

ART

- 847** *Art I* – Students will explore the basic elements and principles of art through creating various projects. Students will gain knowledge and skills in both 2-D and 3-D media as well as various art processes. Art history will be covered and incorporated into many units of study, from Ancient to Modern and Contemporary art.
- 1 Credit (Grade level 9-12)**
- 848** *Art II* – Students will apply previous knowledge and experiences from their Art I course in an advanced classroom setting. Students will explore 2-D media, such as painting, drawing, printmaking and also the 3-D media and clay. Fast paced reviews will be held throughout the semester of art history and artists from Ancient to Modern and Contemporary art. *Prerequisite: Art I*
- 1 Credit (Grade level 9-12)**
- 849** *Art III* – This course is designed for the advanced art student who would like to discover new art skills and enhance their current potential as artists. Students will continue to apply previous knowledge and experiences from both Art I and Art II courses. Students will be exploring a variety of 2-D media, such as drawing, painting, and printmaking. They will also be experimenting with 3-D media such as: clay, paper mache and working on the potter’s wheel. Students will also complete independent project studies, where they will be allowed to decide upon the art process and medium to explore. *Prerequisite: Art I and Art II*
- 1 Credit (Grade level 9-12)**

BAND & CHORUS

- 9868** *Concert Band Y*– Concert Band is for students grades 9-12 who have successfully completed the middle school band program. Students may choose to participate in the following ensembles: *Choice A* – marching band, concert band and pep band or *Choice B* – concert band and pep band.
Exceptions to Choices A & B: Exemptions: from other conflicting athletics.
- 1 Credit (Grade level 9-12)**
- 9870** *Colorguard/Dance Y* – Membership in colorguard class is audition only. Auditions are held in the spring semester each year. **Colorguard will meet at the same period as the Concert Band only.** Students will learn guard equipment skills, dance, posture/grace and movement.
- 1 Credit (Grade level 9-12)**

9856 *Concert Choir Y* – Enrollment is open to students in grades 9-12. Concert Choir provides an opportunity to experience a variety of vocal music styles while singing in a large ensemble. Students will also study music theory and history within the classroom setting. In addition to a performance assessment event, the choir performs several programs throughout the year. Performance attendance/participation is mandatory.

1 Credit (Grade level 9-12)

9858 *Advanced Choir Y* – Advanced Choir enrollment is subject to a student interview and audition with the choral director. Auditions are held in the spring semester of the previous school year. In the case of a new/transfer student an audition may be requested upon school enrollment. The choral director will advise the Guidance office of the Advanced Choir enrollment, pending audition results. Participation in Advanced Choir offers students an opportunity to receive choral music study and performance opportunities on an elevated expectation level. In addition to a performance assessment event, the Advanced Choir performs several programs throughout the school year. Performance attendance/participation is mandatory.

1 Credit (Grade level 9-12)

CAREER MENTORING

870 *Career Mentoring I*

871 *Career Mentoring II* – The ACSHS Career Mentoring Program is a wonderful opportunity for a high school student to spend time in a classroom assisting younger students. The participant will receive a snapshot of the rewarding career of teaching. He/she will directly assist the classroom teacher with delivery of the daily lessons, help prepare instructional materials, and provide positive role models to younger students within our school system. The Career Mentoring Program is designed to allow students considering education as a career to be exposed to real-life experiences. Because the participants will be working outside of the high school everyday, and they will be working with younger, impressionable students, the participants must meet all prerequisite criteria listed below. No exceptions will be made! *Pre-requisites include:*

1. Attend school regularly, with limited tardies.
2. The participant must be recommended by the assistant principal after the discipline record has been reviewed.
3. The participant must be in the 10-12 grade and ACSHS, and on-track to graduate with his/her class. (The student may not exceed two full credits in the Career Mentoring Program for his/her high school career)

4. The participant must attend confidentiality training prior to reporting to his/her assigned school.
5. The participant must sign the Career Mentoring Contract, which binds him/her to the program responsibilities.
6. The participant must follow the rules of the school for which they are working.

