



**Abington-Avon High School**

**Course Description Booklet**

**2023-2024**



## Graduation Requirements

Credits needed for graduation - 30

To graduate from high school the following requirements must be completed:

Courses	Credits
English	4.0
Mathematics (Geometry is required)	3.0
Science	3.0
Social Science/History – Must include History I, II, III, and Government*	3.0
Physical Education	3.5
Health Education	.50
Resource Management (Consumer Ed.)	.50
Driver's Education**	.50
Electives	Dependent on total number needed and if any retakes were necessary

\*All students must pass written examinations on the Illinois and United States Constitutions and on the display of the American flag before they may graduate from Abingdon-Avon High School.

\*\*Driver's Education requirement is limited to the classroom portion only. A student must pass at least 8 courses during the previous 2 trimesters prior to enrolling.

\*\*\*It is recommended that students planning to attend college take at least 2 years of the same foreign language.

# **Agriculture**

**Introduction to Agriculture (9-11)** - This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Agricultural Business Management (10-12)** - This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and/or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Basic Agriculture Mechanics (10-12)** - In this course, theory and hands-on experiences provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. Instructional areas include but are not limited to the basic fundamentals of: small engines in trimester one, basic electricity in trimester two, and woodworking in trimester three. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement.

**Basic Horticultural Science (10-12)** - This course is designed to introduce students to the horticulture industry and provide them with basic plant science knowledge that can be further developed in advanced horticulture courses. Major units of instruction include horticulture research, horticultural careers, plant anatomy, seed germination, plant propagation, growing media, pest management, hydroponics, identifying horticultural plants, growing greenhouse crops, and floral design. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Biological Science Applications in Agriculture (10-12)** - This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. One semester will focus on plant science while the second semester will focus on animal science. Topics of study are in the areas of initiating plant growth (germination, plant sensory mechanisms, enzyme action, absorption), managing plant growth (photosynthesis, respiration, translocation, metabolism, and growth regulation), growth and development of animals (embryology, nutrition, immunity systems), and processing animal products (preservation, fermentation, and pasteurization). The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Natural Resource Conservation and Management (10-12)** - This course develops management and conservation skills in understanding the connection between agriculture and natural resources. Student knowledge and skills are developed in: understanding natural resources and its importance; fish, wildlife, and forestry management and conservation; and exploring outdoor recreational enterprises. Hunting and fishing as a sport, growing and managing tree forests, and outdoor safety education will be featured. Career exploration will be discussed including: park ranger, game warden, campground manager, forester, conservation officer, wildlife manager, and related occupations. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Physical Science Applications in Agriculture (10-12)** - This course is designed to reinforce and extend students' understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental/natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Landscaping and Turf Management (10-12)** - This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student instruction include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. Improving computer and workplace skills will be a

focus. Participations in FFA student organization activities and Supervised Agricultural Experience (SAE) projects in an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**Vet Tech (11-12)** This course will develop students understanding of the small and companion animal industry, animal anatomy and physiology, animal ethics and welfare issues, animal health, veterinary medicine, veterinary terminology, anatomy and physiology, pathology, genetics, handling and restraint, first-aid, and physical examinations along with common surgical skills. Career exploration with focus on veterinarian, veterinary lab technicians, office lab assistant, small animal production, research lab assistant, and an animal nutrition lab technician. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

## **Art**

**Art I (9-12)** - The students will be exposed to a comprehensive study of studio projects that align themselves with the Elements and Principles of Design, allowing the student to demonstrate their understanding of those concepts in a creative manner. Although project parameters will be defined, the students will always be allowed to express themselves individually by modifying the project per teacher approval.

**Art II (10-12)** - The students will be exposed to a greater in-depth study of 2- and 3-dimensional concepts through a variety of media. Emphasis will be placed on improving one's visual perception and awareness manipulating the Elements and Principles of Design. Students will be introduced to an overview of computer graphic programs. Students will be expected to complete assigned studio assignments on Art Concepts, Art History, and Art Appreciation. **Perquisite: A grade of C or better in Art I.**

**Art III (11-12)** - The student will be expected to build upon their acquired knowledge and skill in art concepts by producing more complex 2- and 3-dimensional studio assignments that continue to illustrate their expanding proficiency in manipulating and using a variety of medium. Expectations center on a greater degree of complexity, craftsmanship, and technique. The student will be expected to complete assigned projects, develop individual projects pending instructor approval, and successfully complete assignment academic work. An exploration of careers in Art will also be covered. The student will learn to prepare their own artwork for exhibition. **Perquisite: A grade of C or better in Art II.**

**Art IV (12)** - The students will develop, in conjunction with the instructor, independent projects that illustrate their skills and preferences in creating works of art. The intention of this class is to allow the student more freedom to continue to explore mediums of choice, and to continue to expand their production skills and talents. The student will develop a comprehensive portfolio, under instructor guidance, for possible submission to competitions or scholarships. A portfolio

critique, either oral or written, will be a part of the student's final grade. **Perquisite: A grade of C or better in Art III.**

**Photography I (9-12)** -This course provides students with experiences related to the photography field including conventional and digital cameras. Planned experiences give students a clear and concise introduction in the following areas: Composition, lighting, editing, safety and proper housekeeping of the photo studio, photography of visual and communicative discipline. In addition, students are introduced to photographic terms, composition techniques and studio setup. Students will create photos with different light sources, conduct shop operations, and use various editing programs.

