

2022-2023 VANLUE COURSE DESCRIPTIONS
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COURSE DESCRIPTIONS AND REGISTRATION 2022-2023

1. All courses for which students may register are included in this registration booklet. A final decision as to which courses will be offered will be made by early May. That decision will be based on state mandates, student interest, and recommendations from staff and curriculum committee.

2. The Ohio Department of Education and the Vanlue Board of Education has established the following requirements for graduation from Vanlue High School:

- 4 credits of English/Language Arts
- 4 credits of Mathematics including 1 unit of Algebra II or the equivalent of Algebra II
- 3 credits of Social Studies including 1 credits of American History, 1 credit of World History, ½ credit of Government, and ½ credit of Personal Finance and Economics
- 3 credits of Science including 1 unit of Biological Science, 1 unit of Physical Science, 1 unit of Chemistry or Science and Sustainability
- ½ credit of Physical Education
- ½ credit of Health
- 1 credit of Computer Technology
- 5 credits of Elective Courses (includes fine arts)

***Elective courses must include one or any combination of the following:**

- Foreign Language
- Fine Arts
- Career-Technical Education
- Technology
- English/Language Arts (not otherwise required)
- Mathematics (not otherwise required)
- Science (not otherwise required)
- Social Studies (not otherwise required)

3. All high school students are expected to pass 5.25 credits each year (including required courses) in order to graduate. No students will be permitted to have more than one (1) study hall per day.

4. Dropping and Adding Classes:

Each spring students select their courses for the following school year. These choices are considered to be binding upon the student following a verification of the courses selected. It must be understood that these courses should be chosen carefully and with genuine consideration of the student's future schooling. Schedule adjustments only will be made following the end of a school year to facilitate the repeat of a failed required course. Schedule changes will not be made after the school year begins.

5. All registration forms must be signed by parents before they will be processed.

6. Please read and discuss your son's or daughter's registration form. Class selection will be based on student registration; therefore, it may not be possible to honor last minute changes. Insufficient sign-up may result in a class not being held.

DIPLOMA FOR THE CLASS OF 2023 & BEYOND

Students must meet the following criteria to be awarded a high school diploma:

- A. Pass all courses and credits required by the Ohio Department of Education.
- B. Pass all courses and credits required by the Vanlue Board of Education.
- C. Show competency on the specified state tests mentioned in item 1 below or meet at least one of the remaining items 2, 3, or 4.
- D. Must earn two (2) diploma seals that line up with your goals and interests. One seal must be an Ohio-designed seal.

Current seals include: OhioMeansJobs Readiness Seal (Ohio), Industry-Recognized Credential Seal (Ohio), College-Ready Seal (Ohio), Military Enlistment Seal (Ohio), Citizenship Seal (Ohio), Science Seal (Ohio), Honors Diploma Seal (Ohio), Seal of Biliteracy (Ohio), Technology Seal (Ohio), Community Service Seal (Local), Fine and Performing Arts Seal (Local), Student Engagement Seal (Local).

1. **Ohio's State Tests** – Show competency by earning a passing score of 684 on the Algebra I and English II tests. Students must take all six (6) end-of-course state tests at least once. End-Of-Course Exams – Algebra I and Geometry; Biology; American History and American Government; English II

2. **Demonstrate two career-focused activities: Foundational** – Proficient scores on WebXams, a 12-point industry credential or a pre-apprenticeship or acceptance into an approved apprenticeship program. **Supporting** – Work-based learning, earn the required score on WorkKeys or earn the OhioMeansJobs Readiness Seal.

3. **Enlist in the Military** – Show evidence that you have signed a contract to enter a branch of the U.S. Armed Services upon graduation.

4. **Complete College Coursework** – Earn credit for one college-level math and/or college-level English course through Ohio's free College Credit Plus program.

HIGH SCHOOL REQUIREMENTS FOR COLLEGE

Most of Ohio's state-assisted, four-year universities have adopted part or all of the recommendations made by the Articulation Commission of Ohio on tougher entrance standards for incoming freshmen. The Articulation Commission recommendations are the following core subject areas:

- 4 units of English
- 3 units of Math (minimum Algebra I, Geometry, Algebra II)
- 3 units of Science (minimum Physical Science, Biology, Chemistry)
- 3 units of Social Studies (including history)
- 2 units of Foreign Language (2 to 3 years of a foreign language)
- 1 unit in the Visual or Performing Arts

Not all of the colleges are requiring these courses, however core subjects are highly recommended for college success. In addition, some majors require additional courses.