1-2 credits (Grade level 10-12)

COMPUTER PROGRAMMING

220 *Introduction to Computer Programming* – This course is to prepare students for additional academic and vocational training involving computer science. The course provides students with an understanding of programming principles using Karel and qBASIC. Students will create programs to solve a variety of problems using top-down structure. In the second half of the course, students will use Microsoft Visual BASIC 6.0 as their programming language. Students will design programs using objects and classes incorporating the visual interface that is common in Microsoft applications. *Prerequisite: Algebra I*

1 Credit (Grade level 9-12)

DRIVER'S EDUCATION

552 *Driver's Education* – The complete course has two distinct phases including classroom instruction of 30 hours and in-car instruction of six hours.

1 Credit (Grade level 10-12)

*NOTE: Student must have a *driver's license or valid driver's permit within a reasonable time after the start of the 9 weeks. Requirements for permits are:*

1. Parent signature required
2. Birth certificate required
3. Social Security number required

**Legal Kentucky Drivers must complete a drivers education course within one year from the date you receive your drivers license. This course may be taken through the Allen County-Scottsville High School (limited to approximately 180 students per year) or scheduled through the Kentucky Transportation Cabinet of the Division of Driver Licensing.*

ENGLISH

9109 *English 09 Y* - Students focus on what literature can reveal about people of different ages, cultures, and abilities. Instruction correlates the areas of reading, writing, inquiry, speaking, listening, observing, and using technology for communication. Activities are designed to strengthen communications skills of all students while exploring real-life contexts for their discoveries. Each student will develop a writing folder.

1 Credit (Grade level 9)

9130 *Reading 09-Y* – This class is an in-depth study of phonics, fluency, vocabulary and comprehension skills meant to improve targeted students’ reading scores. Students also learn the seven effective reading strategies that good readers use. This class offers time for “free reading” to students, frequent visits to the library, and the opportunity to enjoy the act of reading. This class is paired with English 09Y.

1 Credit (Grade level 9)

129 *Contemporary Issues: Reading* – Students choose one or more areas of interests and focus on readings that illuminate that area (examples: war, families, travel, sports, fantasy/science fiction, the outdoors). Readings may include novels, nonfiction, poetry, newspaper and magazine articles, and plays. Students in this class will work on improving their reading and discussion skills.

1 Credit (Grade level 9-10)

123 *Oral Communications/Speech*

9123 *Oral Communications/Speech Y* – This course is designed to help students improve their oral communication skills. Students will study interpersonal communication and public speaking. Activities will include writing and making speeches, performing skits, participating in organized debates, storytelling, oral interpretation, mock newscasts, commercials, monologues and short plays. Emphasis will be placed on one-to-one communication in various areas of speech and exposing students to the written exploration of various types of formal public speaking.

1 Credit (Grade level 9-12)

110 *English 10*

9110 *English 10 Y* - Students focus their study on world literature by combining their study of reading, writing, inquiry, speaking, listening, observing, and using technology for communication. Literature is a vehicle for their exploration of themselves and their own world. Each student will develop a writing folder.

Prerequisite: Successful completion of English 9

1 Credit (Grade level 10)

9131 *Reading 10-Y* – This class is an in-depth study of phonics, fluency, vocabulary and comprehension skills meant to improve targeted students’ reading scores. Students also learn the seven effective reading strategies that good readers use. This class offers time for “free reading” to students, frequent visits to the library and the opportunity to enjoy the act of reading. This class is paired with English 10 Y. **1 Credit (Grade level 10)**

120 *English 10 Pre-AP*

9120 *English 10 Pre-AP-Y* - On an even more advanced level, students will expand the skills listed in English 10. Students who plan to take Honors-CP or AP English classes should take this class. Each student will develop a writing folder from which the grade-level portfolio is drawn. *Prerequisite: Successful completion of English 9*

1 Credit (Grade level 10)

156 *Broadcasting I* – A study of broadcasting geared toward students who are interested in a career path in broadcasting and filmmaking. Subjects to be covered are basic equipment operation, postproduction skills, scriptwriting, storyboarding, video direction, video production, marketing, advertising, lighting, law, ethics and broadcast journalism. Students in this class would produce weekly programs for WPAT, would manage the slide announcements that air on NCTC Channel 96 and would write and record the weekly radio broadcasts on WVLE.