**Photography II (9-12)** -. This course provides learning experiences related to the tools, materials, processes and practices utilized in the photography industry including conventional and digital cameras. Instruction includes arranging photography sessions, selecting and using cameras, film, lenses, and accessories, calculating and setting shutter speed, providing students with a better understanding of photographic images and their application in design. Students shoot photographs specifically for design layouts, and printing and in the process develop a better visual language, enhancing photo selection and editing skills. Students work more on photo studio arrangements. Students learn to visualize not only the look of the design, but also the structure and form of the photographs they shoot.. **Prerequisite of a "C" or better in Photography I.**

**3-D Design (11-12)** The course will focus on applying knowledge and experiences gained in prerequisite courses, as well as other areas of study, and how to apply those skills in real life situations in practical ways. Using the knowledge gained in these classes and basic skills learned in high school to help form a better understanding of how and why all areas of academia are studied and applied to business and real life situations. **Prerequisite: Art 1 AND Woods 1**

## **Business and Computer Technology**

**Business & Technology Concepts (9-12)** – The students will be exposed to a basic overview of the business world, with emphasis on economic decisions and systems, activity in the economy, the global economy, social responsibility, business and organizations, entrepreneurship, careers, business management, human resources, and an introduction to banking and finance.

**Yearbook (10-12)** – Students will design the yearbook for the current school year. They are responsible for meeting strict deadlines, proofreading, and working together as a group to get out a quality yearbook to the students and community.

**Survey of Technology (9-12)** - This class will introduce students to a variety of different technologies. Students will benefit from hands-on experience with technologies such as: coding (both drag and drop and writing html), introduction to robotics, digital citizenship, green screen, computer hardware, computer programming, web design, media production and editing, animation, and 3D modeling. Students will be allowed to showcase their creativity in this class

by using these technologies to create their own games, movies, web pages, 3D printing, and obstacle courses and so much more.

**Computer Maintenance (10-12)** - This course will provide students with authentic opportunities to apply IT skills in an actual laboratory experience. This student-run help desk prepares students to provide first-line technical support to students, support staff, and teachers. Students are trained to listen, observe, and assess general end-user issues. The hands-on classroom environment gives students the opportunity to learn how to troubleshoot hardware, software, and network problems, as well as process service tickets and inventory stock. Students will work under the supervision of Information Systems Department Staff and will assist staff and students in the A-Town Technology Support Center. Access to district technology hardware and software will be based on a trust relationship. When students are not troubleshooting or assisting others in the building, they will work independently in a structured environment to develop digital literacy skills by learning about the latest topics in technology. A two-day summer boot camp may be a course requirement—dates will be announced prior to the end of the school year. This course may be repeated. **Prerequisite: Approval of Technology Directors and Administration**

**Accounting (11-12)** - The students will be exposed to a variety of accounting skills and procedures, both manually and electronically. Specific topics include accounting for sole proprietorships, transactions and how they affect the accounting equation, how to journalize and post entries, the understanding of worksheets, financial statements payroll accounting, and accounting for merchandising corporations.

**Audio Visual I (9-12)** - This course is designed to provide students with the skills needed for a career in the technical aspects of film, tv, radio, and broadcasting. Instruction includes camera operations, basic audio and video editing, sound and lighting techniques, and sound mixing. Students learn how to arrange video and audio clips. Students create projects such as their own films and podcast. Students will also explore the basics of journalism and broadcasting. Students also explore a wide variety of visual media techniques.

**Audio Visual II (9-12)** - This course is for students who have completed Audio/Video Production I. In addition to expanding on the activities explored in the first course, students work in a team-based environment to create a variety of video and audio related broadcasts, and shows. Instruction includes single and multi-camera operations, linear and nonlinear video editing, production and post-production processes, animation graphics, sound mixing, multi-track production, audio editing, and special effects. Students learn how to use digital editing equipment and software to electronically cut and paste video and sound segments together. This course also provides students with an understanding of the FCC and other governmental agencies regulations related to radio and television broadcasting. **Prerequisite of a “C” or better in Audio Visual I**

**Digital Graphics (9-12)** - This course provides students with the opportunity to use the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Course topics include 3D modeling, simulation, animation, and

image retouching. Students will create projects such as graphic design logos, 3D design and printing, digital drawings and other digitally created media.

**Cooperative Education (11-12)** —The students will be exposed to a variety of work environment protocols through classroom topics and expectations, and will take that knowledge out into the workplace. Students must arrange their own part-time jobs, pending teacher and administrative approval, and will receive high school credit for working. Students cannot work for a family member. This class is intended to provide students with real-time employment experience and to develop lifelong skills necessary to be successful in the workforce upon graduation.

