

High School Course Descriptions

English I

Course Number 0111

English I integrates the study of composition, language usage, literature, and reading. Students will read and respond to a variety of literary genres and write for a variety of purposes and audiences.

English I Pre-AP

Course Number 0112

A study of all forms of literature from many periods is accompanied by a variety of writing opportunities, vocabulary study, and higher level thinking skills and strategies. The related theme for literature is “Discovery of Self.”

English II

Course Number 0121

English II reinforces study skills, library skills, language usage, and composition methods, reading competence, literature appreciation, vocabulary enrichment, and effective test-taking techniques.

English II Pre-AP

Course Number 0122

Through a study of classic, Anglo/Saxon, Medieval, and Renaissance literature, Students have the opportunity to discover how literature enriches life and to explore a variety of writing opportunities.

English III

Course Number 0133

English III consists of advanced language usage, written compositions, preparation for college entrance examinations through vocabulary development and test-taking techniques, a survey of American literature from 1607 to the present time, and advanced research skills applicable to a documented paper on an appropriate topic.

English IV

Course Number 0141

English IV includes extensive composition and language practice, a study of the origins and growth of the English language through a survey of British literature, and the reading of other works by world masters from all periods.

English III Advanced Placement

Course Number 0133

American culture and literature are studied through a survey of the literature of the United States from its origins until today. Employing critical thinking skills, students will participate in a variety of activities consisting of research, reading, and writing for stylistic purposes. “Growth and Identity” is the theme for the year.

Creative Writing**Course Number 0130**

Creative writing offers students a series of experiences designed to develop the awareness and skills essential in writing creatively. Students will experiment in writing in various forms including short stories, various types of poetry, dramatic monologues, ten-minute plays, children's books, and nonfiction. Selections will be submitted to creative writing contest and literary magazines.

English IV Advanced Placement**Course Number 0144**

To enrich and complement the various surveys from the preceding years is the goal of the last year of advanced placement English. Putting into practice all the skills of reading, listening, thinking, speaking, and writing will provide these students with the best of foundations for their pursuit of higher education.

Dual Credit English III and IV**Course (III) 0134 (IV) 0143**

Dual Credit English IV is designed for college-bound students who demonstrate college-readiness through prior college study. Students study the masterworks of the literature of England from the Anglo-Saxon period, beginning with the epic tradition as illustrated by Beowulf to the decline of Neoclassicism. Spring semester is a study of the masterworks of the literature of England from the Romantic period through the Twentieth Century. With an emphasis on the masterworks of principle authors, collateral reading, class themes, and research projects are required for course credit.

Photography (Photojournalism)**Course Number 0770**

This course includes the study of photographic composition; use of the camera; and photographic techniques such as framing, silhouette, and use of depth-of-field.

Speech (Communication Applications)**Course Number 0149**

Students will identify, analyze, develop, and evaluate communication skills needed for professional and social success in interpersonal situations, group interactions, and personal and professional presentations

Debate**Course Number (1) 0151 (2) 0172 (3)****0173**

This course is designed to teach basic argumentation skills. Students will become familiar with various debate formats, basic research skills, and effective presentations. Students will learn to analyze topics and to support a point of view.

English ESL**Course Number 0125**

This course is designed for students who are at a beginning level of English proficiency. Instruction emphasizes an integrated language arts approach to strengthening oral and written language skills in social as well as academic English. The teacher also clarifies key concepts and academic vocabulary from the students' other content areas.

Mathematical Models with Applications**Course Number 0450**

In this course, students use mathematical methods to model and solve real life applied problems involving money, data, probability and statistics, patterns, music, art, and science. Students use a variety of tools including technology to solve problems and model purely mathematical concepts.

Pre-Calculus**Course Number 0460**

The purpose of this course is to explore many advanced mathematical models which are often used in science, engineering, and other career fields. Topics include: properties and graphs of trigonometric and circular functions and their applications; properties and graphs of special functions; higher degree polynomial functions, sequences and series.

Pre-Calculus Pre-AP**Course Number 0459**

The purpose of this course is to prepare students for careers in math, science, engineering, and other fields and to provide a foundation for higher level math courses. Topics include: exponential and logarithmic functions, trigonometric and circular functions, vectors, complex numbers, sequences, and series. This course combines trigonometry, analytic geometry, and elementary analysis and solving problems.

AP Calculus**Course Number 0465**

This course is a rigorous college-level calculus course leading to the College Board Advanced Placement AB Calculus Exam and to possible college credit for one semester. Topics include: concepts and skills of limit, differentiation, integration, and applications of calculus.

AP Statistics**Course Number 0461**

The purpose of the Advanced Placement Statistics course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. Students who successfully complete the course and examination may receive Credit and/or advanced placement for a one-semester introductory college statistics course.

Algebra I**Course Number 0408**

The purpose of this course is to provide a foundation for students to solve problems using functions, symbolic reasoning and mathematical modeling. The student will investigate real numbers, linear equations and inequalities as well as linear, quadratic and other non-linear functions. This course provides a foundation for upper level mathematics courses.

Geometry**Course Number 0419**

This course includes plane and solid geometry, coordinate geometry, and transformational geometry. It provides the study of traditional and non-traditional proofs, transformations, similarities, coordinate geometry, area, and volume. Geometry is a required course for high school graduation.

Geometry Pre-AP**Course Number 0420**

This course provides an enriched geometry program with a greater emphasis on logical reasoning, higher order thinking skills, and problem solving. All topics and Credits given for Geometry above apply to this course.

Algebra I Pre AP**Course Number 0419**

Students are expected to engage and extend their mathematical abilities to a higher rigor expected of Algebra I. Algebra I is the mathematical basis and foundation for more advanced math courses. Topics will include mathematical processes to acquire and demonstrate mathematical understanding; Linear functions, equations, and inequalities; Quadratic functions and equations; Exponential functions and equations; and number and algebraic methods. The curriculum for this course is determined by the TEKS and TEA.

Algebra II**Course Number 0430**

The purpose of this course is to extend the concepts and skills developed in Algebra I. Functions explored are: quadratic and radical functions, rational functions as well as exponential and logarithmic functions. Students will use real world data and technology to solve problems using these mathematical models.

Algebra II Pre-AP**Course Number 0427**

This course provides an enriched course in Algebra II. It emphasizes higher order thinking skills, problem solving, and preparation for higher levels of mathematics and related fields. Most Algebra II Honors students successfully completed Geometry

Biology I**Course Number 0211**

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; and ecosystems and the environment.

