# **OHIO COMMUNITY HIGH SCHOOL**

# Course Catalog 2025-2026



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# **Registration Procedure**

This course catalog lists course information and graduation requirements for Ohio Community High School. Students, parents, and the counselor will use this document to create a rigorous academic program for each student that ensures graduation requirements are met, college/continued study entrance requirements are met, and courses are selected that are appropriate to student abilities and interests.

Students should use this catalog to find courses offered at Ohio Community High School, and work with their parents and the counselor to create a preliminary four-year course of study that fulfills graduation requirements. This plan will be reviewed annually with the school counselor.

# **Course Selection**

Following the sequencing listed in the course descriptions will ensure proper preparedness for advanced coursework and include state required and possible elective course offerings. Not all courses will be available for student selection, course selection is dependent upon availability of instructors. Study halls and support periods are designed to allow students an opportunity to complete out of class assignments and to make thorough preparations for class so that their achievement may be representative of their best efforts. High School students are limited to 1 study hall per semester, unless prior approval is given by administration. Use the Career Cluster Programs of Study to help select courses for preparation for career goals. These Programs of Study are specific to courses at Ohio and serve as guides for core and elective courses to take in high school. Any student who fails a semester of a required class will be required to repeat it. Students who fail an elective course may choose to repeat it.

# **Credits and Classification**

Students are classified according to the following earned credits:

Freshmen: 0 - 5.5 credits
 Sophomores: 6 - 11.5 credits
 Juniors: 12 - 17.5 credits
 Seniors: 18 credits and above

# **Graduation Requirements**

Credit for completed coursework is applied to a student's record at the end of a semester. Unless otherwise noted, half-credits are awarded for courses successfully completed each semester. Diplomas are awarded after the completion of at least 24 semester credits with certain credits being earned in the following subject/ course areas:

ENGLISH	4.0
MATH	3.0
SCIENCE	2.0
SOCIAL SCIENCE	2.0
CONSUMER EDUCATION	0.5
PHYSICAL EDUCATION/DRIVERS EDUCATION/HEALTH	4.0
FINE ARTS OR CAREER EDUCATION	2.0
ELECTIVES	6.5

#### ADDITIONAL GRADUATION REQUIREMENTS

- ACT EXAM Completion: junior year
- Pre ACT exam: freshman and sophomore year
- Pass US & IL Constitution Exam
- FAFSA Completion
- Sauk Impact Sign-up

#### TOTAL CREDITS NEEDED FOR GRADUATION

#### **ENGLISH**

2.0 credits must include state required writing-intensive requirements, including intensive instruction in computer literacy.

#### **MATH**

- 1.0 Algebra I content
- 1.0 Geometry content
- 1.0 Mathematics Elective

#### **SCIENCE**

2.0 credits of non-specific course sequences or content

• 1.0 credit must include laboratory components

#### **SOCIAL SCIENCE**

- 1.0 US History credit
- 0.5 Civics credit
- 0.5 Social Science elective
  - Students are required to receive a passing score on the US & IL constitution exam & Flag exam prior to graduation.

#### **CONSUMER EDUCATION**

Consumer Education credit can be obtained by taking and passing:

- Consumer Education proficiency exam
- Consumer Education course (.5 credit)
- Intro to Business (1.0 credit)
- Ag Economics (1.0 credit)
- Consumer Math (1.0 credit)

#### **PHYSICAL EDUCATION**

Students are required to enroll in PE every semester they are in school; the equivalence of 1 semester of PE will include Health. Juniors and seniors may be exempt from physical education if they qualify under the Board of Education guidelines. Students can fulfill the Driver's Education requirement by enrolling in the summer Driver's Education course, or through an accredited private Driver's Education program. Those students who complete Driver's Education through a private program must provide a certificate of completion.

#### **FINE ARTS or CAREER EDUCATION**

Students can fulfill this requirement by taking courses from the Foreign Language, Music, Art or courses at the Whiteside Area Career Center (WACC). Students must take 2.0 years of courses from the same department to meet some college and university requirements. Successful completion of courses will range from .25 - 1.0 semester credit hours awarded per course.

#### IMPACT/COMMUNITY SERVICE

By September 1st of their freshman year, students are required to sign up for the Sauk Valley Community College IMPACT program. SVCC's **earned**-tuition program provides eligible students, who graduate within the Sauk district, the opportunity to **earn** tuition and fees for up to three years at SVCC, or until they **earn** their certificate or degree—whichever comes first.

To be eligible for earned Sauk tuition and fees, students are required to:

- Progress with the rest of their class (graduate on time or early)
- Participate in 100 hours of community service before high school graduation (25 hours per year)
- Graduate from a high school or home school program located within the SVCC district
- Apply for at least one other local/state/national scholarship
- Complete the FAFSA—if ineligible to apply for FAFSA—complete the FAFSA forecaster

# **Free Application for Federal Student Aid (FAFSA)**

Students must file a FAFSA with the U.S. Department of Education or, if applicable, an application for state financial aid or file a waiver with the school district.

# **Grading Scale and Grade Points**

Grade point averages are calculated at the end of each semester. Cumulative GPAs are used on college applications and for class rank. Only semester GPAs are used for Honor Roll and High Honor Roll. Grades are unweighted.

- A- 90-100
- B- 80-89
- C- 70-79
- D- 60-69
- F- 0-59

# **Agriculture**

#### **Introduction to Agriculture**

This class surveys a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. Developing communication skills, business principles, and leadership skills are focused on.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Agricultural Business Management**

This course provides students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. It covers topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other topics include developing a business plan, employee/employer relations, problem-solving and decision making, commodities, and building leadership skills. It also incorporates a survey of the careers within the agricultural industry. **Meets Consumer Education graduation requirement.** 

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Agricultural Marketing**

In this course, students are introduced to the principles of marketing. Students will be guided through the development of a marketing plan. The focus will be on product and distribution, price and promotion, and managing risks, finances, and information. Topics will include economics, functions of marketing, international marketing, computers, ethics, and legal issues.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Agricultural Animal Science**

This class develops students' understanding of the livestock (beef, dairy, sheep, goats, and swine), poultry, and large (equine) animal industry. Topics of instruction include scientific investigations, genetics, animal anatomy and physiology, animal nutrition, animal reproduction, animal health, and meat science. 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.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

# <u>Art</u>

#### Art 1

Grade Level: 9, 10, 11, 12

Credit: 1 Length: Year

Prerequisite: None

This class covers elements and principles of design, line, shape, form, space, color, and texture. Students will use various techniques such as drawing, painting, still life, life drawing, and portrait drawing. Students will use a variety of media such as watercolor, acrylics, pastels, pencil, pen and ink, scratchboard, as well as 3D media including clay, paper, cardboard, metal and plastics.

Students will apply the studio habits of mind and artistic behaviors to develop their artistic mindset and skills.

