

AGRICULTURAL SCIENCE

All classes in this cluster require one semester of course (0134) AGRICULTURAL EXPERIENCE PROGRAM

AGRICULTURE & NATURAL RESOURCES 1 (0101)

Prerequisite: None

Grade Levels: 9, 10, 11, 12

This area of study is designed to provide students with core skills and competencies needed for pursuing careers in agriculture and natural resources. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts.

AGRICULTURE & NATURAL RESOURCES II (0102)

Prerequisite: Successful completion of Agriculture & Natural Resources 1

Grade Levels: 10, 11, 12

This area of study is designed to provide students with core skills and competencies needed for pursuing advanced careers in agriculture and natural resources. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts.

AGRICULTURAL & NATURAL RESOURCES III (Course Code: 0135)

Prerequisite: Successful completion of Agricultural & Natural Resources II

Grade levels: 10, 11, 12

This area of agriculture is designed to provide students with knowledge, skills and competencies needed to enter various occupations in agriculture and natural resources. Topics covered in Ag & Natural Resources III are animal science, plant science, agricultural mechanics, microcomputer applications, and leadership and supervised agricultural experience programs. The program combines knowledge and skills with experiential learning and Future Farmers of America (FFA) activities for a total program effect. EDGE Credit is available if student registers and scores 74% or higher on End-of-course test.

AGRICULTURAL & NATURAL RESOURCES IV (Course Code: 0136)

Prerequisite: Successful completion of Agricultural & Natural Resources III

Grade Levels: 11,12

This area of agriculture is designed to provide students with knowledge, skills and competencies needed to enter various occupations in agriculture and natural resources. Topics covered in Agricultural & Natural Resources IV are animal science, plant science, agricultural mechanics, microcomputer applications, leadership and supervised agricultural experience programs. The program combines knowledge and skills with experiential learning and FFA for a total program effect. EDGE Credit is available if the student scores 74% or higher on End-of-course test.

AGRICULTURAL MECHANICS 1 (0112)

Prerequisite: Successful completion of one year of Agriculture Education

Grade Levels: 10, 11, 12

This area of study is designed to provide learners with job entry level skills in the agricultural mechanics industry. Major instructional concepts include an orientation to mechanics industry, leadership, safety, drawing and blueprinting, shop, hand and power tools.

AGRICULTURAL MECHANICS II, III, IV (0113)

Prerequisite: Successful completion of Agricultural Mechanics 1

Grade Levels: 11, 12

This area of study provides students with more advanced concepts and practical application in the areas of leadership, computer application, engines, structures, electricity and fencing.

FORESTRY I (0182) FORESTRY II (0183) FORESTRY III (0184) FORESTRY IV (0185)

Prerequisite: Forestry I – none Forestry II,III & IV- successful completion of prior course.

Grade levels: Forestry I - 9, 10, 11 Forestry II, III, IV : 9,10,11,12

This area of study is designed to provide students with basic knowledge and skills in forestry and related occupations. Major instructional concepts included in this area of study are: safety principles in forestry, tree identification, forest protection, basic forest measurement and agricultural practices.

NOTE: Robert C. Beach Vocational Agriculture Credit- Only students with a declared entry or skilled level major in vocational agriculture (i.e. those whose 5-year plan indicates entry directly into the workforce upon graduation from high school) will, upon their successful completion of a unit of credit in an approved vocational agriculture course above grade 10, be exempt from the third required unit of science credit required for graduation (i.e. the unit above CATS 9 and 10). All other students, including those with declared majors in vocational agriculture at the professional level who anticipate two-year or four year college education, are required to take three units of science as defined by this policy and Policy 2510 for graduation.

HORTICULTURE (0212)

Prerequisite: Agriculture & Natural Resources I

Grade Levels: 10,11,12

This area of study is designed to provide both college bound students and work bound students with the basic skills and knowledge needed in the greenhouse management industry. Major instructional concepts provide students with individual goals and objectives including: plant environments, classification, plant processes, growing media, plant nutrients, propagation, growth, pests and management procedures, nursery and landscape techniques, structures operation and maintenance and advanced greenhouse practice and technologies.

GREENHOUSE TECHNOLOGY (0214)

Prerequisite: Successful completion of horticulture.

Grade levels: 10,11,12

This Ag elective is designed to provide both college bound students and work bound students with the basic skills and knowledge needed in the greenhouse management industry. Major instructional concepts provide students with individual goals and objectives including: plant environments, classification, plant processes, growing media, plant nutrients, propagation, growth, pests and management procedures, nursery and landscape techniques, structures operation and maintenance and advanced greenhouse practice and technologies. EDGE Credit is available if the student scores 74% or higher on End-of- test. Students are encouraged to participate in FFA.

ART

ART 1 (3211)

Prerequisite: None

Grade Levels: 9, 10, 11

Emphasis will be placed on the elements and principles of art. Experiences in producing two-dimensional and three-dimensional artworks using a variety of media, techniques, and processes will be provided. Critical thinking skills will be developed through analysis of works both orally and in written form. An understanding of the arts in relation to culture, history, other disciplines, and careers will be emphasized.

ART 2 (3212)

Prerequisite: Successful completion of Art 1

Grade Levels: 10, 11, 12

This course will extend the students' artistic skills, critical thinking skills and concept development through concrete experiences creating, reflecting and discussing artworks. The exploration of the arts, both two-dimensional and three-dimensional, in the context of cultural and historical parameters will be included.

ART 3 (3213)

Prerequisite: Satisfactory performance in Art 2 and teacher recommendation

Grade Level: 11, 12

Art 3 builds on previous skills with a more in-depth approach. It is designed for the student who has a high interest in art, who displays good craftsmanship and exhibits skills in the use of different media.

ART 4 (3214)

Prerequisite: Satisfactory performance in Art 3 and teacher recommendation

Grade Level: 11, 12

Art 4 students will develop a more in-depth knowledge of art and art making. It offers a more advanced approach of exploring media, techniques, processes, and clarifying a personal philosophy of art.