Integrated Physics and Chemistry (IPC)**Course Number 0221**

Students study the disciplines of physics and chemistry including force, motion, energy, and matter through laboratory and field investigations, using scientific methods, critical thinking and problem solving.

Biology I Pre-AP**Course Number 0212**

Students in this advanced course investigate the same topics as the Biology course, enriched with higher level content and lab investigations. Independent research is an integral part of this course.

Chemistry**Course Number 0231**

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. Students will investigate how chemistry is an integral part of our daily lives

Chemistry Pre-AP**Course Number 0232**

Students in this advanced course investigate the same topics as the Chemistry course, enriched with higher level content and lab investigations. Independent research is an integral part of this course.

Physics**Course Number 0266**

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.

Physics Pre-AP**Course Number 0265**

Students in this advanced course investigate the same topics as the Physics course, enriched with higher level content and lab investigations, including applications of Geometry and Algebra II. Independent research is an integral part of this course.

Dual Credit Biology**Course Number 0263**

This course is a college introductory course usually taken by students during their first year. The college course in biology differs significantly from the usual first high school course in biology with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students.

Biology AP**Course Number 0262**

AP Biology focuses on enduring, conceptual understandings and the content that supports them. This enables students to spend less time on factual recall and more time on inquiry-based learning of essential concepts and the development of reasoning skills.

AP Chemistry**Course Number 0264**

This course is a rigorous, college-level study of chemistry topics including the structure of matter, states of matter, chemical reactions, kinetics, stoichiometry, equilibrium, and descriptive chemistry. This course also includes the strong laboratory component designated by the College Board

World Geography**Course Number 0311**

This course examines people, places, and environments at local, regional, national, and international levels. Students will study the influence of geography on events of the past and present; the characteristics of major land forms, climates, and ecosystems; and the political, economic, and social processes that shape cultural patterns of regions.

Pre-AP World Geography**Course Number 0312**

This course provides an enriched world geography program with a greater emphasis on logical reasoning, higher order thinking skills, and problem solving. All topics and credits given for World Geography above apply to this course. Most students will have completed eighth grade Pre-AP U.S. History prior to enrolling in World Geography Honors.

World History**Course Number 0315**

This course emphasizes the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as important events and issues in western civilization as well as in civilizations in other parts of the world.

Pre-AP World History**Course Number 0316**

This course is much like the AP World History course. Course content will be similar to the College Board requirements, but will follow the District's guidelines. This course may be taken in place of the regular World History course.

United States Government**Course Number 0331**

This course focuses 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. A significant focus of the course is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created.

United States History**Course Number 0321**

This class will survey the major political, economic, social, and cultural developments in the United States since 1877. This class will consider the political development of imperialism, the growth of the office of president, several wars and the significance of each and the overall significance of the United States and its role in the world.

AP United States History**Course Number 0322**

This advanced course in American history explores ideas, concepts, interpretation, and movements in American history from the early settlement of the Americas to the present. Broad themes of the course include the creation and evolution of political institutions, the role of America in the world, the development of the American economy, and the way in which the American people have lived. This course may be taken in place of the United States History. Students may earn college credit through the College Entrance Examination Board AP Examination which is offered in May of each year.

Dual Credit US History**Course Number 0323**

US 1301 and 1302 are general survey courses of American history. The courses focus on all major events that occurred. The material presented encompasses a wide variety of topics including the social, cultural, intellectual, military, and political history. US 1301 begins with early Native Americans to 1877, US 1302 covers 1877 to the present.

AP United States Government**Course Number 0332**

This course will give students an analytical perspective on government and politics in the United States. It includes the study of the various institutions, groups, beliefs and ideas that constitute U.S. politics as well as the general concepts used to interpret U.S. politics, and the analysis of specific examples.

Economics**Course Number 0341**

This course focuses on the basic principles concerning production, consumption, distribution of goods and services in the United States and a comparison with those in other countries around the world. Students will examine the rights and responsibilities of consumers and businesses in a free enterprise system.

AP Economics**Course Number 0342**

This course is much like the AP Economics course. Course content will be similar to the College Board requirements, but will follow the District's guidelines. This course may be taken in place of the regular Economics course.

Spanish I**Course Number 010**

This course is especially designed for students who can understand Spanish, but cannot speak it or speak it very little. Students DO NOT have to be fluent nor speak perfect Spanish to take this class. This course provides the students an opportunity to refine and expand the language skills they already possess. Students will have opportunities to engage in simulated real-life situations using an enriched curriculum exposing them to their Hispanic Culture, Customs, Heritage, and History.

Spanish II**Course Number 0156**

This course is for students who understand and speak some Spanish at this basic level. It offers students opportunities to expand their knowledge of Spanish using special materials and activities designed for Spanish speakers. Students will continue to develop and refine their Spanish skills in speaking, listening, reading, and writing through an enriched curriculum concentrating on Hispanic Culture, Customs, Heritage, and History.

Spanish III Pre AP**Course Number 0157**

Students continue to work towards proficiency in speaking and listening comprehension. The study of some condensed literary works will incorporate the development of reading comprehension and writing skills. Culture topics are integrated throughout the curriculum. Students will do independent, pair, and group work to allow for more creativity and the use of higher order thinking skills.

Spanish IV Pre AP**Course Number 0158**

Students continue to work on all four language skills through a variety of independent, pair, and small group activities. Students concentrate on a variety of cultural topics relating to the Hispanic world which are integrated in the curriculum.

French I**Course Number 0165**

This course focuses on developing speaking and listening comprehension skills. Students are exposed to basic reading and writing skills. Students are introduced to the people, their customs, and other aspects of their culture. Students have the opportunity to work in pairs and small groups to role play real-life situations using the language.

French II**Course Number 0166**

This course continues to focus on opportunities for students to expand their speaking and listening comprehension skills in addition to developing their writing and reading comprehension skills. Students continue to study the culture, the people and their customs. Students will continue to role play and perform dialogues/skits on various everyday situations and topics using the language.

French III Pre AP**Course Number 0167**

Students continue to work towards proficiency in speaking and listening comprehension. Students continue to expand their reading comprehension and writing skills. Culture topics are integrated throughout the curriculum.

French IV Pre AP

Students continue to work towards proficiency in speaking and listening comprehension. Students continue to expand their reading comprehension and writing skills. Culture topics are integrated throughout the curriculum. Group and independent activities will be employed in order for students to use the target language intensively in all aspects of the class.