1 Credit (Grade level 10-12)

157 *Broadcasting II* - Prerequisite: Broadcasting I

1 Credit (Grade level 10-12)

158 *Broadcasting III* – Prerequisite: Broadcasting II

1 Credit (Grade level 10-12)

159 *Broadcasting IV* – Prerequisite: Broadcasting III

1 Credit (Grade level 10-12)

139 *Drama I* – This class is designed to give students a background in the history of Theatre and how it began along with how it evolved to what it is today. Students will be involved in the earliest styles of theatre in order to appreciate the art form. Students will be doing PowerPoint presentations, monologues, scenes, acting, script and skit writing, etc. The purpose for this class is to support and extend on the Drama Core Content in Arts and Humanities. This class will give students a thorough knowledge and appreciation for Drama before moving in to Drama II where the class is entirely performance based.

1 Credit (Grade level 9-12)

125 *Drama II* – Prerequisite: Drama I

1 Credit (Grade level 10-12)

126 *Drama III* – Prerequisite: Drama II

1 Credit (Grade level 10-12)

127 *Drama IV* – This class works in the present day having built off of the history and origin of theatre in Drama I. The class is performance-based. Students will be acting, directing, writing scripts, critiquing film and live stage performance, as well as make-up design, costume design, set design, technical theatre (lighting, set construction), budgeting and promoting a show and putting together a show from beginning to end. Drama IV students are required to compile a portfolio.

Prerequisite: Drama III

1 Credit (Grade level 11-12)

138 *Selected Topics in ACT & Writing* – This course is designed for students who need additional time and support in preparation for ACT or On-Demand writing tests or for students who may not have attained their goal ACT score in the English, Reading or Writing sections of the ACT. Using carefully constructed formative assessment, the teacher will provide whole class, small group and independent instructional activities aimed at each student’s individual needs.

1 Credit (Grade level 10-12)

111 *English 11*

9111 *English 11 Y*- Students focus on a chronological approach to American literature. While the course is based on literature, it incorporates strands of writing, speaking, listening, observing, inquiry, and technology as communications. Writing is based on models from the reading strand, but also includes reflection on what is read. Other strands also reinforce what is being read and written to provide a cohesive package of language arts instruction. Each student will develop a writing folder. *Prerequisite: Successful completion of English 10 or English 10 Pre-AP*

1 Credit (Grade level 11)

122 *AP English 11-Language & Composition*

9122 *AP English 11-Language & Composition-Y* – Students will prepare for the Advanced Placement Test in English Language and Composition through college-level instruction in American literature. Students will become skilled readers of American literature, especially prose, written in a variety of periods, disciplines and rhetorical contexts. Students will become flexible writers who can compose in a variety of modes and for a variety of purposes and will be able to write competently in future college courses. Assignments will emphasize expository, analytical and argumentative essays, as well as research-based writing in which they become competent users of MLA style. Students will review the rules of English grammar and composition, focusing on diction, syntax and tone.

Prerequisite: Successful completion of English 10 or English 10 Pre-AP

1 Credit (Grade level 11)

137 *Creative Writing* - This course is designed to expose students to various types of creative writing. Students will produce pieces suitable for publication in the school literary magazine.

1 Credit (Grade level 10-12)

112 *English 12*

9112 *English 12 Y* - This course integrates the five strands of English/Language Arts. Students read works from both British and contemporary authors as a foundation for the other activities in writing, speaking, listening, observing, inquiry, and using technology for communication. A research or inquiry project including written and oral activities will be required. A writing folder will be developed from which the contents for the state-evaluated portfolio will be drawn. In order to pass English 12, each student must complete at the senior level a writing portfolio as required by the Kentucky State Department of Education. This portfolio should contain those selections that demonstrate the highest level of the student's achievement in writing. *Prerequisite: Successful completion of English 11 or English 11 Pre-AP*

1 Credit (Grade level 12)

9124 *AP English 12 Literature & Composition Y*

124 *AP English 12 Literature & Composition* - Students will prepare for the Advanced Placement Test in English Literature and Composition through college-level instruction in composition; research; English, world, and contemporary literature. Students are expected to take an AP Test in May. In order to pass AP English 12 Literature & Composition, the student must complete at the senior level a writing portfolio as required by the Ky Dept of Education. This portfolio should contain those selections that demonstrate the highest level of the student's achievement in writing. *Prerequisite: Successful completion of English 11 or AP Language & Composition. Dual credit available for this class through Campbellsville University for students with 29 or higher Eng ACT Score.*

1 Credit (Grade level 12)

140 *Humanities*

9140 *Humanities Y* - Students will build upon their knowledge and skills acquired in middle level arts programs to provide a grounding in the arts that enables them to appreciate their cultural and historical heritage. This course includes the disciplines of dance, music, theatre, art, and literature combined with the humanities. A variety of media, print sources and participatory activities are blended to provide a connection among periods, styles, and cultures. Students become aware that time, place, and society influence the arts and humanities and that different peoples share common experiences and attitudes. The main focus is to enable students to respond to all art forms through describing, analyzing, interpreting, evaluating, and considering the arts as significant human achievement. Students will be able to recognize characteristics of particular historical periods, styles, artists, etc.

