

**Mineral Ridge High School
1334 Seaborn Street
Mineral Ridge, Ohio 44440
(330) 652-1451**

STATEMENT OF PHILOSOPHY/AND NON-DISCRIMINATION

The Weathersfield Local Schools Board of Education declares it to be the policy of this District to provide an equal opportunity for all students regardless of race, color, creed, disability, age, religion, gender, ancestry, national origin, place of residence within the boundaries of the Weathersfield Local School District, or social or economic background, to learn through the curriculum offered within this school district.

COURSE SELECTION

The purpose in setting up any course of study is to guide you, the student, into the area of study that best fits your needs within the curriculum guidelines of the school district. While not all students will have clearly defined future goals, it is important that students give careful consideration to the probable direction in which their abilities and interests will take them. It is important for students to enroll in courses which will best help them attain such goals.

GRADUATION

The State of Ohio graduation requirements have been in a state of constant change over the last several years. In addition to the number of credits required by the Weathersfield Local School District, the State of Ohio also requires you to show competency and readiness. The following pages will show you the requirements as established by the State of Ohio as they currently exist.

Graduation Requirements for 2023 and Beyond

Course Completion

Ohio law outlines the course requirements all students must complete to earn a diploma. Ohio students must earn a minimum of 20 units in specific subject areas. Districts and schools may have requirements that exceed the state minimums outlined below. **Weathersfield Local Schools require 21 units.**

General Course Requirements

English Language Arts	4 units
Math	4 units
Health	½ unit
Physical education	½ unit
Science	3 units
Social studies	3 units
Fine Art	1 unit
Electives	5 units

Competency

Students must earn a "competency" score on the English II and Algebra I end-of-course tests. The competency score is 684. Students not earning competency scores on the first attempt must be offered appropriate remediation and support and retake the test at least once. In lieu of attaining competency scores on the state tests, students can use alternative ways to demonstrate competency.

Competency Alternatives

Ohio law established three alternatives to demonstrating competency on state tests. Prior to being eligible to demonstrate competency in alternative ways, students first must retake the test and receive remedial support. The three alternative ways to demonstrate competency for the subject area not passed are as follows:

1. College Credit Plus – Earn college credit in a non-remedial math or English course (for the subject area not passed) to demonstrate competency.

2. Career Experience and Technical Skill – Complete two demonstrations to show competency, at least one of which must be a foundational option.

Foundational: a. Earn a cumulative score of proficient or higher on three or more WebXams in a single career pathway.

b. Earn a 12-point approved industry-recognized credential or group of credentials totaling 12 points in a single career field.

c. Complete a pre-apprenticeship in the student’s chosen career field or, for students ages 18 and older, show evidence of acceptance into an apprenticeship program after high school.

Supporting: a. Complete a 250-hour work-based learning experience with evidence of positive evaluations.

b. Earn the workforce readiness score on WorkKeys.

c. Earn the OhioMeansJobs-Readiness Seal.

3. Military Readiness – Competency can be achieved by meeting the requirements to enlist in the military, which can be demonstrated by a contract with the military to enlist upon graduation (see the Military Enlistment Seal guidelines in this document for more information about enlistment).

4. Remediation-free score – Competency can be shown by obtaining a remediation-free score in the math or English subject areas on the ACT or SAT. To demonstrate competency in ELA II a student must be remediation-free in **BOTH** English and reading on the ACT.

Demonstrating Readiness

In addition to fulfilling curriculum requirements and meeting the competency requirements listed above, students also must show they are prepared for their next steps after high school. State law created 12 diploma seals for students to demonstrate academic, technical and professional readiness for careers, college, the military or self-sustaining professions. Each seal allows students to demonstrate knowledge and skills essential for future success in their chosen post-high school paths. Students will demonstrate readiness by earning at least two diploma seals, one of which must be state defined. Seals help students develop an array of critical skills that are valuable to them as they transition to the next steps after high school.