Athletics

Numerous athletic programs under UIL affiliation are offered for students in the high schools. Students who participate in these UIL sports may earn a maximum of 4 units in P.E. Credit in these courses. Since these athletic teams compete with other 5A schools, students must try out for the teams by demonstrating strong ability in the skills needed for field performance.

Physical Education

PE provides a basis for a lifetime program of physical fitness. In addition to daily warm-up, strength, and flexibility exercises, students participate in an array of the following activities: volleyball, football, conditioning, soccer, basketball, softball, track, table tennis, bowling, tennis, gymnastics, dance, and weight training. Other instructional topics include team game play, substance abuse, fitness, wellness, and outdoor adventures. PE classes allow participants to acquire the knowledge and skills for movement, thus providing the foundation for enjoyment, continued social development through physical activity, and access to a physically active and healthier lifestyle.

Dance Line**Course Number 0810**

These are performing groups which operate much like a team, students must compete for places on the pep squad by demonstrating the skills needed for field performance such as marching, obedience to commands, hand routines, etc.

Art I**Course Number 0511**

The first art course in high school is designed to introduce the student to the various art forms and to develop an appreciation for history of art. Units in design and composition will explore various media and techniques in drawing, painting, sculpture, and printmaking. Students will have the opportunity to display their products at various shows, festivals, and contests. No prior art experience is required to be eligible for this course.

Art II**Course Number 0512**

The second year art course is designed to build on the experience of the first year art course in the areas of drawing, painting, sculpture, printmaking, and art history. The projects of the students are more complex than those of the first year. Assignments in drawing and painting involve experimental approaches to the use of materials, interpretations, and evaluations of projects. Projects are designed to emphasize the conceptual elements of the works. Focus is on extensive creativity, imagery, individualization, and gallery display.

Art III**Course Numbers 0513**

The third year art course provides for activities on a more advanced level than those of the preceding two years. Emphasis continues to be placed on understanding and recognition of art styles and the significance and values of art as a means of expression. Extended creativity and portfolio development is emphasized in this third year course.

Art IV**Course Numbers 0514**

Art IV is an advanced course based on the experiences and skills developed in the first three years. It provides background preparation for students who may wish to major in art in college. Projects are individualized to accommodate students' desires to further explore media and ideas of their own choice.

Choir

Concert choir is a mixed choir composed of the most advanced musicians and gives the students the opportunity to further develop skills in vocal production, music reading, and ensemble participation. Curriculum will include secular music such as folk songs, current hits, vocal jazz, and sacred music of all periods of music history. Students will perform in many public performances and other musical activities throughout-the year.

Chorale

This choir stresses basic skills in proper vocal production and music reading. Membership in this organization provides an opportunity for the student to develop personal strengths and positive attitudes toward ensemble participation through the learning of both popular and serious music. Students will perform in many concert performances and other musical activities throughout the year.

AP Art

Course Number 0515

Advance Placement 2D Design Studio Art. This is rigorous course at a college level in which students develop a portfolio to submit to the College Board for college credit. Emphasis is in developing skills in the principles and elements of design as well as demonstrating an individual voice through art.

Chamber Singers

Chamber singers meet the needs of students with a special interest in singing and performing choral literature other than that studied in the parent choral group. Size and composition of each group are designed to meet requirements of the music to be studied. Music will range from solos to any combination of two or more voices. Ensembles will consist of madrigals, vocal jazz, and other contemporary voice mixtures.

Band The course emphasizes the simultaneous coordination of physical movement with instrumental performance. The class develops student's ability to mentally perceive geometric designs, emphasizes hand/eye coordination, increases visual acuity, and strengthens personal public performance mannerisms. The organization actively participates in University Interscholastic League Marching Contest, numerous other state marching contests, various community parades, pep rallies and football halftimes. Rehearsals for this group begin approximately the first week of August prior to the start of each school year.

Concert Band

This organization is a performing group composed of advanced level musicians. Students of advanced playing ability not able to perform with the symphonic band due to other curriculum conflicts may perform in this group. This band actively participates in University Interscholastic League concert/sight-reading contest and multiple community concerts. Members of this group are eligible to participate in University Interscholastic League solo/ensemble contest.

Symphonic Band

This class consists of students who were in the fall marching band or students who were involved in another curriculum in the fall but demonstrate competent musical skills to perform on the advanced level. The marching band may be separated into two, three, or four symphonic bands of equal instrumentation, depending on the size of the marching unit. The symphonic bands are composed of the most advanced musicians. These bands are actively involved in University Interscholastic League concert/sight reading contest, multiple community concerts, and numerous service projects throughout the school year. Members of these bands may participate in University Interscholastic League solo/ensemble contest and are eligible for Texas Music Educators All-State organizations.

Theatre Arts I

Course Number 0521

Theater Arts I is offered to students who have had no drama training and who want to learn theatrical skills and performance courses with emphasis on pantomime, stage movement, oral interpretation, physical theatre knowledge, acting and theater heritage. Theater Arts I is a survey course where students will study the cultural contribution of theater, its structure, the play, and its performance.

Theatre Production

Course Number 0526

Theater Production provides practical hands-on experiences in acting and stagecraft through the preparation and public performances of plays. This curricular laboratory for the exploration, development, and synthesis of all the elements of theatre supplements other theatre and technical theatre courses that concentrate on theories, information and techniques by providing for the integration and implementation of those ideas and skills. This course requires a commitment of time outside the academic school day and a contract or agreement is expected.

Theatre Arts II

Course Number 0522

Theater Arts II is offered to students who want to further their theatrical skills through work in acting, directing, and theater heritage. Production styles and performances are discussed and the basic principles of performance are analyzed extensively. The objective is to stimulate creativity, student poise, confidence, and independence. Basic principles of production are studied and applied through performances in various theatrical applications. Production work required. Enrollment in the course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.

Theatre Arts III and IV
Extension of Theatre Arts II

Course Number (III) 0523 (IV) 0524

Technical Theatre I

Course Number 0525

Technical Theatre I is a project based class within the theatrical arts curriculum at the high school level focusing on the design process, construction and implementation of the various technical aspects of a production. Students learn lighting basics, audio design, effective make-up application, construction techniques, as well as costume design and construction. Students desiring to excel in skills related to technical theatre are welcome to participate in activities occurring outside the academic school day. No prior theatre experience is required to be eligible for this course.