#### Art 2

Grade Level: 10, 11, 12

Credit: 1 Length: Year

Prerequisite: Art 1 or Teacher Recommendation

This course builds on the knowledge and skills acquired in Art 1. Students are expected to be self-directed in their studies and studio work. Students will apply the studio habits of mind and artistic behaviors to develop their artistic mindset and skills while working with a variety of media.

#### Art 3

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: Art 1 & Art 2 or Teacher Recommendation

This course is a continuation of Art 1 and Art 2. Students are expected to be self-directed in their studies and studio work. Students will apply the studio habits of mind and artistic behaviors to develop their artistic mindset and skills while working with a variety of media.

#### Art 4

Grade Level: 12

Credit: 1 Length: Year

Prerequisite: Art 1, Art 2 & Art 3 or Teacher Recommendation

This course is a continuation of Art 1, Art 2, and Art 3. Students are expected to be self-directed in their studies and studio work. Students will apply the studio habits of mind and artistic behaviors to develop their artistic mindset and skills while working with a variety of media.

# **Business**

#### **Accounting I**

Accounting I is a course that assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Accounting II**

Accounting II is a course that builds upon the foundation established in Accounting I. This course is planned to help students to develop deeper knowledge of the principles of accounting with more emphasis being placed on financial statements and accounting records. It is a study of previously learned principles as they apply to the more complicated types of business organizations: partnerships, corporations, branches, etc. The students may become familiar with such specialized fields of accounting as cost accounting, tax accounting, payroll accounting, and others. Some students may choose to do specialized accounting computer applications, and others may elect payroll clerk, data processing computer applications. Simulated business conditions may be provided through the use of practice sets. Skills are developed in the entry, retrieval, and statistical analysis of business data using computers for accounting business applications.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Banking and Finance**

Banking and Finance courses provide students with an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.

Grade Level: 9, 10, 11,12

Credit: ½

Length: Semester Prerequisite: None

#### **Consumer Education**

This course will prepare students to be successful consumers in our society. Topics include: how to complete income tax forms, how to open a checking account and keep records, how to open a savings account and use bank services, how to calculate interest, how to apply for and obtain credit and loans, how to interpret loan contracts, how to set up a budget and keep records, how to compare investments, how to interpret and compare major types of insurance, how to shop for and purchase a car, how to shop for housing, and how to protect our rights as consumers. **Meets Consumer Education graduation requirement.** 

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Introduction to Business**

This course acquaints students with management opportunities and effective human relations. It provides students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, it provides a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course also emphasizes problem-based, real-world applications of business concepts and uses accounting concepts to formulate, analyze, and evaluate business decisions. **Meets**Consumer Education graduation requirement when taken with Business Economics.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Business Economics**

Business Economics courses integrate economic principles (such as free market economy, consumerism, and the role of the U.S. government within the economic system) with entrepreneurship/business concepts (such as marketing principles, business law, and risk). Meets Consumer Education graduation requirement when taken with Introductory Business.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Business Communications**

Business Communications courses help students to develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based projects and real world application.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Business Law**

Business Law courses emphasize legal concepts that are relevant to business and business organizations. Topics examined in these courses typically include contracts, buying/renting property, installment buying, insurance, buyer/seller relationships, negotiable instruments, employment, taxes, insurance, commercial papers, legal organizational structures, and consumer liabilities. (Available SY 2011-.)

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Business Principles and Management**

Business Principles and Management courses are designed to provide students with an understanding of the American business system, its organizations, and its management. These courses examine the various leadership and management styles of a variety of successful business organizations, large or small.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Business Management**

Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.

Grade Level: 9,1 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Business and Technology Concepts CTE**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level - 12 Business and Marketing 271 courses that make up the Business, Marketing and Management occupations programs.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Product Oriented Marketing**

Product-Oriented Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Advanced Marketing**

Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

Grade Level: 9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

# **Computer Technology**

#### **Computer Tech I**

Students will reinforce their keyboarding skills and develop formatting and document processing skills. Touch keyboarding techniques are stressed for entering alphabetic, numeric, and symbolic information on a computer. Formatting includes arranging, placing, and spacing documents such as letters, memos, reports, tables, etc. Document processing combines keyboarding and formatting through job-related tasks, decision making, application of language skills, proofreading and correcting, and becoming an efficient worker. Students will also develop a comprehensive understanding of Microsoft Word (word processing). Students will learn to create, format and edit documents through a variety of activities and exercises.

Grade Level: 9
Credit: ½

Length: 1st Semester Prerequisite: None

#### **Computer Tech II**

This course will help students develop a comprehensive understanding of computers. Computer Tech II provides a thorough analysis of hardware, software, operating systems, and the role computers play in social and professional settings. This course provides students with theoretical and practical knowledge of Windows 2010 applications (i.e. Word, PowerPoint, Excel, and Access.

Grade Level: 9 Credit: ½

Length: 2nd Semester

Prerequisite: Computer Tech I

## **Computer Presentation and Database (Computer Tech III)**

This course will help students develop a comprehensive understanding of Microsoft PowerPoint (presentation tool) and Microsoft Access (database). PowerPoint combines text, clip art, drawing objects, charts, tables, and other objects to create visual presentations. Access is used for organizing and sorting information. Students will learn the most commonly used features of PowerPoint and Access through computer applications and exercises. A variety of activities/exercises will be completed to provide students with the instruction necessary to become a knowledgeable user of this popular presentation and database software.

Grade Level: 10

Credit: ½

Length: Semester

Prerequisite: Computer Tech I

#### Coding

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

Grade Level:9, 10, 11, 12

Credit: ½

Length: Semester Prerequisite: None

# **Driver Education**

#### **Driver Education**

Driver Education course consists of all learning experiences provided by the school for the purpose of helping students learn to use motor vehicles safely and efficiently. This course requires 30 hours of classroom and 6 hours of behind the wheel instruction. Due to the nature of this course absences will result in removal from the class.

Grade Level: 10

Credit: ½

Length: Summer Prerequisite: None

# **English**

#### **English I**

**English I** emphasizes a better understanding of analysis and whole class discussion. An emphasis on vocabulary and composition skills will be an ongoing part of the course. The course includes studies of various literary genres such as short story, poetry, novel, drama, and non-fiction. The development of critical reading and writing skills is a major emphasis of the course. Students will use **digital literacy skills and knowledge of technology**, including the internet, to produce and publish writing as well as to interact and collaborate with others and must demonstrate sufficient command of keyboarding skills to type a five-paragraph essay in one sitting.

Grade Level: 9

Credit: 1 Length: Year

#### **English II/Speech**

**English II** consists of one semester of speech and one semester of World Literature. Emphasis in both semesters will be placed on vocabulary development, composition skills, and critical reading and writing skills. **Speech** features a variety of performance activities which enable students to hone to mastery their communication skills. The course focuses on public speaking, listening and evaluation skills, persuasive techniques, and speech writing skills. Students give a variety of speech types: Demonstrative, Informative, Impromptu, and Persuasive are a few of the evaluated speeches each student must complete. Students will make strategic **use of digital media** (e.g., textual, graphical, audio, visual, and interactive elements) in speech presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Grade Level: 10

Credit: 1 Length: Year

Prerequisite: English I

#### **English III**

This course continues emphasis on composition skills and literary analysis through a focus on the American Experience. All literary study is supported by composition. A large focus will be applied to Rhetorical Analysis in preparation to better understand the process of argumentation in order that the students will be able to effectively communicate the authority of their own arguments in a final Research Paper. Students will use **media literacy skills**, civic-developed skills, and strategies to evaluate digital tools and resources to research a topic, organize information, and share their findings with others.