**Career Exploration/Work Study Course (Cooperative Education Course) (11-12)** —The students will be exposed to a variety of work environment protocols through classroom topics and expectations, and will take that knowledge out into the workplace. This class is intended to provide students with lifelong skills necessary to be successful in the workforce upon graduation. **This course is a prerequisite for Cooperative Education or can be taken concurrently.**

## **Drivers Education**

**Drivers Education (9-12 Grade)**- The students will be exposed, through mandatory 30 hours of in-class and 6 hours of behind-the-wheel instruction, to the basic laws and maneuvers required in driving an automobile, to gain the knowledge and skills necessary to pass their driver's examination and be eligible for their driver's license. Specific topics covered include the study of signs, signals, right-of-way, laws, and various driving environments and conditions. The students will apply the course content to their BTW experience. School fees apply, and a \$20 dollar application fee to the State of Illinois is required for all eligible students to take the written exam to receive their instructional permits. **Classroom portion is required by State of Illinois law, behind the wheel time is not.**

## **English**

**English I (9) - Required course-** The students will be exposed to the essential elements of reading, writing, speaking, listening, and grammar. Independent course units will consist of contemporary and time-treasured short stories, novels, and dramas, fiction and nonfiction writing, and the application of the parts of speech. Emphasis is placed on the mastery of the fundamental elements of language arts.

**English II (9-10) Required course -** The English II curriculum is designed to reinforce study skills, language usage, composition methods, reading competence, literature appreciation, vocabulary enrichment, and effective test-taking strategies. A thematic approach is used as students read a variety of literary genres. Students will write often and will develop essays



through all stages of the writing process. Emphasis is placed on transitioning to a deeper understanding of the essential elements of language arts.

**English III (10-11)** - English III consists of advanced language usage, preparation for college entrance examinations through vocabulary development and test-taking techniques, and a survey of the American experience through literature. Emphasis is placed on further mastery of critical elements of language arts, and analysis of literature.

**Speech (11-12)** - Communications courses focus on the application of written and oral communication skills through a variety of formal and informal experiences. The courses are performance-based and emphasize effective interpersonal and team building skills. Communications courses may also involve the study of how interpersonal communications are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices. **(1 trimester course)**

**Composition (11-12)** - Composition provides instruction in grammar, vocabulary, and sentence structure. This course will prepare students to write effectively in a workplace environment. **(1 trimester course)**

**English IV (11-12)** - This senior level course will focus on extensive composition and language practice. The student will discover the origins and growth of the English language through studying the British tradition of literature. All students will produce major writing assignments, including but not limited to, an extensive research paper on an assigned major author and literature. Emphasis is placed on the evolution of advanced literary interpretation. Students will learn to compose a variety of workplace documents, review and discuss nonfiction literature, and complete various projects implementing writing through a variety of technological mediums.

**Applied English IV (12)** - Students will improve both language and applied English skills by learning to communicate effectively in a work environment, as well as developing accuracy and confidence in comprehension. Emphasis is placed on preparing students for success in the work world post-graduation. Students will learn to compose a variety of workplace documents, review and discuss nonfiction literature, and complete various projects implementing writing through a variety of technological mediums. This course is also an ideal option for students pursuing a vocational education after high school.

**English Film (11-12)** - This course introduces students to the basics of film analysis, cinematic formal elements, genre, and narrative structure and helps students develop the skills to recognize, analyze, describe, and enjoy film as an art and entertainment form. To understand how films are constructed to make meaning and engage audiences, students will be introduced to the basic “building blocks” and formal elements that make up the film as well as some fundamental principles of analysis, genre, style, performance and storytelling. The class includes screenings, and short writing (1-2 pages) and film composition assignments. **Prerequisite - English I and II (or equivalent) (1 trimester course)**

## **Family and Consumer Science**

**Introduction to Family and Consumer Science (9)** –The students will be provided opportunities to explore and develop knowledge and skills in understanding themselves and their roles in today's society by focusing on the total area of home economics, homemaking as a career, and employment possibilities in the field of FCS. Specific topics covered in class include clothing and textiles, foods and nutrition, human development, interpersonal and family relationships and related career opportunities. The student will be required to supply all sewing unit materials and some material for the cooking unit.

**Resource Management (Consumer Education) (10-12) – Required Trimester Course** - A graduation requirement, the students will be exposed to units of study that include insurance, credit, money management, banking, budgeting, savings, investing, career choices, taxes, nutrition facts, and car shopping. The goal is to help the student become a better and wiser consumer.