AP STUDIO ART (3222)

Advanced Placement Studio Art is based on a student's submitted art portfolio for evaluation at the end of the school year. The AP Studio Art program sets national standards for performance in the visual arts that contributed to the significant role the arts play in academic environments. The College Board program provides the only national standard for performance in the visual arts that allows students to earn college credit and/or advanced placement while still in high school. Students submit, in slide form, 40 pieces of completed art work, along with 8 original pieces no larger than 16" x 20". Results are received by midsummer following submission.

STUDIO ART I (3241) AND STUDIO ART II (3242)

Prerequisite: Art I & II. Art III strongly suggested.

Grade levels: 11,12

Studio Art electives provide in-depth study in selected media, techniques, and processes. Foundation classes such as Art I are strongly recommended but not required. Expectations encompass proficiency of craftsmanship; participation in field experiences; incorporation of modern technology; study of 21st century art careers and related professions; an understanding of contemporary or related vocabulary literacy; understanding the properties of the media; and the safe and responsible use and care of equipment, tools and materials reflecting life skills. Studio Art electives include but are not limited to the following topics taught at the proficiency level: air brush, animation, architecture, batik, calligraphy, ceramics, color and design, commercial art, computer graphics, craft, design principles, drawing, electronic imaging, ethnic art, fiber arts, folk art, film, functional design, graphic design, jewelry, mixed media, painting, photography, printmaking, sculpture, stage design, and stained glass.

APPLIED ARTS

VIDEO JOURNALISM (4061)

Prerequisite: None

Grade Level: 9, 10,11,12

This is intended to be an introductory course for students interested in video production. Scriptwriting, research, and reporting will be part of the course as will film and sound techniques. On-camera speaking will be an essential element for each student. Participation and completion of a video project will be part of the class.

BUSINESS

ACCOUNTING PRINCIPLES 1 (1401)

Prerequisite: None

Grade Level: 10, 11, 12

Course highly recommended for anyone planning a business major in college or entering the business world after graduation. Using automated computer accounting and manual methods, students will learn the basic principles of financial practices used in business firms today.

ACCOUNTING PRINCIPLES 2 (1403)

Prerequisite: Accounting 1

Grade Levels: 11, 12

This course provides students the opportunity to develop advanced knowledge of accounting procedures and techniques utilized in problem solving and in making financial decisions and analyses. Students study the advanced principles, concepts, and practices of the accounting cycle, which include financial statements, banking, payroll, partnerships, corporation, cost accounting, inventory, and tax accounting. Automated accounting will be used frequently. This course is a MUST for students planning to major in the field of business.

INTRODUCTION TO BUSINESS AND MARKETING (1439)

Prerequisite: None

Grade Level: 9, 10, 11, 12

Introduces students to the world of business and helps prepare them for a more meaningful and beneficial interaction with businesses and our economy. This course emphasizes how everyone in our economy interacts with business through the products we buy, the advertisements we see and hear, the jobs we hold, and the money we invest. Entrepreneurial skills needed to start your own business are covered.

BUSINESS COMPUTER APPLICATIONS 1(1411)

Prerequisite: None

Grade Level: 9, 10, 11, 12

This area of study is designed to provide the learner with the opportunity to understand and apply integrated software to business applications. The students will achieve basic proficiency in word processing, spreadsheet, desktop publishing, computerized presentations, and the use of the Internet and/or database applications. Students will achieve these objectives utilizing Microsoft Office Software.

BUSINESS COMPUTER APPLICATIONS 2 (1413)

Prerequisite: Successful completion of Business Computer Applications I (BCA I)

Grade Level: 10, 11, 12

This course is a continuation of concepts learned and covered in Business Computer Applications 1. Students will further their knowledge of Microsoft Office including the use of Word Processing, Spreadsheets, Presentation and Desktop Publishing software.

DESKTOP PUBLISHING (1429)

Prerequisite: None

Grade Level: 10, 11, 12

Desktop Publishing refers to the process of using the computer to produce documents such as newsletters, brochures and books. Furthermore, desktop publishing involves using the computer to create attractive, effective and readable documents by combining text and graphics to create a finished document that can be printed, displayed or faxed. Desktop Publishing is abstract publishing, as opposed to many web pages, which tend to be linear in nature. You simply place things on the page where you would like them, with only your imagination limiting their position, size, font, or relationship to other elements.

WEB PAGE PUBLISHING (2823)

Prerequisite: Successful completion of Business Computer Applications I (BCA I)

Grade Levels: 10, 11, 12

Students will design and create Web pages using HTML and web editors, in addition to learning the basics of page layout and design with desktop publishing. Emphasis will be placed on correct procedures for documenting Internet research. By using hands-on experience, students will learn how a computer processes data and how it uses peripheral hardware such as printers, modems, and multimedia devices.

OFFICE MANAGEMENT (1449)

Prerequisite: Successful completion of Business Computer Applications I (BCA I)

Grade Levels: 10,11,12

This class is designed to aid students in becoming skillful in the operation of an office.

Major instructional areas include: personal development and employability skills, managing records, processing mail, communication skills and responsibilities. keeping financial records, applying computing, accounting, and data skills, processing business correspondence, operating office equipment, using management skills, and completing office support activities. EDGE credit is available if the student scores 74% or higher on the End-of-course test.

Yearbook (Course Code: 4071)

Prerequisite: Successful completion of BCA I

Grade levels: 10,11,12

This class is responsible for planning, designing, laying out and marketing the school yearbook. Students will learn graphic art techniques, layout design, journalism, photography and business procedures. Intensive training in computers is included. Students are enrolled for one 90 minute class each semester.