The ACT and/or SAT are available to students, please see the Guidance Counselor for more information. The writing section of the ACT and/or SAT are now required for admission by some colleges and universities.

Students who have not taken required college preparatory courses can still gain entrance to universities on a “conditional basis.” Some students may test out of some requirements and some will need to take remedial courses to make up for courses they did not take in high school.

If you have any questions, please feel free to contact the Guidance Counselor or Principal during normal school hours.

HONORS DIPLOMA REQUIREMENTS:

1. The student who completes the **college preparatory curriculum** in the high school shall meet at least seven of the following eight criteria:

1. Earn 4 units of English.
2. Mathematics – 4 units, includes Algebra I, Geometry, Algebra II or equivalent and another higher-level course or a four-year sequence of courses that contain equivalent content.
3. Science – 4 units, including Physics and Chemistry.
4. Social Studies – 4 units
5. Foreign Language – 3 units, which includes 2 in a consecutive language.
6. Fine Arts – 1 unit
7. Grade Point Average – 3.5 on a 4.0 scale
8. ACT/SAT Score (Excluding scores from the writing sections) 27 ACT/1210 SAT.

2. The student who completes an **intensive vocational or technical education curriculum** in the high school shall meet at least seven of the following eight criteria:

1. English – 4 units
2. Mathematics – 4 units, including Algebra I, Geometry, Algebra II or equivalent and another higher-level course or a four –year sequence of courses that contain equivalent content.
3. Science – 4 units, including Physics and Chemistry.
4. Social Science – 4 units
5. Electives – 4 units of Career-Technical minimum. Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which can lead to postsecondary credit.
6. Foreign Language – 2 units
7. Grade Point Average – 3.5 on a 4.0 scale.
8. ACT/SAT Score (excluding scores from the writing sections) 27 ACT/1210 SAT.

9. Additional Assessment – achieve proficiency benchmark established for appropriate Ohio Career-Technical Competency Assessment or equivalent.

REGISTRATION INSTRUCTIONS FOR PARENTS AND STUDENTS:

1. Students will be given a preliminary schedule from where changes and adjustments may be made.
2. When parents have approved the student’s schedule, they must sign the approval form and the student must then return this approved schedule to the guidance counselor within 5 days of receiving the schedule and instructions. **IT IS IMPORTANT THAT THESE SCHEDULES BE TURNED IN ON TIME.**
3. The results of this registration will give us important information. For example, if there is enough interest to warrant offering a class; how many desks to put in a classroom, how many books to buy, etc.
4. It is very important that parents familiarize themselves with the first two pages of the course descriptions. Students and parents must know what credits are needed for graduation. If college is a possibility, students need to know the high school requirements necessary for successful admission.
5. **STUDENTS:** When listing course codes please write in required course codes first.
6. We are working with 8 class periods. Students should not plan more than 1 study hall per day.
7. **PARENTS:** Please feel free to call or email if you have any questions.

REQUIRED COURSES FOR GRADUATION FROM VANLUE HIGH SCHOOL

High School Credits Awarded in Junior High:

Vanlue Junior High students have the opportunity to earn high school credit in grades 7 and 8. High school credits are awarded for the following classes for all junior high students:

Art 7 (1/2 credit) Art 8 (1/2 credit) Health 8 (1/2 credit) JH Band (1 credit)

8th grade students will also receive 1 credit for Algebra I only if their 8th grade math teacher promoted them to Algebra I.

FRESHMEN: Class of 2026

CREDITS	COURSE CODE	COURSE
1	201	English 9
1	606	Physical Science
1	501	Algebra I OR
1	503	Geometry
1/2	402	Health (taken in 8 th grade)
1	709	American History
1	131	Computer Technology
1		Any Fine Arts if not taken during previous year

SOPHOMORES: Class of 2025

CREDITS	COURSE CODE	COURSE
1	202	English 10
1	602	Biology
1	502	Algebra II OR
1	503	Geometry
1	701	World History
1/2		Any Phys. Ed.
1		Any Fine Arts if not taken during previous year

JUNIORS: Class of 2024

CREDITS	COURSE CODE	COURSE
1	203	English 11
1	603	Chemistry OR
1	607	Science and Sustainability
1	502	Algebra II, OR
	504	Pre Calculus
1		Any Fine Arts if not taken during previous year
1/2	705	Government
1/2	706	Economics and Personal Finance