**Foods and Nutrition I (10-12)** - The students will be exposed to basic food principles and applied nutrition for people of all ages through classroom content and limited laboratory experiences. Topics covered include promoting food service and preparation management, nutrition concepts, meeting health and safety needs in planning, preparing, and serving food, maximizing resources when planning/preparing/serving food, promoting hospitality in food practices, and analyzing individual and family nutritional needs in relationship to how they change. Some course supplies will need to be supplied by the student. **(1 trimester course)**

**Foods and Nutrition II (10-12)** - The students will be exposed to more food principles and applied nutrition for people of all ages through classroom content and limited laboratory experiences. Topics covered include promoting food service and preparation management, nutrition concepts, meeting health and safety needs in planning, preparing, and serving food, maximizing resources when planning/preparing/serving food, promoting hospitality in food practices, and analyzing individual and family nutritional needs in relationship to how they change. Some course supplies will need to be supplied by the student. **Prerequisite: Foods I. (1 trimester course)**

**Parenting and Child Development (10-12)** – The students will be exposed to the responsibilities and satisfactions of parenthood, and the developmental stages of infants and children, in two separate trimester sequences. Topics covered include stress management, familiarity with community agencies and services, applying good management and decision making skills in parenting, understanding and applying the basic principles of the parenting process, understanding and practicing health and safety standards, encouraging human relations skills in children and adolescents, becoming more aware of the developmental stages

of a child's development and what characteristics accompany them, and research the impact having children have on family and career dynamics. **(2 trimester courses)**

**Sewing I - III** (10-12) - The students will develop specific knowledge and skill sets in regards to the design, development, and production of textile products. Through a variety of hands-on projects based on course content, the students will be exposed to fiber characteristics, fabric construction methods, the elements of science and design in textile and apparel, recognition of design principles in the selection, construction, altering, and remodeling of textile products, and basic construction skills used in the interior furnishings and apparel industries. All course materials will be supplied by the student.

## **Foreign Language**

**Spanish I** (9-12) - The students will be exposed to an introduction of the Spanish language and its culture concentrating on the most basic functions of the language. Development of the four skills of listening, speaking, reading, and writing will be addressed through comprehensive work on grammar and vocabulary. In addition, exposure to customs and lifestyles will be presented.

**Spanish II** (10-12) – The students will build upon their Spanish I experience and concentrate, in more depth, on the development of reading, writing, listening, speaking, and comprehension skills necessary for advanced study in Spanish III. Continued exposure to the culture, and how the students can relate it to the English culture, will be further explored. **Prerequisite: A grade of “C” or better in Spanish I.**

**Spanish III** (11-12) – The students will be further exposed to the Spanish language through more advanced expectations of five curriculum strands emphasized in the Spanish language: communication, cultures, connections, comparisons, and experiences. Students continue their communication development in three modes, including interpersonal, interpretive, and presentational, emphasizing advanced listening, speaking, reading, writing, and verbal communication skills. Continued exposure and study in the Spanish culture and its integration will be covered as well. **Prerequisite: A grade of “C” or better in Spanish II.**

**Spanish IV** (12) – The students will be further exposed to the Spanish language through more advanced expectations of five curriculum strands emphasized in the Spanish language: communication, cultures, connections, comparisons, and experiences. Students will enhance their communication development in three modes, including interpersonal, interpretive, and presentational, emphasizing advanced listening, speaking, reading, writing, and verbal communication skills. A more in depth exposure and study in the Spanish culture and its integration will be covered as well. **Prerequisite: A grade of “C” or better in Spanish III.**

## **Industrial Arts**

**Industrial Orientation (9)** – This course is a series of 9 week units in Manufacturing and Production Technology, Transportation Technology, Communication Technology, Energy Utilization Technology, and Construction Technology. Each unit will cover the resources, technical processes, industrial applications, technological impact and occupations encompassed by that system.

**Introduction to Engineering Design (10-12)** - The Students will be exposed to the process of taking an idea through the design process that will culminate in a manufacturer's product. Topics covered include engineering design concepts and engineering communication through drawing, engaging in various projects and problem solving activities, with emphasis placed on the role of the engineer, the design process, product design, analysis, and improvement, and designing from an engineering perspective. The student will become familiar with the program Inventor, which is a state-of-the-art 3-D design software program. **Preference will be given to those students who have completed Algebra I successfully.**

**Woods I (10-12)** – The students will be exposed to an introduction of woodworking techniques and the use of a variety of related power tools. Topics covered include the safe use of power and hand tools, various types of wood and materials, joinery, assembly and finishing of projects, and computer aided machining of woodworking projects. This class is a hands-on environment where the students will be expected to practice what techniques are taught and produce a finished product.

**Woods II (10-12)** – The students will be exposed to advanced woodworking techniques, building upon their learned skills from Woods I. Emphasis will be placed on larger and more complex projects and multiple smaller projects using more advanced joinery techniques and construction methods. Students are required to produce a yearlong project suitable for judging in regional high school competitions. This class is intended for students who have a serious interest in working with their hands and developing skills that might eventually lead to a trade or additional post-secondary training. **Prerequisite: "C" or better in Woods I.**

**Building Trades (11-12)** – During this course, students will learn how to remodel a home inside and out. This includes roofing, siding, landscaping, flooring, etc. **Students are required to interview with the teacher and upon his approval, a maximum of 8 students will be in the course.**

## **Mathematics**

**Algebra I (9-12) - Required course.** Algebra involves the generalization of real arithmetic using variables, the formulation and solution of equations and inequalities (primarily linear) arising from real-world problems, and the manipulation and use of formulas, probability and statistics. The focus is on the properties of linear equations, but properties of quadratic equations and exponents are also introduced. Equations are represented symbolically, numerically, and graphically.

