

# Giddings High School



## **Course Description Book** 2022-2023

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# ***INTRODUCTION***

This publication is designed to assist students and parents in making proper course choices. Students and parents are strongly encouraged to study the information found here and to make course choices carefully. Counselors and faculty members will assist students as they select their courses.

Courses offered may change from what is printed here due to teacher availability, student class size, and mandated curriculum changes.

Giddings ISD does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, military status, or any other basis prohibited by law in providing educational services.

## **SEMESTER SYSTEM AND CREDITS**

The school year is divided into two semesters. There are three six-weeks reporting periods in each semester. Each semester of the course is worth .5 unit of credit. For courses that are two semesters in duration, the semester grades will be averaged to determine total credit for the course. A passing grade for one semester may bring up a failing grade in the other semester if the yearly average is passing.

## **GRADUATION REQUIREMENTS**

Students are required to graduate on the Foundation program with Endorsements and 26 credits. Students can earn a distinguished level of achievement by successfully completing:

- A total of four credits in math, which must include Algebra 2
- A total of 4 credits in science
- The remaining curriculum requirements
- The curriculum requirements for at least one endorsement.

A student **must** earn a Distinguished Level of Achievement in order to be eligible for automatic top 10% admission to Texas universities.

## **GIFTED/TALENTED PROGRAM**

The GT Program is based on a requirement by the district and students must meet these requirements. More information concerning the GT Program may be obtained by contacting the school counselors.

## **DUAL CREDIT COURSES**

Our Dual Credit courses are offered through Blinn College in Brenham, Texas. In order to take a Blinn Dual Credit Course, you must meet the requirements for acceptance into Blinn College. One of those requirements is to have a 3.0 High School GPA. The other requirements involve any of the following:

ACT – composite score of 23 and at least a 19 on Math and English

TSI Assessment – a 351 or better in the reading and writing portion and a 4 or better on the writer placer. For courses that involve Math, you will also need to score a 351 on the Math portion.

Giddings High School offers the following courses for Dual Credit Enrollment. Please refer to Blinn College Course catalog for a description of each course.

U.S. History: 1301 & 1302  
Credit: 1

English IV: 1301 & 1302  
Credit: 1

Economics: 2301  
Credit: .5

Government: 2305  
Credit: .5

Medical Terminology: HITT 1305  
Credit: 1

## **PRE-AP and AP COURSES**

Pre-AP and AP classes are rigorous courses designed to prepare students to achieve success in college. Students will have the opportunities to develop the reading, writing, problem-solving techniques, and study habits that are expected of college students. An exceptional work ethic and a positive attitude are the two key elements needed for these classes.

## *Graduation Plans*

The foundation graduation program requires completion of the following credits:

<b>Course Area</b>	<b>Number of Credits, Foundation Graduation Program</b>	<b>Number of Credits, Foundation Graduation Program With an Endorsement</b>
English/Language Arts	4	4
Mathematics	3	4
Science	3	4
Social Studies, including Economics	3	3
Physical Education	1	1
Language other than English	2	2
Fine Arts	1	1
Electives	5	7
Miscellaneous	Available Endorsements: Science, Technology, Engineering, and Mathematics Business and Industry Public Services Arts and Humanities Multidisciplinary Studies	
<b>TOTAL</b>	<b>22 credits</b>	<b>26 credits</b>

Students cannot choose to graduate on the Foundation Program. Giddings High School is dedicated to graduate students who are ready for college or a career. All students will be placed on a program to graduate with an endorsement. Parents and students may opt out of this program after the student's 10<sup>th</sup> grade year, if necessary.

### **Endorsements**

GHS offers courses to meet endorsements in all areas: Science, Technology, Engineering, and Mathematics, Business and Industry, Public Services, Arts and Humanities, and Multidisciplinary Studies. There are specific course requirements in the foundation curriculum based on the endorsement selected, however most students meet the requirement of multiple endorsements without making a special effort to do so. Students should select electives that will best prepare the student for the post-secondary goals they aim to pursue. Achieved endorsements will be noted on high school transcripts. Courses chosen during high school become the foundation for the future; therefore, careful selection of challenging courses is recommended.

## ***General School Information***

### **High School Graduation Plans**

A personal graduation plan will be developed for each high school student. GISD encourages all students to pursue a personal graduation plan that includes the completion of at least one endorsement and to graduate with the distinguished level of achievement. Attainment of the distinguished level of achievement entitles a student to be considered for automatic admission to a public four-year college or university in Texas, depending on his or her rank in class. The school will review personal graduation plan options with each student entering grade 9 and his or her parent. Before the end of grade 9, a student and his or her parent will be required to sign off on a personal graduation plan that includes a course of study that promotes college and workforce readiness and career placement and advancement, as well as facilitates the transition from secondary to postsecondary education. The student's personal graduation plan will denote an appropriate course sequence based on the student's choice of endorsement. A student may, with parental permission, amend his or her personal graduation plan after the initial confirmation.

### **Performance Acknowledgements**

Students may earn performance acknowledgements for:

- Dual credit (12 hours of college academic courses with a grade of 3.0 or higher on a 4.0 scale)
- Bilingualism and biliteracy (completing all English language arts requirements with an 80 or higher, and (a) completing 3 credits in the same language with an 80 or higher, or (b) demonstrating proficiency for Level IV or higher with an 80 or higher, or (c) scoring a 3 or higher on a College Board Placement exam for a language other than English)
- Outstanding performance on a College Board Advanced Placement test (a 3 or above) on one or more AP exams.
- Outstanding performance on the PSAT/NMSQT (commended scholar), ACT Aspire exam (college readiness benchmark on two of the four subject tests), SAT exam (at least a 410 on reading and 520 on math), ACT exam (composite score of 28 excluding the writing sub score)
- Nationally or internationally recognized business or industry certification or license (contact the CTE Coordinator for more information)

### **Required State Assessments for Graduation**

STAAR end-of-course (EOC) assessments are administered for the following courses: Algebra I; English I and English II; Biology; U.S. History. "Approaching", "Meets", or "Masters" proficiency standards on the applicable assessments will be required for graduation, unless otherwise waived or substituted as allowed by state law and rules. There are three testing windows during the year in which a student may take an EOC assessment, which will occur during the fall, spring, and summer months. If a student does not meet satisfactory performance, the student will have additional opportunities to retake the assessment. Designated supports (accommodations) will be available for students who require certain instructional and assessment supports on a routine basis. STAAR Alternate 2, for students receiving special education services who meet certain criteria established by the state, will be available for eligible students, as determined by the student's ARD committee. An ARD committee for a student receiving special education services will determine whether successful performance on the EOC assessments will be required for graduation within the parameters identified in state rules and the student's personal graduation plan.