SENIORS: Class of 2023

CREDITS	COURSE CODE	COURSE
1	204	English 12
1		Any Fine Arts if not taken during previous year
		Additional Math Course if missing fourth credit

ADMINISTRATIVE GUIDELINES

COLLEGE CREDIT PLUS ENROLLMENT OPTIONS

A) Procedures for student enrollment and participation:

- 1) The local district is required to notify all 6th through 11th grade students and parents/guardians of this option by February 1st of each school year.
 - a) The notice shall include the following information:
 - (i) Costs:
 - (1) Notice of college credit plus opportunities that have no cost to students, including the free option to attend public institutions of higher education;
 - (2) Clear references to the potential cost of participation with a nonpublic institution of higher education;
 - (3) The prohibition of charging economically disadvantaged students who choose to attend a nonpublic institution of higher education;
 - (ii) Criteria for student participation, including the requirement for a counseling session prior to participation.
- 2) Student and/or parents are required to inform the local board of education of intent to participate by April 1st.
- 3) The local district is required to provide counseling services to students prior to participation in the program. Counseling services to include, but not limited to:
 - a) freshman status as locally determined
 - b) acceptance by college
 - c) financial arrangements for tuition, books, materials & fees
 - d) process of granting academic credits
 - e) criteria for any transportation aid
 - f) available support services
 - g) scheduling
 - h) consequence of failing or not completing a course
 - i) the effect of program participation on student's ability to complete district graduation requirements
 - j) academic and social responsibilities of students and parents under this program
 - k) information/encouragement of college counseling services
 - l) encourage all students exhibiting the ability to consider this program
 - m) the effect of program participation concerning student athletic eligibility
- 4) Student/Parent must be familiar and aware of the post-secondary institution application process and deadlines.

B) Program Requirements

- 1) Each secondary school shall verify that a student electing to participate in the college credit plus program is not taking more than thirty college credit hours during an academic year and not more than the equivalent of four academic years, or one hundred and twenty college credit hours total through the college credit plus program.
 - a) To determine the number of college credit plus program of section 3365.06 of the Ohio Revised Code in an academic school year, take the number of secondary units scheduled by the secondary school for which the student receives only secondary school credit, then multiply that number by three and then subtract the result from thirty. The resulting number shall be the total number of college credits a student participant may earn under college credit plus in an academic year.
- 2) Secondary schools shall use the following conversion for a postsecondary course completed by a student participant under college credit plus to determine the amount of high school credit through participation through the program:
 - a) A college credit plus course transcribing three or more semester credit hours shall count as one full high school unit.
 - b) A college credit plus course transcribing less than three semester hours shall count as a proportional fraction of a high school unit.
- 3) Classes failed or withdrawn with an 'F' will receive an 'F' on the high school and college transcripts and will be computed into the high school and college GPA. If you do not receive a passing grade, the district **will**, in all instances, seek reimbursement for the amount of state funds paid to the college on your behalf for that college course. The school district may withhold grades and credits received for high school courses taken until reimbursement has been made.
- 4) If a student completes a course in college, the board of education shall award them appropriate credit toward high school graduation if at the time of enrollment, he/she elected to receive credit for courses toward fulfilling the graduation requirements.
 - a) High school credit awarded for courses successfully completed shall count toward graduation requirements and subject area requirements) check Vanlue High School's Course Description booklet).
 - (i) The board of education shall award comparable credit for the course/courses completed at college.
 - (ii) If no comparable course is offered by the district, then the board of education shall grant an appropriate number of credits in a similar area.
 - (iii) Any disputes between the student and the board of education regarding high school credits granted for a course may be appealed to the State Board of Education by the student.
 - (iv) Student's records must show evidence of successful completion of each course and the high school credits awarded.
 - (v) Credits earned under the college credit plus program shall be included in the student's grade point average. A grade awarded by the college shall be counted as an equivalent district grade.

5) Other Considerations

- a) A student enrolled in the program will follow the local district attendance policy: as well as the district code of conduct for extracurricular activities. These policies and codes will be applicable during the time the student is attending Vanlue High School and is on school property for any class or activity. CHECK STUDENT HANDBOOK.
- b) The student enrolled in this program must realize that the master schedule will not be altered or adjusted in order to permit enrollment; adjustments to individual schedules may be done by the school administration.
- c) The Vanlue Local School District will adhere to the Ohio High School Athletic Association for eligibility to participate in athletics. In order to be eligible, the student must be passing five courses during the prior grading period. The five courses may be a combination of high school and college courses.
- d) Taking a College Credit Plus course from a public college or university is FREE, which means no cost for tuition, books, or fees. If you choose to attend a PRIVATE college or university, you **MAY** have limited costs.

