

# ROSAMOND HIGH SCHOOL

-An Early College Campus-

Get pre-apprenticeship job experience and/or earn  
an Associate Degree while at RHSECC



## COURSE DESCRIPTIONS

**RHS COURSE  
DESCRIPTIONS**

## **Table of Contents**

<b>English.....</b>	<b>5</b>
<b>Mathematics.....</b>	<b>7</b>
<b>Social Sciences.....</b>	<b>10</b>
<b>Science.....</b>	<b>12</b>
<b>World Language.....</b>	<b>15</b>
<b>Music/Fine Arts.....</b>	<b>16</b>
<b>Physical Education.....</b>	<b>18</b>
<b>Vocational Education/Career Technical Education.....</b>	<b>20</b>
<b>Health Careers Academy.....</b>	<b>23</b>
<b>Electives.....</b>	<b>24</b>

# Rosamond High School is an Early College Campus with Dual Enrollment

## What does that mean?

Earn college credits as a high school student! Start your journey early and experience the college atmosphere before graduating high school.

Dual enrollment enables high school students to simultaneously earn both high school and college credits for a single course. When a student successfully completes the college course they will get high school Honors credit on their high school transcript and college units on their college transcript.

For Example:

<b><i>College Course</i></b>	<b><i>High School Equivalent</i></b>
History 108	Honors Junior History/US History
English 101	Honors Senior English
American Sign Language	One Year Foreign Language
Communications	Honors Elective
Political Science	Government
Econ 101	Economics

What can the Early College Program do for you...

- Earn both honors high school credit and college credit at the same time.
- Find out what college is like before graduating from high school.
- Get college experience while still in high school.
- Save money on college tuition by graduating earlier.

**For more information contact the College Coordinator at Rosamond High School**

# **Rosamond High School Career & Technical Education**

## **What is Career & Technical Education?**

CTE is high school classes and programs that prepare students by teaching them skills and knowledge for lifelong success. Students receive a career prep education as well as technical skills that allow them to graduate from high school with more than a high school diploma.

## **Who Takes CTE classes?**

### **Students who:**

- Want to have hands-on experiences in future major career fields
- Need skills to pay for college expenses
- Want well paying jobs
- Want a head start with work-based learning
- Doing career exploration
- Want skills to be more successful in college

### **Why should students enroll in CTE?**

- Students can earn industry certificates
- Certificate of Completion
- Summer Internships
- Job Shadowing
- College Credit

Career and Technical Education (CTE) prepares youth for a wide range of high-wage, high-skill and high-demand careers. CTE offers unique opportunity to engage students in an enormous variety of subjects, incorporating academic, creative and technical skills, with the specific goal of preparing students for life after high school. With CTE, students gain knowledge, attitude and skills to succeed.

CTE programs at Rosamond High School are constantly evolving to meet the needs of our students, the economy, our community, and the latest college and career readiness requirements.

**For more information see the CTE Coordinator at Rosamond High School**

## English

### English 9

During the first and second semester, students will be using the Pearson Literature online textbook and the 9th grade ERWC nonfiction support modules. Pearson Literature is used for general literature instruction. 9<sup>th</sup> Grade ERWC nonfiction support modules will begin to prepare students for entrance into the 12<sup>th</sup> Grade Expository Reading and Writing Course. Focused novel studies include *To Kill a Mockingbird*, by Harper Lee, and *Romeo and Juliet*, by William Shakespeare. Students will learn to develop a well-crafted five paragraph essay. The following types of writing assignments are covered: friendly letter, business letter, persuasive, expository, and narrative writing, autobiographical incident, and the research paper. Essays will be graded to the 9<sup>th</sup> & 10<sup>th</sup> grade CCSS rubric for writing. Students will make a minimum of two presentations. A benchmark test is given each quarter as preparation for the SBAC is addressed.

### Honors English 9

During the first and second semester, students will be using the Pearson Literature online textbook and the 9th grade ERWC nonfiction support modules. Pearson Literature is used for general literature instruction. 9<sup>th</sup> Grade ERWC nonfiction support modules will begin to prepare students for entrance into the 12<sup>th</sup> Grade Expository Reading and Writing Course. Honors English I is designed to enable students to develop into moral, ethical, responsible, and compassionate citizens who are college forward, critical thinkers. Students will be studying English skills to become fluent and accurate in communicating through writing and speech. As a college prep course, students will be asked to focus on expository essays as they write the friendly letter, business letter, persuasive, narrative, autobiographical, and research papers. Essays will be graded to the 9<sup>th</sup> & 10<sup>th</sup> grade CCSS rubric for writing. Focused novel studies include *To Kill a Mockingbird*, by Harper Lee, *Oliver Twist* by Charles Dickens and *Romeo and Juliet*, by William Shakespeare. The curriculum includes preparation for the PSAT that students take their sophomore year. The program emphasizes the following: Reading Comprehension, Active Listening and Class Participation, Well organized writing, Revision, Standard English usage in writing and speech, Punctuation, and Vocabulary development. A benchmark test is given each quarter as preparation for the SBAC is addressed.

### English 10

During the first and second semester, students will be using the Pearson Literature online textbook and the 10th grade ERWC nonfiction support modules. Pearson Literature is used for general literature instruction. 10<sup>th</sup> Grade ERWC nonfiction support modules will begin to prepare students for entrance into the 12<sup>th</sup> Grade Expository Reading and Writing Course. Focused novel studies include *Night*, by Elie Wiesel, and *Julius Caesar*, by William Shakespeare, and *Animal Farm*, by George Orwell or *Ender's Game* by Orson Scott Card. Students will learn to develop a well-crafted five paragraph essay. The following types of writing assignments are covered: friendly letter, business letter, persuasive, expository, and narrative writing, autobiographical incident, and the research paper. Essays will be graded to the 9<sup>th</sup> & 10<sup>th</sup> grade CCSS rubric for writing. Students will make a minimum of two presentations. A benchmark test is given each quarter as preparation for the SBAC is addressed.

## **Honors English 10**

During the first and second semester, students will be using the Pearson Literature online textbook and the 10th grade ERWC nonfiction support modules. Pearson Literature is used for general literature instruction. 10<sup>th</sup> Grade ERWC nonfiction support modules will begin to prepare students for entrance into the 12<sup>th</sup> Grade Expository Reading and Writing Course. Honors English II is designed to enable students to develop into moral, ethical, responsible, and compassionate citizens who are college forward, critical thinkers. Students will be studying English skills to become fluent and accurate in communicating through writing and speech. As a college prep course, students will be asked to focus on expository essays as they write the friendly letter, business letter, persuasive, narrative, and autobiographical essays. Essays will be graded to the 9<sup>th</sup> & 10<sup>th</sup> grade CCSS rubric for writing. Novel studies include *Night*, by Elie Wiesel, and *Julius Caesar*, by William Shakespeare, and *Animal Farm*, by George Orwell or *Ender's Game* by Orson Scott Card, in addition to *Tale of Two Cities*, by Charles Dickens & *Lord of the Flies*, by William Golding. The curriculum includes preparation for the PSAT that students take their sophomore year. The program emphasizes the following: Reading Comprehension, Active Listening and Class Participation, Well organized writing, Revision, Standard English usage in writing and speech, Punctuation, and Vocabulary development. A benchmark test is given each quarter as preparation for the SBAC is addressed.