DIVERSIFIED COOPERATIVE EDUCATION

DCT I: (0511)

Prerequisite: Application to Instructor

Grade Levels: 11, 12

This area of study is designed to provide learners with a wide range of basic attitudes, knowledge, and skills essential for job success across a wide range of occupations. Major concepts included in this area of study have been developed as a direct result of the 1991 Secretary's Commission on Achieving Necessary Skills (SCANS) report, distributed by the U.S. Department of Labor

DCT II: (0512)

Prerequisite: DCT I, Instructor approval.

Grade Level: 12

Cooperative Education II reinforces and expands the principles and skills learned in the previous class with emphasis on marketing, retailing, and keeping a job. Students in this class must enroll in the work experience segment.

DIVERSIFIED COOPERATIVE TRAINING – WORK EXPERIENCE: (0510)

Prerequisite: DCT I, Instructor approval.

DCT II Work experience offers on-the-job-training to supplement classroom instruction. Students in the class must be employed in a teacher approved job for a minimum 15 hours a week. The employer works closely with the teacher to plan learning experiences that are compatible with students/employer goals. Students must have enough credits to graduate and must remain employed throughout the year. Credits are contingent upon the number of hours the student works.

PAES

Prerequisite:

Grade Levels:

The PAES program provides basic, generalized vocational and life skills that relate to almost every type of career. The course provides students with access to skills needed for vocational training, placement and independent living. In addition, this course provides *hands-on* experience to assess and develop meaningful career information and work behaviors.

FOREIGN LANGUAGE

FRENCH 1 (5621)

Prerequisite: None

Grade levels: 9, 10, 11, 12

This course is designed to introduce the student to French language, culture, history, and geography through reading, writing, listening, and speaking in French. Materials used include videos, games and songs.

FRENCH 2 (5622)

Prerequisite: French 1

Grade levels: 9, 10, 11, 12

French II continues the development of reading, writing, listening, and speaking skills. Cultural information is also included to give the student an opportunity to observe and understand the French-speaking world. Understanding, speaking, reading and writing the language continue to be a major objective. Students will learn more about career possibilities for those with second language skills.

FRENCH 3 (5623)

Prerequisite: French 1 and 2

Grade levels: 10, 11, 12

Students continue to develop communication skills with increased emphasis on creative expression. They explore classic and modern French literature.

FRENCH 4 (5624)

Prerequisite: French 1, 2, 3)

Grade levels: 11, 12

Students continue to expand their knowledge of various aspects of the target language and culture. They apply, evaluate, explain, and integrate this information. Comprehension of the main ideas and significant details in selected authentic texts are emphasized.

AP French Language (course code?)

Prerequisite: French 2 or 3

AP French is comparable in content and in difficulty to a course in French Composition and Conversation at the third-year college level. Students who enroll in AP French Language should already have a good command of French grammar and vocabulary and have competence in listening, reading, speaking, and writing. Although these qualifications may be attained in a variety of ways, it is assumed that most students will be in the final stages of their secondary school training and will have had substantial course work in the language.

The AP French Language Exam is approximately two and one-half hours in length. It is not based on any particular subject matter but instead attempts to evaluate the student's level of performance in the use of the language, both in understanding written and spoken French and in responding in correct and idiomatic French. Listening and reading are tested in the multiple-choice section; writing and speaking are tested in the free-response section. The portion of the exam devoted to each skill counts for one-fourth of the final grade.

SPANISH 1 (5661)

Prerequisite: None

Grade levels: 9, 10, 11, 12

This course in Spanish emphasizes the listening and speaking skills. Conversation, poems, songs, games, and oral readings are utilized. The reading and writing of Spanish and basic grammar are introduced. Cultural material is used to make the student aware of the Spanish-speaking world.

SPANISH 2 (5662)

Prerequisite: Spanish 1

Grade levels: 9, 10, 11, 12

This course continues the development of listening, speaking, reading, and writing skills. Students are expected to demonstrate adequate conversation and pronunciation skills as well as listening comprehension abilities and demonstrate mastery of more advanced grammatical structures.

SPANISH 3 (5663)

Prerequisite: Spanish 1 and 2

Grade levels: 10, 11, 12

Students are expected to demonstrate facility in the language skills of listening, speaking, reading, and writing, to be well acquainted with several verb tenses, the use of the subjunctive, and other advanced grammatical structures. Vocabulary development, reading, and conversation skills are emphasized.

SPANISH 4 (5664)

Prerequisite: Spanish 1, 2, and 3

Grade Levels: 11, 12

Students continue to expand their knowledge of various aspects of the target language and culture. They apply, evaluate, explain, and integrate this information. Comprehension of the main ideas and significant details in selected authentic texts are emphasized.

MUSIC/PERFORMING ARTS

Course level in performing arts courses is determined by number of years in that class regardless of grade level. For example first year Drama students would enroll in Drama I.

CHORUS 1,2,3,4 (By year taken) (3620, 3622, 3623, 3624)

Prerequisite: Choir tryouts and attend summer choir camp.

Grade level: 9,10,11,12

Choir I: This general choir class is available to any student who desires to develop music reading skills and vocal techniques.

Choir 2, 3, 4: Continues the development of music reading and vocal techniques. The course will expose students to all types of music from rock to classics.

SHOW CHOIR 1, 2, 3, 4 (By year taken) (3767)

Prerequisite: By audition only

Grade level: 9, 10, 11, 12

The Show Choir is a contemporary performing group that appears at various school and community functions. Involves dancing and singing simultaneously and is designed for students who are willing to make an outside school commitment.

After school rehearsals and performances are required.

CONCERT BAND 1, 2, 3, 4 (By year taken) (3706)

Prerequisite: Teacher approval

Grade Levels: 9,10,11,12

Concert Band is an open instrumentation ensemble with emphasis on improving the musicianship of the ensemble performer. Music selected will be tailored to the group. Topics explored will include theory concepts and technique development. During the first semester, this ensemble performs as part of the Marching Band.