Technical Theatre II

Course Number 0522

These courses are a continuation of Technical Theatre I in which students assume a leadership role in the design and construction of elements required for theatrical productions such as lighting, sound, scenic elements, properties, and costumes. These courses may require a commitment of time outside the academic school day.

Career and Technical Education Courses by Endorsement

Agriculture, Food and Natural Resources Cluster

Principles of Agriculture, Food and Natural Resources

PEIMS 13000200

Cluster: Agriculture, Food and Natural Resources

Course Number: 0610

Grades: 9, 10, 11,1,12

Credit: 1

In this course, students will learn about what agriculture is as a whole. Students will develop the knowledge and skills to enter into many different areas of the agriculture work force. We teach areas of Ag, such as, intro level welding, intro level wood working, livestock production, (NRM) Natural Resource Management, FFA, history of agriculture, soils and plants.

Livestock Production**PEIMS 13000300**

Cluster: Agriculture, Food and Natural Resources

Course Number: 0613

Grades: 10, 11, 12

Credit: .5

To be prepared for careers in the field of animal science, students in this course will attain skills and knowledge about production animals. The animals in this course consist of chickens, sheep, goats, cattle, pigs, and horses. They will learn how to feed these animals, how they reproduce, how the animals give birth, and how to prepare the animals to go to market. They will also learn about animal rights vs animal welfare. Students will get to do fun activities such as, make butter, and ice cream from scratch.

Equine Science**PEIMS 13000500**

Cluster: Agriculture, Food and Natural Resources

Course Number: 0612

Grades: 10, 11, 12

Credit: .5

Students in this course will gain specific knowledge of the equine industry. With the equine industry creating over 1.6 million jobs and producing \$300 billion annually there is a demand for people in the horse world. Animals that will be studied extensively are horses, donkeys, and mules. Students will learn the proper nutrition and wellness of these animals as they care for them on a daily basis.

Wildlife (Wildlife, Fisheries, and Ecology Management)**PEIMS 13001500**

Cluster: Agriculture, Food and Natural Resources

Course Number: 0614

Grades: 9, 10, 11, 12

Credit: 1

This course allows students to get the required hunter's education and boater's education. In this course students also gain knowledge of poisonous reptiles, endangered species, primitive survival skills, and ocean life. Students will also get hands on experience with bows, how to handle them and shoot them properly. This course will focus on wildlife conservation.

Ag Mechanics & Metal Technology**PEIMS 13002200**

Cluster: Agriculture, Food and Natural Resources

Course Number: 0615

Grades: 10, 11, 12

Credit: 1

In this course students will be introduced to all aspects of a fabrication shop. This will include tools, their function and uses in fabrication work. It will include equipment in wood working and all metal construction. Students will demonstrate knowledge acquired by completing various projects in a fabrication shop setting.

Greenhouse Production (Food Technology and Safety)**PEIMS 13001300**

Cluster: Agriculture, Food and Natural Resources

Course Number: 0620

Grades: 10, 11, 12

Credit: 1

To be prepared for careers in food products and processing systems, students need to acquire technical knowledge and skills related to natural resources and **the workplace**. Career opportunities will be researched to learn entry requirements, and industry expectations. This course examines the food technology industry as it relates to food production, handling, and safety.

Intro to Horticulture (Food Processing)**PEIMS 13001400**

Cluster: Agriculture Food and Natural Resources

Course Number: 0624

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement)

Students will have the opportunity to learn, apply, and transfer the knowledge and skills learned in classroom setting and transfer that knowledge and skill to raising food products and ornamental plants in the greenhouse. This course focuses on the food processing industry with special emphasis on the handling, processing, and marketing of food products.

Landscape Design and Management (Landscape Design and Turf Grass Management)
PEIMS 13001900

Cluster: Agriculture Food and Natural Resources

Course Number: 0625

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement)

To be prepared for careers in horticultural systems, students need to acquire technical knowledge and skills related to horticultural systems and the workplace. Career opportunities will be researched and students will learn the entry requirements, and industry expectations. This course is designed to develop an understanding of landscape and turf grass management techniques and practices. Student projects may include designing a landscape and identifying plants that will work best in various landscapes.

Floral Design (Principles & Elements of Floral Design) **PEIMS 13001800**

Cluster: Agriculture Food and Natural Resources

Course Number: 0626

Grades: 9, 10, 11, 12

Credit: 1 (This course will count as a Fine Arts Credit.) (6.0 weighted for GPA)

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.**

Ag Power Systems **PEIMS 13002400**

Cluster: Agriculture Food and Natural Resources

Course Number: 0602

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement)

In this course students will be introduced to power systems that are used in agriculture and industry. These power systems will include use of electricity, hydraulics, gas and diesel powered engines. Students will learn basic electrical wiring skills of light switches, electrical outlets and lights. In addition students will learn hands on the parts of engines and functions. Furthermore, they will learn the proper use of power equipment to accomplish tasks that are assigned.

Ag Structures (Ag Facilities Design and Fabrication)**PEIMS 13002300**

Cluster: Agriculture, Food and Natural Resources

Course Number: 00621

Grades: 11, 12

Credit: 1 (Advanced Credit for Endorsement)

Students will learn basic design and fabrication techniques using power equipment. These will include welding, oxy fuel torch, and special design fabrication equipment. Knowledge will be demonstrated using fabrication equipment to complete projects that will be designed and fabricated by students.

Energy and Natural Resources Technology**PEIMS 13001100**

Cluster: Agriculture, Food & Natural Resources

Course Number: 0611

Grades: 10, 11, 12

Credit: 1

In this course students will gain knowledge of how energy is created, both man-made and natural energy. They will learn how those energy sources are harnessed and used in Power Distribution Centers. Students will take their knowledge of this course and be able to create their own opinions on which energy sources are better for mankind, in the Natural Resource Management section of this class.

Horticulture (Horticulture Science)**PEIMS 13002000**

Cluster: Agriculture Food and Natural Resources

Course Number: 0623

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.0 Weighted GPA)

This course is designed to develop an understanding of practices as they relate to growing food and ornamental plants in a greenhouse. Students will work in the greenhouse growing vegetables, bedding plants and house plants. This will enable students to understand the practice of raising food for personal consumption and plants used in landscaping and decoration as well.