EDUCATIONAL OPTIONS:

Vanlue High School provides educational options to students who have special needs and interests. Educational options are defined as experiences or activities, which are provided in accordance with Board policy to supplement the regular school program. Such options will include: College Credit Plus, correspondence coursework, credit flex, Millstream, work study, independent study, summer school, and alternative school education.

ART

Art 8 (1/2 credit)

No. 305

Students will develop skills and appreciation of Visual Art by engaging in a variety of 2D and 3D studio projects, techniques, and Art History. Focus in on understanding perspectives. Students that are in Junior High that are not taking band will take this course.

Lab fee

Art 1 (1 credit)

Grades 9, 10, 11, 12

No. 301

Art 1 is a course that provides an introduction to art through a multi-media experience. Students will learn and apply the elements and principles of design to produce creative art projects that reflect their understanding of these concepts through the integration of aesthetics, art criticism, art history, and studio production. Assignments at this level will be highly teacher directed and will emphasize technical skills, creative thinking skills, and problem solving.

Lab fee

Art 2 (1 credit)

Grades 10, 11, 12

No. 302

Art 2 is a course that provides continued practice with art concepts through a multi-media experience. Students will apply the elements and principles of design to produce creative art projects that reflect their understanding

of these concepts through the integration of aesthetics, art criticism, art history, and studio production. Assignments at this level will be partially teacher directed with more choice for students to explore personal interests with emphasis on technical skills, creative thinking skills, and problem solving.

Prerequisite: The completion of a full year of Art 1 or comparable with a grade of C or higher.

Fee

Art 3 (1 credit)

Grades 10, 11, 12

No. 303

Art 3 is an advanced course that provides students the opportunity to explore new and/or preferred media and subject matter more in-depth. Students will apply the elements and principles of design to produce creative artwork that express their understanding of these concepts through the integration of aesthetics, art criticism, art history, and studio production while expressing their personal views. Assignments at this level will be student directed with guidance from the teacher as needed. Emphasis will be on personal meaning, technical skills, creative thinking skills, and problem solving.

Prerequisite: The completion of a full year of Art 2 or comparable with a grade of B or higher.

Fee

Art 4 (1 credit)

Grades 10, 11, 12

No. 304

Art 4 is an advanced course that provides students the opportunity to explore new and/or preferred media and subject matter more in-depth. Students will apply the elements and principles of design to produce creative artwork that express their understanding of these concepts through the integration of aesthetics, art criticism, art history, and studio production while expressing their personal views. Assignments at this level will be student directed with guidance from the teacher as needed. Emphasis will be on personal meaning, special projects, technical skills, creative thinking skills, problem solving, and portfolio development.

Prerequisite: The completion of a full year of Art 3 or comparable with a grade of B or higher.

Fee

CAREER EXPLORATION AND EMPLOYABILITY SKILLS

Career Exploration and Employability Skills (1-2 credits) Grade 12

No. 165

CEES is intended to provide career development and job skills for senior students. Students have the option to be released from school after required courses are scheduled to go to a work site. Those students choosing to be released will earn additional credit after working a total of 120 hours during the school year. Students must provide transportation to and from the worksite. Students must also maintain regular attendance and passing grades in academic classes or they will lose their afternoon work privileges. CEES class activities including finding and maintaining employment, money management, understanding taxes, banking, and job safety. Students MUST fill out an application to be released for work purposes.

COMPUTER TECHNOLOGY

Computer Technology (1 credit)

Grade 9 Requirement

No. 131

In this introductory course, students will learn how to use Google Docs, Sheets, and Slides. Students will also learn to use Microsoft Word, Excel, and PowerPoint along with video editing software to create, analyze, edit, share, and publish information for a variety of purposes and audiences. Through step-by-step instruction and a project-based approach to learning students will become familiar with key concepts and basic skills of today's technology.

Lab fee

Yearbook (1 credit)

Grades 9, 10, 11, 12

No. 145

Using a variety of application software including InDesign, Photoshop, and eDesign, students will help collect pictures, design the annual school yearbook, and will help create sports programs and Prom invitations. Students will also work with local businesses for advertisement purchases and will help sell yearbooks throughout the year. Prerequisites: Computer Technology with a grade of C or better, teacher recommendation, and application filled out.