### **College Credit Courses**

Students in grades 9–12 have opportunities to earn college credit through the following methods:

- Certain courses taught at the high school campus, which may include courses termed dual credit, Advanced Placement (AP), International Baccalaureate (IB), or college preparatory;

- Enrollment in an AP or Dual-Credit courses.

All of these methods have eligibility requirements and must be approved prior to enrollment in the course. Please see the school counselor for more information. Depending on the student's grade level and the course, a state-mandated end-of-course assessment may be required for graduation. It is important to keep in mind that not all colleges and universities accept credit earned in all dual credit or AP courses taken in high school for college credit. **Students and parents should check with the prospective college or university to determine if a particular course will count toward the student's desired degree plan.**

### **Course Availability**

Courses are offered according to student needs and teacher availability. Students and parents are reminded that course selection determines how the school's schedule is built, faculty hired, and room assignments are made. Schedule changes can have a significant impact on the calculation of the six weeks average. Therefore, schedule changes will be considered for the following reasons only:

- The student is a senior not scheduled in a course needed for graduation;
- The student has already earned credit for a course in which he/she is currently scheduled;
- The student does not have the prerequisite(s) for a class listed on his/her schedule;
- The student has previously failed this course under the same teacher;
- The student has been dismissed from a program for which approval must be granted for placement;
- The student does not have a full schedule;
- There is a data entry error (i.e., no lunch, class listed twice, free period); or
- Other as approved by building administrator or designee.

Schedule changes must be approved by the administrator or administrative designee. *State law mandates 90% attendance in each class, each semester, to acquire credit.*

## Business & Industry

Pathway:	Year 1	Year 2	Year 3	Year 4
Business Management	Principles of Business, Marketing and Finance or Business Information Management 1	Business Law or Business Information Management 2	Human Resources and Virtual Business	Practicum in Business Management
	Industry Certification: Certifications in Microsoft Office Word Core, Microsoft Office Excel Core, Microsoft Office Power Point and Microsoft Office Word Expert.			
Accounting and Financial Services	Principles of Business, Marketing, and Finance	Accounting 1	Accounting 2	Securities and Investments or Practicum in Business Management
Animal Science	Principles of Agriculture, Food and Natural Resources	Small Animal Management & Equine Science	Livestock Production	Advanced Animal Science
Welding	Introduction to Welding	Welding 1	Welding 2	Practicum in Manufacturing
Networking Systems	Computer Science 1	Internetworking Technologies 1	Internetworking Technologies 2 & Principles of Applied Engineering	Practicum in Information Technology
	Industry Certification: A+ Certification, CISCO Certified Entry Networking Technician (CCENT), CISCO Certified Network Associate (CCNA)			

## Arts & Humanities

Pathway:	Year 1	Year 2	Year 3	Year 4
Photojournalism	Yearbook 1	Yearbook 2	Photojournalism	Digital Design & Media
Social Studies (total of 5 credits)	World Geography or Pre-AP World History	World History or AP World History	U.S. History or AP U.S. History or Dual-Credit U.S. History AND Psychology/ Sociology	Government & Economics (both 1 Semester courses) or Dual Credit Economics and Government
Visual & Performing Arts	Year 1 & 2: Courses from one Category in fine arts (Band, Theatre or Art)		Year 3 & 4: 2 additional courses from the same category as Years 1 and 2 OR 2 courses from a category different than Years 1 and 2	

The Arts and Humanities endorsement will be taken in a cohesive sequence with the courses required in the Foundation Plan.



## Public Service

Pathway:	Year 1	Year 2	Year 3	Year 4
Teaching and Training	Principles of Human Services	Human Growth and Development	Instructional Practices	Practicum in Education and Training
Healthcare Services	Principles of Health Science	Chemistry	Anatomy and Physiology and Medical Terminology	Practicum in Health Science – Pharmacy Tech; Certified Medical Assistant; Phlebotomy
	Industry Certifications: CMA – Certified Medical Assistant, Pharmacy Technician, Phlebotomy			
Cosmetology	Principles of Business, Marketing and Finance	Principles of Human Services	Cosmetology 1	Cosmetology 2
	Industry Certification: Cosmetology			
Exercise Science & Wellness	Lifetime Nutrition and Wellness	Sports Medicine 1	Sports Medicine 2 AND Anatomy and Physiology	Sports Medicine 3 or Project Based Research

The Public Service endorsement will be taken in a cohesive sequence with the courses required in the Foundation plan.

## STEM (Science, Technology, Engineering and Mathematics)

Pathway:	Year 1	Year 2	Year 3	Year 4
Computer Science	Computer Science 1	Computer Science 2	Computer Science 3	AP Computer Science A
	Industry Certification: A+ Certification			
Advanced Science (total of 5 science credits)	Biology*+	Algebra 2* & Chemistry*	Physics*	Choose 2 courses from the following; AP Biology, AP Chemistry, AP Environmental Science, Anatomy and Physiology, Environmental Systems, Advanced Animal Science, AP Physics
Advanced Math (total of 5 math credits)	Geometry*+ (Algebra 1 must have been taken in 8 <sup>th</sup> grade)	Algebra 2*	Pre-AP Precalculus	AP Calculus
Advanced Math/Science (total of 9 math/science/computer science credits)	Geometry*+ & Biology*+ (Algebra 1 must have been taken in 8 <sup>th</sup> grade)	Algebra 2* & Chemistry*	Physics* + Choose 1 credit from Science, Computer Science, or Math for which Algebra 2 is a prerequisite	Choose 2 credits from Science, Computer Science, or Math for which Algebra 2 is a prerequisite

The STEM endorsement will be taken in a cohesive sequence with the courses required in the Foundation Plan.

\*courses offered as Pre-Advanced Placement.

+ This course is part of the Foundation Plan.

## Multidisciplinary Studies

Pathway - A student must complete one of the following:
<b>Four advanced courses</b> that prepare a student to enter the workforce successfully or to enter postsecondary education without remediation from within one or more endorsement areas. The courses do not have to be in a coherent sequence.
<b>Four credits in each of the four foundation subject</b> areas to include English IV and chemistry and/or physics.
<b>Four credits in AP, or dual credit</b> selected from English, mathematics, science, social studies, or economics.

The Multidisciplinary Studies endorsement will be taken in a cohesive sequence with the course required in the Foundation Plan.