**Geometry (9-12) - Required course.** Geometry is the study of geometric figures in two and three dimensions and their properties. This course focuses on Euclidean and coordinate geometries with an introduction to geometric probabilities. Coinciding with this study is the development of the language and logic of geometry and the bases for an axiomatic system, including the need for formal proof. Most of the properties and theorems are developed from a transformational point of view. Extensive use is made of computer drawing software.

**Algebra II (9-12)** - This course continues the study of Algebra focusing on the function concept. Linear, quadratic, power, exponential, and logarithmic functions are studied using graphical, symbolic, and numeric representations. Systems of equations and inequalities are solved using various techniques including the use of matrices. Right triangle trigonometry is introduced, probability and statistics are continued.

**Advanced Algebra (10–12)** - This course will ask students to build upon their earlier preparation in algebra to develop increased mathematical skills which include the study of logarithms, the unit circle, and trigonometry concepts. Fundamental concepts of probability and data analysis are also studied. Trigonometry is extended to include formulas for angle sums and differences and double angles, as well as verifying identities. The final topic introduces students to the notation and concept of limits and derivatives in calculus. **Prerequisite: Algebra II**

**Finite Math (12) Independent Study** - This course features topics that demonstrate basic mathematical ideas used to analyze and problem solve questions of individual or societal need. Topics include, but are not limited to, Mathematical Logic, Sets, Counting Techniques, Probability, Statistics, and Matrix Algebra. **Prerequisite: Must have 3 math credits and permission of instructor.**

**Applied Math (11-12)** - This class involves the application of concepts taught in Algebra 1 and Geometry. Through projects and activities, students apply their skills and knowledge to real-life situations. Algebra 1 concepts used may include ratios/proportions, linear equations and inequalities, and the manipulation and use of functions and formulas. Probability and statistics will also be included. Geometry concepts may include area and volume of shapes, and transformations. A variety of texts and resources will be used in the classroom. **Prerequisite: Recommendation of instructor.**

**Calculus (12)** - This calculus sequence is intended for those students whose major interest is in mathematics, engineering, or the physical sciences. Major topics covered include a review of lines and functions, limits, derivatives, applications of differentiation, definite and indefinite integrals, and selected topics from analytic geometry. These topics build into the main theme of the course: the Fundamental Theorem of Calculus. **Prerequisite: Completion of Advanced Algebra.**

**Transitional Math (12)** -Quantitative Literacy & Statistics course features four units of instruction and a capstone project. The units of study are Personal Finance, Statistics & Predictions in Everyday Life, Analyzing and Optimizing our World, and Math in Decision Making. Students will learn about relevant financial skills like managing salary, buying a car,

and avoiding debt. They will use data and Statistics to explain and predict events in daily life; describe and plan for their physical world using mathematical ideas and properties; and further analyze various decision-making processes; modeling of data; basic financial logistics and safety-related decisions; and use network models for making informed decisions. **Prerequisite: Three math credits.**

## **Music and Fine Arts**

**High School Band (9-12)** - Membership is open to all 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students who wish to extend their knowledge, understanding, and appreciation of music by playing a wind or percussion instrument. Topics covered in this course are as follows: intermediate to advanced music fundamentals, technical achievement, and performance and rehearsal skills through exposure to a variety of music styles and genres. High School Band is a performance based class. Student learning will be evaluated through the following required activities: Pep band (during high school home football and basketball games), homecoming activities, and Concert performances (two to three a year). Each performance is considered a test grade. Jazz Band will meet outside of regular band time, and will be audition based. Finally, band students will be strongly encouraged to participate in various contests and festivals. (Required Books: Essential Elements 2000 Book #2 will be used through High School for warm ups and learning new techniques. *Students are responsible for this purchase.*)

**High School Choir (9-12)** - The students will continue to develop their vocal skills in more advanced and challenging musical arrangements, and will also be exposed to additional music appreciation and concepts through academic coursework. Since High School Chorus is considered an advanced music offering, the students will be required to perform in multiple concerts and contests throughout the year.

**History of Rock and Roll (9-12)** History of Rock and Roll is a course designed to familiarize the student with the history of Rock music. Prominent players and groups of each era will be covered, as well as sociological, economic and cultural factors that shaped the many styles of Rock music. Classroom activities will include listening, analyzing, writing, class discussions, research, and presentations.

**Music and Film (9-12)** -This course combines the history of film music in general with the purpose of gaining an understanding of the role of music in a film, observing various approaches to how music is used in a film, and examining how music interacts with other elements in the soundtrack (dialogue, sound effects) that accompany the visual aspect of the film to create a compelling work of art. Students will learn how music affects how we perceive a moving picture, and will be able to watch movies with a new understanding of how the picture and soundtrack combine.