JAZZ BAND 1, 2, 3, 4 (By year taken) (3744)

Prerequisite: Audition only

Grade Levels: 9,10,11,12

A select auditioned instrumentation ensemble performing big band literature. Emphasis will be placed on ensemble playing, solo improvisation, and theory.

MUSIC APPRECIATION/HISTORY/HUMANITIES (3671)

Prerequisite: None

Grade level: 9, 10, 11, 12

Music Appreciation is an historical overview of the study of music and the basic elements, while using group and independent classroom activities. This course will require hands-on participation

DANCE 1 (3401)

Prerequisites: None

Grade Level: 9, 10, 11, 12

Dance I focuses on dance as an effective means of communication and healthful living. In addition, the basic elements of dance will be identified and demonstrated.

DANCE 2 (3402)

Prerequisite: Successful completion of Dance 1

Grade Level: 10, 11, 12

Dance II will concentrate on comparing and contrasting dances of various cultures and historical periods as well as applying and demonstrating critical and creative thinking skills in dance. Emphasis will be placed on dance as a means of developing and maintaining a healthy lifestyle.

DANCE 3 (3403)

Prerequisite: Successful completion of Dance 1 and Dance 2

Grade Level: 11, 12

Dance III will stress practice in performing technical and choreographic skills necessary for artful presentation. Emphasis will be placed on the relationship of dance to other disciplines and careers. Research of dance history and artists will be an integral part of this level of study.

DANCE 4 (3404)

Prerequisite: Successful completion of Dance 1, Dance 2, and Dance 3

Grade Level: 12

Creating and performing dance is the major emphasis of dance study on the fourth level. The creative process will be studied and students will develop an awareness of dance and its place in the present and future cultures.

SOCIAL STUDIES

WORLD HISTORY (7010)

Prerequisite: None

Grade Level: 9

This course is the study of the world emphasizing the historic, geographic, political, and social structure of various cultural regions of the world from the dawn of civilization to the interdependent world of the twentieth century.

US HISTORY to 1900 (7009)

Prerequisite: None

Grade Level 10

US History to 1900 is the study of the United States history and culture from the earliest inhabitants of the North American continent to the end of the 1800's emphasizing major political, economic and social changes.

TWENTIETH/TWENTY-FIRST CENTURIES 11 (7011)

Prerequisite: Successful completion of US History to 1900.

Grade level: 11

Twentieth/Twenty-first century history provides students with an understanding of the major events and people who have shaped the world in which they live. Students will examine the political, economic, and technological changes which have occurred during this century.

AP US HISTORY (7046)

Prerequisite: Application, teacher approval, teacher recommendation

Grade level: 11

This class is a college-level course, which may be taken in lieu of U.S. in the Twentieth Century. It will examine major themes in U.S. history from the founding of the first colonies to the present. Students are required to take the Advanced Placement History Examination at the conclusion of the course. Content standards and objectives will be met for History 11.

GEOGRAPHY (7033)

Prerequisite: None

Grade level: 10, 11, 12

Geography is a course that deals with physical (climate, land forms, resources, bodies of water, etc.) and human (population patterns, lifestyles, social problems, etc.) geography. Special attention will be paid to the study of cultures. Map skills will be taught and heavily emphasized.

PSYCHOLOGY (7321)

Prerequisite: Teacher approval

Grade level: 11,12

Surveys the science of psychology; addresses research methods, biological bases of behavior, sensation and perception, states of consciousness, learning, memory, motivation and emotion, language, lifespan development, intelligence, stress and health, social behavior, personality, and abnormal behavior and treatment; application of psychology in a culturally diverse world.

SOCIOLOGY (7341)

Prerequisite: Teacher approval.

Grade level: 11,12

Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization, and social change, and the relationships of individuals and groups in society. These courses may examine a specific topic in sociology, such as culture and society or the individual in society, rather than providing an overview of the field of sociology.

CIVICS and GOVERNMENT (7031)

Prerequisite: Successful completion of World History, Us to 1900 and 20/21st century history.

Grade level: 12

In this course, students develop the knowledge, skills, and dispositions to engage in civic life, financial literacy, politics and government and analyze the personal, political and economic roles of responsible citizens in American democracy. Students explain and give examples of the traits of public character of informed, effective and responsible citizens and demonstrate through explanation and example how responsible citizens interact, monitor and influence public policy. They will understand the structure and operation of national, state, and local government.

AP CIVICS and GOVERNMENT

Prerequisite:

The AP Government & Politics: United States course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. While there is no single approach that an AP Government & Politics: United States course must follow, [certain topics](#) are generally covered in college courses.

The AP United States Government and Politics exam is 2 hours and 25 minutes long. It includes a 45-minute multiple choice section consisting of 60 questions and a 100 minute free-response section consisting of four questions.

AP HUMAN GEOGRAPHY

The Advanced Placement Program offers a course and exam in Human Geography to qualified students who wish to complete studies in secondary school equivalent to an introductory college course in human geography. The exam presumes at least one semester of college-level preparation, as is described in this book. The inclusion of material in this course description and in the exam is not intended as an endorsement by the College Board or ETS of the content, ideas, or values expressed in the material. The material has been selected by geographers who serve as members of the AP Human Geography Development Committee. In their judgment, the material printed here reflects the content of a typical introductory college course in human geography. The exam is representative of such a course and therefore is considered appropriate for the measurement of skills and knowledge in the field of introductory human geography.

The AP Human Geography Exam is approximately 2 hours and 15 minutes in length and includes both a 60-minute multiple-choice section and a 75-minute free-response section. Each section accounts for half of the student's exam grade.

TECHNOLOGY

CONSTRUCTION SYSTEMS (2424)

Prerequisite: None

Grade level: 9, 10, 11, 12

This course provides opportunities for students to study and apply technological systems, concepts and processes as they relate to construction technology. Group and individual activities engage students in creating ideas, developing innovations and implementing design solutions as they relate to construction systems. Students will utilize problem-solving techniques and manipulative skills while completing laboratory activities to develop an understanding of course concepts. Topics range from how construction meets the needs of society to basic construction techniques. Safety instruction is integrated into all activities.