# ***LANGUAGE ARTS***

## **English 1**

Credit: 1

Grade Placement: 9

Prerequisite: None

English I is a world literature survey course integrating literature, grammar, and writing. Students improve reading skills through studying various literary genres and class novels. Major works studied include The Odyssey, Romeo & Juliet, To Kill a Mockingbird, and Animal Farm. Frequent reviews of usage and sentence structure are practiced. Students are given the opportunity to develop skills in research process, which culminates with a research presentation.

## **Honors English 1**

Credit: 1

Grade Placement: 9

Prerequisite: See note in Introduction concerning Pre-AP.

English I Pre-Advanced Placement includes all course work of English I. In addition, this course consists of independent literature study units, creative projects, and major writing assignments. Interdependent cognitive and affective strategies are applied to develop intellectual reasoning and perseverance. Students will be required to complete summer reading assignments in preparation for fall semester.

## **English 2**

Credit: 1

Grade Placement: 10

Prerequisite: English 1

English 2 focuses on language skills (usage and sentence structure) as applied to composition. Students write several essays and a research paper. Students examine reading skills in the area of world literature. Short stories, nonfiction, poetry, Antigone, Our Town and Julius Caesar are the main topics of study. Both semesters include frequent practice exercises in the STAAR-related areas of grammar and reading. An intensive unit on persuasive writing is covered during second semester, just prior to the STAAR test.

## **Honors English 2**

Credit: 1

Grade Placement: 10

Prerequisite: English 1. See note in Introduction concerning Pre-AP.

In addition to regular course work of English 2, English 2 Pre-AP curriculum includes three additional novels; theme and vocabulary are emphasized in these readings. Varied formats for tests are developed, stressing open-ended questions. Creative projects are required, such as posters, video presentations, and various writings, all of which relate to the literature of the course. Both semesters include frequent practice exercises in the STAAR-

related areas of grammar and reading. An intensive unit on persuasive writing is covered second semester, just prior to the STAAR test. Students will be required to complete summer reading assignments in preparation for fall semester.

### **English 3**

Credit: 1

Grade Placement: 11

Prerequisite: English 1, 2

English III will focus on writing skills and analysis of American Literature from the Colonial Period until present. Major authors, works, and forms will be studied. A review of the parts of speech, vocabulary usage, and sentence structure will be taught in conjunction with a required term paper and a variety of other written assignments.

### **AP English 3 - Advanced Placement**

Credit: 1

Grade Placement: 11

Prerequisite: English 1, 2. See note in Introduction concerning AP.

This is a course for motivated students. Students are expected to communicate on a higher intellectual level than the regular English III student. The curriculum includes independent reading, analysis of classic American literature, vocabulary, and writing assignments. The research project for AP literature consists of a critical analysis of the works of an American author. SAT and ACT vocabulary skills are emphasized. Students will be required to complete summer reading assignments in preparation for fall semester.

### **English 4**

Credit: 1

Grade Placement: 12

Prerequisite: English 1, 2, and 3

This course is designed for the college-bound student. The course covers the complete composing process, providing the students opportunities to develop necessary skills. It also includes a survey of the development of British literature and history from Anglo-Saxon age through the twentieth century. After reading historical background and selected literary masterpieces, students are encouraged to analyze literature through class discussion and expository essays. Incorporated into the study of literature and composition is the research paper.

### **AP English 4 - Advanced Placement**

Credit: 1

Grade Placement: 12

Prerequisite: English 1, 2, and 3. See note in Introduction concerning AP.

This is a course for motivated students. AP students are expected to communicate on a higher intellectual level. The curriculum includes reading and analyzing British literature, writing assignments, and vocabulary. An

extensive literary research project is required. Students will be required to complete summer reading assignments.

## **English I & 2 for Speakers of Other Languages**

Credit: 1

Grade Placement: By examination

Prerequisite: English not spoken at home

Course Number: 0114-1st year 0115-2nd year

This course is designed for the non-English speaking immigrant student. It parallels the regular English essential knowledge and skills with emphasis on oral language and vocabulary development. In addition, the course teaches American grammar rules, capitalization, punctuation, writing style, traditions, culture, and literature.

## **Professional Communications**

Credit: .5

Grade Placement: 10-12

Prerequisite: Willingness to speak to a student audience

Semester(s) Offered: fall and spring

The course will focus on the basic skills in topic selection, organization of ideas, preparation and presentation. Each student will be expected to prepare and present manuscript, extemporaneous and impromptu speeches. Study of delivery skills will include both verbal and nonverbal skills such as the use of appropriate diction, voice control, appropriate posture and gesture, and good eye contact. Other elements of the course will include listening skills, rhetorical tradition, and noteworthy speakers of the past and present.

## **Photojournalism**

Credit: 1

Grade Placement: 11

Prerequisite: None

Photojournalism introduces students to the world of photography and journalism. The law, ethics and history of photography complement the major units of study: operation and care of the camera, taking pictures, digital vs. film, print processing, teamwork and management skills. Technology, visual, and electronic media are used as tools for learning as students create, clarify, critique, and produce effective visual presentations. Students enrolled in this course will refine and enhance their journalistic skills, plan, prepare, and produce photographs for a journalistic publication (including the yearbook). This course may provide students insights into college and career choices. Some out of class time will be required including the time to shoot photo assignments. Students will work on the yearbook during first semester.

## **Yearbook Production 1**

Credit: 1

Grade Placement: 9-12

Prerequisite: Digital Design and Media Production and/or Photojournalism

This course is designed for students who are interested in continuing to work on the yearbook. Students in this course will be on the school yearbook staff. The curriculum includes the following: individual and group effort in the production of the yearbook within time constraints and budget limitations; being financially responsible for funding the yearbook through advertising and yearbook sales; photography; and page design and layout, copyrighting, editing, and proofreading. Students will be required to sell advertisements outside of the school day. In areas such as yearbook sales, fundraising, photography etc., some work outside of school hours will be required.

## **Yearbook Production 2**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: Yearbook Production 1.

This course will expand and refine the skills presented in Yearbook Production I. Students in this course will be on the school yearbook staff. It is designed to provide increased responsibility and involvement in the process and production of the yearbook. Students will assume editorial and organizational roles, such as section editors, business manager, etc., and overall leadership of the yearbook staff. In areas such as yearbook sales, fundraising, photography, etc., some work outside of school hours will be required. Students will campaign and sell yearbooks, sell advertisements to local businesses outside of the school day, and layout those ads. They will plan and set yearbook specifications such as cover art, end sheets, number of pages, etc. Some publications production work and photography will be required.

## **Spanish 1**

Credit: 1

Grade Placement: 9 - 11

Prerequisite: None

This class provides an introduction to basic understandings in communication, cultures, connections, comparisons, and communities. Students will be expected to listen, speak, read and write Spanish at the novice progress checkpoint. Students will learn correct pronunciation, word order and usage of such topics as days of the week, months of the year, numbers, colors, animals, and telling time. Student success in this course will depend partially on the strength of their background in English.