**Theatre/Set Tech (9-12)** -This course is designed to teach students about the different aspects of theatre. They will be provided with hands-on, action-packed assignments that are engaging,

challenging, creative, and fun. They will learn about pantomime, improv, character development, character analysis, writing, directing, creating props, and planning/implementing set designs. Students in T1 and T2 will provide the sets, props, possible costumes, lighting, possible acting, and stage crew for both middle school and high school plays. T3 students will perform a short play for the grade school at the end of the school year. **Repeatable for credit.**

## **Physical Education and Health**

**Advanced P.E. (9-12)** - The students will be exposed to rigorous and performance based expectations in strength development and conditioning through the exposure to the basic fundamentals of weight training in sport-specific workouts. Emphasis will be on the development of speed, agility, flexibility, strength, and endurance. This course is intended for students who are serious about their physical conditioning, as expectations are high.

**High School P.E. (9-12)** – The students will be instructed in areas of physical fitness, leisure time activities, lifetime wellness activities, and all types of games and sports. The students will be exposed to a variety of units each year including, but not limited to: soccer, football, volleyball, basketball, hockey, badminton, pickle ball, and handball. Emphasis is put on positive effort and other workplace skills through instruction, physical activity, and academic activities.

**High School Health (9-12) – (Required course)** The students will be exposed to an in depth study of Mental Health issues, Drugs, Alcohol, and Tobacco awareness, sex education, STDs, and infectious diseases, and will emphasize developing healthy habits and good decision making.

## **Science**

**Physical Science (9-12)** – Students will study topics related to the Physical Science standards as set by the Next Generation Science Standards (NGSS). Topics of study will include: matter and its interactions, motion and stability, forces and interactions, energy, and waves and their applications in technologies for information transfer. This course will incorporate the use of phenomena to figure out science concepts by engaging in science and engineering practices through the lens of crosscutting concepts. Engineering design challenges will be incorporated into various units and will require students to use their conceptual science understandings to solve a problem or create a device.

**Biology I (9-12)** – Students will study topics related to the Life Science standards as set by the NGSS. Topics of study will include: from molecules to organisms: structures and processes; ecosystems: interactions, energy, and dynamics; heredity: inheritance and variation of traits; biological evolution: unity and diversity. This course will incorporate the use of phenomena to figure out science concepts by engaging in science and engineering practices through the lens of crosscutting concepts. Engineering design challenges will be incorporated into various units and

will require students to use their conceptual science understandings to solve a problem or create a device.

**Biology II (10-12)** - Students will study topics related to the Life Science standards as set by the NGSS. Topics of study will include: from molecules to organisms: structures and processes; ecosystems: interactions, energy, and dynamics; heredity: inheritance and variation of traits; biological evolution: unity and diversity. This course will incorporate the use of phenomena to figure out science concepts by engaging in science and engineering practices through the lens of crosscutting concepts. Engineering design challenges will be incorporated into various units and will require students to use their conceptual science understandings to solve a problem or create a device. **Prerequisite: Satisfactory completion of Biology I or Physical Science.**

**Earth and Space Science (10-12)** - Student will study topics related to some of the Earth and Space Science standards as set by the NGSS. Topics of study will include, but are not limited to: Earth's place in the universe and Earth systems. This course will incorporate the use of phenomena to figure out science concepts by engaging in science and engineering practices through the lens of crosscutting concepts. Engineering design challenges will be incorporated into various units and will require students to use their conceptual science understandings to solve a problem or create a device. **Prerequisite: Satisfactory completion of Biology I or Physical Science. This course may be offered every other year.**

**Chemistry (10-12)** – Students will study topics related to some of the Physical Science standards as set by the NGSS. Topics of study will include, but are not limited to: matter and its interactions, motion and stability, forces and interactions, and energy. This course will incorporate the use of phenomena to figure out science concepts by engaging in science and engineering practices through the lens of crosscutting concepts. Engineering design challenges will be incorporated into various units and will require students to use their conceptual science understandings to solve a problem or create a device. **Prerequisite: Satisfactory completion of Biology I.**

**Physics (11-12)** – The course would focus on the principles of STEM (science, technology, engineering, math) where students will be required to research a problem/solution, design various models to scale, collect data using various instruments and analyze their results. Students will reverse engineer various modern day structures, calculate and analyze their strengths and drawbacks. Then fabricate their own designs, test them and compare the empirical data. **Prerequisite: Completed or currently enrolled in Algebra II. This course is offered every other year.**

**Anatomy and Physiology (11-12)** – Students will study interactions among organs and organ systems in the human body. Topics of study will include: anatomical terminology, homeostasis, histology and organ systems. This course will incorporate the use of patient studies, placing students in the role of the diagnosing physician. Students taking this course should be interested in a medical field after high school. Dissection will be incorporated into this course. **Prerequisite: Satisfactory completion of Biology 1 and Chemistry or Physical Science.**