Lab fee

Coding (1 credit)

Grades 9, 10, 11, 12

No. 166

Learn the fundamentals of programming concepts, include data types, variables, decision statements, loops, and input/output. Develop simple scripts using common scripting language constructs, including lists, literals, and regular expressions. Gain an introduction to programming through hands-on activities.

Fee

Coding 2 (1 credit)

Grades 10, 11, 12

No. 167

To build on the fundamentals and concepts learned from Coding I. Build their knowledge from Python concepts. Students will gain a better understanding through hands on activities and projects.

Pre-req - Coding 1

Fee

Videography (1credit)

Grades 9, 10, 11, 12

No. 308

Students will learn about film and how it has impacted society. At the same time students will learn how to record and edit digital video. Project based learning will be used to gain knowledge in different film genres.

Fee

ENGLISH

Introduction to High School Literature (1 credit)

Grade 9

No. 201

This course is an introduction of necessary high school English skills such as writing, vocabulary, listening skills, reading, spelling and grammar. Students will also be introduced to the works of Shakespeare, classic American novels, and basic public speaking techniques. Students will begin to learn strategies that will help them pass state standardized tests. Required of all Freshmen.

World Literature (1 credit)

Grade 10

No. 202

This course will build upon the skills learned in English 9 and focus on a study of World Literature. In addition to these skills, students will begin to explore informational texts useful in helping to select a career. Public speaking skills are emphasized, as well as strong composition skills, novels, and drama. Students will be focused on skills needed to pass state standardized tests. Required of all Sophomores.

American Literature (1 credit)

Grade 11

No. 203

This course consists of non-fiction and fictional American Literature. This course stresses the importance of advancing the skills learned in English 9 and English 10. Emphasis is placed on composition, research, and critical thinking. Students will continue the focus on career, explore advanced American novels, create presentations for public speaking exercises, and work to advance vocabulary to the college level.

British Literature (1 credit)

Grade 12

No. 204

This course is an intensive study in British Literature where students master the skills learned in English 9, English 10, and English 11. Emphasis is placed on advanced composition, research, and critical thinking. Students will explore post graduate goals, create beginning level college presentations and writings, explore higher educational texts, and focus on college level vocabulary that will advance both writing and speaking skills.

Creative Writing (1 credit)

Grades 9, 10, 11, 12

No. 211

This course will focus on the study and practice of writing creatively. Students will write short stories, poems, plays, and chapters of novels. They will learn about strong, creative writing practices including plot diagrams, characterization, and story structure. Students will also read various essays written by published authors to learn more about their craft. By the end of the year, students will have produced several polished pieces ready for submission to a publication if they so choose.

Prerequisite: "C" Average in English

Modern Literature (1 credit) (Not offered in 2022-2023) Grades 9, 10, 11, 12

No. 210

Modern Literature is a course focused on recently published works such as newly released novels, articles, and short stories. Students will get the chance to discuss and critique recent works and participate in projects that are both fun and educational. Course expectations include a passion for reading, open-minded communication/discussion skills, the ability to work independently, and a willingness to try projects/readings that may be challenging at times.

Prerequisite: "C" Average in English

Fee

FOREIGN LANGUAGE – SPANISH

Spanish I (1 credit)

Grades 9, 10, 11, 12

No. 258

Students will begin to listen to, speak, read, and write Spanish while achieving an awareness of the similarities and differences between North American and Hispanic cultures. Cultural understanding and language development will continue with students listening to and reading excerpts, stories, legends, by viewing videos and by preparing research projects.

Pre-requisite: "C" Average in English

Spanish II (1 credit)

Grades 10, 11, 12

No. 259

By successful completion of the second year of Spanish, the student can communicate with native Spanish speakers on a conversational level. This year further develops listening, speaking, reading, and writing skills while emphasizing cultural studies.

Pre-requisite: Spanish I

Spanish III (1 credit)

Grades 11, 12

No. 260

This course is designed for students who intend to continue their education in a four-year college or university program or who are genuinely interested in furthering their foreign language study. This course prepares students for taking advanced placement tests for college credit as well as for entering the job market with a skill that enhances their employability.

Pre-requisite: Spanish II

Spanish IV (1 credit) (Not offered in 2021-2022)

Grade 12

No. 261

This course is designed for students who intend to continue their education in a four-year college or university program or who are genuinely interested in furthering their foreign language study. This course prepares students for taking advanced placement tests for college credit as well as for entering the job market with a skill that enhances their employability.