Grade Level: 11

Credit: 1 Length: Year

Prerequisite: English I, English II

#### **English IV**

English IV consists of a survey of technical writing **or** classic British Literature. A requirement of the course is a final Research Paper. For the option of British literature, authors from 1500 to the present will be explored. Genres covered will include poetry, drama, novels, short stories, and expository literature. A heavy emphasis will be placed on compositions including critical analysis essays. For the Technical Writing option, resumes, cover letters, memos, emails and workfield-related documents will be of major focus. No matter the course options, a final Research Paper provides students with the opportunity to combine their literary analysis of the year's texts and the research writing process. Students will use **media literacy skills**, civic-developed skills, and strategies to evaluate digital tools and resources to research a topic, organize information, and share their findings with others.

Grade Level: 12

Credit: 1 Length: Year

Prerequisite: English I, II, III

#### **Creative Writing**

This course is designed for students who have previously demonstrated a mastery of writing skills and who wish to pursue an enhanced depth of understanding in writing description, short stories, poems, scripts, and one-act plays. Various works of literature will be read for the purpose of providing effective models for student writing. Students in the class will be asked to submit their work for public critique on a regular basis throughout this course. Development of writing style and author's voice will be emphasized. This course is an intensive writing class.

Grade Level: 11, 12

Credit: 1/2 Length: Semester Prerequisite: None

#### **Novels**

Over the course of a semester students will learn the history of the novel, read a broad range of novels from different genres, and write analytical responses to those novels. This course will provide students the opportunity to expand their knowledge of novel genres, to better engage in and sustain attention during extended reading sessions, and to respond analytically to fiction. Students will be required to journal about reading assignments, write essays, and create projects. This course is an intensive writing class.

Grade Level: 11, 12

Credit: 1/2

Length: Semester Prerequisite: None

#### **ENG 101- Composition I**

This course develops awareness of the writing process; provides inventional, organizational, and editorial strategies; stresses the variety of uses for writing; and emphasizes critical skills in reading, thinking, and writing. **Dual Credit offered through Sauk Valley Community College.** Students will use **media literacy skills**, civic-developed skills, and strategies to evaluate digital tools and resources to research a topic, organize information, and share their findings with others.

Grade Level: 11, 12

Credit: ½

College Credit: 3 Semester Hours

Length: Semester

Prerequisite: Required placement score on approved English placement test

#### **ENG 103- Composition II**

An advanced course in essay writing with emphasis on formal research, ENG 103 serves to develop a proficiency in the collection and selection of data as applied to the completion of a formal research paper. In addition, students receive instruction in logic and reasoning, including the fundamentals of argumentative and persuasive writing. **Dual Credit offered through Sauk Valley Community College.** Students will use **media literacy skills**, civic-developed skills, and strategies to evaluate digital tools and resources to research a topic, organize information, and share their findings with others.

Grade Level: 11, 12

Credit: ½

College Credit: 3 Semester Hours

Length: Semester

Prerequisite: A grade of C or higher in ENG 101

# **Health/ Physical Education**

#### Health

Health is a required course. Unit topics include Red Cross CPR, first aid, stress management, substance abuse, human sexuality, death education, and body systems. Students are encouraged to explore healthful lifestyles through class lecture, discussion, research projects, and media.

Grade Level: 9 Credit: ½

Length: Semester Prerequisite: None

#### **Physical Education**

Physical Education is required of all high school students unless exempt according to state guidelines. The course provides daily physical activity as well as basic instruction in skills, rules, and team strategy.

Grade Level: 9, 10, 11, 12

Credit: 1 Length: Year

## **Mathematics**

#### Algebra I

Algebra I uses the math skills that the students learned in grade school to explore the world of higher mathematics. The students learn new vocabulary, new concepts and different ways to use their knowledge. They will learn addition, subtraction, multiplication, and division models for solving linear equations, work with exponents, and add, subtract, multiply, and divide radicals, polynomials, systems of linear equations, and rational equations. Students will incorporate the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) as appropriate for each concept.

Grade Level: 9 Credit: 1 Length: Year

Prerequisite: None

#### Geometry

Geometry relates mathematics to the physical world and is used to design. Geometry also encourages the development of logical thinking and reasoning skills. The student will study polygons, circles, lines, and properties that apply to them. Other topics covered will include: measurement formulas, three-dimensional figures, surface area, volume, coordinate geometry, and similarity. Students will incorporate the use of hand held calculators, spreadsheets, online graphing calculators (ex. Desmos), and dynamic geometry software (ex. Geogebra) as appropriate for each concept.

Grade Level: 10

Credit: 1 Length: Year

Prerequisite: Algebra I

#### Algebra II

Algebra II is an extension of Algebra I. There is a review of the basic algebra skills and vocabulary. Then, these skills are enriched and added to so that the student can explore more algebra skills that will lead them into advanced mathematics. Topics covered will include: variations & graphs, arithmetic & geometric sequences, matrices, system of equations, & trig. Students will incorporate the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) as appropriate for each concept.

Grade Level: 10, 11, 12

Credit: 1 Length: Year

Prerequisite: Algebra I with a grade of C or better

#### **Business Math/Consumer Math**

Business Math assists students in the use of mathematics in their personal and business lives. Students will learn terminology, apply mathematical skills, and use formulas to solve a variety of business and personal finance problems. Students will incorporate the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) as appropriate for each concept.

Grade Level: 11, 12

Credit: ½ - 1

Length: Semester or Year

Prerequisite: None

#### **Occupational Applied Math**

Occupationally Applied Math courses reinforce general math skills, extend these skills to include some pre-algebra and algebra topics, and use these skills primarily in occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations. Students will incorporate the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) as appropriate for each concept.

Grade Level: 9, 10,11, 12

Credit: ½

Length: Semester Prerequisite: None

#### **Pre-Calculus**

The purpose of this class is to provide the college-bound student with an introduction to precalculus. Pre-Calculus mathematics deals mainly with infinite and continuous processes. Its subject matter includes functions, coordinate systems, trigonometry, vectors, limits, and sequences and series. Students will incorporate the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) as appropriate for each concept.

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: Algebra I, Algebra II, Geometry with grades of C or better

## **MAT 078 - Prep Math for Non Stem Majors**

This course is to prepare students for college-level liberal arts math, technical math, or general statistics courses through content that is relevant for non-STEM majors. Topics in this course incorporate real-life applications while teaching pre algebra, numerical, algebraic, geometric, and measurement concepts; along with an introduction to probability and statistics. Online course offered through Sauk Valley Community College. High school credit awarded, no college credit awarded.