1 Credit (Grade level 11-12)

EXCEPTIONAL EDUCATION

- 9948** *Study Skills Y – 9th grade*
9970 *Study Skills Y – 10th grade*
9971 *Study Skills Y – 11th grade*
9972 *Study Skills Y – 12th grade* - This course will assist in the development of good study habits. This structured course will outline good organizational skills for the challenged student based on individual assessments.

1 Credit each (Grade level 9-12)

Community Based Instruction (Scholastic Diploma)

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|--|---|
| 940 <i>Practical Living I</i> | 946 <i>Practical Living II</i> |
| 941 <i>Occupational Preparation I</i> | 947 <i>Occupational Prep II</i> |
| 942 <i>Daily Living I</i> | 944 <i>Daily Living II</i> |
| 943 <i>Consumer Economics I</i> | 960 <i>Consumer Economics II</i> |
| 938 <i>Career Coop I</i> | 939 <i>Career Coop II</i> |

These courses focus on four main domain areas: Daily Living Skills, Social Skills, Career Awareness and Preparation and Consumer Economics. This life management curriculum will be used to prepare exceptional children working on a certificate of attendance. Students will work on independent life goals.

1 Credit (Grade level 9-12)

FOREIGN LANGUAGE

PLEASE NOTE -Pre-College curriculum requires two years of a foreign language.

_____ ***Chinese*** - This course will be offered through a WKU teaching program. Talk with counselor for more information

- 141** *Spanish I*
9141 *Spanish I Y* – This course is an introduction to the Spanish language and culture through conversation, reading, writing and listening. (*If you plan to attend college, see Pre-College Curriculum*)

1 Credit (Grade level 10-12)

- 142** *Spanish II*
- 9142** *Spanish II Y* – This course is a continued development of communication skills and knowledge of Spanish culture with a greater focus on grammar. (*If you plan to attend college, see Pre-College Curriculum.*) *Prerequisite: Spanish I*
1 Credit (Grade level 11-12)
- 143** *Spanish III*
- 9143** *Spanish III-Y* - Continues with progress in basic skills, using more sophisticated reading material and grammar. *Prerequisite: Spanish I & II*
1 Credit (Grade level 11-12)
- 144** *AP Spanish-*
- 9144** *AP Spanish-Y* – Increased competency in all skill areas with an emphasis on writing and speaking and preparation for the AP exam given in the spring.
Prerequisite: Spanish I, II & III
1 Credit (Grade level 11-12)
- 144w** *AP Spanish* – same description as 144 using the weighted scale
- 9144w** *AP Spanish Y* – same description as 9144 using the weighted scale
1 Credit (Grade level 11-12)
- 9145** *Chinese I Y* -

HEALTH & P E

- 9502** *Health & P.E. - Y* - Community/Consumer Health, safety and accident prevention, substance use and abuse, growth and development, personal health, mental health, family life, environmental health and nutrition education subjects are all addressed in the Health portion of this class. Team, individual and lifetime activities are emphasized in P.E. Instruction is offered in a wide variety of activities, which stimulate physical and mental capabilities of the student.
1 Credit (Grade level 9-12)
- 503** *PE II* - The program in PE II is primarily an individual improvement program with emphasis on carry-over values. Techniques of various sports will be taught.
1 Credit (Grade level 10-12)
- 504** *PE III* - This course is a continuation of the activities included in PE and PE II with an emphasis on the demonstration of officiating skills and tournament play knowledge. It is desirable that community facilities be utilized at this level.
1 Credit (Grade level 11-12)
- 506** *Advanced PE* - This class will focus on lifetime activities for maintaining good physical fitness.
1 Credit (Grade level 11-12)