## **English 11**

During the first and second semester, students will be using the Pearson Literature online textbook and the 11th grade ERWC nonfiction support modules. Pearson Literature is used for general literature instruction. 11<sup>th</sup> Grade ERWC nonfiction support modules will finalize preparation for students' entrance into the 12<sup>th</sup> Grade Expository Reading and Writing Course. Focused novel studies include *The Great Gatsby*, by F. Scott Fitzgerald & *Huckleberry Finn* by Mark Twain. Writing assignments include personal response, essays, poetry, persuasion, analysis, and research papers. Essays will be graded to the 11<sup>th</sup> & 12<sup>th</sup> grade CCSS rubric for writing. Such skills include learning and practicing proper uses of grammar, vocabulary and spelling, exploring the creative and practical uses of writing, and expanding knowledge in various literature readings and novels. Students will make a minimum of two presentations. A benchmark test is given each quarter as preparation for the SBAC is addressed.

## **Honors English 11**

During the first and second semester, students will be using the Pearson Literature online textbook and the 11th grade ERWC nonfiction support modules. Pearson Literature is used for general literature instruction. 11<sup>th</sup> Grade ERWC nonfiction support modules will finalize preparation for students' entrance into the 12<sup>th</sup> Grade Expository Reading and Writing Course. Honors English II is designed to enable students to develop into moral, ethical, responsible, and compassionate citizens who are college forward, critical thinkers. In this college prep course students become skilled readers of prose written in a variety of rhetorical contexts, and skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. Essays will be graded to the 11<sup>th</sup> & 12<sup>th</sup> grade CCSS rubric for writing. Novel Studies include *The Great Gatsby*, by F. Scott Fitzgerald, *Huckleberry Finn* by Mark Twain, & *The Scarlet Letter* by Nathaniel Hawthorne. The curriculum

includes preparation for the SAT that students take their junior or senior year. Students will make a minimum of two presentations. A benchmark test is given each quarter as preparation for the SBAC is addressed.

### **Expository Reading and Writing (ERWC) (12th grade)**

A full-year college preparatory English course for high school seniors, this course strengthens critical reading and writing skills identified as weaknesses by the CSU English Placement Test Committee, and prepares students to meet the expectations of college and university faculty. Course assignments, organized into 8 modules and based mainly on nonfiction texts, emphasize the in-depth study of expository, analytical, and argumentative reading and writing. Essays will be graded to the CSU rubric for writing. The University of California has approved the ERWC for credit (from the "ag" requirements), and the Course meets college preparatory requirements for both the UC and CSU systems. Students achieving a 70% or higher for each semester are automatically placed into English 101 at any Cal State University. Novel studies may include *Into the Wild*, by John Krakauer, *Hamlet* by, William Shakespeare, *1984* by George Orwell, & *Brave New World* by Aldous Huxley. Students will make a minimum of two presentations. A benchmark test is given each quarter. Submitted to AVC for Articulation.

### **Honors Expository Reading and Writing (ERWC) (12th grade)**

Honors ERWC is designed to enable students to develop into moral, ethical, responsible, and compassionate citizens who are college going, critical thinkers. As full-year college preparatory English course for high school seniors, this course strengthens critical reading and writing skills identified as weaknesses by the CSU English Placement Test Committee, and prepares students to meet the expectations of college and university faculty. Course assignments, organized into 8 modules and based mainly on nonfiction texts, emphasize the in-depth study of expository, analytical, and argumentative reading and writing. Essays will be graded to the CSU rubric for writing. The University of California has approved the ERWC for credit (from the "ag" requirements), and the Course meets college preparatory requirements for both the UC and CSU systems. Students achieving a 70% or higher for each semester are automatically placed into English 101 at any Cal State University. Novel studies may include *Into the Wild*, by John Krakauer, *1984* by George Orwell, *Brave New World* by Aldous Huxley, *Hamlet*, by William Shakespeare, & *Frankenstein* by Mary Shelly. Students will make a minimum of two presentations. A benchmark test is given each quarter. Submitted to AVC for Articulation.

## **Mathematics**

### **STEM Prep: (10th-12th graders; Elective credit only)**

This class is a supplemental instruction program for the students who have failed Algebra 1 at least once. Students who are performing far below basic will receive help on their basic number sense and computational reasoning skills. Prerequisite: Teacher recommendation. The students will receive elective credit for this class. It does not meet the three years of math requirement for graduation. This is an intervention class meant to be taken alongside the Algebra 1 course.

### **Algebra I**

Symbolic reasoning and calculations with symbols are central in algebra. In the study of algebra, a student develops an understanding of the symbolic language of mathematics and sciences. In addition, algebra skills

and concepts are developed and used in a wide variety of problem solving situations. Prerequisite: All incoming freshman who have not yet passed Algebra I in the 8th grade. Any upperclassmen who has not yet passed both semesters of Algebra 1.

### **Geometry**

The geometric skills and concepts developed in this discipline are useful to all students. Aside from these skills and concepts, students will develop their ability to construct formal logical arguments and proofs in geometric setting and problems. Prerequisite: The student must score a C or higher in the second semester of their Algebra 1 class.

### **Honors Geometry**

The geometric skills and concepts developed in this discipline are useful to all students. Aside from these skills and concepts, students will develop their ability to construct formal logical arguments and proofs in geometric settings and problems. In addition to the skills stated above, students will be introduced to the concepts of Algebra II and Trigonometry. Prerequisite: The student must score a B or higher in their Algebra 1 class and receive a teacher recommendation.

### **Algebra II**

Students will be able to interpret functional relationships between two or more variables. Students will be able to formulate functional relationships when presented in data sets. Students will transform functional information from one representation to another all of these concepts will demonstrate higher-order thinking. Prerequisite: The student must score a C or higher in the second semester of their Geometry class.

### **SMAP (AVC/RHS elective)**

This course is designed to increase the proficiency of students who have completed Algebra 2 but are not yet ready for college coursework. This is an accelerated math program that students are encouraged to complete in one semester or over the summer. Students who complete this course may receive college credit for math 65, 70, and 102 at AVC. Completion of this class replaces the AVC math assessment score. Students who complete SMAP are expected to enroll in Math 115 (Statistics for Liberal Arts majors) or Math 105 and 135 (Advanced Geometry and Trigonometry for STEM majors). Elective credit (10 credits) will be awarded for this class. Math credit will be awarded for the completed college level math class. This course **does not** count as a third year for the UC/CSU *A-G requirements*. This is an Articulated course through AVC.