**Environmental Science (10-12)** - Students will study topics related to some of the Earth and Space Science standards as set by the NGSS. Topics of study will include, but are not limited to: Earth systems and Earth and human activity. This course will incorporate the use of phenomena to figure out science concepts by engaging in science and engineering practices through the lens of crosscutting concepts. Engineering design challenges will be incorporated into various units and will require students to use their conceptual science understandings to solve a problem or create a device. **Prerequisite: Satisfactory completion of Biology I.**

## **Social Science/History**

**U.S. History I (9) – Required Course** - The students will be exposed to an in depth study of United States History from the earliest Americans through the foundation of the United States of America. Emphasis will be placed on early American civilizations, native and European contact, colonial life in America, events leading up to the revolutionary war, the revolutionary war, and the first administrations. Topics covered will include geography, religion, economics, politics, social and cultural structures, and the role those have played in the growth of our nation. Students will be asked to analyze primary sources and write on a variety of historical perspectives.

**U.S. History II (9) – Required Course** - The students will be exposed to an in depth study of United States History from the Jacksonian Era through the antebellum period. Emphasis will be placed on the study of the War of 1812, Jacksonian democracy, Industrialism, changes in society, westward expansion, and events leading to the Civil War. Topics covered will include geography, religion, economics, politics, social and cultural structures, and the role those have played in the growth of our nation. Students will be asked to analyze primary sources and write on a variety of historical perspectives.

**U.S. History III (10) – Required Course** - The students will be exposed to an in depth study of United States History from the end of the Civil War Reconstruction through WWII. Emphasis will be placed on the study of Progressivism, Big Business, World War I, the 1920's, the Great Depression, the development of Fascism, World War II, the origins of the Cold War. Topics covered will include geography, religion, economics, politics, social and cultural structures, and the role those have played in the growth of our nation. Students will be asked to analyze primary sources and write on a variety of historical perspectives. Freshman may take this course in the third trimester if they have already passed U.S. History I and II.

**Government (11/12) – Required Course** - This course will focus on satisfying state requirements on the Federal and State Constitution. We will also study the history of the American Flag and current Constitutional issues. The course will also include the history of our state and local government. We will look at current issues of government and how those issues affect our local area.

**Ancient World History (10–12)** – The students will be exposed to the development of Humans and origins of Civilization, with specific emphasis on the development of river valley civilizations. This course will lead students through a detailed study of the development of humanity from the prehistoric age through approximately 1500 bc. This course will concentrate on civilizations such as Mesopotamia, Egypt, China, India, Greece, and Rome; looking at how geography, religion, economics, politics, and social/cultural structures helped to define them. **This course may be offered every other year.**

**Current Events (10–12)** - This course deals with the trends in history and politics today. Current events form the basis of discussion with research into the causes of the problem under discussion as well as possible solutions. Students will also focus on improving their media literacy skills. **This is writing and research based course. Students will be assigned readings and writings weekly. The final for this course is a research paper.**

**Eastern Geography (10 -12)** - This class will cover the physical, political, and cultural geography of the eastern hemisphere. We will look at how the physical geography of a region affects the people of that region and how it affects the political divisions (boundaries between countries) of the eastern hemisphere. We will also spend a large portion of the class studying the countries and people of the eastern hemisphere and how they affect life in the eastern hemisphere.

**Illinois History (10–12)** - Students will be exposed to the study of Illinois History, concentrating on the development of Illinois as a state from pre-historic Illinois to the present day, specifically concentrating on how geography, religion, economics, politics, and social/cultural structures factored into the development of our state. **This is a writing and research intensive course. Students will have weekly writing and research assignments assigned from various sources. The final for this course is a research paper. This course may be offered every other year.**

**Modern European History (10-12)** – The students will be exposed to an in depth study of European History from 1700 – 1918. The course concentrates on the rise of the European nation states, with specific topics including the French and American Revolutions, British Industrial Revolution, rise of Germany, WWI, and the development of European dominance in the 19<sup>th</sup> century. **This course may be offered every other year.**

**U.S. History in Film (10-12)** - This course will delve into the study of events throughout United States' history, through the lens of film. The content of this course will be student lead, meaning students will choose what topics throughout history they would like to learn more about. Each topic will have a notes portion, the movie(s), and a paper(s) that connect the movie to what historically happened. This will be a writing intensive course, and students should understand that this will be in conjunction with the writing standards of Abingdon-Avon High School. **Prerequisite: U.S. History I, II, and III.**

**Genocide & Holocaust (11-12)** - This course is an examination of hate and prejudice, the history of anti-Semitism and the Holocaust, and genocide studied through primary and secondary resources, literature, and film. Students will examine the definition of genocide, the holocaust

and genocides in Armenia, Asia, Bosnia, Rwanda and Darfur. This course will be discussing very difficult topics and events within history. *Students will need to understand this is not an easy class, and it can take an emotional toll on students.*