Spanish 2

Credit: 1

Grade Placement: 10 - 12

Prerequisite: Spanish 1

This class is a continuation of understanding Spanish in communication, cultures, connections, comparisons, and communities. More emphasis is placed on novice to intermediate writing skills. Connections focus on speaking and writing "production" skills in the natural process of listening, speaking, reading, and writing. An above average mastery (80 or above) of Spanish 1 is recommended for student success in this course.

## **Spanish 3**

Credit: 1

Grade Placement: 10 - 12

Prerequisite: Spanish 2

The proficiency level from Spanish 2 to Spanish 3 progresses to comprehension at the intermediate checkpoint. Listening and reading include context clues and "schema" as the class is taught almost entirely in the target language. Background knowledge in communication, cultures, connections, comparisons, and communities enhances this process. Writing is furthered with cultural introductions to selected literature. Success for this student requires increased foreign language productivity and a personal desire to think accordingly.

## ***MATHEMATICS***

### **Algebra 1**

Credit: 1

Grade Placement: 9

Prerequisite: None

Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions 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.

### **Geometry**

Credit: 1

Grade Placement: 9-10

Prerequisite: Algebra 1

Students will build on the knowledge and skills for mathematics in K- 8 and Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability.

### **Honors Geometry**

Credit: 1

Grade Placement: 9-10

Prerequisite: Algebra 1 (90 + average recommended) See note in Introduction concerning Pre-AP.

This course includes a more challenging and rigorous study of geometric thinking, symbolic reasoning, and properties of figures. Students in this course will further explore proofs and relationships between geometry and other areas of mathematics. Solid Algebra skills are needed.

### **Algebra 2**

Credit: 1

Grade Placement: 10-12

Prerequisite: Algebra 1 and Geometry

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

## **Honors Algebra 2**

Credit: 1

Grade Placement: 10-12

Prerequisite: Algebra 1 and Geometry. See note in Introduction concerning Pre-AP.

Course Number: 0208

This course includes a more challenging and rigorous study of the above description for Algebra II.

## **Financial Mathematics**

Credit: 1

Grade Placement: 11-12

Prerequisite: Algebra I and Geometry

Course Number: 7120

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 and will integrate career and postsecondary education planning into financial decision making. Students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.

## **Pre-calculus**

Credit: 1

Grade Placement: 11-12

Prerequisite: Algebra 1, Geometry, and Algebra 2

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. 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.

## **Honors Pre-calculus**

Credit: 1

Grade Placement: 11-12

Prerequisite: Algebra 1, Geometry, and Pre-AP Algebra 2. See note in Introduction concerning Pre-AP.



This course is preparation for AP Calculus and presents a more challenging and rigorous course of study of the above stated description for Pre-calculus.

### **AP Calculus - Advanced Placement**

Credit: 1

Grade Placement: 12

Prerequisite: Algebra 1, Geometry, Pre-AP Alg. II, and Pre-AP Precalculus. See note in Introduction concerning AP.

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations.

### **AP Computer Science A – Advanced Placement**

Credit: 1

Grade Placement: 11 and 12

Prerequisite: Completion of Algebra 2; Pre-AP Computer Science is strongly recommended

AP Computer Science A is equivalent to a first-semester, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.

## ***SCIENCE***

### **Biology**

Credit: 1

Grade Placement: 9, 10

Prerequisite: None

In Biology, students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs, nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; ecosystems; and plants and the environment.

## **Honors Biology**

Credit: 1

Grade Placement: 9, 10

Prerequisite: See note in Introduction about Pre-AP.

This course includes a more challenging and rigorous study of the above description for Biology. Students will need to possess a high degree of self-motivation to be successful in this course.

## **Integrated Physics and Chemistry**

Credit: 1

Grade Placement: 9, 10

Prerequisite: None

In Integrated Physics and Chemistry, students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: forces, circuitry, motion, waves, energy transformations, properties of matter, changes in matter, chemical reactions, equilibrium, classifying chemical reactions, and solution chemistry.

## **Chemistry**

Credit: 1

Grade Placement: 10, 11, and 12

Prerequisite: 1 unit of High School Science & 2 units of High School Math (or concurrent enrollment)

In Chemistry 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: characteristics of matter; energy transformations during physical and chemical changes; atomic structure; periodic table of elements; stoichiometry; behavior of gases; bonding; nuclear fusion and nuclear fission; oxidation-reduction reactions; chemical equations; solutes; properties of solutions; acids and bases; and chemical reactions. Students will investigate how chemistry is an integral part of their daily lives.

## **Honors Chemistry**

Credit: 1

Grade Placement: 10, 11, and 12

Prerequisite: Student must meet Chemistry and Algebra II criteria. See note in Introduction concerning Pre-AP.

All college-bound students are encouraged to take this course of Chemistry as it will prepare students for the demands of college science courses. General topics in Chemistry will be covered in class lectures and through labs designed to prepare students for college lab experience. This class will prepare the student for AP Chemistry.

## **Physics**

Credit: 1

Grade Placement: 10, 11, and 12

Prerequisite: 1-unit high school Science and 2 units of Math

In 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; force; thermodynamics; characteristics and behavior of waves; quantum physics, and static and current electricity. This course provides students with a conceptual framework, factual knowledge, and analytical and scientific skills. The main objectives of this course are (1) to develop an understanding of our physical environment; (2) to understand the concepts, facts and principles of physics, both mathematically and verbally; (3) to apply concepts, facts and principles through laboratory investigations; and (4) practice in remembering, understanding, applying, analyzing, synthesizing and evaluating information.

## **Honors Physics**

Credit: 1

Grade Placement: 10-12

Prerequisite: Pre-AP Biology and Pre-AP Geometry and concurrent enrollment in Algebra II. See note in Introduction concerning Pre-AP.

Students will need to be strong math students with a high-degree of self-motivation. In 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; force; thermodynamics; characteristics and behavior of waves; quantum physics, and static and current electricity. This course provides students with a conceptual framework, factual knowledge, and analytical and scientific skills. The main objectives of this course are (1) to develop an understanding of our physical environment; (2) to understand the concepts, facts and principles of physics, both mathematically and verbally; (3) to apply concepts, facts and principles through laboratory investigations; and (4) practice in remembering, understanding, applying, analyzing, synthesizing and evaluating information.

## **Anatomy and Physiology**

Credit: 1

Grade Placement: 11 and 12

Prerequisite: Biology and Chemistry

This course will explore human anatomy and physiology through observation of anatomical structures and their functions. Laboratory experimentation will include data acquisition for quantitative and qualitative analysis as well as dissection. Students will acquire an extensive amount of vocabulary and learn to use proper medical terminology.