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: Algebra I

#### MAT 121 - College Algebra

This course assumes proficiency with material in MAT 080. Topics extended to the college level include: real numbers, exponents and radicals, polynomials and factoring, fractional expressions, equalities and inequalities, functions and their graphs, conic sections, and systems of equations and inequalities. New topics include: zeros of polynomial functions, rational functions, exponential and logarithmic functions, matrices and determinants, sequences, and the Binomial Theorem. This course requires a graphing calculator as the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) will be incorporated as appropriate for each skill concept. **Dual Credit offered through Sauk Valley Community College.** 

Grade Level: 11, 12

Credit: ½

College Credit: 4 Semester Hours

Length: Semester

Prerequisite: Two years of high school Algebra and Geometry with grades of C or higher and appropriate placement

score.

#### **MAT 122 - Trigonometry**

This course consists of an elementary survey of trigonometry and its applications. Topics include a review of prerequisite topics, radian measure and the unit circle, trigonometric functions and their graphs, and inverse trigonometric functions. Also included are trigonometric identities and equations, the solution of right and oblique triangles, vectors, and a review of exponential and logarithmic functions and their applications. Students will incorporate the use of hand held calculators, spreadsheets, online graphing calculators (ex. Desmos), and dynamic geometric software (ex. Geogebra) as appropriate for each concept. **Dual Credit offered through Sauk Valley Community College.** 

Grade Level: 11, 12

Credit: ½

College Credit: 3 Semester Hours

Length: Semester

Prerequisite: MAT 121 with a grade of C or higher

#### **MAT 240 - Elementary Statistics**

An introduction to basic concepts in statistical methods including measures of central tendency, measures of dispersion, probability, theoretical and empirical distribution, estimation, tests of hypotheses, linear regression and correlation. Students will incorporate the use of hand held calculators, spreadsheets, and online graphing calculators (ex. Desmos) as appropriate for each concept. **Dual Credit offered through Sauk Valley Community College.** 

Grade Level: 12

Credit: ½

College Credit: 3 Semester Hours

Length: Semester

Prerequisite: Two years of high school Alg & Geom with grades of C or higher required.

#### Music

#### **Band**

Band gives the students an opportunity to continue the study of a musical instrument, and to extend the experience of ensemble playing while mastering new skill levels in these areas. Band includes Concert Band, Pep Band, and Marching Band.

Grade Level: 9, 10, 11, 12

Credit: ¼ or ½ per semester (students who take band 5 days per week will receive ½ credit per semester)

Length: Year

Prerequisite: None

#### **Chorus**

Choir develops a student's knowledge and appreciation of music through choral performance. Students learn technical skills and develop aesthetic values that will contribute to a lifetime of music enjoyment and appreciation.

Grade Level: 9, 10, 11, 12

Credit: ¼ or ½ per semester (students who take chorus 5 days per week will receive ½ credit per semester)

Length: Year Prerequisite: None

# Science

#### **Earth Science**

This is a basic freshman course designed to cover four fields of science: geology, space, weather and climate, and how the oceans function. It will introduce students to basic concepts in each field. This course is designed to teach general skills related to scientific study. Each field of study will use the scientific method to develop laboratory experiments related to certain processes within these fields. Each student will be required to develop a science project related to one of the fields mentioned above.

Grade Level: 9 Credit: 1 Length: Year

#### **Biology**

This course is designed to improve the students' knowledge of biological concepts. The characteristics of living things and the scientific method are reviewed, as well as the tools and techniques that biologists use. Cellular structure and function, cell reproduction and food/waste processing are covered. Basic chemistry is used to study the biochemistry of life. Genetics and inheritance are introduced. Students will complete projects and experiments relating to these topics. Each student will also be required to complete a one-semester science project that is related to Biology.

Grade Level: 10

Credit: 1 Length: Year

Prerequisite: None

#### **Physical Science**

This course is designed to improve the students' general knowledge of subjects underneath the topic of Physical Science. The course is divided into two major subjects: Physics and Chemistry. In units related to Physics, students will develop an understanding of Measurements, Motion, Force, Work and Energy, Temperature and Heat, Sound Waves, Light Waves, Electricity and Magnesium, and the basic concept of the Atom and Nuclear Reactions. In units related to Chemistry, students will develop an understanding of Chemical Elements, Chemical Bonding, Chemical Reactions, Organic Chemistry, and Place and Time.

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: None

#### Chemistry

This course is designed for college bound students. Students will use a variety of lab materials to study matter and its changes. Atomic Theory, elements and their properties, formula writing, balancing equations, stoichiometry, concentration of solutions, gas laws, equilibrium, reaction tendencies and metric measurements will be studied. This course is organic in nature. Students will be required to complete two semester long projects that are related to chemistry.

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: 2 Years of Science

#### **Physics**

This course is designed for the college bound student. Students will use toys and simple materials to study the basics of kinematics (motion); dynamics (how forces alter motion); work and energy; wave phenomena; electricity; magnetism; and heat and internal energy. The students will do extensive problem solving as well as learn real life application of the material covered. Students will also complete two semester long projects that are related to physics.

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: Algebra II and Geometry (May take Algebra II concurrently with Physics)

#### **Application of Agriculture Science**

Applications of Agriculture is a science elective that explores the scientific principles and technological innovations behind modern agriculture. This interdisciplinary course bridges biology, chemistry, environmental science, and engineering as students investigate how food, fiber and fuel are produced sustainably. Through hands-on projects, labs, case studies and field experiences, students will learn about plant and animal systems, soil science, biotechnology, sustainable practices and the role of agriculture in global and local ecosystems.

Grade Level: 11, 12

Credit: 1 Length: Year

Prerequisite: None

#### **BIO 105 - Principles of Biology**

A survey of the basic principles of biology including: nature of science, cells, structure and function of organisms, genetics, evolution and ecology. This course is designed to satisfy the biology requirement for general education and vocation-occupational curriculum majors. It provides a basis for understanding principles common to all major fields of biology for the science or professional major. **Dual Credit offered through Sauk Valley Community College.** 

Grade Level: 11, 12

Credit: ½

College Credit: 5 Semester Hours

Length: Semester
Prerequisite: Biology

#### **BIO 108- Introduction to Human Anatomy and Physiology**

A study of introductory chemistry, cells, tissues, and structure and function of organ systems including: digestive, respiratory, reproductive, urogenital, cardiovascular-lymphatic, musculoskeletal, nervous, immune, and endocrine systems. **Dual Credit offered through Sauk Valley Community College.** 

Grade Level: 11, 12

Credit: ½

College Credit: 4 Semester Hours

Length: Semester Prerequisite: BIO 105

# **Social Science**

#### **World History**

This course involves an explanation of today's world through the study of past events that shaped Western Civilization, the growth of technology, colonialism-past and present, the growth of nationalism, the drawing of national borders, the Cold War, and the new frontiers available to man. Specific Units will include the study of Ancient Greece, the Roman Empire, Medieval Europe, the Renaissance and Reformation, the Industrial Revolution, World War I, World War II, and the Cold War. This course uses a combination of a textbook and on-line format.