TRANSPORTATION SYSTEMS (2448)

Prerequisite: None

Grade levels: 9,10,11,12

This course provides opportunities for students to study and apply technological systems, concepts and processes as they relate to relocating people and goods. Group and individual activities engage students in creating ideas, developing innovations and implementing design solutions as they relate to transportation systems. Students will utilize problem-solving techniques and manipulative skills while completing laboratory activities to develop an understanding of course concepts. Topics range from the transportation subsystems to the sources of energy used in the industry. Safety instruction is integrated into all activities.

FOUNDATIONS OF ENGINEERING (2436)

Prerequisite: None

Grade level: 9, 10, 11, 12

This course provides opportunities for students to study and apply basic principles of materials, mechanisms, structures, electricity, electronic control, fluidics, computer control and graphic communication and how they can be integrated and used to solve a variety of complex technical challenges. Students work in engineering teams to develop work process skills, such as researching, writing, organizing, modeling, calculating and communicating with others. Students will utilize problem-solving techniques and manipulative skills while completing laboratory activities to develop an understanding of course concepts. Safety instruction is integrated into all activities.

MANUFACTURING SYSTEMS (2442)

Prerequisite: None

Grade level: 9, 10, 11, 12

This course will introduce students to the basic elements of the manufacturing industry. This course provides opportunities for students to study and apply technological systems, concepts and processes in the development and operation of a student manufacturing enterprise. Group and individual activities engage students in creating ideas, developing innovations and implementing design solutions as they relate to manufacturing systems. Students will utilize problem-solving techniques and manipulative skills while completing laboratory activities to develop an understanding of course concepts. Safety instruction is integrated into all activities.

COMMUNICATION SYSTEMS (2421)

Prerequisite: None

Grade levels: 9,10,11,12

This course provides opportunities for students to study and apply technological systems, concepts and processes in communication technology. Group and individual activities engage students in creating ideas, developing innovations and implementing design solutions as they relate to communication systems. Students will utilize problem-solving techniques and manipulative skills while completing laboratory activities to develop an understanding of course concepts. Safety instruction is integrated into all activities.

FUNDAMENTALS OF DRAFTING (1729)

Prerequisite: None

Grade Level: 10, 11, 12

This course will introduce students to the basic fundamentals of drafting and geometric construction. Students will become familiar with drafting equipment and methodology used in industry. Students will develop the basic understanding of drafting techniques necessary to allow them to progress to a Computer Aided Drafting (CAD) program.

ENGLISH/ LANGUAGE ARTS

ENGLISH LANGUAGE ARTS 9 (4009)

Prerequisite: None

English 9 will focus on the effective use of written language in educational and occupational endeavors and interpersonal communication. The use of a broad array of literature will also be covered.

ENGLISH LANGUAGE ARTS 10 (4010)

Prerequisite: Successful completion of English 9

English 10 will focus on the use of written language for educational, occupational, and personal endeavors. Preparation will include critiquing oral presentations and using speaking and listening while reading and writing. A broadened array of literature will encourage an increased appreciation for the power of the spoken and written word.

ENGLISH LANGUAGE ARTS 11 (4011)

Prerequisite: Successful completion of English 10

English 11 provides an enhancement and refinement of fundamental literary and communication skills. The course is a literature-based study of reading, writing, speaking, listening, and thinking with emphasis upon paragraph and essay composition and American literature.

ENGLISH LANGUAGE ARTS 12 (4012)

Prerequisite: None

English 12 provides focus and polish in personal goals and academic proficiency. The expansion and appreciation of language and literature is the focus of the senior year. The course is a literature-based integrated study of reading, writing, speaking, listening, and thinking skills with emphasis placed upon types of essay composition and British literature.

HONORS ENGLISH LANGUAGE ARTS (9, 10, 11, 12)

Intended for student of above-average abilities and achievements who can master the skills at a faster rate and who can benefit from additional explorations in language, literature, and composition.

HONORS ENGLISH LANGUAGE ARTS 9 (4009H)

Prerequisite: Teacher Recommendation

Honors English is an accelerated program with the emphasis on evaluation of literature, analytical thinking and special topics.

HONORS ENGLISH LANGUAGE ARTS 10 (4010H)

Prerequisite: Teacher Recommendation

English 10 Honors is an integrated study of reading, writing, speaking, listening, and thinking skills with emphasis upon Standard English usage and mechanics; sentence, paragraph, and essay, composition; types of literature.

HONORS ENGLISH LANGUAGE ARTS 11 (4011H)

Prerequisite: Teacher Recommendation

English 11 Honors is a literature-based study of reading, writing, speaking, listening, and thinking with emphasis upon paragraph and essay composition and American literature.

CREATIVE WRITING (4022)

Prerequisite: A "C" or better in English is recommended

Grade level: 10, 11, 12

This course is for elective graduation credit only (not for English credit). In this course students will explore the use of imagination and the resources of the English language to create various forms of personal and creative expression such as (but not limited to) short stories, poems, screenplays, and writers' sketchbooks. Emphasis will be placed on both creating and sharing through the use of the writing process and appropriate technologies. This class requires extensive writing; best suited for students interested developing serious writing skills.

SCHOOL YEARBOOK 1 (4071)

Prerequisite: Teacher recommendation

Grade level: 9, 10

This course is designed to help students study the art and techniques of reporting timely events through the use of pictures and words. Major emphasis is placed in the areas of newspaper, yearbook, and photojournalism. The course will stress various styles of journalistic writing (news, sports, feature, and opinions) computer technology, and political designs. Completion of this course (with a minimum grade of "C") entitles the student to try out for a position or positions on the Yearbook staff.