Diploma Seals Required for Graduation

2 Required (At least one must be State-Defined)

State-Defined Diploma Seals				Locally Defined Seals	
Seal	Options	Seal	Options	Seal	Options
Science Seal	Proficient on Biology EOC Exam	Technology Seal	Proficient on Biology EOC Exam	Community Service Seal	Minimum of 15 hours service
	2 or Higher AP or IB Score		2 or Higher AP or IB Score		Prior Approval from Admin
	"B" or Higher in adv sci/qualifying CCP course		"B" or Higher in qualifying CCP course		Collect signatures/keep log
Citizenship Seal	Proficient on Am Hist and Gov EOC Exams	Biliteracy Seal	Students must show proficiency in English	Fine/Performing Arts Seal	Successfully complete one
	2 or Higher AP or IB Scores (both)		and high levels of proficiency in a second		credit of a fine art; actively
	"B" or Higher in qualifying courses (both)		language		involved in a fine art-keep log
Military Enlistment Seal	Provide evidence of enlistment in the military	Honors Diploma Seal		Student Engagement Seal	Complete one season or year
	OR		Earn any of Ohio's Honors Diplomas		of participation in an
	Participate in JROTC program for 2 years				extracurricular activity or sport
Industry-Recognized Credential Seal	Earn 12 points of industry-recognized	College-Ready Seal	Earn a remediation-free score on the ACT		
	credentials from a single career field		or SAT		
	NIMS-in Career Readiness Class (11th grade)		ACT-E-18,R-22,M-22 SAT-R/W 480, M-530		
OhioMeansJobs Readiness Seal	Show aptitude in 15 professional skills,				
	as endorsed by three mentors				
	Career-Readiness Class (11th grade)				

MINERAL RIDGE HIGH SCHOOL
2022-2023

ADD/ DROP POLICY

No schedule changes will be made after the **first 5 days** of the new school year or after the **first 5 days** of the new semester. A student may ADD or DROP a course that is not a requirement for graduation within the time frame mentioned above.

Required courses will not be dropped from a student's schedule for any reason.

Students are not permitted to have more than one study hall in a school day.

If a student drops/withdraws or is removed for disciplinary reasons from a course after the first five days, a grade of (F) will be averaged into the student's GPA. The grade will be placed on the report card as a final mark for that course.

END OF YEAR SUBJECT FAILURES

If a student fails a required course for the year, the course must be taken in summer school at the cost of the parent or repeated the following school year.

HONORS COURSES

Students who want to be considered for valedictorian or salutatorian of their class must take and receive credit in all HONORS English courses offered at Mineral Ridge High School during their four years; failing to enroll and receive credit in any HONORS English course will deem a student ineligible to be considered for valedictorian or salutatorian status.

Students in contention for Valedictorian or Salutatorian must have completed: 4 Honors English courses, 4 years Academic Math to include Trigonometry, 4 years Science to include Physics, 3 years Social Studies, 3 years Foreign Language, and 1 year of Fine Art.

HIGH SCHOOL ACADEMIC DIPLOMA WITH HONORS:

Students who graduate from Mineral Ridge High School with an honors diploma need to fulfill all but one of the following criteria:

- 1) Four Units of English
- 2) Four units of Mathematics that include Algebra I, Geometry, Algebra II, or equivalent, and one other higher-level course or a four-year sequence of courses that contain equivalent content.
- 3) Four units of Science that include two units of advanced science.
- 4) Four units of Social Studies.
- 5) Three units of one Foreign Language or two units each of two Foreign Languages.
- 6) One unit of fine art.
- 7) Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year.
- 8) Obtain a composite score of 27 on the American College Testing (ACT) test or an equivalent composite score of 1210 on the Scholastic Assessment Test (SAT).
- 9) Career-Technical and/or elective courses are not counted toward requirements.
- 10) Diploma with Honors requirements pre-suppose completion of all high school diploma requirements in the Ohio Revised Code including: ½ unit Physical Education, ½ unit Health.

COLLEGE CREDIT PLUS

College Credit Plus is a program designed for college bound students who want to begin college course work while in high school. You must take either the ACT or SAT and achieve a remediation free score to be considered for acceptance into the program. The college decides whether you meet the requirements for admittance, not Mineral Ridge High School. You must go through the procedures established by the college/universities to apply to College Credit Plus and to enroll in the course(s) and adhere to their deadlines. You may have to take a college placement test in addition to the ACT/SAT.

COURSE FEES: The following programs have fees. Fees may be assessed depending upon funding, project requirements, and availability of materials. Please check with your assigned teacher for any fee requirements.

Fine Arts:	Drawing I, II	\$15.00
	Painting I, II	\$15.00
	Digital Imaging	\$20.00
	3D Design	\$20.00
	Ceramics/Crafts	\$20.00
	AP Studio Art	\$25.00
Technology:	All Computer Courses	\$10.00
Science:	Anatomy	\$20.00
	Biology I	\$20.00
	Biology II	\$20.00
	Chemistry I	\$20.00
	Chemistry II	\$20.00
	AP Physics	\$20.00
Spanish:	Spanish I	\$15.00
	Spanish II	\$15.00
	Spanish III	\$15.00
	Spanish IV	\$15.00

TRUMBULL CAREER AND TECHNICAL CENTER

To qualify for admission to any of the two-year programs at the Trumbull Career and Technical Center, students are required to complete all local requirements during ninth and tenth grades. Included in these credits are:

English-2 Units	Science-2 Units
Social Studies-2 Units	Phys. Education- ½ Unit
Mathematics-2 Units	Health- ½ Unit
Computers- ½ Unit	Fine Art-1 Unit

Apply for the program of your choice online at TCTC's website before the deadline established for that year. Students should obtain as much information as possible about the programs at the TCTC before choosing a program. Consult the TCTC course descriptions online for more information. Plan to attend all orientation sessions and TCTC tours.

