PRINCIPLES OF ENGINEERING (POE)

Grade Placement: 10-12 (weighted)

1 Credit

*Prerequisite: IED, completion of or concurrently enrolled in Alg. II or higher level math*

Principles of Engineering (POE) exposes students to some of the major concepts that one might encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and are introduced into the areas of mechanisms (simple machines, gears, pulley systems), thermal energy transfer, electrical circuits, machine control/robotics through programming with ROBOTC, fluid power (hydraulics/pneumatics), statics, material properties/testing, statistics and projectile motion. POE challenges students to continually hone their interpersonal skills, creative abilities, and problem-solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

### ENGINEERING DESIGN AND DEVELOPMENT COURSE DESCRIPTION

Grade Placement: 12 (*specifically limited to seniors who have had all 3 previous engineering electives*) 1 Credit

*Prerequisite: IED & CEA & POE (weighted)*

Engineering Design and Development (EDD) is the capstone course in the PLTW high school engineering program. Students will perform research to choose, validate, and justify a technical problem. After carefully defining the problem, students will design, build, and test their solution or prototype. Finally, students will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with experts and will continually hone their organizational, communication and interpersonal skills, their creative and problem solving abilities, and their understanding of the design process. EDD is a high school level course that is appropriate for 12th grade studies.

## GENERAL ELECTIVES

### **ACADEMIC DECATHLON I-IV**

Grade Placement: 9-12 (weighted)

1 Credit

A fall and/or spring semester elective course designed for students interested in competing in the academic decathlon. Studies in an interdisciplinary program fusing the essential element strands of language and literature, fine arts, social sciences and science will be offered.

### **APPLIED VOCATIONAL SKILLS**

Grade Placement: 9

*Prerequisite: Placement by ARD.*

Students learn about many different types of employment in this vocational exploration class. This class is intended to develop or improve functional application skills necessary to obtain and maintain employment.

### **APPLIED OCCUPATIONAL PREPARATION**

Grade Placement: 10-13

*Prerequisite: Eligible for LIFE placement/program by ARD.*

Coursework includes the critical skills necessary for competitive employment. Students learn about the many types of employment settings through vocational exploration, assessment and training. This is campus/community based educational program (CBVE). CBVE may include unpaid work experiences conducted in various locations throughout the local community and on school campus.

### **PERSONAL SOCIAL SKILLS**

Grade Placement: 9 -12

*Prerequisite: Required and denoted by ARD.*

This is a course used to help students learn self-control, interaction skills, and other personal/social skills necessary for success in school and community life.

### **AVID I, II, III, & IV**

Grade Placement 9-12 (weighted)

½ - 1 Credit

*Prerequisite: Interview-Application / Teacher Signature*

**AVID (Advancement Via Individual Determination)** is offered as an elective course that prepares students for college eligibility and readiness. The overall goal of AVID is to develop fundamental skills that will support post-secondary success. Students participate in activities that incorporate strategies focused primarily on writing, inquiry, collaboration, organization, and reading (WICOR) to support their academic growth. There is an emphasis on preparation for college entrance and placement exams, study and test-taking skills, time management techniques, and note taking and research. Intensive tutoring is facilitated by college students during the AVID elective class. Trained tutors help students with the process of learning through inquiry, academic dialogue, and advanced note taking.

In AVID, students also participate in motivational activities, college and career research, college visits, and service learning experiences. These activities provide students with the resources they need to learn about the many positive opportunities available to them that will impact their future.

## ONLINE DUAL CREDIT COURSES

### **ARTS 1301 Art Appreciation**

1 Credit

Grade Placement: 9 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

Designed to help students develop an understanding of the visual arts through a basic survey of art mediums, visual elements such as line and color; a basic history of art.

### **BIOL 1409 General Biology: Diversity & Environment**

1 Credit

Grade Placement: 11 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

Intended primarily for non science majors. Diversity, structure and life cycles of monerans, protists, fungi, plants, animals (including humans); population genetics, evolution, principles of ecology and global ecology. Lab portion required, BIOL 1109

### **HITT 1305 Medical Terminology**

½ Credit

Grade Placement: 9 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

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

### **HUMA 1301 Introduction of the Humanities**

½ Credit

Grade Placement: 9 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

Interdisciplinary course: The study of music, literature, painting, sculpture, architecture and philosophy; relation of these subjects to each other in social-political context.

### **PSYC 2301 General Psychology**

½ Credit

Grade Placement: 9 -12 (weighted)

TSI Assessment Levels: R3, E3, M1

Survey of major topics in psychology. Introduces the study of behavior and the factors that determine and affect behavior.