### **Honors Algebra II/ Trigonometry**

This discipline completes and expands the mathematical context and concepts of Algebra I and Geometry. Students who master this course will gain experience with algebraic solutions of problems in various content areas, including the solution of systems of quadratic equations, logarithmic and exponential functions the binomial theorem, and the complex number system. Trigonometry is a discipline that utilizes the techniques of both the algebra and geometry that students have previously learned. The trigonometric functions studies are defined geometrically, rather than in terms of algebraic equations. Facility with these functions, as well as being able to prove basic identities regarding them is especially important for students intending to study calculus, more advanced mathematics, physics and other sciences, and engineering in college. Prerequisite: Successful completion of Geometry with a B or higher plus a teacher's recommendation.



### **Trigonometry/ Math 135 (AVC/RHS)**

Trigonometry is a discipline that utilizes the techniques of both the algebra and geometry that students have previously learned. The trigonometric functions studies are defined geometrically, rather than in terms of algebraic equations. Facility with these functions as well as being able to prove basic identities regarding them is especially important for students intending to study calculus, and strengthens the conceptual understanding and mathematical reasoning with solving problems. These standards take a functional point of view on all of these topics. Students must also enroll in math 105 while taking math 135 in order to proceed to the next course. The student must complete Algebra 2 with a C or higher second semester and they must demonstrate proficiency on the MDTP Math Analysis Readiness test. They must also have above a 2.5 GPA. They must enroll at AVC and score high enough on the Math Placement test to enroll in the class. **Students who complete this course with a C or higher will receive 3 semester units of college credit to count toward their Bachelor's degree.**

### **Advanced Geometry/ Math 105 (AVC/RHS)**

This course is designed to teach students the art of proofs. It is specifically designed to prepare students for the proof writing required in higher level mathematics courses. It will cover two column and paragraph proofs. It will focus on inductive and deductive reasoning as well as teaching students methods of indirect and direct proof. Students must enroll in this course at the same time as Math 135. Each course will only meet twice a week. The student must complete Algebra 2 with a C or higher second semester and they must demonstrate proficiency on the MDTP Math Analysis Readiness test. They must also have above a 2.5 GPA. They must enroll at AVC and score high enough on the Math Placement test to enroll in the class. **Students who complete this course with a C or higher will receive 3 semester units of college credit to count toward their Bachelor's degree.**

### **Precalculus/ Math 140 (AVC/RHS)**

This course is designed to review all of the necessary algebraic, trigonometric and geometric concepts necessary to be successful in a college level Calculus course. Students will focus on functions and graphs and review all of their applications. They must also have above a 2.5 GPA. They must enroll at AVC and score high enough on the Math Placement test to enroll in the class, or they can complete math 105 and 135 with a C or higher. **Students who complete this course with a C or higher will receive 5 semester units of college credit to count toward their Bachelor's degree.**

### **Calculus 1/ Math 150 (AVC/RHS)**

This course is designed to cover first semester college calculus. The topics presented include Limits, Differentiation and Applications, Integration and Transcendental Function. The students will follow the course outline generated by AVC. In order to enroll in the course the students must score high enough on the Placement Exam or complete Math 140. Students must also maintain a 2.5 GPA and be enrolled as students at AVC.

### **Calculus 2/ Math 160 (AVC/RHS)**

This course is designed to cover the second half of three semester of college calculus. Topics include Integration and Techniques, Infinite Series Parametric Equations and Functions of several variables. The students will follow the course outline generated by AVC. In order to enroll in the course the students must

score high enough on the Placement Exam or complete Math 140. Students must also maintain a 2.5 GPA and be enrolled as students at AVC.

### **Statistics/ Math 115 (AVC/RHS)**

The purpose of this course is to introduce the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be encouraged to take the AP Statistics exam in May. Time will be devoted throughout the course in order to review for the exam. A TI-84 + calculator is recommended and will be used heavily throughout the course. We will also be using Statistics software in the school computer lab that will help us to prepare our course projects and understand important curriculum concepts. Students must have a 2.5 GPA or higher and be enrolled as a students at AVC. They must also score high enough on the placement test to enroll in the class or they can complete SMAP.

### **Business Math**

In this course students will explore fundamental mathematical concepts such as basic order of operations, real numbers, percent, measurement, calculator usage, fractions, decimals, problem solving, ratios, and proportions. We will cover “real life” topics such as taxes, personal finance, purchasing, finance, housing, insurance, transportation and investment. This course features examples in a problem solving format that allows students to use mathematical skills in consumer situations. Prerequisite: Students must complete Algebra 1 with a D or higher or be concurrently enrolled in Algebra 1 if they have not completed it yet.

### **Accounting**

Accounting is a full year math/general elective course that fulfills graduation requirements for Rosamond High School. Students will study and practice basic manual accounting procedures and principles related to accounting for sole proprietorships, partnerships and corporations. In addition to accounting skills, students will also be required to read independently and communicate effectively. Prerequisite: Students must complete Algebra 1 with a D or higher or be concurrently enrolled in Algebra 1 if they have not completed it yet.

### **Math for the Trades**

This course is designed to introduce the student to the basic math skills needed to be successful in the vocational trades industry. Math and calculations are the foundation of the vocational trades industry. Basic mathematical calculations and measurement systems are often used on the construction, manufacturing and automobile repair sites. Therefore, it is very important for the students to master these tools. To advance in the vocational trades industry you must be able to convert decimals, calculate quality take-offs, shoot elevations, operate a level laser, use percentages, slope ratios, read blueprints, understand squaring principles, read tape measures and calculate angles. This course covers some of the mathematical procedures that must be mastered and gives examples of how they might apply to work in the vocational trades industry.

## **Social Sciences**

### **Success (9th Grade)**

Freshman course using the Career Choices Series and My10yearPlan.com™, students will learn a proven decision making process as they develop an informed, meaningful Career & Education Plan. Using nearly 100

surveys, questionnaires, activities, and charts, this curriculum duo promotes learning through questioning rather than the didactic copy common in traditional textbooks. Thoroughly engaged, students will come away with an online 10 year plan & portfolio as well as an in-depth understanding of what is needed to thrive- Not only in today's college environment but the workplace as well. From this comprehensive guidance experience, students will be motivated to persist and graduate because they understand the value of a good education.

### **Health (9th Grade)**

Health Science examines students making healthy choices. This is a semester course which focuses on the physical, mental, and social influences that affect our health and well-being. Topics include personality formation, managing stress, mental disorders, family and social relationships, preventing violence, human development, food and nutrition, abstaining from alcohol, tobacco and drugs, and preventing infectious diseases. Students are encouraged to establish their own values and standards, think independently, and know when to ask for assistance.

### **World History (10th Grade)**

First semester students are introduced to the political, social, economic, and cultural history of the world, including the origins and development of peoples and societies. The course provides students the opportunity to learn all major aspects of World History from antiquity of the 1600's. Second semester students are introduced to the political, social, economic and cultural history of the world, including the origins and development of peoples and societies. The opportunity to learn the major aspects of World History from the 1700 to the present.