Grade Level: 9 Credit: 1 Length: Year

Prerequisite: None

#### **Civics**

Civics courses examine the general structure and functions of U.S. systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve to the same degree of detail into constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

Grade Level: 10

Credit: ½

Length: Semester Prerequisite: None

#### **World Geography**

This course focuses on the study of how the world came to look the way it does. Students will be looking at specific locations, what makes a location unique, how similar places are combined, how people, goods, and ideas move from place to place, and the effect people have on their environment as well as how the environment affects people. Skills in reading maps, charts, and tables will be reviewed. Relevant current events in each location will be discussed. This course uses an on-line format, including an on-line textbook.

Grade Level: 10

Credit: ½

Length: Semester Prerequisite: None

#### **United States History**

This course offers an in-depth study of United States history including coverage of political, social, economic, and diplomatic events. Specific areas of study will include Colonial and Revolutionary America, Young America, Expansion, Civil War, and Reconstruction, Industrial Transformation, and becoming a World Power.

Grade Level: 11

Credit: 1 Length: Year

#### HIS 221- American History to 1865

Students will examine the first interactions of Native American cultures, European conquerors, and enslaved Africans. They will compare the Spanish, French, and English experiences in North America, and explore the events in the English colonies that led to revolution and independence. They will examine the constitution issues, political clashes, and social changes of the Federalist, Jefferson and Jacksonian periods. Students will explore westward expansion, immigration in the north, and the southern slave economy. They will consider the events of the decade of crisis that led to civil war, and look closely at the war and its major consequences. This is a Dual Credit course offered through Sauk Valley Community College.

Grade Level: 11, 12

Credit: ½

College Credit: 3 Semester Hours

Length: Semester

#### HIS 222- American History Since 1865

Students will examine American history from the Reconstruction Era to the present. They will gain an understanding of historical periods and events such as the Industrial Revolution, the Gilded Age, the Great Depression, the two World Wars, the Cold War, The Age of Affluence, and the Struggle for Racial and Gender Equality. **This is a Dual Credit course offered through Sauk Valley Community College.** 

Grade Level: 11, 12

Credit: ½

College Credit: 3 Semester Hours

Length: Semester

# **Spanish**

#### Spanish I

Spanish I is the beginning of the study of the Spanish language and the people who speak it. This course includes a beginning study of Spanish vocabulary, grammar, reading, comprehension, written and aural – oral communication skills. Emphasis is placed on communication of basic needs. Students will also study Spanish and Hispanic people and culture.

Grade Level: 9, 10, 11, 12

Credit: 1 Length: Year

Prerequisite: None

#### Spanish II

Spanish II is an intermediate study of the Spanish language with more emphasis on grammar and communication skills. A study of Spanish-speaking people continues.

Grade Level: 9, 10, 11, 12

Credit: 1 Length: Year

Prerequisite: Spanish I with a grade of C or higher

# **Whiteside Area Career Center (WACC)**

The Whiteside Area Career Center (WACC) is a cooperative endeavor of sixteen member school districts and four parochial schools located in Northwestern Illinois. WACC is located at 1608 Fifth Avenue in Sterling. The regional system encompasses approximately 1,450 square miles and has a population of 110,000 plus. Students come from five counties: Bureau, Carroll, Lee, Ogle, and Whiteside.

Career education is a broad term encompassing career awareness, career development, and skill preparation for ALL students at ALL levels of education. Career education integrates and reinforces academic and employability skills while at the same time preparing our students for careers in an increasingly technological and service oriented economy. And, career education is for students of all abilities whether they choose to begin their careers immediately after attending high school, trade school, community college or university.

Ohio Junior and Senior students may choose to attend WACC and receive career and technical education. Our students may select from the following occupational clusters: agriculture, business and related, family and consumer science, health occupations, and industrial/technical. Transportation will be provided to WACC. With travel, students will be away from Ohio Community High School for three class periods.

Programs at WACC Include:

Allied Health is a one-year program offered to junior and senior students that are interested in pursuing a career in various medical fields. Students are in the classroom two days per week and at clinical sites the other days. Students participate in two to three clinical sites throughout the school year. Clinical sites include, but are not limited to, hospitals, clinics, long-term care facilities, chiropractors, veterinary clinics, physical therapists, etc. Students can practice in different areas of the medical field, such as Maternal-Child Nursing, Geriatrics, Emergency Nursing, Radiology, Dental Medicine, Veterinary Science, and more. Allied Health is a dual credit program, therefore students wishing to enroll in Allied Health are required to pass the SVCC reading exam, or earn a 20 or higher on the reading component of the ACT, or enroll in the Sauk Reading class. Due to the internship component of this program, students must also be recommended by his or her counselor.

Grade Level: 11, 12

Credit: 1

College Credit: 6 Dual Credits with SVCC: 3 credits for Medical Terminology (NRS116) and 3 credits for Diet

and Nutrition (NRS132)

Length: Year

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Auto Service is a one- or two-year program offered to junior and senior students. First year students will be building basic repair skills such as lubrication, brakes, engine tune up, suspension, fuel injection, computer controls, electrical systems, exhaust systems, transmissions and clutches, cooling systems, and heating and air conditioning. Second year students will learn engine rebuilding, transmission rebuilding, differential operation, engine diagnostics, and qualifying students can participate in work-based learning at various job sites in order to gain real world work experiences while going to school. Employment opportunities include quick lube, independent garages, new car and truck dealerships, auto parts counter person, agricultural mechanic, diesel mechanic, and motorcycle-snowmobile-ATV mechanic.

Grade Level: 11, 12

Credit: 1

College Credit: 2 Dual Credits with Highland Community College in AUTM 138

Length: Year

Prerequisite: None

Building & Construction Trades is a one- or two-year program offered to junior and senior students. This course provides experiences related to the construction and maintenance of residential buildings and related fixtures. During the year, students will spend 80% of their time at a job site constructing or remodeling a residential house. The other 20% of the time students will be in the classroom. Instruction will include safety principles, framing, plumbing, wiring, roofing, installing insulation, dry wall, painting, pouring concrete, landscaping, estimating materials, blueprint reading, hanging cabinets, siding, hanging doors, heating and air conditioning, masonry, and finish work. Second year students are provided the opportunity to advance their skills in the construction trades.

Grade Level: 11, 12

Credit: 1

College Credit: 6 Dual Credits with Highland Community College: 3 credits for MTEC 240 and 3 credits for

MTEC 245. Length: Year

Prerequisite: None

**CEO (Creating Entrepreneurial Opportunities)** is a one-year program that acquaints students with the knowledge and skills necessary to own and operate their own businesses. Concepts such as supply and demand, cost/benefit analysis, competitive advantages, and opportunity recognition are covered. Coursework includes innovative thinking strategies, product development, business structure, marketing, financial strategies, record keeping, and preparing an income statement, balance sheet, income, and cash flow statements. Entrepreneurial thinking (out-of-the box problem solving) is utilized throughout the course. This course will take place in area businesses, and will include tours of local industry and guest speakers from all areas of business.