## **AP Chemistry - Advanced Placement**

Credit: 1

Grade Placement: 11 (preferably), 12

Prerequisite: Pre-AP Chemistry. See note in Introduction concerning AP.

AP Chemistry is equivalent to freshman college Chemistry. AP students should have completed honors courses in Biology and Chemistry. This course is structured around the six big ideas articulated in the AP Chemistry curriculum framework provided by the College Board. Big ideas include: Structure of matter; properties of matter-characteristics, states, and forces of attraction; chemical reactions; rates of chemical reactions; thermodynamics; and equilibrium. A special emphasis will be placed on the seven science practices, which capture important aspects of the work that scientists engage in, with learning objectives that combine content with inquiry and reasoning skills. AP Chemistry is open to all students that have completed a year of chemistry who wish to take part in a rigorous and academically challenging course. Students are engaged in hands-on laboratory work, integrated throughout the course that accounts for more than 25% of the class time.

## **AP Biology - Advanced Placement**

Credit: 1

Grade Placement: 11, 12

Prerequisite: Must meet Biology, Chemistry criteria. See note in Introduction concerning AP.

The AP Biology course is designed to provide capable and motivated students with the opportunity to obtain college credit while enrolled in high school. This course is comparable to a first-year college course; therefore, students should be prepared for homework and reading assignments nightly. Topics emphasized in AP Biology include biochemistry, cellular energy transformations, molecular genetics, and biological systems interactions.

## **Environmental Systems**

Credit: 1

Grade Placement: 11, 12

Prerequisite: Must have 1 unit of high school Biology and 1 unit of high school Chemistry or Physics.

In Environmental Systems, students study a variety of topics that include: biotic and abiotic factors in habitats; ecosystems and biomes; interrelationships among resources and an environmental system; sources and flow of energy through an environmental system; relationship between carrying capacity and changes in populations and ecosystems; and changes in environments.

## **AP Environmental Science - Advanced Placement**

Credit: 1

Grade Placement: 11, 12

Prerequisite: Must have 1 unit of high school Biology and 1 unit of high school Chemistry.

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

## **AP Physics 1 – Advanced Placement**

Credit: 1

Grade Placement: 11, 12

Prerequisite: Must have 1 unit of high school Biology, 1 unit of Pre AP-Physics and Algebra 2

AP Physics 1 is an algebra-base, introductory college-level physics course. The students will form a better understanding of Physics as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound. AP Physics is not available every year.

## ***SOCIAL STUDIES***

### **World Geography**

Credit: 1

Grade Placement: 9 preferred or 10

Prerequisite: None

This course is approached by using the 5 themes of geography: location, place, region, human-environment interaction, and movement. In this course students will become acquainted with countries around the world. The physical features, the climate, the location, the type of government, the exports and imports, as well as the relationship of this country to its neighbors will be studied in depth. Cultural awareness will be an important part of this course. Students will be expected to master many map skills. Independent and group projects will be used to measure the student's mastery of world geography.

### **Honors World Geography**

Credit: 1

Grade Placement: 9 preferred or 10

Prerequisite: None

This course is built around three ideas: that history is an interrelated story of the world; history and geography are inherently dynamic; and historians and geographers are investigators. Students will acquire knowledge by evaluating evidence from a wide range of primary and secondary sources, explaining relationships among events and people by examining evidence for causality, correlation, continuity, and change over time. They will demonstrate command by incorporating all that they have learned into written and oral arguments. Students will need to possess a high degree of self-motivation to be successful in this course.

### **World History**

Credit: 1

Grade Placement: 9 or 10 preferred

Prerequisite: None

This course should give students the opportunity to learn about the major historical developments from the earliest civilizations to the twentieth century. Students will concentrate on several skill areas. The class will combine history and geography and will place emphasis on map reading, as well as the study of ancient, medieval and modern history.

## **AP World History – Advanced Placement**

Credit: 1

Grade Placement: 10 preferred -12

Prerequisite: None

In this course students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians. Students will explore five themes throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.

## **United States History**

Credit: 1

Grade Placement: 11

Prerequisite: World History or World Geography

In this course students study the history of the United States since Reconstruction to the present. Students will focus on the political, economic, and social events and issues related to a variety of events from industrialization and urbanization to reform movements such as the Civil Rights movement. Students are expected to use critical thinking skills, analyze historical documents, and complete projects dealing with important topics in US History.

## **AP United States History - Advanced Placement**

Credit: 1

Grade Placement: 11

Prerequisite: World History or World Geography. See note in Introduction concerning AP.

This course is designed to increase the student's understanding of United States History from its beginning to the present, its development and institutions. The goals of the class are to develop (1) an understanding of some of the principle themes in early and modern U.S. History, (2) an ability to analyze historical evidence, and (3) an ability to analyze and to express historical understanding in writing and other forms of communication.

AP U.S. History is a rigorous, fast-paced and challenging course designed to be the equivalent of a college freshman U.S. History survey course. Students need to have strong reading and writing skills and be willing to devote *substantial* time to study and the completion of class reading assignments. Emphasis is placed on class discussion, the use of primary and secondary sources, critical reading, and analytical writing. This course prepares students to take the College Board Advanced Placement United States History examination and possibly earning college credit.

## **Economics with an emphasis on the Free Enterprise System**

Credit: .5

Grade Placement: 12

Prerequisite: U.S. History

In this class, students will investigate the fundamental concepts of economics (e.g., scarcity, opportunity costs, specialization, supply and demand, business cycles, inflation, unemployment, etc.) They will study the American free enterprise system, the interrelationships between this system and the government, and the relationship between the American economic system and international economic policy. Consumer economics will also be a part of the course (e.g., consumer rights and responsibilities, credit, insurance, budgeting, taxes, etc.).

## **Government**

Credit: .5

Grade Placement: 12

Prerequisite: U.S. History

In this course, students examine the three branches of government at the federal, state, county and local levels. Students examine current events to understand practical application of this study of government. Students will understand that the U.S. Constitution grants us a democratic system of government and that in order for this form of government to be successful, individual participation in this process must take place.

## **Psychology**

Credit: .5

Grade Placement: 10, 11, and 12

Prerequisite: None

Semester Offered: fall

This course is designed for the student to learn about themselves. Students will learn an explanation of how humans behave and their mental processes. Topics include the brain, intelligence, sleep, dreaming, memory, psychological disorders, substance abuse among others.