Architecture and Construction Cluster

Construction Technology

PEIMS 13005100

Cluster: Architecture and Construction

Course Number: 0609

Grades: 9, 10, 11, 12

Credit: 1

Students in this class will gain the real world knowledge they need to go into the workforce and be an entry level carpenter. Students will gain an understanding of the values and crafts of the other construction fields such as wood working, electrical wiring, and concrete work. Students will be responsible for designing and building their own

Interior Design

PEIMS 13004300

Cluster: Architecture and Construction

Course Number: 0663

Grades: 9, 10, 11, 12

Credit: .5

Interior Design teaches students to enhance the function and quality of interior spaces/rooms for the purpose of improving the quality of life, increasing productivity, and protecting the health, safety and welfare of everyone whether they live or work in that space. Individuals will use historical facts, knowledge and skills related to interior and exterior environments, as well as furnishings and accessories to make wise consumer decisions as interiors are designed. Careers in this field will be researched.

Housing (Principles of Architecture and Construction)

PEIMS 13004200

Cluster: Architecture and Construction

Course Number: 0666

Grades: 9, 10, 11, 12

Credit: .5

This course provides an overview to the various fields of architecture, interior design, construction science, and construction technology. Students will begin their study with the history of housing and work their way to current trends in housing **using decision b**

Arts, A/V Technology and Communications Cluster

Animation

PEIMS 13008300

Cluster: Arts Audio, Video Technology and Communications

Course Number: 0696

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.0 weighted GPA)

Careers in animation span all aspects of motion graphics. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the history and techniques of the animation industry. Students will use industry standard software such as Adobe Flash, 3DS Max and Sketchup Pro.

Principles of Art Audio Video Technology and Communications

PEIMS 13008200

Cluster: Arts, Audio/Video Technology and Communications

Course Number: 0761

Grades: 9, 10, 11, 12

Credit: 1

This course will introduce students to principles of design that are applied to photography, graphic design and video production. Units of study include basic photography, graphic design principles, digital storytelling and introductions to other CTE courses in the Arts, Audio/Visual Technology and Communications cluster. As an introductory course, students will acquire skills that build upon digital art and multimedia projects.

Graphic Design and Illustration

PEIMS 13008800

Cluster: Arts, Audio/Video Technology and Communication

Course Number: 0763

Grades: 10, 11, 12

Credit: 1 (Advanced credit for Endorsement) (6.0 weighted GPA)

This course will explore digital art and design principles using Adobe software, photography, and multimedia resources. As a project-based learning environment, students will apply skills toward projects that benefit the high school community while pursuing individual creativity. Assignments will complement student publications and media productions. Student portfolios (electronic) will be assembled with the best work exhibited and submitted for competition.

Fashion Design**PEIMS 13009300**

Cluster: Arts, Audio/Video Technology and Communication

Course Number: 0659

Grades: 10, 11, 12

Credit: 1

Fashion is a diverse industry and involves everything from history of fashion and textiles, drawing, sewing, trend research, apparel production, making accessories, planning a fashion show production, and fashion business opportunities. This class will give students the opportunity to express their creativity, create, alter and transform clothing and begin to look at fashion as a rewarding and successful career.

Business Management and Administration Cluster**Business Information Management I****PEIMS 13011400**

Cluster: Business Management and Administration

Course Number: 0669

Grades: 9, 10, 11, 12

Credit: 1 (6.0 weighted GPA)

You will enhance your keyboarding skills, as well as learn Word, Excel (spreadsheet), PowerPoint, and Access (database). You will have the opportunity to receive MOS certification in Word, as well as OPAC certification in Word, Excel, PowerPoint, and Access.

Emerging Technologies (Touch Systems Data Entry)**PEIMS 13011300**

Cluster: Business Management and Administration

Course Number: 0695

Grades: 9, 10, 11, 12

Credit: .5

Students apply technical skills to address business applications of emerging technologies. Students will need to apply touch system data entry for production of business documents.

Business Information Management II**PEIMS 13011500**

Cluster: Business Management and Administration

Course Number: 0670

Grades: 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.5 weighed GPA)

Prerequisite: Business Information Management I

Business Information Management II is a Pre-AP course. You will enhance your skills as we dive deeper into Excel, Power Point, and Access. You will have the opportunity to receive MOS certification in Excel and PowerPoint. Once you have three certifications, you will be considered a Microsoft Office Specialist.

Career Development Cluster**Career Preparation I (Practicum in Marketing I)****PEIMS 12701300**

Cluster: Career Development

Course Number: 0690

Grades: 11, 12

Credit: 3 (Advanced Credit for Endorsement)

In this class, the students will learn the basics of using technology and be certified in at least one area that will help advance their careers in the future. You will experience basic job skills, ethics, interview skills, and build a resume. We will explore careers as well as match your personality to a career. We will explore emerging technology skills including but not limited to, Photoshop elements, Photoshop Premiere, and Sketch-Up.

Career Preparation II (Practicum in Marketing II)**PEIMS 12701400**

Cluster: Career Development

Course Number: 0691

Grades: 12

Credit: 3 (Advanced Credit for Endorsement)

In this class, the students will learn the basics of using technology and be certified in at least one area that will help advance their careers in the future. You will experience basic job skills, ethics, interview skills, and build a resume. We will explore careers as well as match your personality to a career. We will explore emerging technology skills including by not limited to, Photoshop Elements, Photoshop Premiere, and Sketch-Up.

Education and Training Cluster

Ready, Set, Teach! (Instructional Practices in Education & Training)

PEIMS 13014400

Cluster: Education Training

Course Number: 0600

Grades: 9, 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement)

This course is designed to introduce students to various careers available that involve working with children. Students will analyze these various careers and will gain an understanding of the skills needed to work with children, this class is a beginning class and a pre-requisite to Ready, Set, Teach! II.

Ready, Set, Teach II (Practicum in Education and Training)

PEIMS 13014500

Cluster: Education Training

Course Number: 0607

Grades: 12

Credit: 2 (Advanced Credit for Endorsement)

Prerequisite: Ready, Set, Teach!

This course is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Student-interns are placed with experienced mentor-teachers at North Lamar Elementary campuses to gain authentic teaching experiences in grades prekindergarten through 2nd grade. During the field experience student-interns observe and assist master teachers with instructional (teaching small groups or the entire class) and non-instructional (designing and creating bulletin board, grading, running copies, laminating, etc.) duties.