Grade Level: 11, 12

Credit: 1

College Credit: Dual Credit Pending

Length: Year

<u>Commercial Food Service</u> is a one- or two-year program open to juniors and seniors. Students explore Culinary Arts, preparing food for a large number of consumers, and catering. Occupational skills taught include care and use of commercial equipment, food preparation, customer service, management, and nutrition. Students in this program will receive weekly hands-on experience in the WACC commercial kitchen and provide food services for the public.

Grade Level: 11, 12

Credit: 1

College Credit: No dual credit available

Length: Year

Prerequisite: None

**Computer Technology** is a one-or-two year program offered to junior and senior students who want to work with the repair and networking of computers. Students entering this program will learn the essentials of repairing, maintaining, and networking of computers for both home and small business environments. The latest methods of networking and configuring operating systems will be used in the class. Second year students will continue with courses exploring Microsoft Workstation Operating Systems, Server Operating Systems, and Linux Distributions. Qualified students will acquire the skills to potentially pass the CompTIA A+, Network+, Linux+, Security+ and/or Microsoft Technology Associate Certifications.

Grade Level: 11, 12

Credit: 1

College Credit: 6 Articulated Credits with SVCC: 2 credits for CIS 151, 2 credits for CIS 167, and 3 credits for CIS 109. 8 Dual Credits for second-year students with SVCC: 2 dual credits for CIS 190, 3 dual credits in CIS 197, and 3 dual credits in CIS 250.

Length: Year

Prerequisite: None

<u>Criminal Justice</u> is a one year program designed to train students in various aspects of law enforcement, criminal justice, and the legal system. Students will receive instruction in skills needed for careers in associated fields; e.g. police officers, prosecuting and defense attorneys, probation and parole officers, crime scene investigators, correctional officers, etc. Major objectives of the program include: history of law enforcement, constitutional law, Illinois law, courts and the legal system, communication and dispatch operations, report writing and records, criminal investigations, search and seizure, community relations, patrol functions, traffic investigations, corrections, private security operations, criminology, and other related areas. Role play scenarios are used to enhance the student's learning experiences and provide an introduction to practical experiences which might be expected in the field.

Grade Level: 11, 12

Credit: 1

College Credit: 6 Articulated Credits with SVCC: 3 credits for CJS 101 and 3 credits for CJS 232.

Length: Year

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Digital Media Arts is a one or two year program offered to junior and senior students. The classes are for visual and creative thinkers as well as computer geeks interested in cutting edge digital and media arts. The program offers the latest trends, techniques and technologies in the ever-evolving multimedia field. The wide variety of our curriculum provides opportunities to build skills for future success in careers as an illustrator, desktop publisher, photographer, graphic artist, digital video editor, video studio staging director, filmmaker, computer animator, sound engineer, camera operator, web designer or other positions in the exciting and growing recording, entertainment and digital media arts field. Students work at their own pace and get "hands-on" experience using state-of-the-art software, sound equipment, cameras, printers and broadcasting equipment in our sound and lighting studios. All classes begin each fall and spring semester and you will take two classes per semester. Students completing a selection of five classes will receive a Certificate in Graphic Design and students completing an additional three elective classes will receive an Advanced Certificate in Digital Media Arts from Sauk Valley Community College. Students not able to complete the certificates while attending WACC are invited to enroll at Sauk Valley Community College after high school to finish the certificate requirements if they so choose. Students who pass the Sauk Reading exam may also earn Sauk credit in these classes.

Grade Level: 11, 12

Credit: 1

College Credit: 27 Dual Credits with SVCC: ART 100-Media Arts, ART 103-Digital Photography, ART 105-Motion Graphics, ART 107-Digital Drawing, ART 231-Graphic Design, ART 236-Film and Video, ART 237-Image and Sound Recording, ART 238-Interactive Media Design, ART 299-Topics and Issues (3 credits per course = 30 total credits offered).

Length: Year

Prerequisite: None

**Early Childhood Education** is a one-or-two year program offered to junior and senior students. The courses include a study of growth and development; early childhood learning theories; types of early childhood programs; teaching methods and procedures; the role of the child care professional; and working with young children with special needs. This program provides preparation and a practicum for students interested in a variety of educational fields, such as; preschool teachers, teacher's aides, elementary teachers, speech/pathology teachers, and social workers. First year students will work on a weekly basis with children at our on-site laboratory called, "Kiddie Kampus Preschool." Second year students will work with a cooperating teacher at a work-based-learning site for three days a week during both semesters of the school year. This work-based learning site could be a daycare center, preschool program, elementary school, or a location specific to a students' career interest. (ie: special education, speech teacher, social worker).

Grade Level: 11, 12

Credit: 1

College Credit: 6 Dual Credits with SVCC: 3 credits for ECE 110 for first year students, 3 credits for ECE 110 for second-year students. 6 Articulated Credits with SVCC: ECE 114 and ECE 115 offered alternative years..

Length: Year

**Health Occupations – CNA** is a one-year program offered to junior and senior students that are interested in pursuing a career in the medical field. Upon completion of the Illinois Department of Public Health (IDPH) requirements, the students will be eligible to take the State Certified Nursing Assistant exam at the end of the school year. The students must meet the following criteria to be successful in Health Occupations I: 1) Achieve a C or better each quarter throughout the year on the coursework, 2) Be competent at the 21 skills in the laboratory and at the clinical site, 3) Have excellent attendance throughout the school year, and 4) Pass the criminal background check. Students must have an outstanding work ethic, be self-motivated, and take initiative to be successful in Health Occupations. Students will spend 40 hours at clinical sites while at WACC.

Grade Level: 11, 12

Credit: 1

College Credit: 8 Dual Credits with SVCC: 4 credits for NRS101, 4 credits for NRS103

Length: Year

Prerequisite: None

<u>Welding & Manufacturing Technology</u> is a one or two year program offered to junior and senior students. Welding, Machining, and CAD principles will be taught through hands-on experiences. Topics include:

- Welding processes Stick, Oxyacetylene, Mig, Tig, Plasma cutting, and OAW cutting
- Machine operations Lathes, Mills, grinders, shear, pipe cutters, etc.
- AutoCAD Computer aided drafting program
- Blueprint reading

Grade Level: 11, 12

Credit: 1

College Credit: None

Length: Year

Prerequisite: None

The second year will provide students with the opportunity to obtain advanced training on components of welding and metal fabrication. Welding processes – Structural welds, Pipe welds, Flux cored welding

- Machine operations CNC and manual Machining
- Inventor Computer aided drafting program
- Product design and development
- Internship

Grade Level: 12

Credit: 1

College Credit: Students will get two Highland Community College Credits in Drafting 106, and 2 Dual Credits

with SVCC: WELD 106

Length: Year

Prerequisite: Welding and Manufacturing Technology I

# **Programs of Study**

Today's students will have multiple jobs and several different careers over their lifetime. Some will be working in careers that have yet to be created due to rapidly changing technologies. Equipping students with the knowledge and skills to develop a career plan as well as acquiring the academic and technical preparation to be successful is critically important. In the following pages, sequences of suggested high school courses related to career clusters are provided to help students choose courses aligned to future goals.