## **Sociology**

Credit: .5

Grade Placement: 10, 11, 12

Prerequisite: None

Semester Offered: spring

Sociology provides a look at the interworkings of individual and group relations. The class examines cultural and societal customs, social institutions, deviance, criminology, and other social problems.

# ***Physical Education***

## **Physical Education**

Credit: 1

Grade Placement: 9, 10, 11, 12

Students will gain knowledge of the motor skills basic to effective movement. Skills, rules, strategies, protocol and safety practices appropriate to individual, dual and team sports are taught. Knowledge and skills for leisure and lifetime sports are included. A wide range of individual interest is met through these two courses. One credit is required for graduation. P.E. can only be taking 1 time.

### **Athletics 1 - Freshmen Girls and Boys**

Credit: 1

Grade Placement: 9

Prerequisite: Participating in or playing the sports offered for that semester or the offseason sport offered; (Note: Some sports require being placed in the athletic period. Some sports are “after school only”. Check with the appropriate coach to see if placement in the athletic period is required for your participation.

This course prepares boys and girls for competitive athletic competition. Participants will work to develop the skill necessary to progress and be successful in U.I.L. competition. Students not participating in the sport in season will work in an off-season program consisting of advanced weight training and aerobic exercises with emphasis on self-motivation and discipline. Athletics will substitute as required credit in Physical Education.

### **Athletics 2-4 JV/Varsity Girls and Boys**

Credit: 1

Grade Placement: 10 - 12

Prerequisite: Participating in or playing the sports offered for that semester or the offseason sport offered; (Note: Most sports require being placed in the athletic period. Some sports are “after school only”. Check with the appropriate coach to see if placement in the athletic period is required for your participation. Participation is not guaranteed; there are try-outs for sports at the varsity level.

Participants prepare for one of the teams competing in scheduled U.I.L. competition. During off-season students participate in a variety of physically demanding activities such as advanced weight training and advanced aerobic training. Mental discipline and self-motivation are also stressed. Athletes will substitute as credit required in Physical Education.

## ***FINE ARTS***

### **Theatre Arts 1**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: None

In this class, students will become acquainted with the basic elements of the theater, as well as the roles played by various members of a theatrical production company. Other topics covered will include voice and diction, history of the theater, acting technique and some technical theater, such as lights and set design. Students should be willing to perform in front of class or in an on-stage role. Students will be introduced into the audition process. Work in departmental productions is optional.



## **Theatre Arts 2**

Credit: 1

Grade Placement: 10 - 12

Prerequisite: Theatre Arts 1 and permission from the director

Students may continue their dramatic training by learning advanced acting and characterization techniques, classical and modern production styles and specialty theatre. Students will learn to audition. Also covered will be playwriting and directorial principles. Students will be introduced to costume and makeup. This is a class for students who showed interest in the beginning elements of theater and wish to progress. Work on departmental productions is required. Placement in upper levels of Theater depend on the individual student's work and behavior in the previous class.

## **Theatre Arts 3**

Credit: 1

Grade Placement: 11 or 12

Prerequisite: Theatre Arts 1 & 2 and permission from the director

Students will learn from diverse forms of storytelling and production. They will learn to exercise and develop creativity, intellectual curiosity, critical thinking, problem solving and collaborative skills. Students will delve further into the costume and makeup process. Students will learn to go into the subtext of a script and be introduced into the script writing process. Students will be involved in a variety of theatrical experiences which will allow them the opportunity to develop an understanding of self and their role in the world. Students are expected to learn monologues for class presentation. Work on departmental production is required.

## **Theatre Arts 4**

Credit: 1

Grade Placement: 12

Prerequisite: Theatre Arts 1, 2, and 3 and permission from the director

Students will be reinforced in the elements from Theatre Arts 3, especially in the fields of playwriting, performance, costume and makeup, and directing. Students will be researching theatre history and expected to make presentations in class based on their findings. Students will present audition-ready monologues, as well as, partner and/or group scenes. Work on department production is required.

## **Art 1**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: None

Students will be introduced to the elements and principles of design and will create original artwork in the areas of design, drawing, painting, ceramics, and sculpture. In addition, the students will learn to appreciate art and evaluate the artwork of students and major artists.

## **Art 2**

Credit: 1

Grade Placement: 10 - 12

Prerequisite: Art 1 and permission from the department

Students will participate in an advanced course of study dealing primarily with drawing, painting, ceramics, and sculpture. A strong emphasis is placed on the elements of design and learning to communicate through the visual arts. Students must be able to work through their own initiative on individual projects and develop artistic independence. Placement in upper levels of Art depend on the individual student's work and behavior in the previous class.

## **Art 3**

Credit: 1

Grade Placement: 11 - 12

Prerequisite: Art 1 and Art 2 and permission from the department

This course is designed to allow students to create their own direction or path in the visual arts, with the expectation of thematic concepts. All work will be geared towards contests, exhibitions and a final portfolio. Students must be self-directed with a serious intent towards using the visual arts, as a part or whole, or their career choice. Placement in upper levels of Art depend on the individual student's work and behavior in the previous class.

## **Art 4**

Credit: 1

Grade Placement: 12

Prerequisite: Art 1, Art 2, and Art 3 and permission from the department

The fourth-year course takes the self-directed student and further develops their artistic style and personal direction in Art. All work will be geared toward competition, exhibitions, final portfolio, and electronic portfolio. Students will work with instructor on college and career choices. Placement in upper levels of Art depend on the individual student's work and behavior in the previous class.

## **Band 1, 2, 3, 4**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: Participation in Band the previous year or by Director approval

Band offers a unique co-curricular education opportunity. The Band marches at football games; UIL and invitational marching contests and parades; plays at Christmas and spring concerts; and UIL Concert and Sight-Reading Evaluation. Students have the opportunity to excel individually at region, area, and state honor band auditions, and UIL solo and ensemble. Participating students will not only learn fundamentals of musicianship and instrumental and ensemble technique but will also have the opportunity to develop highly marketable skills

and qualities of leadership, teamwork, self-discipline and the pursuit of excellence. Note: Academic eligibility is required by TEA and UIL for participation in many of the Band's events and activities.

### **Instrumental Ensemble**

Credit: 1

Grade Placement: 9-12

Prerequisite: Current Member of the Band or by Director approval

The student will be offered individual instruction on their particular instrument and/or the opportunity to learn a new instrument. Individual and/or small group study/practice time will be an aspect of this class. Instruction will include general music theory and instrument specific theory.

### **Floral Design**

Credit: 1

Grade Placement: 10-12

Prerequisite: None

Students will learn the principles and techniques related to floral design, artistic composition, and color theory along with developing an understanding of the management of floral enterprises. This course is also an Agricultural course.