Finance Cluster

Accounting I

PEIMS 13016600

Cluster: Finance

Course Number: 0673

Grades: 10, 11, 12

Credit: 1 (6.0 weighted GPA)

In this class, you will learn how to keep records for a small business. Anyone who majors in any type of business career in high school will be required to take Accounting in College. **This class is an introduction to business terms, recordkeeping, banking, cash controls and QuickBooks. This class will help them to compete in Accounting UIL.**

Accounting II**PEIMS 13016700**

Cluster: Finance

Course Number: 0674

Grades: 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.5 weighted GPA)

Prerequisite: Accounting I

In this class, you will learn how to keep records for a small business. Anyone who majors in any type of business career in high school will be required to take Accounting in College. This class is an introduction to business terms, recordkeeping, banking, cash controls and QuickBooks. This course will help prepare you for a career as a financial analyst, certified public accountant, auditor, investment advisor or several other careers in the financial industry.

Money Matters**PEIMS 13016200**

Cluster: Finance

Course Number: 0656

Grades: 9, 10, 11, 12

Credit: .5

Students will investigate global economics with emphasis on the free enterprise system and its impact on consumers and businesses. Students apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to set long-term financial goals based on those options. Students will determine methods of achieving long-term financial goals through investment, tax planning, asset allocation, risk management, retirement planning, and estate planning.

Health Science**Anatomy and Physiology (A&P)****PEIMS 13020600**

Cluster: Health Science

Course Number: 0240

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement) (This course counts as a Science Credit) (6.5 weighted GPA)

Anatomy and Physiology is an advanced science course that provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and a complete study of the major body systems including interrelationships among each. Laboratory work will include dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, and multimedia presentations. This course is recommended for students majoring in science or interested in health-related career, especially those students who plan to study medicine, nursing, physical therapy, and athletic training.

Health Science I (Principles of Health Science Technology)

PEIMS 13020200

Cluster: Health Science

Course Number: 0682

Grade: 9, 10, 11, 12

Credit: .5

The Principles of Health Science provides an overview of health care. Students will develop health care specific knowledge and skills in effective communication, ethical and legal responsibilities, patient care, safety, first aid and CPR with lots of hands-on learning. This course prepares the student for the transition to clinical or work based experiences in health care.

Medical Terminology

PEIMS 13020300

Cluster: Health Science

Course Number: 0681

Grades: 9, 10, 11, 12

Credit: .5 (Advanced Credit for Endorsement) (6.0 weighted GPA)

This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. Learn the medical language while also learning about human anatomy and physiology.

Health Science II (Health Science)

PEIMS 13020400

Cluster: Health Science

Course Number: 0683

Grade: 11, 12

Credit: 2 (Advanced Credit for Endorsement) (6.5 weighted GPA)

Pre-requisite: Health Science I (Principles of Health Science)

This course will provide advanced knowledge and skills related to a wide variety of health careers with lots of hands-on experiences. Student will extend their knowledge and experience of health care while career shadowing in the hospital setting and various health care businesses. Pharmacy Technician preparation is offered second semester for seniors currently enrolled in Health Science and interested in taking Pharmacy Technician Certification Exam after graduation.

Health Science III (Practicum in Health Science)**PEIMS 13020500**

Cluster: Health Science

Course Number: 0684

Grade: 12

Credit: 2 (Advanced Credit for Endorsement) (6.5 weighted GPA)

Prerequisite: Health Science II (Health Science)

This course gives students practical application to build their knowledge and skills in health care. While career shadowing in a hospital setting and other health care businesses, students will prepare for the transition to higher education. Pharmacy Tech preparation is offered second semester for seniors currently in Health Science III (Practicum in Health Science) and interested in taking the Pharmacy Technician Certification Exam after graduation.

Hospitality and Tourism Cluster**Restaurant Management****PEIMS 13022400**

Cluster: Hospitality and Tourism

Course Number 0661

Grades: 9, 10, 11, 12

Credit: .5

The restaurant industry provides more jobs on a daily basis than any other hospitality area. Qualified restaurant managers are always in demand. Study will include restaurant terms, management skills, and the complete restaurant operation, including food safety. The students plan a "food truck" or "restaurant" from start to finish including design, menu, pricing, and equipment. People in these professions are part of a team that serves nutritious, wholesome and tasty food to the public in child care centers, schools, hospitals, nursing homes, business and industry facilities, and senior centers.

Principles of Hospitality and Tourism**PEIMS 13022200**

Cluster: Hospitality and Tourism

Course Number: 0660

Grades: 9, 10, 11, 12

Credit: .5

The hospitality and tourism industry maintains the largest national employment base in the private sector. The hospitality industry is a broad category of fields within the service industry that includes lodging, event planning, theme parks, transportation, resorts, cruise line, and additional fields within the tourism industry. Students will plan a specified trip using all resources available that have been studied. If you like travel and are intrigued by the idea of helping other explore the beauty, culture and cuisine of the world around them, you will want to check out Hospitality and Tourism.

Culinary Arts**PEIMS 13022600**

Cluster: Hospitality and Tourism

Course Number: 0650

Grades: 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.0 weighted GPA)

Prerequisite: Intro to Culinary Arts

Culinary arts means “related to cooking”, and is the art of the preparation, cooking and presentation of food, usually in the form of meals. People working in this field, especially in establishments such as restaurants, are commonly called “chefs” or “cooks”. Culinary begins with the knowledge of food science, nutrition and diet and is responsible for the preparation of meals that are as pleasing to the eye as well as to the taste. Students prepare and serve food in an institutional setting to teachers and community groups. This course provides students with knowledge to organize, plan, cook and deliver a quality food product. Skills are taught in preparation of food, commercial equipment, serving, and safety while cooking and cleaning.

Food Science (Food Exploration)**PEIMS 13023000**

Cluster: Hospitality and Tourism

Course Number 0658

Grades: 11, 12

Credit: 1 (Advanced Credit for Endorsement)

Need course description

In Food Science student conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. 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. The preservation of foods through the canning and dehydration process is also studied.

Human Services Cluster

Interpersonal Studies

PEIMS 13024400

Cluster: Human Services

Course Number: 0654

Grades: 9, 10, 11, 12

Credit: .5

This course examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

Dollars and Sense

PEIMS 13024300

Cluster: Human Services

Course Number: 0653

Grades: 9, 10, 11, 12

Credit: .5

Dollars and Sense class focuses on consumer practices and responsibilities, the money management process, decision making skills, the impact of technology, and preparation for human services careers. Students will learn how to work with personal budgets, banking, and financial decisions for individuals and families.