SCHOOL YEARBOOK 2 (4071)

Prerequisite: Teacher recommendation Grade levels: 10, 11, 12

This lab-based course is for second and third year journalism students who wish to contribute their writing and design talents in publishing the school's yearbook. The course emphasizes those skills learned in the introductory course. Staff members are required to work, when needed, during after school hours to meet publication deadlines.

SPEECH ORAL COMMUNICATIONS 1 (4076)

Prerequisite: None, full year or semester course.

Grade Levels: 10, 11, 12 (Semester or full year course. Must be full year if used as a Career Major Credit)

Speech 1 is an elective which enhances the Reading/English Language Arts curriculum. Oral communication is fundamental to all other learning. By actively participating in a variety of speaking activities, students will gain the confidence and skills to overcome communication anxiety. A student who communicates well succeeds in social, economic, and academic environments. Effective oral communication provides readiness for the workplace and/or post secondary education and is, therefore, a recommended elective for students in all career majors.

MATH

ALGEBRA 1 (3021)

Prerequisite: None

Grade Levels: 9, 10, 11, 12

Algebra I is a course that provides the gateway to all higher mathematics courses. Topics include solving linear equations and inequalities (including applicable work problems), evaluating relations and functions, graphing and writing equations of lines, solving systems of equations, simplifying and factoring polynomial expressions, solving quadratic equations, and simplifying and solving radical expressions.

ALGEBRA SUPPORT (3107)

Prerequisite: Teacher recommendation and sequential enrollment in Algebra 1.

Grade levels: 9, 10

This class is available to students who struggle in their math classes prior to being enrolled in Algebra 1. This additional math course will give the student extra reinforcement and practice with algebra skills. This class is required for some students as a prerequisite to Algebra I to allow students a full year to complete the Algebra I curriculum.

ALGEBRA 2 (3041)

Prerequisite: Successful completion of Algebra 1

Grade level: 9, 10, 11, 12

This course is a continuation of the study of algebra concepts with emphasis on functions, equalities and inequalities, graphing, and complex numbers. Algebra II is recommended for college-bound students. Colleges and universities require this course for entrance.

ALGEBRA 2 HONORS (3041H)

Prerequisite: Successful completion of Algebra I

Teacher approval: Department approval (Placement Exam)

Grade level: 9

This course is a continuation of the study of algebra concepts with emphasis on functions, equalities and inequalities, graphing, and complex numbers. The course is a more rigorous approach to the traditional Algebra 2.

ALGEBRA 3 (3141) WVEB College Algebra.

Prerequisite: Successful completion of Geometry and Algebra 2

Grade level: 11, 12

Algebra II is similar to a college Algebra course, advanced study of Algebra concepts to extend and strengthen students', mathematical skills and confidence. An excellent course for the college bound student not ready or not desirous of taking Pre Calculus yet who needs to keep their math skills sharp. **Dual credit with WVU.**

PRE-CALCULUS (3046)

Prerequisite: Successful completion of Algebra 2 and geometry.

Grade level: 10, 11, 12

The purpose of this course is to provide the firm foundation in algebra and analytic geometry needed to begin the study of calculus. It is equivalent to a course in college algebra.

This course extends and integrates concepts from algebra and geometry. It includes a study of polynomial, rational, exponential, logarithmic, and inverse functions and their graphs. Other topics include conic sections, complex numbers, parametric applications, and sequences and series.

AP CALCULUS (AB) (3031)

Prerequisite: Successful completion of Pre-Calculus and Trig, teacher recommendation

Grade level: 12

This course covers elements of the differential and integral calculus of functions of a single variable and is designed to prepare the student for the AB Advanced Placement examination in calculus. This course includes a differential and integral calculus with applications of previous math courses. The intent is preparation for college and/or one or more semesters of advanced placement calculus. Study includes functions and continuity, limits, differentiation and applications of derivatives, integration and its application to area, volume, and displacement. The Rule of Four (Numerical, Analytical, Graphical and Verbal) will be applied throughout the course. Available technology will be used by students and teachers to enhance learning. Graphing utilities will be used to investigate concepts and to evaluate derivatives and integrals. Students will prepare to take the College Board Advanced Placement Exam.

APPLIED GEOMETRY (3043)

Prerequisite: Successful completion of Algebra 1

Grade Levels: 9, 10, 11, 12

Applied Geometry is taught in more of a lab setting and will use manipulative to enhance the understanding of geometric concepts and terminology. Working in groups will allow students to analyze applications of geometry in their lives and in the work place. Concepts will be taught using lab activities including the use of tools such as the graphing calculator. The objectives of Applied Geometry are the same as those for Geometry, and a Geometry credit is earned. Students need to be aware that applied geometry is not approved as a college bound math course.

GEOMETRY (3045)

Prerequisite: Successful completion of Algebra 1 or Applied Math 1 and Applied Math 2

Grade level: 9, 10, 11, 12

The study of Geometry will include the study of two and three-dimensional figures with classification in terms of congruence and similarity. Students will become proficient in analyzing conjectures and in formulating proofs by inductive processes. Manipulative may be used to enhance understanding and to help analyze applications of geometry in their lives and in the work place.

GEOMETRY HONORS (3045H)

Prerequisite: Successful completion of Algebra 1, teacher recommendation

Department approval (Placement Exam)

Grade level: 9

Essentially the same topics will be covered in this honors level course as in the Geometry course. A greater emphasis is placed on development of a working knowledge of theory and deductive reasoning.

Trigonometry and Probability and Statistics are a package set of courses. If you enroll in Trig the first semester you are agreeing to take Statistics second semester.

TRIGONOMETRY (3048)

Prerequisite: Successful completion of Algebra 2 or successful completion of the first semester of Algebra 2

Grade level: 10, 11, 12

This course concentrates on the study of trigonometry in preparation for the study of calculus.

Grade Level: 10, 11, 12

This course emphasizes connections between right triangle trigonometry and circular functions. Graphing calculators are integrated throughout the course to enhance learning and to find the values of trigonometric functions and their inverses. Trigonometric topics include the unit circle, trigonometric identities, and graphing, analyzing, and applying the six trigonometric functions. Trigonometric properties will be utilized to solve problems.