Pre-requisite: Spanish III

HEALTH AND PHYSICAL EDUCATION

Health (1/2 credit)

Grade 9 (taken in 8th)

No. 402

This course looks at many areas of life as well as cultural perceptions of health and wellness. The human body is examined in great detail as we discuss the multiple body systems and their functions. Each body system is broken down and discussed individually before learning how the systems work together to achieve homeostasis. Students examine all six domains of health and wellness: spiritual, mental, physical, social, emotional, and vocational. The course is offered in an online setting. The virtual classroom is available to students twenty-four hours a day which allows students to work at their own pace to meet the course requirements. This course is required for graduation.

Team and Individual Sports (1 credit)

Grades 9, 10, 11, 12

No. 410

This course is designed to introduce and provide opportunities for students to develop the basic and intermediate skills and strategies in a variety of team and individual sports that they will be able to participate in now and in the future. Students will be exposed to the basic skills, strategies, and etiquette of the various activities. The components of fitness: muscular strength, muscular endurance, flexibility, and cardiovascular fitness will be emphasized throughout the year.

Lifetime Fitness (1/2 credit) (1st Semester)

Grades 9, 10, 11, 12

No. 411

This course is designed to introduce and provide opportunities for students to develop the basic and intermediate skills in a variety of health and fitness-related activities that they will be able to participate in now and in the future. Students will be exposed to the basic fitness concepts, lifelong fitness skills, physical health-related concepts as well as various activities. The components of fitness: muscular strength, muscular endurance, flexibility, and cardiovascular fitness will be emphasized throughout the year.

Sports Medicine (1/2 credit) (2nd Semester)

Grades 9, 10, 11, 12

No. 413

The Sports Medicine curriculum is designed for students interested in the career of athletic training. The primary focus will include, but not be limited to, the following topics: The Sports Medicine Team, organization and administration, injury prevention, physical training and conditioning techniques, nutritional considerations,

protective sports equipment, psychology of sports injury/illness, mechanisms and characteristics of sports trauma, tissue response to injury, human anatomy, exercise physiology, biomechanics, kinesiology, CPR/bloodborne pathogens, injury assessment and evaluation, environmental concerns, basic taping and bandaging, explanations of therapeutic modalities, basic exercise rehabilitation, drug use/abuse in sports, and skin disorders.

Personal Training (1 credit)

Grades 9, 10, 11, 12

No. 417

The Personal Training curriculum is designed to give students the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. Students will learn the fundamentals of strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

MATHEMATICS

Algebra I (1 credit)

Grades 8, 9, 10, 11, 12

No. 501

This course is the foundation for high school mathematics courses. It is the bridge from the concrete to the abstract study of mathematics. Topics include evaluating and solving equations, linear functions, systems of equations, quadratic functions, exponential functions, operations, and polynomials. Real world applications are presented in each area to prepare students for higher-level mathematics courses and the End of Course Assessment for Algebra I.

TI 30x scientific calculator required.

Geometry (1 credit)

Grade 9, 10, 11, 12

No. 503

This course is designed to emphasize the study of the properties and applications of common geometric figures in two and three dimensions. It includes the study of transformations and right triangle trigonometry. Inductive and deductive reasoning skills are used in problem solving situations, and proof writing. Real world applications are presented in each area to prepare students for higher level mathematics and End of Course Assessment for Geometry.

Prerequisite: Pass Algebra I.

TI 30x scientific calculator is required.

Algebra II (1 credit)

Grades 10, 11, 12

No. 502

This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills that build on concepts learned in Algebra I such as: systems of equations with and without matrices, advanced polynomial functions, imaginary and complex numbers, quadratics, logarithmic and exponential functions, and rational functions. This course will have an emphasis on the mathematics concepts that are covered on the ACT.

Graphing calculators will extensively be integrated into the coursework.

Prerequisite: Pass Algebra I

TI 83+ graphing calculator or higher model required.

Consumer Math (1 credit)

Grades 12

No. 506

This course will focus on real-life situational math. Students will explore the following: wages, income, checking accounts, rent/mortgage payments, home/auto loans, paying utilities, budgeting, establishing credit, insurance, interest, and other consumer-related topics.

Prerequisite: A student must pass Algebra 1 and Geometry, and either have passed or be enrolled in Algebra II.

Pre-Calculus (1 credit)

Grades 11, 12

No. 504

In Pre-Calculus, students use functions, equations, and limits as useful tools for expressing generalizations and as means for analyzing and understanding a broad variety of mathematical relationships. Functions are used to represent and connect ideas in geometry, probability, statistics, trigonometry, and calculus and to model physical situations. Topics include polynomial, rational, radical, exponential, logarithmic, trigonometric, and piecewise-defined functions, sequences and series, parametric representations of conic sections, and vectors. Graphic calculators will be extensively integrated into the coursework.