JROTC

681 *JROTC I*

9681 *JROTC I Y* – The goals of the JROTC program are to develop ethical values, good citizenship, leadership potential, effective communication and logical thinking, improved physical fitness, incentive to live drug-free, positive self-motivation and management, a historical perspective of the military services, team building skills and motivation to graduate from high school and pursue a successful career. The objectives of the JROTC program are: to promote and encourage citizenship/patriotism and an appreciation of ethical values and principals, strengthen self-esteem, develop leadership potential, enhance physical fitness and teamwork principles and promote community service. The JROTC program is designed to cover the areas of wellness, first aid, cultural studies, citizenship and areas in geography and civics. The student-centered curriculum includes: Problem solving exercise, Differentiated Instruction, Learning Styles Inventory, Multiple Intelligences, Thinking Maps, Rubrics to Evaluate.

1 Credit (Grade level 9-12)

682 *JROTC II*

9682 *JROTC II Y* – prerequisite JROTC I

1 Credit (Grade level 9-12)

683 *JROTC III*

9683 *JROTC III Y* - prerequisite JROTC I & II

1 Credit (Grade level 10-12)

684 *JROTC IV*

9684 *JROTC IV Y* – prerequisite JROTC I, II & III

1 Credit (Grade level 10-12)

MATH

9200 *Algebra I Y* - This course is a one-year, two-credit complete algebra course. Algebra I is a course that provides the basic building block to all higher mathematics courses. The objective of Algebra I is to develop strategies for solving non-routine problems and to enable students to develop an understanding of algebra by emphasizing concepts, structure and applications. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze functions. Manipulatives, such as algebra tiles, should be used as a

transition from the concrete to the abstract. Calculators, computers, spreadsheets, graphing utilities, graphing calculators and computer graphing simulators should be used as tools to assist in problem solving.

1 Credit (Grade level 9)

9202 *Math Lab Y*– This math lab class is to be taken with Algebra I as a supplementary class. Math Lab will be an intervention class that helps elaborate on and go more in depth on the different topics covered in Algebra I. This class will help strengthen the mathematical basics that are crucial for success in Algebra I. This course is designed to be a “catch up” class for students to review and learn the basic skills that they will have to know to pass their Algebra I class. A lengthy break down of basic operations involving fractions, decimals and mixed numbers will be included. Time will also be spent on converting numbers into different forms, solving simply algebraic equations, and any other concepts that seem to be causing difficulties in Algebra I. This class will also have time devoted to working on the assignments distributed in each students. Algebra I class. This class is a freshman level course which is to be taken in addition to taking Algebra I.

1 Credit (Grade level 9)

9207 *Geometry Y* - Emphasis is placed on discovery, proof and realistic applications of geometric relationships and principles. Topics include constructions, inductive and deductive reasoning, points, lines, planes, angles, triangles, planar figures, similarity and congruence, circles, geometric solids, coordinate geometry and transformations. Appropriate use of calculators and computers will be integrated throughout the course. *Prerequisite: Algebra I.*

1 Credit (Grade level 9-10)

9208 *Geometry Pre-AP Y*-This course is designed for pupils with a high degree of proficiency in abstract mathematical ideas. This course includes the skills and concepts of geometry but differs in the approach to and rigor of formal proof. Topics, which might be included in greater depth, are formal logic, coordinate geometry, transformational geometry and other non-Euclidian geometries. Problem solving through realistic applications is an integral part of the course. Appropriate use of calculators and computer should be integrated throughout the course. *Prerequisite: Algebra I (8th Grade)*

1 Credit (Grade level 10)

9205 *Intermediate Algebra II Y* – This course presents the fundamentals of Algebra and emphasizes problem-solving strategies. Topics to be taught are: Review of Real Numbers, First Degree Equations and Inequalities, Linear Functions and Inequalities in Two Variables, Systems of Equations, Polynomials and Exponents, Rational expressions, Radical Exponents and Radicals, Quadratic Equations and Inequalities, Functions and Relations, Exponential and Logarithmic Functions, Sequences and Series and Conic Sections. *Prerequisites: Algebra I and Geometry.*