**Western Geography (10–12)** - This class will cover the physical, political, and cultural geography of the western hemisphere. We will look at how the physical geography of a region affects the people of that region and how it affects the political divisions (boundaries between countries) of the western hemisphere. We will also spend a large portion of the class studying the countries and people of the western hemisphere and how they affect life in the western hemisphere. **This course may be offered every other year.**

**Military History I (10-12)** - Students will examine the origins and developments of military institutions, traditions, tactics and practices across the world, focusing on both Western and Eastern military philosophies. Special focus will be places on the United States from 1775 to the present, including the relation between the armed forces and other government agencies. Emphasis will be placed on such conflicts as the Revolutionary War, War of 1812, Mexican-American War, Spanish-American War, and both World Wars. Guiding questions for this course will be: What situational factors shape strategies and tactics? How does philosophy define strategies and tactics? How do conflicts shape history? How do certain battles shape the outcome of larger conflicts?

**Military History II (10-12)** - This course will delve into both a tragic and fascinating recurring theme in the human story: armed conflict. Primarily from a US perspective, students will learn to think critically about war as it has occurred across time and continents. In this course, students will learn and delve into the study of battles of World War II, Korea, Vietnam, Gulf War, Iraq & Afghanistan. This course will be very demanding as it includes thinking critically, readings and classroom discussions. **Prerequisite: Military I with a C or better.**

**Women and Minorities History (10-12)** - This course will delve into the examination of how women and various minority groups contributed to American history. This course will allow students to see major events in American history through the perspectives of groups that have been underrepresented in the history books. This course will be a **project-based** course, in which students will be given a topic and will be responsible for researching and presenting information to their classmates. There are no exceptions to presenting. *Students that are not comfortable doing presentations in front of the class should not take this course.*

**This course may be offered every other year.**

**World History (10-12)** - Students will be exposed to an in-depth study of our global community's past, emphasizing the people and events that changed past societies, and how these changes affect our modern society. The course is separated into lessons comprising the following topic areas: early civilizations such as Ancient Greece and Rome, the rise of the civilizations of the Americas, societies of the Middle Ages such as the Byzantine Empire, Russia and Eastern Europe, the Renaissance and Reformation, the start of the Global Age in Europe, Africa, Asia and the Americas. Other topic areas include the French Revolution and Napoleon, the beginning of the Industrial Revolution and the Revolutions of Europe and Latin America, Nationalism in

Europe the growth of Western Democracies, and New Imperialism. The course closes with WWI and the Russian Revolution, the rise of totalitarianism, WWII and its aftermath, the world since 1945 including the Cold War, the emergence of new nations, regional conflicts, the developing world and the world today. **This course may be offered every other year.**

## **Dual Credit College Courses**

Juniors and Seniors wanting to take dual credit courses are encouraged to attend the dual credit meeting with a parent or guardian. All courses are taught online or at Abingdon-Avon High School by Carl Sandburg College instructors. Students will earn high school and college credit for these courses. Payments for these courses are made through Carl Sandburg College, and students must purchase or rent the required textbooks.

Students are also required to take the Accuplacer placement test for reading and math. Accuplacer scores determine a student's mandatory placement into college level courses (classes with course number 100 and above). There is no charge to take the Accuplacer placement test. Minimum score requirements on the Accuplacer test are as follows:

**Reading: 240**

**Mathematics: 256 or Completion of Algebra I, Geometry and Algebra II with C or better.**

In lieu of taking the Accuplacer placement test, official ACT or SAT scores will be accepted for placement if the test was taken within two years of the admission date to CSC. Minimum score requirements on the ACT or SAT are as follows:

**English/Writing: ACT 20**

**Reading: ACT 20**

**Math: ACT 25**

**Reading/Writing: SAT 480**

**Math: SAT 530**

**Students wanting to earn their Associate of Arts degree will take 9.0 credit hours each trimester (3 college classes) along with 3 high school classes. They will also take 2 classes in the summer between their junior and senior year at Carl Sandburg College in Galesburg.**

## **Galesburg Area Vocational Center**

The following is a list of career and technical education programs open to Abingdon-Avon Junior and Senior students. Students must fill out the GAVC application and will be notified if they are accepted into the course. For more information on GAVC's career and technical education offerings, please go to [www.gavc.org](http://www.gavc.org).

**AP Computer Science**  
**AR/VR Development**  
**Auto Mechanics I**  
**Auto Mechanics II**  
**Building Trades**  
**CNC Machining I & II**  
**Culinary Occupations I & II**  
**Drone Operation & Maintenance**  
**Early Childhood Education I & II**  
**Ed Pathway II**  
**Electrical Trades I & II**  
**Engineering Design**  
**Emerging Technology**  
**Fire Science**  
**Health Occupations (Semester Course)**  
**Introduction to Law Enforcement**  
**Introduction to Teaching**  
**Introduction to Pharmacology/Medical Terminology**  
**Nutrition**  
**Web Development**  
**Welding**