TI 83+ graphing calculator or higher model required.

Calculus (1 credit)

Grade 12

No. 505

Calculus explores concepts that change at variable rates. The major subjects of calculus include limits, derivatives, and integrals. Each subject will be explored in four different ways: graphically, numerically, algebraically, and verbally while emphasizing the connections and applications. The graphic calculator is an integral part of the course and will be used daily to help solve problems, explore relationships, and interpret and support results. This course is designed for college-bound students who possess good math skills and who are planning on enrolling in calculus-level courses in college.

Prerequisite: Pass Pre-Calculus with a C or higher.

TI 83+ graphing calculator or higher model required.

MUSIC

Band (1 credit)

Grades 7, 8, 9, 10, 11, 12

No. 320

Students in band are expected to make a one-year commitment; i.e. band members are in marching band (June through October) and concert band (November through April or May). Pep band, All County Band, and participation in Solo and Ensemble contest are voluntary. Students are expected to attend all band concerts and performances.

Fees

Choir (1 credit)

Grades 8, 9, 10, 11, 12

No. 321

Choir is an elective course offered three (3) days per week. Students must be able to distinguish and match pitches. Some knowledge of music would be helpful, but not necessary. Vocal repertoire will consist of music by different composers from various periods in history. The course subject matter will include, but not limited to: vocal technique, sight-singing, music theory, music literature, and music technology. Students are required to participate in various public performances during the school year.

Music Theory/Appreciation (1/2 credit)

Grades 9, 10, 11, 12

No. 322

Students will learn the fundamentals of music notation and aural training. This includes the recognition and understanding of basic musical fundamentals and patterns that occur in typical Western music. This includes the study of scales, rhythmic patterns, intervals, phrases, melodic direction, and chords. The students will learn how this applies to the everyday music they listen to. Students will also learn how to compose their own music using these concepts.

Students will also learn different forms of music of music throughout history, starting at the beginning of notated music to the present day. Students will learn to appreciate the changes and innovations that made music evolve throughout known history. Students will also make correlations between music and the current events of the era. The concepts used in the theory section of this course will directly relate to the history.

SCIENCE

Physical Science (1 credit)

Grades 9

No. 606

This course will explore both physical and earth and space science which students will need as background knowledge for further science courses. Some of the concepts and skills students will develop include: the structure, and properties of matter, atoms, and molecules; the formation and patterns of substances; conservation of matter and energy; physical and chemical changes; motion and forces affecting motion; interactions of matter and energy; the nature of waves and electricity; describing and predicting physical interactions and events in the natural world; the origin of the universe; and the life cycle of stars. This course will have frequent laboratory experiences to reinforce key concepts and safety procedures. Physical Science students should expect at least one research project each quarter.

Lab fee

Biology (1 credit)

Grades 10, 11, 12

No. 602

Biology is the study of the characteristics of life, structure and function of organic molecules and cells, the principles of heredity, biological evolution, the diversity and interdependence of life, and how living systems function and interact with the physical environment, including the cycling of matter and the flow of energy in living systems. There will be a strong emphasis on understanding and relating key concepts in preparation for state testing. Laboratory work will be performed to supplement those concepts and to reinforce safety procedures. Biology students should expect one or more research papers in MLA style each quarter to hone their research and writing skills in technical subjects, as well as other independent and group projects.

Lab fee

Chemistry (1 credit)

Grades 11, 12

No. 603

Chemistry is the study of the structure and composition of matter, the changes that occur in the composition of matter, and the mechanisms that bring about these changes. Laboratory work will be performed to supplement concepts and to reinforce safety procedures. Assessments will measure students' ability to describe or explain concepts, to relate concepts to each other, and to apply those concepts to calculations involving quantities of matter. Equation manipulation skills learned in Algebra I will be used on a regular basis. Chemistry students should expect at least one independent or group project each quarter, including research papers in MLA style.

Lab fee

Physics (1 credit)

Grades 11, 12

No. 604

Physics is the study of the relationship between matter and energy. Course topics include motion, forces, energy, sound, light, and electromagnetism. Laboratory experiences, some of which will be student-designed, will focus on the collection, analysis, and use of physical data. Assessments will measure students' ability to describe or explain concepts, to relate concepts to each other, and to apply those concepts using complex multi-step calculations. Physics students should have a very strong mathematics background, particularly rearranging formulas and basic trigonometry. The ability to visualize, analyze, and diagram a situation from a written description will be an enormous asset; Chemistry, while not a prerequisite, is highly recommended as preparation.