CAREER-TECHNICAL DIPLOMA WITH HONORS:

Students who graduate from Mineral Ridge High School with a Career-Technical Honors Diploma need to fulfill all but one of the following criteria:

- 1) Four units of English, which may include one unit of applied communications.
- 2) Four units of mathematics that include Algebra I, Geometry, Algebra II, or equivalent, and one other higher level course or a four year sequence of courses that contain equivalent content.
- 3) Four units of science that include two units of advanced science.
- 4) Four units of Social Studies.
- 5) Two units of a world language.
- 6) Four units in the student's Career-Technical education curriculum. Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which can lead to post secondary credit.
- 6) Maintain an overall high school grade point average of at least a 3.5 on a 4.0 point scale up to the last grading period of the senior year.
- 7) Obtain a composite score of 27 on the ACT test or an equivalent composite score of 1210 on the Scholastic Assessment Test (SAT).
- 8) Complete a field experience and document the experience in a portfolio.
- 9) Develop a comprehensive portfolio of work based on the field experience reviewed by external experts.
- 10) Earn an industry-recognized credential.

CAREER BASED INTERVENTION: Career-Based Intervention is a program in which the students receive a minimum of 120 hours of annual instruction (can be a multi-year program) and access to a wide range of services tailored to their needs. Through Career-Based Intervention, students receive assistance in six areas: academic intervention; employability skills; career exploration; implementation of a career plan; work-based learning (paid, unpaid or a combination of both); and participation in a career pathway with options for both further education and jobs. The programs adhere to seven key principles for students to succeed: Higher Expectations; Common Curriculum; Authentic Learning; Supportive Structures; Sense of Belonging; Continuous Improvement; and Student Identification. Work-based learning, particularly career and technical education, is a significant workforce development strategy. Improved skills lead to better efficiencies; the availability of a better-trained labor pool encourages business growth. Students participating in work-based learning add to the community through:

- Increased graduation rates
- Better understanding of their long-term roles in the community
- Recognition of opportunities in the community
- Integration of school into the community
- Positive positioning of business
- Understanding of drug and alcohol issues relative to work and income
- Better preparation to assume responsibility at younger ages

**MINERAL RIDGE HIGH SCHOOL CHAPTER
OF THE NATIONAL HONOR SOCIETY**

National Honor Society membership is a privilege and an honor. No student has a right to membership. NHS members must exhibit academic achievement, leadership, honorable and admirable character, as well as service that demonstrates a willingness to use talents and skills for the improvement of society.

Membership is limited to students in the junior or senior class. The criteria for selection to the NHS will focus on the four ideals of Scholarship, Leadership, Service, and Character. Any student in the junior or senior class with a 3.4 Grade Point Average **is eligible to become a candidate** for NHS membership. However, **no student is inducted simply because of a high academic average.** The National Honor Society strives to recognize the total student; one who excels in all of the aforementioned areas. Students who are eligible scholastically, and seek membership, must complete and submit in a timely manner, a Student Candidate Form.

Service Activities: Eligible **junior candidates** must accumulate a minimum of **10 service points** and **senior candidates** must accumulate a minimum of **15 service points** at the time of consideration for induction. One service point is awarded for participation in each extra-curricular school activity, and each community activity.

Extra-Curricular School Activities: A student's participatory activities during high school including clubs, athletic teams, athletic team statistician and/or manager, musical groups, plays, committees, yearbook, newspaper, office aide; library aide; physical education aide; jazz band; etc.

Community Activities Service: Participation in community activities outside of the school in which students have **voluntarily participated.** For example; Relay for Life, Nursing Homes, Soup Kitchens, Church Groups, Clubs sponsored outside the school, Boy or Girl Scouts, Volunteer Groups, or unpaid work for a charitable organization

Leadership Positions: Eligible junior candidates must have at least 2 leadership points, and senior candidates must have at least 3 leadership points at the time of consideration for induction. One leadership point is awarded for each activity in which a candidate was **directly responsible for directing or motivating others.** For example, elected Student Council Officer, class officer, or club officer; committee chairperson; Road Not Taken; Boys State; HOBY; Youth Leadership Mahoning Valley; Ohio Business Week, Students Teaching Students; newspaper editor; work area manager; or community leader. Students may start a club or initiate a project where they are actively involved from start to finish. Students may recognize a community problem, actively identify it and perform some solution or awareness to the problem.