Programs of Study can help students identify Ohio courses that align with their career interests and make informed choices about course selection as part of their educational plan.

These Programs of Study are in no way meant to be an absolute plan that all students must follow. Rather, they reflect recommendations of potential four-year plan course choices that may help students connect high school learning with future career endeavors. Please note that required courses are shaded in gray. All other courses listed each year are suggestions of electives that would help prepare students interested in the particular career cluster. Students should not expect to take all electives suggested for each year. In addition, students should discuss all course plans with the counselor, teachers, and parents.

"Career Pathways." VALEES. Valley for Educational Employment System, 17 Nov. 2010. Web. 9 Dec. 2010. <a href="http://valees.org/pathways1.html">http://valees.org/pathways1.html</a>.

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# Natural Resource Program of Study for Agriculture, Food and Natural Resources Cluster

	Cluster			
Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	
Science	Earth Science	Biology	Chemistry or Physics	Chemistry or Physics
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster	Intro to Agriculture	Any of the Agricultural Courses	WACC Food Services I, Any of the Agricultural Courses	WACC Food Services II, Any other Agricultural Courses
Other Recommended Electives	Spanish I	Spanish II	Spanish III	Spanish IV
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Civil Engineering Tech Commercial Driver Farm Equipment Technician Heavy Equipment Operator/Technician Miner, Survey Technician Oil and Gas Well Drilling Crew Power Plant Operator		Careers Requiring a Bachelor's Degree: Agriculture Engineer Veterinarian Civil Engineer Dietician Environmental Consultant or Engineer Farmer, Botanist Food Inspector Global Information System Specialist	



# hitecture ਲੈ Construction Program of Study for Architecture and Construction Cluster

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Earth Science	Biology	Chemistry or Physics, BIO 105, BIO 108	Chemistry or Physics, BIO 105, BIO 108
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster	Intro to Agriculture	Any of the Agricultural Courses	WACC Building Trades I, WACC Welding & Manufacturing I	WACC Building Trades II, WACC Welding & Manufacturing II
Other Recommended Electives	Spanish I	Spanish II	Spanish III	Spanish IV, Statistics
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Bricklayer/Stonemason Building Inspector Cabinetmaker Carpenter Construction Laborer Drafter Electrician Heating, Air Conditioning, Refrigerator Tech Pipefitter Plumber		Careers Requiring at least a Bachelor's Degree: Architect Civil Engineer Construction Manager Home Inspector Interior Designer Land Surveyor Landscape Architect Real Estate Agent Solar Energy Technician	



# S, A/V Technology Communication Program of Study for Arts, A/V Technology and Communications Cluster

Cluster				
Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	
Science	Earth Science	Biology	Chemistry or Physics	Consumer Education
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC Digital Media Arts I	WACC Digital Media Arts II
Other Recommended Electives	Spanish I, Art	Spanish II, Art	Spanish III, Art	Spanish IV, Art
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Actor Announcer Artist Audio-Video Technician Broadcast Technician Computer Animator Fashion Designer Film and TV Crew Makeup Artist Photographer Recording Engineer Sound Technician Video Game Developer Website Designer		Careers Requiring a Bachelor's Degree:	



## Program of Study for Business Management and Administration Cluster

7	Cluster				
Grade	9	10	11	12	
English	English I	English II	English III	English IV	
Math	Algebra I	Geometry	Algebra II	Statistics	
Science	Earth Science	Biology	Chemistry or Physics	Consumer Education	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education	
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education	
Career and Technical Courses Specific to this Cluster			WACC CEO	WACC CEO	
Other Recommended Electives	Spanish I	Spanish II	Spanish III	Spanish IV	
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Administrative Assistant Advertising Copywriter Bookkeeper Data Entry Clerk Event Planner Facilities Manager Medical Transcriptionist Office Manager OSHA/ADA Compliance Officer Sales Representative		Careers Requiring a Bachelor's Degree: Auditor Business Consultant Certified Public Accountant Corporate Trainer Health Care Administrator Human Resources Manager Investment Executive Marketing Analyst Public Relations Manager School Superintendent		



#### ucation & Training Program of Study for Education and Training Cluster

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Earth Science	Biology	Chemistry or Physics	Chemistry or Physics
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC Early Childhood Education I	WACC Early Childhood Education II
Other Recommended Electives	Spanish I, Art	Spanish II, Art	Spanish III, Art	Spanish IV, Statistics, Art
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Child Care Worker Choreographer Coach Diving Instructor Fitness Instructor Sports Instructor Teacher Assistant Translator		Careers Requiring a Bachelor's Degree: Athletic Trainer Assessment Specialist Clinical Psychologist College/University Faculty Counselor Curriculum Developer Elementary/Middle/High School Teacher Librarian Principal Professor School Counselor/Social Worker/Psychologist Speech-Language Pathologist	



### Program of Study for Finance Cluster

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Earth Science	Biology	Chemistry or Physics	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC CEO	WACC CEO
Other Recommended Electives	Spanish I	Spanish II	Business Math	Statistics
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Bank Teller Bookkeeper Commodities Representative Credit Counselor Insurance Agent Internal Auditor Tax Preparer Examiner Treasurer		Careers Requiring a Bachelor's Degree: Actuary Auditor Certified Public Accountant Economist Financial Planner Foreign Exchange Manager Investment Banker Money Manager Research Analyst Trader Venture Capitalist	



## Administration Program of Study for Government and Public Administration Cluster

	Cluster			
Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	
Science	Earth Science	Biology	Chemistry or Physics	Chemistry or Physics)
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster				
Other Recommended Electives	Spanish I	Spanish II	Spanish III	Spanish IV
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Coast Guard City Manager Election Supervisor Food Inspector Infantry Interpreter Transportation Inspector		Careers Requiring a Bachelor's Degree:	



#### **Program of Study for Health Science Cluster**

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Earth Science	Biology	Chemistry or Physics, BIO 105, BIO 108	Chemistry or Physics, BIO 105, BIO 108
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC Health Occupations I	WACC Allied Health, WACC Health Occupations II
Other Recommended Electives	Spanish I	Spanish II	Spanish III	Spanish IV, Statistics
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Dental Assistant/Hygienist EMT/Paramedic Health Records Professional Home Health Aide Lab Technician Licensed Practical Nurse Massage Therapist Medical Imaging Technician Personal Trainer Phlebotomist Psychiatric Aide Radiographer Registered Nurse Veterinary Technician		Careers Requiring a Bachelor's Degree:  Anesthesiologist  Biomedical Engineer  Dentist  Geneticist  Nutritionist  Occupational Therapist  Pharmacist  Physician (MD/DO)  Physician's Assistant  Psychologist/Psychiatrist  Radiologist  Research Scientist  Speech/Language Pathologist  Surgeon	