### **Honors World History (10th grade)**

Honors World History course content is structured around the investigation of five course themes and 19 key concepts in six different chronological periods, from approximately 8000 B.C. to the present. The themes are as follows: (1) Interaction Between the Humans and the Environment (2) Development and Interaction of Cultures (3) State Building, Expansion and Conflict (4) Creation, Expansion, and Interaction of Economic Systems (5) Development and Transformation of Social Structures. Prerequisite: A or B in Social Sciences and a recommendation from teacher. This is an Articulated course through AVC.

### **U.S. History (11th grade)**

Survey of American History is designed to provide a survey of the highlights of important events in the development of the United States, from the Colonial era through the end of the 20<sup>th</sup> century. This will be accomplished through a combination of course reading, in addition to independent research and study done by the student. The readings in this course are intended to provide an overview of various topics and to provide a starting point for deeper investigation.

### **Honors U.S. History (11th grade)**

The Honors U.S. History course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year introductory college courses. Students will learn to assess historical materials—their relevance to a given interpretive problem, reliability and importance; and to weigh the evidence and

interpretations presented in historical scholarship. Honors U.S. History is designed to develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. This is an articulated course through AVC.

**Economics (12th grade)** 1 - Semester course

This course introduces students to principles essential to understanding the basic economic concepts, theory and institutions of the United States and comparative economic systems. This course will introduce how the economy as a whole operates with regard to: output, growth, productivity, and the causes of economic fluctuations. Students will discuss the causes and impact of inflation, unemployment, and the law of supply and demand in micro economic environment. Finally, students will be exposed to investment markets, interest rates and impact to the Federal Reserve System (its structure and rule) and on the U.S. economy. Special attention will be devoted to transitioning economics, both Russia and China with regard to central planning, collapse of the Russian economy, the new Russian market system, and Chinese market reforms.

**Honors Economics (12th grade)** 1 - semester course

Honors Economics introduces students to principles essential to understand the basic economizing problem, specific economic issues, and policy alternatives available for dealing with them. This course will introduce how the economy as a whole, operates with regard to; productivity and causes of economic fluctuations. Also, students will analyze the law of supply and demand in the microeconomic environment. Finally, students will be exposed to investment markets, interest rates and the impact the Federal Reserve System (its structure and role) has on the U.S. economy. Special attention will be devoted to transitioning economies, both Russia and China, with regard to central planning, collapse of the Russian economy, the new Russian market system, and Chinese market reforms.

**Government (12th grade)** 1- semester course

American Government (aka US Civics) provides study of the United States government, starting from its formation. This focuses on key documents, such as the U.S. Constitution, and discusses the individual responsibilities as a citizen, including the responsibilities as a voter. Topics include: The Constitution; Bill of Rights; Articles of Confederation; the Federalist Papers, Executive Branch; Legislative Branch; Judicial Branch; Levels of Government (including federal, state, county, city, and village/town); The Electoral College; Citizenship; and Voter Responsibilities.

**Honors Government (12th grade)** 1 - semester course

American Government provides study of the United States government, starting from its formation. Topics include: the Constitution; Bill of Rights; Articles of Confederation; the Federalist Papers; the Executive Branch; the Legislative Branch; the Judicial Branch; Levels of Government; Electoral College; and Citizenship. Students will do concentrated study of the U.S. Constitution. Use of primary sources, document analysis, political cartoons.

## **Science**

**Biology (Biological)**

Biology is the study of living organisms and natural systems. It requires knowing current accepted scientific laws and theories. Science requires problem-solving skills, such as projecting experimental or real life outcomes. Biology will help prepare students for their next phase of study, especially in future science

courses, by challenging critical thinking skills. Mastery of Biology or lab calculations requires math skills in basic algebra. Organizational skills will be essential for success as a student of science. Hands on (laboratory) lessons will be a component of the course, since it is an AG approved college preparatory lab science. It requires that each student complete a laboratory safety quiz, correct errors if any, and sign a safety contract along with a parent signature or guardian. Students can be at any grade level for this course, although it is predominantly geared towards 9<sup>th</sup> and 10<sup>th</sup> grade students.

### **Biological Links to Energy and the Environment (Biological)**

Biological Link to the Environment is a hands-on, biological exploration of cellular biology and the variety of chemical reactions that occur in specialized areas of organism cells. Specific attention is paid to energy acquisition and use in living organisms, complex ecosystems and the changing environment. This includes a fundamental look at cell type, function and structure. Students compare energy sources for plants and animal cells with renewable and nonrenewable energy use by humans. Specific aspects to CTE include an understanding of energy types, energy calculations, and how energy is derived from a variety of natural and manmade sources. Students explore how environmental change affects cell function and structure based the presence of pollutants in the environment. Students investigate protein synthesis and function as well as the composition and use of DNA and RNA. Students build on their knowledge of cellular functions to investigate environmental factors that can alter cell reproduction (mitosis & meiosis), genetic change (genotypes and phenotypes) and evolution. Students calculate energy production of macromolecules as a means to understanding various forms of energy. Students then relate this investigation of how things work to the internal environment of the human body and its ability to maintain homeostasis despite change in the outside environment. They do this by understanding the types and functions of organ systems such as the acquisition of oxygen and nutrients and the removal of toxic waste products. They also investigate how neurons transmit information and how the nervous system mediates communication between the different body parts and the body's interactions with the environment.

### **Agricultural Biology (Biological)**

This course is a laboratory science course designed for the college-bound student. The course emphasizes detailed knowledge of the biological principles of the following areas: molecular and cellular aspects of living things, structure and function of agricultural plants and animals, genetics, physiology, plant and animal diversity, principles of classification, ecological relationships, and animal behavior. Students can be at any grade level for this class, although it is geared towards 9<sup>th</sup> and 10<sup>th</sup> grade students.

### **Animal Science (Biological)**

This course provides an introduction to fundamental principles of animal science, including the economic impact of animal agriculture upon the United States and the world, animal genetics, anatomy and physiology, growth, reproduction, artificial insemination, lactation, egg laying, nutrition, animal disease, animal research; laboratory includes visits to animal industries in the area, livestock selection. This course provides student eligibility for all FFA events. Offered to Juniors and Seniors who have successfully completed AG Biology or Biology and Ag Chemistry or Chemistry with a "C" or better. This Course is the concentrator for the Animal Science Pathway.

### **Veterinary Science (Biological)**

Veterinary Science is designed to provide students with an opportunity to study the science of veterinary medicine, including animal anatomy and physiology, animal health, nutrition, and cause/prevention of disease. Students will learn various veterinary laboratory skills, aseptic and surgical procedures, basic radiology, and scientific research writing skills. This course provides student eligibility for all FFA events. Offered to

Juniors and Seniors who have successfully completed AG Biology or Biology and Ag Chemistry or Chemistry with a “C” or better. This Course is the capstone for the Animal Science Pathway.