### **SOCI 1301 Introduction to Sociology**

½ Credit

Grade Placement: 9 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

An Introduction to the concepts and principles used in the study of group life, social institutions, and social processes.

### **SPCH 1311 Introduction to Speech Communication**

½ Credit

Grade Placement: 10 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

Introductory course in theory and practice of speech communication behavior in personal relationships, small groups and public/professional communication situations. Introduces skills to communicate with others, participate effectively in groups and deliver researched public speeches.

**SPCH 1315 Fundamentals of Public Speaking**

Grade Placement: 10 - 12 (weighted)

TSI Assessment Levels: R3, E3, M1

Introductory course in theories and practices of speech communication behavior in public communication situations. Includes listener and audience analysis with an emphasis on research, organization and delivery of informative/persuasive presentations.

**COSC 1301 Introduction to Computing**

Grade Placement: 10 - 12 (weighted)

TSI Assessment Levels: R1, E1, M1

An overview of computer systems - hardware, operating systems and microcomputer application software, including the Internet, word processing, spreadsheets, presentation graphics and databases. Current issues such as the effect of computers on society, and the history and use of computers in business, educational and other modern settings are also studied.

**MATH 1324 Mathematics for Business and Social Sciences I**

Grade Placement: 10 - 12 (weighted)

TSI Assessment Levels: R3, E1, M3

A study of linear equations, systems of linear equations, systems of linear inequalities, linear programming, probability, logarithmic, exponential functions, and mathematics of finance.

**MATH 1325 Mathematics for Business and Social Sciences II**

Grade Placement: 10 - 12 (weighted)

TSI Assessment Levels: R3, E1, M3

A study of functions, limits, differential calculus, integral calculus, and applications.

Prerequisite: MATH 1314 or 1324

## LOCAL CREDIT COURSES

**These courses are offered for local credit only. They may not count towards the required state credits. These classes can only be taken as a junior or senior --- with approval --- and the student enrollment is limited.**

### **LIBRARY SCIENCE**

Grade Placement: 11-12

½ -1 Credit

*Prerequisite: "B" average; Librarian approval*

Develops library skills and the utilization of materials, resources, facilities, and services available in the library.

### **OFFICE AIDE**

Grade Placement: 11-12

½ -1 Credit

*Prerequisite: Passed EOC; "B" average; Approval from principal's office*

Enhances office etiquette, interpersonal relations, and communication. Offers training in clerical work and the use of office machines.

### **COUNSELOR OFFICE AIDE**

Grade Placement: 11-12

½ -1 Credit

*Prerequisite: Passed EOC; "B" average; Approval from counselors' office*

Enhances office etiquette, interpersonal relations, and communication. Offers training in clerical work and the use of office machines.

### **CAPSTONE**

Grade Placement: 12

1 Credit

Credit: Local

An independent research class with student-selected exploration of a topic of interest; therefore, learning becomes more relevant and "real life". An integrated, multifaceted project designed to provide students with an opportunity to synthesize many of the skills they have developed throughout their academic careers. This class should be a P/F or Non GPA

### **FUTURE PROBLEM SOLVING**

Grade Placement: 9-12 (weighted)

1 Credit

*Prerequisite: Must have passed previous STAAR or EOC English/Language Arts Test; English Instructor signature*

Future Problem Solving, a class geared for gifted/talented students, focuses on possible problems of the future and involves preparation for competition in the Texas Future Problem Solving Program. Students will research several global issues facing society today and will use the 6-step creative problem solving model to solve different problems set in the future related to those topics. Students may also read and write futuristic short stories based on the FPS topics. This is an English Language Arts elective credit and is **reading, researching, and writing intensive**. Students will earn credit for Research and Technical Writing for FPS I; Practical Writing for FPS II; Independent Study in English for FPS III; and College Readiness and Study Skills for FPS IV.

**Plato Lab Grade and Credit Recovery Courses**

**HIGH SCHOOL – ENGLISH  
LANGUAGE ARTS**

English I  
English II  
English III  
English IV

**MATHEMATICS**

Algebra I  
Algebra II  
Geometry

**HISTORY & GEOGRAPHY**

Economics  
Government  
World Geography  
World History

**SCIENCE**

Biology  
Chemistry  
Integrated Physics & Chemistry  
Physics

**FOREIGN LANGUAGE**

Spanish I  
Spanish II

**HEALTH**

High School Health

Other courses as needed

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<http://www.sintonisd.net/counselors/>

***Sinton High School  
Course Description Handbook***

***2018-19***