1 Credit (Grade level 11-12)

- 9209** *Algebra II Y* - This course is designed for college bound students. In addition to expanding the mathematical concepts of Algebra I, emphasis should be placed on preparation for study of higher mathematics, abstract thinking skills, the function concept and the algebraic solution of problems in various content areas. Topics include the complex number system, matrices, quadratic equations and inequalities, functions, progressions and series, binomial theorem, linear programming and introductory work in conics sections, probability and trigonometry. Appropriate use of calculators and computers should be integrated throughout the course. *Prerequisite: Algebra I*
- 1 Credit (Grade level 11)**
- 9215** *Career Math Y*– This course is for students who need additional time and support to complete the mathematics requirements for graduation or who may not have attained the mathematics benchmark ACT score, set by the Council on Postsecondary Education. It addresses the KY high school core academic standards for mathematics and the ACT’s college readiness standards, with a strong emphasis on real world connections and/or connections with other disciplines of study. This course could serve as a mathematics **elective** for high school graduation, but not as one of the three required math courses for high school graduation which are Algebra I, Geometry, Interm Algebra II **or** Algebra II.
- 1 Credit (Grade level 11-12)**
- 9214** *College Algebra Y* – This senior level math course is designed to bridge the gap between two years of high school algebra to college level pre-calculus courses. Topics include polynomials, rational expressions, solving linear, quadratic, absolute value equations and equations involving radicals. Also included are topics related to inequalities and functions with their graphs. This course is offered as **Dual Credit with Campbellsville University, Math 111 College Algebra**. *Prerequisites: Completion of Algebra I, Geometry and Algebra II*
- 1 Credit (Grade level 12)**
- 9210** *Algebra II Pre-AP Y* - This course is designed for accelerated students with a high degree of proficiency in abstract mathematical ideas. This course includes skills and concepts of Algebra I. Topics, which might be included in greater depth, are systems of quadratic equations, inequalities, mathematical induction, permutations, combinations, probability, trigonometry and circular functions. Extensive problem solving will be interwoven into each topic. Appropriate use of calculators and computers will be integrated throughout the course. *Prerequisite: Algebra I*
- 1 Credit (Grade level-11)**
- 9211** *Pre Calculus Y (Trigonometry)* - This course is intended for students who plan on going to college or vocational school. The majority of the course is trigonometry and its applications. However, other topics will include analytic geometry, functions, inverse functions, logarithmic functions, and matrices.

Appropriate use of calculators will be integrated throughout the course.
Prerequisite: *Algebra II Pre-AP and Geometry Pre-AP or math recommendation*
1 Credit (Grade level 11-12)

9213 *Selected Topics Math Y (ACT-prep)* – The purpose of this course is to prepare students for the ACT and to provide more enrichment of the skills needed to succeed in College/Vocational School. A wide variety of topics will be discussed from relations and functions in Algebra to trigonometric relationships. Geometry and Analytic Geometry and Euclid Geometry will be reviewed. ACT (Admissions College Test) topics will be included. The Graphing Calculators will be utilized. The student who enrolls in this course should be the student who is going on to further their education in college or vocational school. *Prerequisite: Geometry Pre-AP, Algebra II Pre-AP and Pre-Calculus or math teacher recommendation.*
1 Credit (Grade level 11-12)

9218 *AP Calculus AB Y* - This course follows the curriculum established by the College Board and focuses on limits and derivatives which prepare students to take the AP Calculus AB Test in the spring for college credit. This course is offered as Dual Credit with Campbellsville University for Mathematics 123, Elementary Calculus. *Prerequisite: Pre-Calculus*
1 Credit (Grade level 11-12)

9219 *AP Statistics Y* – This course is designed to address the guidelines provided by the College Board for the Advanced Placement Statistics examination. It is also designed to address such concepts as theoretical and experimental probability, binomial distributions, normal distributions, displaying and describing distributions of data, collecting data, measures of central tendency and dispersion and methods of inferential statistics, with extensions and acceleration provided for students who qualify. *Prerequisite: Algebra I, Geometry, Algebra II*
1 Credit (Grade level 11-12)

NOTE: Courses listed below may count as a 4th math credit

677 *Agricultural Math*
9756 *Financial Math Y*
756 *Financial Math*

These course descriptions are found under the Agricultural and Business sections of the Career & Technical Programs Course Directory in this registration book