Signatures must be obtained for each or a letter verifying the accomplishment.

Character: A candidate must have a minimum 3.0 average on a character evaluation, which is calculated as follows: Character points will be determined from two areas:

1. Faculty members will complete a Candidate Character Inventory, which will assign points to each candidate based on a 4-point scale; with 4 being the highest and 0 being the lowest. To obtain an average, the total number of points accumulated by the candidate is divided by the number of teachers assigning points to that candidate.
2. Yearly conduct grades for the candidate's years completed and the candidate's first semester will be totaled and averaged.

The ^Vgrades from the Character Inventory (area 1) and the yearly conduct average (area 2) will then be averaged to obtain the character evaluation.

ENGLISH/LANGUAGE ARTS DEPARTMENT

NOTE: If a student enters from another school midyear and was previously enrolled in Honors English curriculum and meets all other requirements for the class, the summer reading assignments will be waived.

English 9

1.00 Credit

Students enrolled in English 9 will complete eight thematic/text units over the course of the year in which they will be required to read two novels and multiple short fiction and non-fiction pieces. Concentration in the course will be on vocabulary acquisition, grammar, informational and argumentative writing, and developing critical thinking skills. Students will be required to write multiple formal essays using MLA style.

Honors English 9

1.00 Credit

PREREQUISITE: Grade of 90% or higher in Eighth Grade Language Arts and recommendation of English teacher.

Students enrolled in Honors English 9 should expect an accelerated course in which they will complete eight thematic/text units over the course of the year. They will be required to read three novels and multiple short fiction and non-fiction pieces, as well as complete several projects that will seek to develop and refine their abilities to read, write, and speak analytically. Concentration in the course will be placed on vocabulary acquisition, grammar, informational and argumentative writing, and critical thinking with major emphasis on essay writing, MLA format, and college level discussion. Summer reading will be a requirement of the Honors and AP curriculum and a test over the reading will be given within the first week of school. Students must receive an 85% or better on the summer reading test in order to stay in the course. Students will be required to write multiple formal essays using MLA style.

English 10

1.00 Credit

This course continues the development of ideas and concepts introduced in English 9. The topics studied in this course will be covered in thematic units and include the study of novels, short stories, non-fiction, poetry, drama, informational and argumentative writing (with emphasis on literary analysis, persuasion, and MLA documentation), grammar usage, and vocabulary acquisition. Featured authors may include Edgar Allan Poe, Ray Bradbury, John Steinbeck and William Shakespeare. The completion of a literary analysis paper is required to pass the course.

Honors English 10

1.00 Credit

PREREQUISITE: Grade of 90% or higher in Honors English 9 and/or recommendation of Ninth Grade English teacher.

This is a rigorous course in which students will practice and refine reading and writing skills, as well as their understanding and usage of literary and poetic elements, rhetoric, vocabulary, and grammar. Featured authors may include Nathaniel Hawthorne, Edgar Allan Poe, Ray Bradbury, John Steinbeck and William Shakespeare. In their exploration of different genres of literature, the students will also complete a number of independent reading and writing projects throughout the course. Compositions and projects will focus on developing critical thinking and writing skills. MLA format will be reviewed and used on all writing assignments. This course will seek to prepare students for both college and the AP Literature and Composition course. **Summer reading will be a requirement of the Honors and AP curriculum and a test over the reading will be given within the first week of school. Students must receive an 85% or better on the summer reading test in order to stay in the course.**

English 11**1.00 Credit**

This course is a study of major historical movements in American literature, from the historical documents of colonial times to acclaimed contemporary works. Students will make connections between the changing cultural ideologies and literature in America throughout its history. They will be exposed to texts from the eras of Transcendentalism, Romanticism, Realism, and others. This course will reinforce skills in close reading of both fiction and non-fiction, composition, critical thinking, grammar, and vocabulary. Composition work will include several writing styles including research based projects and papers. The course is designed to aid in preparation of college entrance exams such as the ACT and SAT, as well as success in entry level college courses. Students will be required to independently read multiple novels and participate in college level discussions. Students will be required to write multiple formal essays using MLA style.