Child Development

PEIMS 13024700

Cluster: Human Services

Course Number: 0655

Grades: 9, 10, 11, 12

Credit: .5

Students will study about a child's growth and development from birth through school-age children. Students will learn skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Parenting (Child Guidance)**PEIMS 13024800**

Cluster: Human Services

Course Number: 0657

Grades 9, 10, 11, 12

Credit: .5

Parenting addresses the knowledge and skills related to child growth and guidance giving students ideas and techniques to develop positive relationships with children and effective caregiver skills. The skills learned can be used later in life to promote the well-being and healthy development of children, strengthen our society, and pursue careers related to the care, guidance, and education of children, including those with special needs.

Intro to Culinary Arts (Lifetime Nutrition and Wellness)**PEIMS 13024500**

Cluster: Human Services

Course Number: 0652

Grades: 9, 10, 11, 12

Credit: 1

This course introduces students to beginning cooking skills, kitchen design and equipment, and reading food labels and basic nutrition knowledge. Students will learn to use principles of lifetime wellness to help them make informed choices about meal planning, grocery shopping, healthier personal lifestyles and careers associated with nutrition.

Cosmetology I**PEIMS 13025200**

Cluster: Human Services

Course Number: 0698

Grades: 11, 12

Credit: 3 (Advanced Credit for Endorsement) (Offered through Paris Junior College)

Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included

Cosmetology II**PEIMS 13025300**

Cluster: Human Services

Course Number: 0699

Grades: 12

Prerequisite: Cosmetology I

Credit: 3 (Advanced Credit for Endorsement) (Offered through Paris Junior College)

Students review academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination.

Information Technology Cluster**Digital Interactive Media****PEIMS 13027800**

Cluster: Information Technology

Course Number: 0667

Grades: 9, 10, 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.0 weighted GPA)

Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will use industry standard software such as Adobe Photoshop and Auto CAD.

Computer Programming**PEIMS 13027600**

Cluster: Information Technology

Course Number: 0671

Grades: 10, 11, 12

Credit: .5 (6.5 weighted GPA)

In this class the students will be creating Video Games using Scratch, Game Maker, and Visual Basic. We will create everything from Ping Pong, Shooter 1945, Star Wars, Maze Games and Side Scrolling games like Mario Brothers. We will spend some time looking at Visual Basic for those students going into the Robotic classes.

Advanced Computer Programming**PEIMS 13027700**

Cluster: Information Technology

Course Number: 0672

Grades 11, 12

Credit: 1 (Advanced Credit for Endorsement) (6.5 weighted GPA)

In this class the students will be creating Video Games using Scratch, Game Maker, and Visual Basic. We will create everything from Ping Pong, Shooter 1945, Star Wars, Maze Games and Side Scrolling games like Mario Brothers. This course will help prepare you for a career as a computer programmer, data communication specialist, or a software application specialist.

Video Game Design (Web Technology)**PEIMS 13027900**

Cluster: Arts, Audio/Video Technology and Communication

Course Number: 0692

Grades: 10, 11, 12

Credit .5

Careers in the Arts, Audio/Video Technology and Communications career cluster require, in addition to creativity, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and education requirements for those opportunities. Students will learn how to create simple video games as projects.

Manufacturing Cluster**Welding (Intro to Welding)****PEIMS 13032300**

Cluster: Manufacturing

Course Number: 0618

Grades: 10, 11, 12

Credit: 1

Students will gain hands on experience in the welding field. They will learn proper use of oxygen/acetylene cutting and welding. Also they will learn how to use various welding techniques such as arc welding, Mig welding, and Tig welding. After training of various welding and cutting methods, students will use these machines to complete various fabrication projects in the shop.

Advanced Welding**PEIMS 13032400**

Cluster: Manufacturing

Course Number: 0619

Grades: 11, 12

Credit: 2 (Advanced Credit for Endorsement) (6.5weighted GPA)

Prerequisite: Welding (Intro to Welding)

This course prepares a student to pass an industrial welding certification which will help them acquire a job in the welding industry. Students will take the American Welding Society's 7018 arc welding plate test and AWS tig pipe tacking test.

Principles of Manufacturing**PEIMS 13032200**

Cluster: Manufacturing

Course Number: 0680

Grades: 9, 10, 11, 12

Credit: 1

In Principles of Manufacturing, the students will gain knowledge of real world applications dealing with assembly line style manufacturing. They will get hands on training, in the labs they will take raw product and turn them into a finish product. For example, students will build pins out of a block of wood. They will also gain knowledge of machines that make these products such as wood lathe, drill press, and milling machine.

Marketing Cluster**Building Your Own Business (Entrepreneurship)****PEIMS 13034400**

Cluster: Marketing

Course Number: 0665

Grades: 10, 11, 12

Credit: .5

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

Retailing and E-Tailing**PEIMS 13034500**

Cluster: Marketing

Course Number: 0664

Grades: 10, 11, 12

Credit: .5

Students will have the opportunity to develop skills that involve electronic media techniques necessary for a business to compete in a global economy. Students will coordinate online and off-line marketing. They will use critical-thinking skills using decision-making models, case studies, various technologies, and business scenarios.

Science Technology Engineering and Math Cluster**Drafting I (Concepts of Engineering and Technology)****PEIMS 13036200**

Cluster: Science Technology, Engineering and Math

Course Number: 0635

Grades: 9, 10, 11, 12

Credit: 1

Drafting I provides an overview of the various fields of science, technology, engineering and mathematics and their interrelationships. Students will use industry standard software programs such as Auto CAD and Sketchup Pro.

Drafting II (Engineering Design and Presentation)**PEIMS 13036500**

Cluster: Science, Technology, Engineering, and Mathematics

Course Number: 0636

Grades: 10, 11, 12

Credit: 1(Advanced Credit for Endorsement) (6.0 weighted GPA)

Prerequisite: Drafting I

Students enrolled in this course will demonstrate knowledge and skills of the process of design as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use software programs such as Auto CAD and Sketchup Pro.