### **Chemistry (Physical)**

Students should be extremely strong in algebra to register for this class. Being concurrently enrolled in Algebra 2 is recommended. Chemistry is an advanced science course which fulfills the AG lab requirement for college entrance in the “D” category of a lab science. As a college preparatory class, chemistry is rigorous with a heavy math component. It covers concepts associated with matter and energy. First semester covers basic math conversions, significant figures, atomic structure, periodic table, ionic and covalent compounds, and stoichiometry. Second semester covers more advanced stoichiometry, solutions, gas laws, equilibrium, acids and bases, reaction rates, electrochemistry, and nuclear chemistry. The text is published by Pearson, and the course itself is predominantly accessed through class attendance, but has a large component of online computer work. Advanced science processing skills will be expected and the students will be completing homework every night to reinforcement chemistry concepts. Labs will be integrated to support math skills, and to expose students to a variety of science equipment. This is an Articulated course through AVC.

### **Agricultural Chemistry (Physical)**

This course is a laboratory science course designed for the college-bound student with career interest in agriculture. Students will be involved in hands-on laboratory study, and receive an in-depth look at various concepts in chemistry including: chemistry and its relationship to agriculture, matter and energy, the periodic table, bonding, chemical reactions, stoichiometry, gas laws, and acid-base chemistry. Ag. Chemistry is intended to provide an introductory foundation for those students who intend to continue their study of related scientific, medical, and agricultural fields.

### **Introduction to Green Energy (Physical)**

Introduction to Green Technology is an introductory science course that prepares students for further learning in the emerging engineering fields of green technologies, environmental technology, and renewable energy forms. The main focus of the course is on physics and environmental science, and includes a strong laboratory component. Students in this course will analyze various energy forms, including forces, thermodynamics, fluid dynamics, kinetic energy, energy efficiency, renewable energy, and electromagnetism. They will conduct hands-on experiments to aid and increase their understanding of the concepts they have learned. This course is an approved AG college preparatory course as a Physical Lab Science.

### **Conceptual Physics (Physical)**

Conceptual physics is a Physics laboratory science class that prepares students for any science course. Students will develop scientific reasoning, scientific skills, and apply skills learned in Algebra I. This course differs from regular Physics because it is conceptually based, requiring less computational mathematics. Topics include motion, energy, Newton’s Laws and forces, optics, sound and wave motion, and electricity and magnetism. Through inquiry labs, students explore their own notions about common, physical phenomena, make observations, discuss observations with peers, practice data collection and graphing techniques, and apply some mathematical skills (solving equations, interpreting graphs, and reasoning proportionately) to explain observations. Students may have opportunities to use computer graphing from databases, scientific publications, and desktop publishing.

## **World Language**

### **Spanish I**

Spanish I will introduce the student to the receptive skills of listening and reading. The course will also include an introduction of the productive skills of speaking and writing, as well as cultural study. These skills will be developed through basic vocabulary, interrogative words, fundamental verbs, pronouns, adverbs, and adjectives. It may also include learning greetings, months, days of the week, colors, the alphabet, telling time, numbers, seasons, weather, food etc.

### **Spanish II**

This course is an intermediate foreign language class. Students will build upon communication skills learned in Spanish I, by learning past tenses, commands and additional vocabulary and cultural topics. Spanish II is a demanding level of study, requiring self-discipline, good writing skills, and strong study skills. Prerequisite: Completed Spanish I with a grade of C or better. It is also strongly recommended that students have a strong English grade of C or higher.

### **Spanish III**

This course is an advanced elective course that meets the Fine Arts graduation requirement for Rosamond High School as well as the UC/CSU admission requirement. Spanish III will continue to develop the receptive skills of listening and reading, using both conversational and academic levels of speech in present and future tenses. The student will demonstrate reading skills and listening comprehension skills by understanding main idea, facts, stories, and narratives in texts. Students will develop the productive language skills of speaking and writing at the academic and conversational levels as well as paragraphs, journals, letters, reports, and answering questions about reading passages. Cross-cultural understanding, noting similarities and differences and recognizing points of misunderstanding will be practiced.

## **Music/Fine Arts**

### **Band Auxiliary Flags**

The award winning Rosamond High School Color Guard and Banner Squad are made up of a unique group of performers who enjoy spinning flags and dancing. Experience is not necessary to enroll in this class, just a desire to perform and willingness to work hard.

During the first semester, the flags perform in conjunction with the marching band; this includes football games, parades and field show competitions. In the second semester, the auxiliaries participate in winter guard. This is a unique activity that brings the field and street routines and drill to the floor of a basketball court. The winter guard travels to competitions, as well as performs for activities in the community of Rosamond.

### **Marching Band**

The award winning Rosamond Roadrunner Marching band is divided into the areas of Wind ensemble, Percussion ensemble, and Color Guard. All students in the band program must be enrolled in Marching Band. Experience is not necessary to enroll in this year long course. The Marching Band serves a number of purposes. The Marching Band performs at Rosamond High Football games to support the RHS Football team, by playing Pep songs and performing a half-time show, as well as performing in its own right at field show competitions around Southern California as well as representing Rosamond High School and the Rosamond community at various parades and other events. Important note: Students enrolled in Marching Band receive **5 P. E. credits per year.**

### **Advanced Band**

The Rosamond High School Concert Band, in tandem with the Marching Band, performs both a Winter and a Spring concert, as well as participating in ratings festivals. Whereas the focus on Marching Band is marching, the focus of Concert band is concert music and musicianship. The students will gain insight on the techniques of performing both as an individual and as an ensemble, as well as music theory, music history, and a musical knowledge that will add to their musical repertoire and experience in preparation for the student's future life in music. These fundamentals will allow the students to either play music in their post high school life or to merely retain a musical knowledge that will allow a long life of musical enjoyment.

### **Choir**

The Rosamond High School Choir performs in a Winter and a Spring Concert. No prior musical experience is necessary. Choir class is open to any students interested in participating in a mixed choir (Soprano, Alto, Tenor, and Bass). This course is a yearlong course and is designed to develop the vocal skill, musical theory, ear training, and performance levels of each student. The students will learn, and perform music in a variety of genres from folk songs to spirituals to classical music to pop music.

### **Music Appreciation**

This course introduces the student to the world of music, and offers an historical survey of Western Music from the Middle-Ages to today. Students will learn to identify the different types of instrument used in both western and non-western music as well as some fundamentals of music theory, and the ability to identify major composers and their works. Students will learn how music has evolved from an oral non-written form



to the modern symphony and beyond and how political, religious and cultural changes in history have affected and shaped western music into what it is today. By the conclusion of the course the students will have developed an increased awareness of music in our culture. This is an Articulated course through AVC.