SCIENCE

- 9301** *Biology Y* - This course is an introduction to life science. All major areas of Biology will be explored with emphasis placed in cellular transport, biochemistry, evolution, and photosynthesis/cellular respiration, genetics, ecology and animal behavior. Several lab exercises will be required.
1 Credit (Grade level 9)
- 317** *Integrated Science*– This course is designed to offer all students a general laboratory experience and activities in the concepts of chemistry. Related topics such as atomic structure, structure and properties of matter, chemical reactions and its applications to earth science. The class will include many hands on activities and labs that will promote scientific thinking and good laboratory skills as well as enforce the concepts presented in class. *Prerequisite: Algebra I and Biology*
1 Credit (Grade level 10)
- 303** *Physics I* - Physics I offers all students an introduction to physics and space science and applies mathematical applications to those concepts. The class includes many hands on activities and labs to aid in the conceptual learning of the physical interactions between matter and energy. Space science concepts, such as star formation and death, theoretical views of the beginning of the universe, and the forces that govern our solar system, will also be addressed. *Prerequisite: Algebra I, Biology and teacher recommendation.*
1 Credit (Grade level 10-12)
- 302** *Chemistry I* - Chemistry I offers students laboratory experiences and activities in the concepts of chemistry through the study of the composition of substances and of their effects upon one another. This class will build upon the topics presented in Integrated Science and introduce a higher level of concepts not previously covered. Many lab activities will be required. *Prerequisite: Algebra I, Biology and teacher recommendation*
1 Credit (Grade level 10-12)
- 320** *Chemistry I Pre-AP* – This course is designed for the students motivated to pursue higher-level science courses in preparation for science related majors in college. The curriculum includes the same topics as Chemistry I, but will add a more intense pace and lab schedule. The fundamentals of chemistry will be covered in detail so that little or no review will be needed in AP Chemistry. *Prerequisites: Algebra I, Biology and teacher recommendation*
1 Credit (Grade level 10-12)
- 309** *AP Chemistry* – AP Chemistry is the equivalent to a general Chemistry course usually taken in the first year of college. It is designed to comply with College Board recommendations to prepare students for an AP Exam in Chemistry. The

course helps build students' understanding of the nature and reactivity of matter. The course begins with the structure of atoms, molecules and ions; then students explore how that structure lets us predict and quantify the chemical reactions that substances undergo. AP Chemistry will enable you to develop an understanding of chemical concepts and become skilled at solving quantitative chemical problems through a combination of instructional activities. Suggested pre-requisites are Chemistry and Algebra II.

1 Credit (Grade level 12)

309w *AP Chemistry* – Same description as 309 with weighted scale.

1 Credit (Grade level 11-12)

314 *AP Physics B* – Topics include both classical and modern Physics. A knowledge of algebra and basic trigonometry is required for the course. An understanding of the basic principles involved and the ability to apply these principles in the solution of problems will be the major goals of the course. Consequently, the course will utilize guided inquiry and student-centered learning to foster the development of critical thinking skills. AP Physics will provide instruction in each of the following five content areas: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics and atomic and nuclear physics.

1 Credit (Grade level 11-12)

314w *AP Physics B* – Same description as 314 with weighted scale.

1 Credit (Grade level 11-12)

307 *AP Environmental Science* – Students will study basic principles of environmental work. Air quality, water quality, soil testing, waste management are examples. Labs will relate to community events and problems. Students should be independent workers and be able to read well from multiple sources. This is an application class. *Prerequisites: Biology*

1 Credit (Grade level 11-12)

307w *AP Environmental Science* – Same description as 307 with weighted scale.

1 Credit (Grade level 10)

323 *Forensic Science* – This class is a science elective class and is designed to be an application of the material learned in other science classes with an applied focus towards forensics. Lecture and labs will include topics such as genetics, blood typing, fingerprint analysis, chromatography, fiber identification, soil testing, trajectory of projectiles and many more. The class will conclude with the analysis of a “realistic” crime scene as a final grade. *Prerequisites: Biology plus two additional science credits.*