Lab fee

Science and Sustainability (1 credit)

Grades 11, 12

No. 607

This course is an active study of science and the nature of science, with emphasis on hands-on laboratory learning and live discourse; active participation in class is required. Students will investigate food, water, shelter, energy use, technology, demographics, and various other aspects of life in our nation and others. Students will also study and discuss various environmental problems of today and the near future, such as ecosystem stability, overpopulation, the world food supply, resource depletion, energy production, and pollution. Assessments will measure students' ability to describe or explain concepts, to relate concepts to each other, and to apply those concepts. Students should expect at least one research project each semester.

Lab fee

SOCIAL SCIENCE

Psychology (1/2 credit)

Grades 9, 10, 11, 12

No. 707

Psychology focuses on individual behavior and why an individual thinks, feels, and reacts to certain stimuli. Major emphasis will be placed on research methods, stages in childhood and adolescence, how the brain works, altered states of consciousness, psychological testing, and psychological disorders.

SOCIAL STUDIES

Modern American History (1 credit)

Grade 9

No. 709

This course examines the history of the United States from 1877 to the present. The federal republic has withstood challenges to its national security and expanded the rights and roles of its citizens. The episodes of its past have shaped the nature of the country today and prepared it to attending the challenges of tomorrow. Understanding how these events came to pass and their meaning for today's citizens is the focus of this course. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

Contemporary World Issues (1 credit)

Grades 9, 10, 11, 12

No. 704

This course makes use of various forms of mass media to gain a better understanding of world and domestic issues with an emphasis on those that have wide-ranging effects. Topics will include the political and cultural landscapes of various religions, war, natural disasters, scientific breakthroughs, and other issues that dramatically affect the world around us.

Government/Economics/Personal Finance (1 credit)

Grade 11

No. 705 & 706

Government focuses on the United States' founding principles and beliefs and how they have shaped our country. Students will study the structure, functions, and powers of government at the national, state, and local levels. Economics will give the students a greater understanding of economics ranging from the viewpoint of the individual consumer/small business owner to the global economy. This course will study the law of supply and demand, forms of business, labor unions, government finances and influence on the economy, money and prices, and inflation and deflation cycles. Personal finance will cover understanding concepts including savings, investing, and debt to prepare students for financial well-being after high school.

Modern World History and Geography (1 credit)

Grades 10

No. 701

This course will study significant historical people, geographical regions, military conflicts, political movements, and technological advancements that took place around the world during the modern era (1670-present).

History Through Film (1/2 credit)

Grades 9, 10, 11, 12

No. 711

This a semester course that will examine the use of movies to depict and explain various historical events. Students will watch, discuss, and verify the accuracies or inaccuracies of the selected films through research. Topics covered will include wars, political issues, and other events that have helped shape history.

JEFFERSON COUNTY COURSES

1 or 1/2 credit

Grades 9, 10, 11, 12

Jefferson County ESC delivers online courses that is current, relevant, and fully aligned to Ohio's content standards. Their resources feature an active learning format designed to promote student engagement and deeper learning.

Lab fee required

MILLSTREAM CAREER AND TECHNOLOGY PROGRAMS

Training in each program consists of related classroom instruction and practical job experience aimed at developing the knowledge and skills required for job success. Approximately 80% of the occupations in the United States require less than a four year college degree.

Development of leadership skills that are critical in today's workplace are accomplished in part through membership and participation in the following co-curricular organizations: DECA-An association of marketing students; VICA-Vocational Industrial Clubs of America; BPA-Business Professionals for America; FRCCLA-Family, Career and Community Leaders of America; and FFA.

The following Career Technology programs are open to all juniors and seniors:

(Courses marked with an asterisk (*) will receive College Credit Plus credit)

Arts, Communications & Information Technology

- *Computer Networking & Cyber Security
- *Computer Programming & Software Engineering
- *Media Productions
- Performing Arts

Business Administration

- *Business Essentials

Construction

- Construction Skills

Engineering & Manufacturing

- *Engineering & Design
- Welding

Health Science

- *Health Professions

Human Services Cluster

- Cosmetology
- *Culinary Arts
- *Teaching Professions
- Hospitality

Transportation

- *Automotive Technology

JTC Job Training