WvEB TRIGONOMETRY (3048)

Prerequisite: A "C" or better in Algebra 1, Algebra 2, and Geometry as well as a "C" or better in one other college prep math course AND satisfactory completion of WvEB Algebra and a satisfactory score on the WVU Algebra Placement test, 3.0 GPA. Second Semester Only

A college level web-enhanced Trigonometry course for high school seniors. Upon successful completion of this semester students will earn college credit for corresponding courses at any state supported college or university. Students must pay \$158 (Approximate Cost) fee for college enrollment. The grade will appear on both high school and college transcripts. This course is an option for students wishing to complete college requirements while in high school. **Dual credit with WVU.**

CONCEPTUAL MATHEMATICS (3044)

Prerequisites: Successful completion of Algebra 1 and Geometry or Applied 1, Applied Math 2, and Applied Geometry

Grade Level; 11, 12

Conceptual Mathematics is a one credit math course designed to expose students to topics in mathematics that are relevant to a well-rounded education. It will include major topics from algebra and geometry and extend these ideas to practical usage. Basic ideas of probability, statistics, and the mathematics of finance will also be included. This course may serve as a credit of mathematics needed for high school graduation.

SCIENCE

PHYSICAL SCIENCE 9 (6009)

Prerequisite: None

Grade Level: 9

Physical Science 9 pursues the development of foundation knowledge in chemistry, physics, earth/environmental science and astronomy. Students will engage in active inquires, investigations and hands on activities to develop conceptual understandings and research/laboratory skills. This course fulfills the ninth grade science requirement.

BIOLOGY 10 (6010)

Prerequisite: Physical Science 9

Grade level: 10

This course is designed for students who have completed Physical Science 9. It offers a broad in-depth study of the content found in many biological fields of endeavor. Students will engage in active inquiries, investigations, and hands-on activities to develop conceptual understanding and research/laboratory skills and experiences.

CONCEPTUAL BIOLOGY (6022)

Prerequisite: Physical Science 9

Grade level: 10

This course is designed for students who have completed Physical Science 9, but who are not intending to apply to a college or university following high school graduation.

ENVIRONMENTAL/EARTH SCIENCE (6201)

Prerequisite: Successful completion of Physical Science 9 and Coordinated and Thematic Science 10.

Grade level: 10,11, 12

This course combines principles of earth science and earth processes with a study of the environment, and environmental issues. Topics may include but are not limited to: water issues, physical and historical geology, climate and weather, energy, ecosystems, major environmental topics, and man's relationship to the environment. This course includes hands on, interpretive lab and field experiences.

ADVANCED HUMAN ANATOMY & PHYSIOLOGY (6103)

Prerequisite: "B" in Biology or teacher recommendation.

Grade level: 11, 12

A course for students who wish more detailed explanations of some of the functions of the human body beyond those found in biology class; valuable for those students who are planning to enter the medical or health fields after graduation.

BIOLOGY TECHNICAL CONCEPTUAL (6101) Offered but not taught 2009-2010

Prerequisite: Physical Science 10

Grade Level: 11, 12

Technical Conceptual Biology is an advanced science course that is an alternative to Advanced Biology. Biotech will cover biological topics, nature of life, cellular biology, ecology, microbiology, and biotechnology. The course focuses on new lab techniques and hands on experiences; for example, DNA extraction, gene manipulations, gel electrophoresis and "forensic" type activities.

CHEMISTRY (6031)

Prerequisite: physical science 9, biology, algebra II

Grade Levels: 11, 12

Chemistry I: a basic chemistry course that deals with the chemical world with emphasis on laboratory experiments and the investigative approach; designed to prepare students for AP Chemistry and/or college chemistry. Minimum concurrent enrollment in Algebra II or teacher permission required

CHEMISTRY II (6033)

Prerequisite: Algebra II, "B" in chemistry I; teacher approval.

Grade Levels: 11, 12

This class is an in-depth lab intensive study of chemistry that continues concepts of chemistry I to prepare students for college level course work. Development of critical thinking and analytical skills is emphasized.

CHEMISTRY TECHNICAL/CONCEPTUAL (6301) Offered but not taught 2009-2010

Prerequisite: Successful completion of Coordinated and Thematic Science 10 and Algebra 1 or Applied Math 2

Grade level: 11, 12

The American Chemical Society as an introduction to chemistry designed this chemistry course for high school students who will not be majoring in science in college. This course covers the topics of a traditional chemistry course with less emphasis on the algebra applications and more emphasis on organic chemistry, biochemistry, and nuclear chemistry.

MICROBIOLOGY (6162)

Prerequisite: Completion of Biology

Grade level: 11, 12

This course is the study of microscopic organisms, the techniques used to study them, their uses, and the diseases that they cause.

ADVANCED PHYSICS (6041)

Prerequisite: Algebra II; trigonometry, teacher approval.

Grade Levels: 11, 12

Provides a firm understanding of basic scientific knowledge, problem solving ability, and laboratory skills. Major topics: Kinematics, Dynamics, vectors, force, energy, electricity, light, and circular motion.

FAMILY & CONSUMER SCIENCES

NUTRITION AND FOODS (0951)

Prerequisite: None

Grade level: 10, 11, 12

Nutrition and food science is the study of the basic nutrients and the bodies that need and use them. Individual nutritional needs will be studied. This course includes basic knowledge in nutrition and weight control for lifelong health. As the budget allows, selection and preparation of vegetables, breads, desserts, main courses and beverages are part of the lab class. This course gives students practical knowledge and skills in management of time, money and energy, which may be applied personally in the home or to a career.

PARENTING&CHILD DEVELOPMENT (0902)

Prerequisite: None

Grade levels: 10, 11, 12

Students will learn about parenting skills and the decision-making processes to handle situations in parenting. Topics include family settings, lifestyles, prenatal care, and adjustments to children. An emphasis is placed on the types and stages of child development.