### **Beginning Art**

Art I is a beginning art class that will include all of the standard art practices (drawing, painting ect.) and will include instruction in Art Appreciation and Art History. Students will participate in the creative process through several art projects. Art History is addressed through lectures and projects based on different artistic movements throughout history. Students will learn about the role of art in different cultures and develop an appreciation for different artistic styles. The Elements of Art and Principles of Design are introduced and they begin to use artistic terms.

### **Advanced Art**

Students will build on their skills to create a cohesive body of work. This class is studio based in which students are encouraged to explore their creativity and find their artistic voice. Students in advanced art must sketch every day for homework in order to discover their artistic preferences. Art Critique is heavily relied upon as students use the artistic critique process to better their own work. They also use critique to form about different artworks and give constructive criticism to one another. They develop language that is used to describe art that will prepare them for any art classes they wish to pursue after high school.

### **Beginning Drama**

This course is offered as an elective for Fine Arts credit. It is designed to acquaint students with the basics of theatre, techniques of acting, and technical theatre aspects. It is offered to students with little or no experience in dramatic arts. Key areas of focus include improvisation, acting, playwriting, theatrical design, audition techniques, and basic theatre vocabulary. Grading emphasis is on student participation and regular attendance. This course is a prerequisite for the Advanced Drama Class if completed with “C” or better, along with an audition.

### **Advanced Drama**

Advanced Drama is an Audition Only class. Auditions will be held in April or May of the year before. See Drama teacher for details. It is encouraged to take Beginning Drama before auditioning. This course is offered as an elective for Fine Arts credit. This is a “Productions” class, meaning that the students in this course are the actors who put on our school productions. They must be motivated and committed to the Drama program and willing to spend after school hours rehearsing and performing. This course involves acting, auditioning, writing, directing, and helping wherever needed with the school productions.

### **Beginning Stage Tech**

Beginning Stage Tech is an elective offered for Fine Arts or Vocational Ed credit. It is an introduction to technical theatre and the creation of scenic elements. The course includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and career possibilities. The focus is on the tools, materials, methods and decision-making procedures used. Also included is an introduction to the basic elements of scenic design, which allows the student to develop an understanding and ability to make value judgments, regarding the design and execution of scenic elements for theatrical productions. Students are also responsible to help staff events and keep the theatre room organized

and clean. This course is a prerequisite for the Advanced Stage Tech class if completed with a “C” or better along with an interview.

### **Advanced Stage Tech**

You must complete an Interview with Drama teacher before you can take this course. It is encouraged that you take Beginning Drama before interviewing. This course is offered as an elective for Fine Arts or Vocational Education credit. It is offered in conjunction with the Advanced Drama class. The class is geared to students who wish to put their stage tech skills to use “behind the scenes” of our productions. Each student specializes in an aspect of technical theatre such as Set Design, Set Construction, Lighting Design and lighting equipment operation, Costume Design, Costume Construction, Sound Effects and sound equipment operation, Makeup, Publicity, or Stage Management. Students must be motivated and committed to the Drama program and willing to spend after school hours rehearsing, building, and running performances.

### **Yearbook**

Students in this year long course are responsible for the design and publication of the High School Yearbook. Students should have a background or interest in one of the following areas: photography, desktop publishing, art/design or written language. Those enrolled must research the need and the market for this product. Students must produce quality work, work together in groups, must be able to handle deadline pressure and should expect to spend additional time outside of class working on the publication.

## **Physical Education**

Physical Education is a coeducational conditioning and sports participation class with a curriculum that emphasizes health and fitness-related instruction. Instruction will take place in the gymnasium and outside fields. Students will learn WHY exercise and fitness are important, EVALUATE their own personal level of fitness, and learn HOW to attain fitness and maintain fitness throughout their life. The **2 year curriculum** will include:

### **Recreational sports:**

Badminton, soccer, basketball, flag football, softball, ultimate Frisbee, team handball, and volleyball.

### **Fitness:**

Weight training, mile runs, daily flexibility, body weighted resistance training

### **AFJROTC I (AS 100, LE 100, LE 500, Wellness/Physical Education)**

#### ***AS 100 – Journey into Aviation History***

This is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and military applications of airpower from World War I to the present. It is interspersed with concise overviews of the principles of flight to include basic aeronautics, aircraft motion and control, flight power, and rockets. Throughout the course, there are readings, videos, hands-on activities, flight simulator flying and intext exercises to guide in the reinforcement of the materials.

#### ***LE 100 – Citizenship, Character, and Air Force Tradition***

LE 100 introduces cadets to the Air Force Junior Reserve Officer Training Corps (AFJROTC) program providing a basis for progression through the rest of the AFJROTC program while instilling elements of good

citizenship. It contains sections on cadet and Air Force organizational structure; uniform wear; customs, courtesies, and other military traditions; health and wellness; fitness; individual selfcontrol; and citizenship.  
***LE 500 – Drill and Ceremonies***

**Note: Students will be required to wear a uniform one day a week  
and abide by grooming standards**

**AFJROTC II (AS 200, LE 100, LE 200, LE 500, Wellness/Physical Education)**

***AS 200 – The Science of Flight: A Gateway to New Horizons***

During this year, cadets will look deeper into the flying environment. Major sections of study are; How Airplanes Fly, Working Through Flight Conditions, Flight and the Human Body, and Flying From Here to There. Throughout the course, there are readings, videos, hands-on activities, flight simulator flying and intext exercises to guide in the reinforcement of the materials.

***LE 100 – Citizenship, Character, and Air Force Tradition (see description above) LE 200 – Communication, Awareness, and Leadership***

LE 200 stresses communications skills and cadet corps activities. Much information provided is on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development. Written reports and speeches complement the academic materials.

***LE 500 – Drill and Ceremonies (see description above) Wellness/Physical Education (see description above)***

**Note: Students will be required to wear a uniform one day a week  
and abide by grooming standards**

**AFJROTC III (AS 220, LE 100, LE 300, LE 500, Wellness/Physical Education)**

***AS 220 – Cultural Studies: An Introduction to Global Awareness***

This course is a customized course about the world’s cultures. The course is specifically created for the US Army, Marine Corps, Navy, and Air Force Junior ROTC programs. It is designed to introduce students to the study of world affairs, regional studies, and cultural awareness. It delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. ***LE 100 – Citizenship, Character, and Air Force Tradition (see description above)***

***LE 300 – Life Skills and Career Opportunities***

This course it is designed to prepare students for life after high school in the hightech, globally oriented, and diverse workplace of the 21st century. Students will learn how to become a more confident financial planner and to save, invest, and spend money wisely, as well as how to avoid the credit trap. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates.

***LE 500 – Drill and Ceremonies (see description above) Wellness/Physical Education (see description above)***

**Note: Students will be required to wear a uniform once a week**

**and abide by grooming standards.**

**AFJROTC IV (AS 300, LE 100, LE 400, LE 500, Wellness/Physical Education)**

***AS 300 – Exploring Space: The High Frontier***

This course begins with the study of the space environment from the earliest days of interest in astronomy and early ideas of the heavens, through the renaissance, and on into modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and Solar System, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere – such as orbits and trajectories – unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned missions, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and safety.