1 Credit (Grade level 11-12)

- 321** *Selected Topics in Science* – Topics included are earth science, biology, chemistry, physics and space. Students revisit basic principles of each topic. Labs are conducted in each topic area. A science writing and a community or school based project will be required. This can serve as the third science credit for students not on pre-college curriculum. *Prerequisites: Biology and Integrated Science*
- 1 Credit (Grade level 11)**
- 306** *AP Biology* – The AP Biology course is designed to be the equivalent of a college introductory biology course. Accordingly, the goals have been set for percentage coverage of three general areas: molecules and cells 25%, organisms and populations 50% and heredity and evolution 25%. Students will do all 12 labs required by the AP College Board. Students are expected to take the AP exam in the spring. *Prerequisite: Biology and Chemistry*
- 1 Credit (Grade level 11-12)**
- 306w** *AP Biology* – Same description as course 306 with weighted scale.
- 1 Credit (Grade level 10-11)**
- 308** *Microbiology* - This is an upper level biology course that explores the world of microbes. In this course students will study virology, bacteriology, mycology and parasitology. Biochemical processes of these organisms will be addressed. There will be an emphasis on the symbiotic and parasitic interactions with humans. Emphasis toward medical microbiology. *Prerequisite: Biology*
- 1 Credit (Grade level 11-12)**
- 311** *Genetics & Biotechnology* - This course explores classical genetics, genetic diseases, and genetic engineering. Students will experiment with *Drosophila* crosses, mapping chromosomes and isolating **DNA**. This course is lab-intensive and may include an independent project. Students will conduct the standard colony transformation, PCR and restriction enzyme labs. *Prerequisite: Biology & Chemistry*
- 1 Credit (Grade level 11-12)**
- 826** *Anatomy & Physiology* – This course explores the normal structure and function of the human body. *Prerequisite: Biology I.*
- 1 Credit (Grade level 11-12)**

SOCIAL STUDIES

- 9401** *Civics Y* - This class will be one semester and will address the Social Studies basic concepts and applications in geography, economics, government and societal and cultural needs. It is designed to prepare the students to be able to

apply such basic concepts and application skills to high levels required in the study of World History and American History.

1 Credit (Grade level 9)

402 *World Civilization -*

9402 *World Civilization Y* - A general survey of the world's major civilizations with emphasis on how they influence modern day thinking and governments. This course meets pre-college curriculum requirement.

1 Credit (Grade level 10)

9403 *U.S. History Y* - This course covers the span of American history from post Civil War to the present. The course requires note taking and comprehensive reading skills. This class is required for graduation.

1 Credit (Grade level 11)

9412w *AP World History Y* – Advanced Placement World History is the first of the AP social studies courses offered to students who wish to obtain college credit while attending high school. This course focuses on the time period 8000 BCE to the present. Students will get away from memorizing “just the facts” of history and learn to detect continuity and change over time in areas of society, politics, religions, intellectual movements, technology, economics, and the environment. Writing and study skills required of all college students will also be emphasized. Though a rigorous course, by passing the AP exam students may earn up to six hours (two classes) of college credit. **This course may be substituted for World Civilization.**

1 Credit (Grade level 10)

9405w *AP U.S. History Y* - The American History AP program is a college level course and examination for secondary students. This course will be more challenging and requires more effort and homework on the part of the student than a regular or advanced high school course. All students will be expected to take the AP test exam at the completion of this course.

1 Credit (Grade level 11-12)

406 *Sociology*

9406 *Sociology Y* – How do you feel about the death penalty, censorship, religious freedom, AIDS, terrorism, or genocide? Do these issues have a place in society? Sociology is the study of society and human behavior. In this down-to-earth approach, we will discuss the social conflicts that face the United States (and the whole world) and explore how various societies deal with controversial issues.

1 Credit (Grade 11-12)

408 *Intro Psychology*

9408 *Intro Psychology Y* - Areas of study include personality theory, intelligence, heredity, environment, mental health and mental illness. Throughout the course there is an emphasis on the application of psychological theory to daily living.

1 Credit (Grade level 12)

9413 *AP European History Y* – This course focuses on the rigorous study of Europe from 1450 to the present, particularly the cultural, economic, political and social developments that played a fundamental role in shaping the world in which we live. The goals of this course are to:

- a. understand the principle themes in modern European history
- b. analyze historical evidence and historical interpretation
- c. express historical understanding through essay writing
- d. successfully complete/pass the AP Exam at the end of the year.

1 Credit (Grade level 11-12)

9413w *AP European History Y* – Same description as 9413 with weighted scale.

1 Credit (Grade level 10)

407 *Social History of Rock Music*

9407 *Social History of Rock Music Y* – This course will examine rock ‘n’ roll – its historical and musical roots, its explosive beginnings in the mid-1950s and its rise to cultural dominance. It will explore issues of race, gender and class amidst the rapidly changing social, cultural, economic and political landscape of mid-to late-20th century United States.

1 Credit (Grade level 11-12)