HEALTH and PHYSICAL EDUCATION

HEALTH 10 (6909)

Prerequisite: None

Grade level: 10

Health class is a comprehensive health education program focusing on a positive approach to health. It is aimed at helping students become knowledgeable of facts related to health as well as helping them develop positive attitudes toward health. Topics covered include but are not limited to: fitness, stress, mental health, suicide, nutrition, sexuality, decision making, substance abuse, first aid, and CPR. This course satisfies the health credit graduation requirement.

HEALTH – ONLINE (6609V)

Prerequisite: 3.0 GPA

Grade Level: 10

PHYSICAL EDUCATION 9 (6609)

Prerequisite: None

Grade Level: 9

Emphasis placed on individual and dual sports, team sports, and outdoor recreation and lifetime or leisure activities toward the development of a healthy lifestyle. This satisfies the physical education graduation credit requirement. Students who do not earn credit in physical education in grade 9 must wait until grade 12 to complete the graduation requirement of 1 credit of physical education.

FITNESS/CONDITIONING (6709)

Prerequisite: Successful completion of Physical Education 9

Grade Level: 10, 11, 12

This course is a Physical Education elective. Students will engage in all phases of fitness and conditioning incorporating: cardiovascular fitness, muscular endurance, strength, and flexibility. During this course, students will also learn to set personal goals, record data, and make the choices needed in order to experience fitness for life. Students will be required to change clothes and participate in all activities, as this will be a large percentage of their grade. This class CAN NOT be a substitute in lieu of the current required Physical Education in the ninth grade, which is a requirement for graduation.

LIFE FITNESS (6733)

Prerequisite: Successful completion of Physical Education 9

Grade Level: 10, 11, 12

DRIVER EDUCATION

DRIVER EDUCATION (6811)

Prerequisite: Learner's permit if not 16 years old by the end of the semester and meet state prerequisite for driving.

Grade Level: 10, 11 (First or second semester)

The goals of the Driver Education Program of Study are to provide students with the knowledge and skills to safely and efficiently operate a motor vehicle on our nation's streets and highways, to equip students with the knowledge to enable them to make wise decisions as drivers, and to assist students to become responsible users of the highway transportation system. The program of study includes cognitive development relating to traffic laws and ordinances, traffic signs, signals and markers, natural laws, fuel conservation and vehicle restraint systems. The program emphasizes strategies to develop the behavior patterns known as the S.I.L.P.D.E. Concept (Search, Identify, Predict, Decide, and Execute) for all driving and driving related activities.

TESTING STRATEGIES:

Testing Strategies: Designed to assist students who have not met mastery on the WESTEST II and/or benchmarks given in core content areas each six weeks, this class focuses on re-teach, and in some cases remediation, for basic skills in the core content areas. Students and teachers work together to identify weaknesses in State goals and objectives, remediate these weaknesses, and continuously collect data to mark individual improvements. At the end of each six weeks, students in grades 9-11 take a benchmark in each core content area to determine their placement in the 30-minute class, which runs opposite of lunch

MENTORSHIP

This 30 minute class is offered to 9th and 10th graders for one six weeks period of time in order to address counseling related issues in academic, career and personal social counseling. The counselor role is to provide academic, career, college readiness, and personal/social competencies to all students through advocacy, leadership, systemic change, and teaming and collaborating with other stakeholders as part of a comprehensive developmental school counseling program. Information is taken from the book *The 7 Habits of Highly Effective Teens*, as well as various other counselor resources.

RE-TEACH ENRICHMENT

Enrichment/Re-teach: This 30-minute class is offered to 11th and 12th graders for one six-weeks period of time in order to address testing weaknesses on the WESTEST II and/or test-taking strategies for current courses, vocational/technical assessments, WESTEST II, ACT, SAT, or post-secondary assessments in the work place or higher education institution. Students are placed in the class by homeroom assignment

INSTRUCTIONAL AIDE

Prerequisites: Teacher/supervisor approval, Cumulative GPA of 2.5 or higher

Grades: 12

A student may schedule an aide period in one of the following situations: individual classroom, school office, guidance office, media center, science lab, and technology office. All aides may perform some clerical tasks; additional responsibilities differ according to the aide assignment. For additional information students should speak with the appropriate teacher/supervisor and refer to the Instructional Goals and Objectives for each aide classification. A letter grade is given and a half credit awarded with the successful completion of each semester.

Teacher Aide: The student will be assigned to a particular teacher with that teacher's approval. The student will perform routine classroom housekeeping tasks, routine clerical tasks, and assist the teacher and/or other students as needed and directed by the teacher.

Office Aide: The student will be assigned to the main office. Work assignment will include performing routine clerical tasks, interacting with the public, taking phone messages, and demonstrating professional office behaviors.

Technology Aide: The student will be assigned to the technology coordinators and, under their direction, set up, troubleshoot, and maintain equipment and software assist teachers and students with technology applications, and perform routine clerical duties.

Science Aide: In addition to performing teacher aide duties, the science aide will set up labs and equipment, clean and put away equipment, and maintain supply in

WV LEARNS – WV VIRTUAL SCHOOL

Students are the most important component of the West Virginia Virtual School. It is to serve your needs that the Virtual School exists. All efforts are made to insure that quality courses, taught by highly qualified teachers, are available when and where you need them.

Since virtual school courses are rigorous and the schedule demanding, students wishing to attend these classes should:

- wish to be challenged;
- be highly motivated and able to work independently;
- be willing to work outside the normal school day;
- have basic knowledge of computers;
- have easy access to the course web site and email for regular communication with the facilitator and online teacher;
- have school-level recommendations; and
- have guardian support

To view available online courses, as well as AP College Board online courses, taught through WV Virtual School, go to:

<http://virtualschool.k12.wv.us/vschool/student/index.html>