## ***BUSINESS EDUCATION***

### **Principles of Business, Marketing, and Finance**

Credit: 1

Grade Placement: 9-11

Prerequisite: None

In Principles of Business, Marketing, and Finance, 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. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

### **Human Resources Management**

Credit: .5

Grade Placement: 11-12

Prerequisite: None

Students analyze the primary functions of human resources management, which include recruitment, selection, training, development, and compensation. Topics will incorporate social responsibility of business and industry. Students develop a foundation in the economical, financial, technological, international, social, and ethical aspects of human resources in order to become competent managers, employees, and entrepreneurs. Students incorporate a broad base of knowledge that includes the legal, managerial, financial, ethical, and international dimensions of business to make appropriate human resources decisions.

## **Virtual Business Management**

Credit: .5

Grade Placement: 10-12

Prerequisite: None

The student builds a functional website that incorporates the essentials of a virtual business. They will incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions. Students will be able to identify steps needed to locate customers, set fees, and develop client contracts. Students will be able to provide administrative, creative, and technical services using advanced technological modes of communication and data delivery.

## **Accounting I**

Credit: 1

Grade Placement: 10, 11, and 12

Prerequisite: None

Students will learn the fundamental concepts and theory of the "language of business" - accounting. Students will demonstrate an understanding of the accounting cycle for a service business, merchandising business and a corporation. Students will learn to compute payroll and become familiar with banking procedures. They will also perform specialized accounting procedures. Students will become familiar with some accounting career options. In addition, students will improve and apply many business skills as they apply to accounting.

## **Accounting 2**

Credit: 1

Grade Placement: 11 or 12

Prerequisite: Accounting 1

Course Number: 7070

Students will learn how accounting is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will engage in various managerial and cost accounting activities that will help them to learn how to formulate and interpret financial information for use in the management decision making process.

## **Securities & Investments**

Credit: .5

Grade Placement: 9 – 12

Prerequisite: None

Students will learn how to determine methods of achieving long-term financial goals through investment, tax planning, asset allocation, risk management, retirement planning, and estate planning. Students will also learn personal expense tracking, insurance, budgeting, banking practices, gender perceptions of money, career goals,

health savings accounts, and debt management. The backbone of this class is based on Dave Ramsey Financial Peace University curriculum.

## **Business Law**

Credit: 1

Grade Placement: 10 - 12

Prerequisite: None

Students analyze the social responsibility of business and industry regarding the significant issues relating to the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, business organizations, concept of agency and employment, and real property. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

## **Practicum in Marketing**

Credit: 3

Grade Placement: 12

Prerequisite: None

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.

# ***TECHNOLOGY APPLICATIONS***

## **Business Information Management I**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: Ability to touch type

This course is designed to strengthen student computer skills. Emphasis will be placed on developing skills to be successful in the workplace. Students will perform various word processing skills including many business documents. Students will apply spreadsheet technology to formulate and produce solutions to a variety of business problems. Students will apply database technology to perform data management procedures and to produce and analyze business reports. Students will apply desktop publishing technology. Students will be given an opportunity to work with multimedia presentations.

## **Business Information Management 2**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: BIM 1

This class will continue to strengthen the knowledge base started in BIM 1. Students will have the opportunity to earn Microsoft Office Specialist certifications while they learn advanced concepts and skills that allow them to strengthen computer skills for the workplace and college.

## **Touch System Data Entry**

Credit: .5

Grade Placement: 9-12

Prerequisite: None

Students will learn the proper use of the keyboard to input data using the computer and will develop speed and accuracy. Students will learn to prepare and develop business documents using word-processing skills.

## **Digital Design and Media Production**

Credit: 1

Grade Placement: 9-12

Prerequisite: None

Digital Design & Media Production develops a broad foundation of basic entry-level skills required for careers in the digital publishing industry. The content includes computer skills; digital publishing operations; layout, design, and measurement activities; digital imaging as well as communication, collaboration and decision-making activities; critical thinking; and problem solving. The content includes enhanced practical experiences in computer generated art and text, graphic design, graphic production, electronic design skills, preparation of electronic layouts and illustrations, and electronic scanning; and development of specialized skills in multimedia presentations. Students will work on the yearbook during the first semester.

## **Principles of Applied Engineering**

Credit: 1

Grade Placement: 11 & 12

Prerequisites: Algebra 2 or concurrent enrollment in Algebra 2

This course provides an overview of the various fields of technology, engineering and design, and their interrelationships. Creative skills are used to dissect and solve problems. Students will use a variety of computer software and hardware applications to develop and test prototypes. Prototypes will be produced by hand or 3D printer. Further, students will work with a variety of hand tools and power tools on a design team to develop a product or system. Students will maintain a meticulous design and computation engineering notebook.

## **Computer Science 1**

Credit: 1

Grade Placement: 9-12 (preference given to upper level students)

This is an introductory course in computer programming using Java based programming language. Topics include elementary data types, control structures, documentation, basic file manipulation, terminal input/output, problem solving techniques, modular design, and logical implementations of best practice coding techniques. Discussions of contemporary industry trends will be included in lectures. Class assumes no prior exposure to programming and limited exposure to computer hardware and software.

## **Computer Science 2**

Credit: 1

Grade Placement: 10-12

Prerequisite: Computer Science 1

## **Computer Science 3**

Credit: 1

Grade Placement: 11-12

Prerequisite: Computer Science 2

## **Internetworking Technologies I**

Credit: 1

Grade Placement: 10-12 (preference given to upper level students)

Prerequisite: Jr/Sr. status or Completion of Introduction to Computer Maintenance

In this fundamental course in Network Engineering principles and protocols, students will learn the implementation of interactions and solutions between Home, Small Businesses, and Internet Service Provider Networks. Curriculum includes: Networking topologies and standards, applications of the 7-Layer OSI model theories, IP addressing and sub-netting, basic network design, switching, and router theory. Students participate in the Cisco Networking Academy Discovery-1 and Discovery-2 programs and upon program completion will hold the education necessary to complete the Cisco Certified Entry Network Technician Exam with a significant probability of passing the exam.

## **Internetworking Technologies II**

Credit: 1

Grade Placement: 11-12

Prerequisite: Completion of Internetworking Technologies I with a "B" or better and Algebra 2.

This course is a continuation of the Cisco Network Academy curriculum using Discovery-3 and Discovery-4 programs. Topics involve routing and switching protocols at the Enterprise level and designing and troubleshooting advanced network topologies. A significant end of year project will be required by all students. Upon program completion, students will hold the educations necessary to complete the Cisco Certified Network Associate Exam with a significant probability of passing the exam.