***LE 100 – Citizenship, Character, and Air Force Tradition (see description above)***

***LE 400 – Principles of Management***

This course provides exposure to the fundamentals of management. The text contains many leadership topics that will benefit students as well as provide them with some of the necessary skills needed to put into practice what they have learned during their time in AFJROTC. We are confident this course, coupled with what cadets have already learned during their time in AFJROTC, will equip them with the qualities needed to serve in leadership positions within the corps. Throughout the text are many ethical dilemmas, case studies, and role play activities built into the lessons.

***LE 500 – Drill and Ceremonies (see description above) Wellness/Physical Education (see description above)***

**Note: Students will be required to wear a uniform once a week  
and abide by grooming standards.**

**Vocational Education/ Career Technical Education**

**Note:** These classes are all hands-on classes and all RHSECC students are required sometime during their high school career to take (10) units in this one of the areas listed below:

**Transportation Industry Sector/Systems Diagnostics, Service and Repair Pathway**

**Small Engine Repair**

Small Engine Repair is intended to offer entry level instruction and training in the areas of tool use, measurement, maintenance, diagnostics, personal and shop safety, theory, design and applications as they pertain to the subject of small internal combustion engines. Students will be exposed to various methods of instruction, including (but not limited to) lecture, audiovisual instruction and hands-on learning in a lab environment. The course promotes students to demonstrate their ability to access and use technological means to achieve the course goals. Critical thinking and problem solving skills are demonstrated through completion of required projects, such as the disassembly and reassembly and successful running of a small gas engine. Small Engine Repair: Safety test given. This course is the introductory course for the Systems Diagnostics, Service and Repair Pathway. This is a prerequisite for Automotive Technology.

### **Automotive Technology**

Automotive Technology is designed to explore the world of Auto Mechanics. Students will explore basic operation of the automobile, engine, drive train, electrical system, braking system, emissions, and maintenance of cars. Each student will have the opportunity to physically operate hand tools and power tools associated with auto mechanics. Students will learn the importance of maintaining ones vehicle, and cleaning the shop environment. They should have some type of work clothing, shop coat, old shirt, coveralls, to protect good clothes. Automotive Technology: Safety test given. This course is the concentrator for the Systems Diagnostics, Service and Repair Pathway. This is a prerequisite for Advance Automotive.

### **Advanced Automotive Technology**

Advanced Automotive Technology provides the student with pre-apprenticeship skills in tune-up, brake system, electrical systems, lamp adjustments, lubrication service and parts management. The program will be conducted in an auto facility run as a production shop in conjunction with classroom presentations. Advanced Auto students will assist Automotive Technology students as needed. All students will have instruction in shop operations and procedures. Students may concentrate on one or more certificates of competency in this shop environment. Advanced Automotive Technology: Safety test given. This course is the capstone for the Systems Diagnostics, Service and Repair Pathway.

## **Building and Construction Trades Industry Sector/Residential and Commercial Construction Pathway**

### **Math for the Trades**

This course is designed to introduce the student to the basic math skills needed to be successful in the vocational trades industry. Math and calculations are the foundation of the vocational trades industry. Basic mathematical calculations and measurement systems are often used on the construction, manufacturing and automobile repair sites. Therefore, it is very important for the students to master these tools. To advance in the vocational trades industry you must be able to convert decimals, calculate quality take-offs, shoot elevations, operate a level laser, use percentages, slope ratios, read blueprints, understand squaring principles, read tape measures and calculate angles. This course covers some of the mathematical procedures that must be mastered and gives examples of how they might apply to work in the vocational trades industry.

### **Construction Trades**

Construction Trades I is a course designed to explore the world of construction. Students will encounter many opportunities to reflect upon construction as a profession, develop images of themselves as a tradesperson, and experience the realities of the job duties. Students will have the opportunity to explore safe and proper use of hand and power tools. They will also learn about construction based mathematics. Students will explore the common techniques involving home construction ie: framing, siding, roofing, electrical, plumbing, and painting. They should have some type of work clothing, shop coat, old shirt, coveralls, to protect good clothes. **A Safety test is given and must be passed to 100%.** This course is the concentrator for the Residential and Commercial Construction Pathway. This is a prerequisite for Advance Construction Trades.

### **Advanced Construction Trades**

This course is the second level in the Construction Trades area. Each student will have the opportunity to physically operate hand and power tools associated with construction, maintaining sharp edged tools, and

cleaning the shop environment. Students will explore more advanced techniques involving home construction ie: framing, siding, roofing, electrical, plumbing, and painting. Advanced students are more independent and/or work as Supervisors to the Construction Trades I classmates. Coursework also focuses on employability (work habit/professionalism/teamwork) job skills. This course is the capstone for the Residential and Commercial Construction Pathway. Students who complete this program may be recommended for an apprenticeship at the local carpenters union.

### **Manufacturing and Product Development Industry Sector/Welding and Materials Joining Pathway**

#### **Welding**

A basic welding and metal fabrication course which stresses theory and application in welding methods. Instruction is given on sheet metal layout and manufacturing techniques. This course covers the safe and efficient use of welding tools and techniques and emphasizes the fabrication of guards and brackets, welding dissimilar metals, structural welding, out-of-position welding, MIG/TIG welding, SMAW welding, air-arc welding, various grinding and cutting tools, sheers, and breaks. This course provides welding advanced certification preparation for year 1 of a 2 year course design. This course has been articulated through Antelope Valley College (Weld 101). This course is the concentrator for the Welding and Materials Joining Pathway. This is a prerequisite for Advanced Welding.

#### **Advanced Welding**

The Advanced Welding Technology program is designed to offer students the necessary skills for entry level positions in the welding industry. There is an increasing demand for skilled welders in the fields of MIG ,TIG, and Pipe welding. This course provides welding advanced certification preparation for year 2 of a 2 year course design. This course has been articulated through Antelope Valley College (Weld 110). This course is the capstone for the Welding and Materials Joining Pathway.

### **Manufacturing and Product Development Industry Sector/Machining and Forming Technologies Pathway**

#### **Manufacturing 1**

This course is an introduction to traditional and contemporary manufacturing techniques including precision measurement, design and layout, hand tools, fiberglass, composites, drilling, lathing, sawing and fabrication through a series of projects. Students will also be introduced to advanced design and manufacturing techniques such as computer aided design (CAD), computer aided manufacturing (CAM), computer numerical control machining (CNC) and 3D printing. This is the concentrator course for the Machining and Forming Technologies Pathway for 10-12 grade students.. This is a prerequisite for Manufacturing 2.

#### **Manufacturing 2**

This course will allow students to advance their manufacturing skills with traditional machine tools and will progress to designing and building projects using computer aided design (CAD), computer aided manufacturing (CAM) and computer numerical control (CNC) machines using more technical machining manufacturing techniques. This is the capstone course for the Machining and Forming Technologies Pathway for 11-12th grade students..