### Program of Study for Hospitality and Tourism Cluster

Grade	9Cu	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	
Science	Earth Science	Biology	Chemistry or Physics	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC Culinary Arts	WACC Culinary Arts II
Other Recommended Electives	Spanish I, Art	Spanish II, Art	Spanish III, Art	Spanish IV, Art

Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or  Certificate:  Butcher  Caterer  Chef  Concierge  Flight Attendant  Hotel Desk Clerk  Housekeeper  Travel Agent	Careers Requiring a Bachelor's Degree: Curator Event Planner Hotel Manager Recreation Director Sports Marketer Zookeeper
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#### Program of Study for Human Services Cluster

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Statistics
Science	Earth Science	Biology	Chemistry or Physics	Chemistry or Physics
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster				
Other Recommended Electives	Spanish I, Art	Spanish II, Art	Spanish III, Art	Spanish IV, Art
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Community Worker Cosmetologist Early Childhood Educator Florist Esthetician Funeral Director Hospital Service Worker Humanitarian Aid Worker Massage Therapist Optician Personal Fitness Trainer Pet Groomer			



## formation Technology Program of Study for Information Technology Cluster

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Earth Science	Biology	Chemistry or Physics	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC Computer Technology I	WACC Computer Technology II
Other Recommended Electives	Spanish I, Computer Tech I, Computer P & D	Spanish II, Computer Tech II	Statistics	Statistics
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or  Certificate: Animator Desktop Publisher Electronics Repairer Quality Controller Technical Sales Representative Technician Video Game Developer Web Developer Webmaster		Careers Requiring a Bachelor's Degree: Animator Computer Engineer Computer Scientist Electrical Engineer Multimedia Developer Project Manager Video Game Developer Web Developer Webmaster	



## Public Safety Corrections Program of Study for Law, Public Safety, Corrections, and Security

	Cluster				
Grade	9	10	11	12	
English	English I	English II	English III	English IV	
Math	Algebra I	Geometry	Algebra II		
Science	Earth Science	Biology	Chemistry or Physics	Chemistry or Physics	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education	
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education	
Career and Technical Courses Specific to this Cluster	Intro to Agriculture	Any of the Agricultural Courses	WACC Criminal Justice	WACC Criminal Justice	
Other Recommended Electives	Spanish I, Art	Spanish II, Art	Spanish III, Art	Spanish IV Honors, Art	
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree: or Certificate Corrections Officer Court Reporter Crime Scene Investigator EMT/Paramedic Firefighter Park Ranger Police Officer Public Information Officer Security Systems Technician Transportation Inspector		Bachelor Civil Li Core Federa Forensic Jud Law Para Probation/P	iring at least a 's Degree: tigator oner I Agent Scientist dge vyer legal arole Officer ices Worker	



## enufacturing Program of Study for Manufacturing Cluster

Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Pre-Calculus
Science	Earth Science		Chemistry or Physics	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster	Intro to Agriculture	Any of the Agricultural Courses	WACC Welding & Manufacturing I	WACC Welding & Manufacturing II
Other Recommended Electives	Spanish I, Art	Spanish II, Art		
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Blacksmith Electrician Heating, Air Conditioning, Refrigeration Tech Industrial Machinery Mechanic Manufacturing Technician Plumber Production Manager Quality Control Technician Tool and Die Maker Upholsterer Welder		Design E Electrical Environmen Industrial Labor Relatio Quality C	Bachelor's Degree: Engineer Engineer Ital Engineer Engineer Ons Manager Controller Engineer



#### **Program of Study for Marketing Cluster**

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Grade	9	10	11	12
English	English I	English II	English III	English IV
Math	Algebra I	Geometry	Algebra II	Statistics
Science	Earth Science	Biology	Chemistry or Physics	
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education
Career and Technical Courses Specific to this Cluster			WACC Digital Media Arts I	WACC Digital Media Arts I
Other Recommended Electives	Spanish I, Art, Computer Tech I, Computer P & D	Spanish II, Art, Computer Tech II, Marketing	Spanish III, Art	Spanish IV, Art
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Copywriter/Designer Customer Service Representative Mortgage Broker Real Estate Agent Retail Marketing Coordinator Trade Show Manager Travel Agent Warehouse Manager Web Developer Webmaster Website Designer		Advertising Acc Appr Entrep Media Sports N Web De Webr	a Bachelor's Degree: count Executive raiser breneur Buyer Marketer eveloper naster Designer



## Engineering & Mathematic Program of Study for Science, Technology, Engineering and Mathematics Cluster

Mathematics Cluster							
Grade	9	10	11	12			
English	English I	English II	English III	English IV			
Math	Algebra I	Geometry	Algebra II	Pre-Calculus			
Science	Earth Science	Biology	Chemistry or Physics, BIO 105, BIO 108	Chemistry or Physics, BIO 105, BIO 108			
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education			
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education			
Career and Technical Courses Specific to this Cluster			WACC Building Trades I	WACC Building Trades II			
Other Recommended Electives	Spanish I, Computer Tech I, Computer P & D, Art	Spanish II	Spanish III	Spanish IV			
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Appliance Repairer CAD Technician Civil Engineer Drafter Electrical Engineering Tech Geologist Petroleum Engineer Taxidermist Technical Writer		Careers Requiring a Bachelor's Degree: Aerospace Engineer Agricultural Engineer Astronaut Biologist Biomedical Engineer Ecologist Geologist Mathematician Zoologist				



# Program of Study for Transportation, Distribution and Logistics Cluster

	Cluster					
Grade	9	10	11	12		
English	English I	English II	English III	English IV		
Math	Algebra I	Geometry	Algebra II			
Science	Earth Science	Biology	Chemistry or Physics			
Social Science	World History	U.S. History	World Geography/ Civics	Consumer Education		
Physical Education	Physical Education, Health	Physical Education	Physical Education	Physical Education		
Career and Technical Courses Specific to this Cluster	Intro to Agriculture	Any of the Agricultural Courses	WACC Automotive Technology I	WACC Automotive Technology II		
Other Recommended Electives	Spanish I, Computer Tech I, Computer P & D	Spanish II, Computer Tech II				
Possible Careers and Recommended Post-Secondary Schooling Related to this Cluster	Careers Requiring an Associate's Degree or Certificate: Air Traffic Controller Auto body Detailer Automotive Service Technician Civil Engineering Technician Industrial Machinery Mechanic Motorcycle Mechanic Pilot Transportation Inspector Truck Driver		Careers Requiring a Bachelor's Degree:  GIS Specialist  Logistics Specialist  Operations Research Analyst  Urban and Regional Planner			