## **AP Computer Science**

Credit: 1

Grade Placement: 12

Prerequisite: AP Computer Science A. Students will be dual enrolled with AP Computer Science A students.

This course is a continuation of Advanced Placement curriculum with an emphasis on higher level data structures to include advanced recursion, Regular Expressions, Big-O algorithm analysis, AVL and B-tree, advanced algorithms such as Dijkstra's Algorithm, and Tree Structures evolving into Adjacency matrix's, Black and Red Structures, Tree Traversals, Hash Tables, and Interfaces. A significant Inter-Process Communication (IPC) project will be required. Students will be introduced to C++ programming language. An emphasis will be placed on UIL Computer Science Academic competition.

## ***HEALTH SCIENCE***

### **Principles of Health Science**

This course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and developmental systems of the healthcare industry.

### **Sports Medicine 1 and Sports Medicine 2**

These courses provide sports medicine opportunities including prevention, evaluation, immediate care of injuries, taping/wrapping, first aid/CPR/AED, emergency procedures, sports psychology, and more.

### **Phlebotomy, Pharmacy Tech, Certified Medical Assistant**

These courses are based on availability through our partnership with Blinn College.

## ***FAMILY AND CONSUMER SCIENCES***

### **Principles of Human Services**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: None

This course addresses the topics of leadership, decision-making, consumerism, nutrition, child development and careers in the Human Services Career Cluster.

### **Human Growth and Development**

Credit: 1

Grade Placement: 10-12

Prerequisite: None

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



## **Lifetime Nutrition and Wellness**

Credit: .5

Grade Placement: 10, 11 and 12

Prerequisite: Principles of Human Services

Semester Offered: Both fall and spring

This laboratory course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.

## **Instructional Practices**

Credit: 2

Grade Placement: 12

Prerequisite: Principles of Human Services, Lifetime Nutrition and Wellness, and Child Development

In this two-period blocked course, students will experience field-based internships that provide background knowledge of child and adolescent development as well as principles of effective teaching and training practices, teaching strategies, learning styles, classroom environments, brain development, and behavior management. Various projects will require supplies\*

Students are placed in a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and assist teachers with acceptable aide responsibilities.

## **Practicum in Education and Training**

Credit: 2

Grade Placement: 12

Prerequisite: Instructional Practices

This course is a field-based internship that provides students with background knowledge of child and adolescent development as well as the principles of effective teaching and training practices. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, and complete other responsibilities of teachers, trainers, or other educational personnel.

## **Cosmetology 1/Cosmetology 1 Lab Innovative**

Credit: 3

Grade Placement: 11-12

Prerequisite: None

Students will learn sterilization and sanitation procedures, hair care, nail care, and skin care. The knowledge gained from this instruction will meet the Texas Department of Licensing and Regulation requirement for licensure after passing the state exam. This is a two-year program and requires students to complete both years

to gain the hours and information necessary to take the State Exam. This class meets at LaGrange High School and students must be able to provide their own transportation.

## **Cosmetology 2/ Cosmetology 2 Lab Innovative**

Credit: 3

Grade Placement: 12

Prerequisite: Cosmetology 1

Students will continue to build on their skills from Cosmetology 1 and will gain advanced training for employment in cosmetology careers. Upon completion of Cosmetology 2, they will have the hours and knowledge necessary to take the state exam.

# ***AGRICULTURE***

## **Principles of Agriculture, Food, and Natural Resources**

Credit: 1

Grade Placement: 9 - 12

Prerequisite: None

This introductory course is designed to enhance a student's knowledge of global agriculture. Included in the course will be history of agriculture, the food and fiber chain, new research, and new developments in agriculture and agricultural career development. It will also develop personal, social and communications skills and develop democratic leadership skills through the FFA organization conducting effective meetings.

## **Floral Design**

Credit: 1

Grade Placement: 9-12

Prerequisite: None

Students will learn the principles and techniques related to floral design, along with developing an understanding of the management of floral enterprises.

## **Small Animal Management**

Credit: .5

Grade Placement: 10 - 12

Prerequisite: Principles of Agriculture, Food, and Natural Resources

Semester Offered: Fall

This is a course designed to develop knowledge and skills pertaining to the nutrition, reproduction, health and management of livestock. Major topics included are animal anatomy and physiology, genetics, evaluation and selection of breeding animals, carcass evaluation, the causes and treatment of disease, management techniques, nutritional requirements, record keeping, and exploration of career opportunities. Students will also plan and conduct leadership activities.

## **Equine Science**

Credit: .5

Grade Placement: 10 - 12

Prerequisite: Principles of Agriculture, Food, and Natural Resources

Semester Offered: Spring

This class is focused on learning about horses. The beginning of the semester will address basic equine knowledge such as history, breeds, identification, conformation, and judging. Students will explore concepts in anatomy, physiology, reproduction, nutrition, health, equine facilities, and management.

## **Advanced Animal Science**

Credit: 1

Grade Placement: 12

Prerequisite: Biology, Chemistry, Physics, and Principles of Agriculture, Food, and Natural Resources

In this class, the student will continue to develop knowledge and skills pertaining to the nutrition, reproduction and health management of livestock. This course can count as a fourth science requirement.

## **Introduction to Welding**

Credit: 1

Grade Placement: 9

Prerequisite: Principles of Manufacturing, Agricultural Mechanics and Metal Technologies

This course concentrates on welding skills, welding positions, welding variables, and reading WPS sheets. This class takes off from key principles and concepts that were already covered and learned from prerequisite classes. This period also allows for personal welding projects for competitions.

## **Welding 1**

Credit: 2

Grade Placement: 10

Prerequisites: Intro to Welding

This course concentrates on using the welding skills, welding positions, welding variables, and reading WPS sheets that have been learned. This class accelerates the learned knowledge and skills through building projects for competition shows and welding skills competitions. Welding 1 is a two-hour class. Placement in upper levels of Welding depend on the individual student's work and behavior in the previous class.

## **Welding 2**

Credit: 2

Grade Placement: 11

Prerequisite: Welding 1

Placement in upper levels of Art depend on the individual student's work and behavior in the previous class.

## **Practicum in Manufacturing**

Credit: 2

Grade Placement: 12

This course 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, or assistantships.

## ***MISCELLANEOUS***

### **Student Aide**

Credit: .5 - 1 (Local credit only)

Grade Placement: 12

Prerequisite: Must have passed all courses the previous semester

This course allows a student to be assigned to a teacher or to the office in order to gain practical experience in the teaching field as well as office procedures. Students are assigned workstations at the beginning of each semester and are assigned a grade by their supervisor. The grade does not enter into the grade average that decides class rank or honor roll.