## **Information and Communication Technologies Industry Sector/Networking Pathway**

### **Introduction to Computers and Digital Technology**

Introduction to Computers and Digital Technology is a course designed to teach users the features of a personal computer, how it operates and how to select one that best fits individual needs. Students will learn how to use the major features of the Microsoft Office applications Word, Excel, PowerPoint, Access, and Outlook. At the end of the course, students will be prepared to take the certification exams TestOut Desktop Pro, and MOS (Microsoft Office Suite for Word, Excel, PowerPoint, Access, and Outlook). The course will utilize videos, virtual labs and end of chapter tests to prepare for the certification exams. The course will provide essential skills for students to be successful in the classroom and in a job. This course is an introductory course and is intended for students with little to no experience with personal computers, however, the course offers even experienced students to learn proficiency with a standard computer productive suite. After successful completion of the course, students will be able to advance to A+ certification to learn PC repair and maintenance.

### **A+ Certification**

A+ Certification students will acquire knowledge, through the use of online software, of basic computer hardware and operating systems, covering such skills as installation, upgrading, configuring, troubleshooting, optimizing, diagnosing and preventative maintenance. Students will also gain knowledge of additional elements such as networking and server issues, security, safety, environmental issues, communication, and professionalism. The course is designed to prepare students to pass three IT industry certification exams: TestOut's PC Pro Certification Exam, CompTIA's 220-901 Certification Exam, and Comp TIA's 220-902 Certification Exam. This course is designed to work in conjunction with Network+ to prepare a student to pursue an IT career after high school or pursue further studies in cybersecurity/IT at the college level. This is the concentrator course for the Networking Pathway.

### **Network+**

Network+ Certification students will acquire, through the use of online software, the ability to perform tasks commonly performed by IT network professionals, including systems administrators, network administrators, network engineers and related careers. The core responsibilities of these job roles typically revolve around the management of hardware and software networking components and include IP configuration, setting up wireless and wired networks, managing networks, basic network security, software updates, hardware upgrades and network protocols. The course is designed to prepare students to pass two industry certification exams: TestOut's Network Pro Certification Exam and CompTIA's Network+ N10-006 Exam. This course is designed to work in conjunction with A+ Certification to prepare a student to pursue an IT career after high school or pursue further studies in cybersecurity/IT at the college level. This is the capstone course for the Networking Pathway.

## **Health Science and Technology Industry Sector/Patient Care Pathway**

### **Introduction to Medicine**

Introduction to Medicine is a beginning course intended to give the student a chance to explore the healthcare industry and the possible career paths within the industry. Students obtain skills required to succeed in a technologically advanced and changing society. Each student applies their knowledge by using several different types of advanced medical devices found in a clinical setting. Students explore the major career fields and are able to distinguish between technical, professional, and entry level positions within each area.

Research pertaining to diseases and health careers is taught throughout the course. Students also build their medical vocabulary. Introduction to Medicine is intended as an introductory course for the Patient Care Technician Pathway. This is a prerequisite for Human Anatomy and Physiology.

### **Human Anatomy and Physiology**

Anatomy and physiology is a course that will enable students to develop an understanding of the relationships between the structures and functions of the human body. Students will also learn the mechanisms for maintaining homeostasis within the human body. This course will involve laboratory activities, projects, dissections, textbook material, models, diagrams, journal writings, and clinical studies. This is the concentrator course (2<sup>nd</sup> course) in the Patient Care Technician CTE Pathway and is a prerequisite for the Patient Care Technician Course.

### **Patient Care Technician**

This course prepares the student to work as an entry-level Patient Care Technician in a clinic, hospital, nursing home, or long term care facility. Students will learn to check vital signs, administer CPR and First Aid, assist in medical examinations, perform electrocardiograms (EKGs), perform basic laboratory procedures and phlebotomy, as well as learn to provide basic patient care including bathing, feeding, and toileting and ambulating patients. Upon successful completion of the pathway courses, the student will also be eligible to take the National Health-Career Association exam to become a Certified Patient Care Technician (CPCT). This is the completer course for the CTE Pathway.

## **Electives**

Teacher, Office, Cafeteria and Tech Aides: A student (11<sup>th</sup> and 12<sup>th</sup> only) may have one period of one of these courses.

### **Work Experience Education 1,2,3,4 (Elective)**

Work Experience Education is an elective class, which combines paid employment or unpaid work experience with classroom instruction. Students work up to twenty (20) hours per week and complete related classroom assignments. Students will develop work habits, positive work attitudes, self-confidence, and job skills which can be used to locate, secure and retain employment in the community. The related classroom instruction is divided into four areas. The first semester deals with the employment cycle: how to obtain a job, how to retain a job, and how to leave a job. The second semester involves career exploration. The third semester examines workplace economics. The fourth semester students study legal issues in the workplace. Students earn up to 10 credits per semester. See CTE Coordinator for details.

### **No Course**

Available to students who are concurrently enrolled in a college course **OR** 12<sup>th</sup> grade students who are on track to graduate, have a GPA of 3.0 or higher, and an attendance rate of 90% or higher.

### **9th & 10th Grade AVID**

The AVID course is an elective class for students who are college-bound. The AVID curriculum focuses on writing, inquiry, collaboration and reading (WICR) through the AVID High School curriculum in both teacher



and tutor-led activities. While concurrently enrolled in a college-prep course of study, students learn strategies to enhance success. Note-taking, outlining, writing, speaking, reading, test-taking strategies, and self-awareness are stressed. Tutorials are two days a week and Friday is reserved for motivational and team-building activities. In addition, the course includes college motivational activities and intensive preparation for the PSAT, SAT I and SAT II.

### **11th & 12<sup>th</sup> Grade AVID**

This course expands on the same skills taught in the 9<sup>th</sup> & 10<sup>th</sup> grade AVID elective. It is a junior/senior seminar course that focuses on writing and critical thinking expected of first and second year college students.

Students study, in depth, exceptional leaders in contemporary society and examine the effect that these individuals have had on culture, politics, education, history, science, and the arts. The course requires that students read essays, speeches, articles, and letters by these leaders, as well as at least one full-length work by the leader or about the leader. The AVID class is designed to offer students, who have been selected based on their work ethic and desire to learn, the necessary skills and work habits to enable them to perform quality work and succeed at the college level. Tutorials are done twice a week. AVID curriculum is completed on the other two days. Friday is usually reserved for motivational and team-building activities.

### **AVID Peer Tutor**

This course is available only to seniors. Students who have previous experience with the AVID program and are strong in math and science are preferred. The course requires the student to be a role model, academic tutor, and life coach to multiple grades and classes. Students will receive instruction in:

1. Professionalism
2. Training and coaching including feedback on tutors, binders, etc.
3. Students will be expected to facilitate large sustained group discussion, one on one coaching, checking points of confusion and note taking, and anchor grading.
4. Tutors will be expected to participate in 16 hours of training and multiple follow up meetings.