Rocket Science (Scientific Research and Design)**PEIMS 13037200**

Cluster: Science, Technology, Engineering, and Mathematics

Course Number: 0267

Grades: 11, 12

Credit: 1(This course counts as a Science Credit) (Advance Credit for Endorsement) (6.5 weighted GPA)

This is a hands-on science/CTE class for juniors and seniors. First semester topics include the science behind rocketry-velocity, force, impulse, stability, and electronics. Students learn to design rockets on rocket simulation software and build and launch 3 model rockets. The second semester is spent on a class project of designing, researching materials, ordering, and building a high power rocket that will carry a 1 pound payload up to 1 mile high. This launch requires FAA clearance so students travel to Fredericksburg, Texas to launch it. It IS ROCKET SCIENCE that you can do in high school.

Engineering Mathematics**PEIMS 13036700**

Cluster: Science, Technology, Engineering, and Mathematics

Course Number: 0462

Grades: 11, 12

Credit: 1(This course counts as a Math Credit) (Advanced Credit for Endorsement) (6.0weighted GPA)

Prerequisite: MUST HAVE ALGEBRA II

This is a math/CTE course for juniors and seniors that is computer based. Students will build robots that can be remotely controlled or programmed to run autonomously. They will learn to program in EasyC and learn about speed/power, maneuverability, gears, and other topics. The class competes with other schools in a robotic competition. Also students will learn a bridge design software and build a bridge to compete with other students in the class for the best design and construction.

Electronics I**PEIMS 13036800**

Cluster: Science, Technology, Engineering, and Mathematics

Course Number: 0604 (New 2016-17)

Grades: 10, 11, 12

Credit: 1

The Electronics course is modeled after PJC's Electro-Mechanical Program. In this course students will know and understand Electrical Safety. Students will learn about Electrical wiring, Electrical tools, symbols, AC Motors, DC Motors, and Transformers. Students will get Hands on training by way of Circuit boards. Students will gain the knowledge of how to read a wire diagram and apply that to the circuit board to make a motor run.

Advanced Electronics**PEIMS13036900**

Cluster: Science, Technology, Engineering and Mathematics

Course Number: 0605 (New 2017-18)

Grades: 11, 12

Credit: 2 (Advanced Credit for Endorsement)

Prerequisite: Electronics I

In addition to the skills students receive from Electronics I, students in Electronics II will receive higher knowledge of how electricity works in AC Circuits compared to DC Circuits. In the Labs, Students will build up a Circuit and then have to trouble shoot that Circuit to find the problem within the Circuit. Students will also begin learning about Programmable Logics Controllers (PLC's).

Robotics and Automation**PEIMS13037000**

Cluster: Science, Technology, Engineering, and Mathematics

Course Number: 0606 (New 2017-18)

Grades: 11, 12

Credit: 1 (Advanced Credit for Endorsement)

Prerequisite: Electronics I

This course focuses primarily on the understanding and development of a robot. The students first must take and know the electronics course material. In robotics, students take what they learned in electronics and apply that to building a robot that they can program and control. Students will go through the steps of learning how to write code and talk to the robot from the computer.

Transportation, Distribution and Logistics Cluster**Small Engine Technology****PEIMS 13040000**

Cluster: Transportation, Distribution, and Logistics

Course Number: 0629

Grades: 9, 10, 11, 12

Credit: 2

Outdoor power equipment technicians make sure small engines of all kinds start up every time. Qualified professionals are needed to repair and maintain two- or four-cycle engines in everything from motorcycles and watercraft to chainsaws and leaf blowers. Our comprehensive program includes plenty of hands-on laboratory experience. Students will practice mechanical fundamentals such as adjustments, cleaning, and lubrication of engine components, as well as the repair or replacement of all engine parts.

Advanced Small Engine Technology**PEIMS 13040100**

Cluster: Transportation, Distribution, and Logistics

Course Number: 0630

Grades: 10, 11, 12

Credit: 2 (Advanced Credit for Endorsement) (6.5 weighted GPA)

Students will continue to build their expertise in small engine fundamentals such as electrical systems, failure analysis, gear drives, tune-ups, and overhauls. Some career opportunities would be outdoor power equipment and other small engine mechanic, farm equipment mechanic, motorcycle mechanic, recreational vehicle service technician, or parts salesperson

Principles of Transportation Systems, Distribution & Logistics PEIMS 13039200

Cluster: Transportation, Distribution, and Logistics

Course Number: 0631

Grades: 9, 10, 11, 12

Credits: 1

In this course students will learn about the many career opportunities in the transportation industry. This course will cover careers that can be found in this industry, although we will mainly focus on the technology that goes into everyday vehicles. Jobs range from entry level maintenance to highly skilled specialty repairs. This course will help students decide if they want to pursue a career in this field.

Energy, Power & Transportation Systems (Logistics, Planning, and Mgt. Systems)**PEIMS13039300**

Cluster: Transportation, Distribution and Logistics

Course Number: 0634

Grades: 9, 10, 11, 12

Credit: 1

This course is designed to provide training for entry-level employment in the Logistics, Planning and Management Systems. This course focuses on the business planning and management aspects of transportation, distribution, and logistics. To prepare for success, students will learn, reinforce experience, apply, and transfer their knowledge and skills and technologies in a variety of settings.

Automotive Technology**PEIMS 13039600**

Cluster: Transportation, Distribution, and Logistics

Course Number: 0632

Grades: 11, 12

Credit: 2

In this course students will learn the importance of a safe work environment while learning vehicle operation and vehicle repair. Because of how advanced vehicles have become the cost of repairs have risen; good technicians are able to market themselves to companies and receive rewarding career. Even if a student does not want to pursue a career in automotive technology they will learn enough information to have a great hobby and to make educated decisions when dealing with automotive repairs.

Advanced Automotive Technology**PEIMS 13039700**

Cluster: Transportation, Distribution, and Logistics

Course Number: 0633

Grades: 12

Credit: 2 (Advanced Credit for Endorsement) (6.5 weighted GPA)

Prerequisite: Auto Tech I

In this course students will learn the importance of a safe work environment while learning vehicle operation and vehicle repair. This class will focus more with the actual hands on diagnosis and repair of vehicles. More time is spent learning electrical systems and computer aided diagnosis. The goal of this class is to prepare students for the career that most interest them in the transportation industry.

Law Public Safety, Corrections, and Security**Law Enforcement****PEIMS 13029300**

Cluster: Law, Public Safety, Corrections, and Security Cluster

Course Number: 0601

Grades: 10, 11, 12

Credit: 1

This course focuses primarily on the criminal justice system - crimes, investigations, the arrest and arraignment phase, the trial, the differences in the juvenile justice system. Guest speakers - policemen, private investigators, and judges - introduce the law and the legal system in the United States.