Student Publications- Yearbook**1.00 Credit****Grades 11 and 12**

Juniors and seniors in this class will learn the basic journalistic principles of production, design and publication as they work as a team to create the newest edition of our school yearbook, *The Echo*. Skills developed throughout the year will include copy writing, editing, photography, and the use of technology. Students will also be responsible for record keeping, marketing, and sales of the finished product. It should be noted that students who choose to take this elective will be expected to spend extra time during lunch, before and after school, and during breaks to help the publication meet the strict deadlines set by the publisher. Leadership/editorial positions on the staff will be available to seniors in their second year of the class.

AP Literature and Composition**1.00 Credit****Grade 11**

AP English Literature and Composition is an accelerated course in which students will have an experience equivalent to an introductory college level literature class. This class will be an intensive study of the interpretation and evaluation of literature through careful reading, thoughtful discussion and critical analysis. The study of literature will correspond to discussions, assessments, writing assignments and class projects. Writing assignments will be both critical and analytical and will examine style and voice, as well as exemplify the students' use of literary vocabulary. Writing will be formal and creative and it will include persuasive, narrative and expository samples, as well as an argumentative research paper. Students will engage with a variety of classic and modern texts including, but not limited to, *Frankenstein*, *Wuthering Heights*, *King Lear*, *The Kite Runner*, and *Their Eyes Were Watching God*. Structure, style and theme will be considered throughout the class readings. Social and cultural values will be studied within the works and then compared and responded to throughout the course. Perrine's *Sound and Sense* will be used, as poetry is a focus for the class as well. This course of study is designed to prepare students for the College Board's corresponding AP exam, which is given in May as a standardized measure of what students have learned. In taking the exam, students entering college have the opportunity to be granted credit, placement, or both, based on their AP Exam score.

Summer reading lists and assignments will be a requirement of the Honors and AP curriculum and a test over the reading will be given within the first week of school. STUDENTS MUST RECEIVE AN 85% OR BETTER ON THE SUMMER READING TEST TO STAY IN THE COURSE.

English 12**1.00 Credit**

English 12 focuses on British Literature, writing, vocabulary and the research paper. Literature begins with the Anglo-Saxon time period and continues through contemporary writings. “Beowulf”, “The Canterbury Tales”, “Macbeth”, as well as other British novels, short stories, essays, ballads and sonnets are included. Essay writing is a focus of the course, with emphasis on persuasive writing, as well as critical and reflective pieces. Vocabulary acquisition, use of textual evidence and text analysis will be focused upon throughout the year. Research techniques are taught as students are expected to use several different types of sources in their writing. Students will complete an argumentative research paper, which is a graduation requirement. MLA documentation is a requirement for all assignments. The students will also complete a creative writing project near the end of the course. This course is designed to prepare students for the ACT and enable success in English and Literature coursework at the college.

ENGL 1550 – Writing 1 College Credit Plus**1.00 Credit****Grade 12**

PREREQUISITE: Must have applied and been accepted to YSU.

Strategies for writing as a means of critical inquiry, with focus on writing processes and on the roles of writer, audience, and purpose as they affect writing. Students divide their time between regular classrooms and computer classrooms, where they have the opportunity to acquire and develop basic word processing and electronic communications skills. Open to students on the basis of Composition and Reading Test results or successful completion of ENGL 1509, ENGL 1539, or ENGL 1540. Grading is ABC/NC. According to YSU policy, if a student receives a D or F in this class they will not get credit for it. Y.S.U credit – 3 semester hours in English.

ENGL 2618 – American Literature and Diversity College Credit Plus 1.00 Credit Grade 12

PREREQUISITE: Must have applied and been accepted to YSU.

Writers and works relate to the diversity of American culture, politics, lifestyles, and social movements. Y.S.U. credit – 3 semester hours in Humanities.

Mythology**.50 Credit****Grades 10, 11, 12**

This class creates a foundation in ancient mythology, focusing on Greek and Roman myths. Discussion may also cover Norse, Irish, Chinese, Arabic, Hawaiian and Hindu myths, among others. Emphasis is on examining various classical myths as expressed through plays, poems, and stories. It will be supplemented with classical Hellenistic-Greek and Roman writings in addition to prose and poetry written in multiple time periods. The objective is to demonstrate an understanding of the differences between myths, legends, and other similar genres and show how classical world mythology still influences contemporary society..

Science Fiction and Horror Stories of the 20th and 21st century 0.50 Credit Grades 10, 11, 12

Science Fiction and Horror explores the literary, social, and genre importance of science fiction/ horror in the twentieth century. Course objectives are to appreciate the method and artistry of the works studied, to develop an understanding of the nature of Science Fiction and Horror Fiction. Additionally students will analyze themes and methods in the literature, develop skills in original research, develop skills at presenting ideas in class discussions, oral reports, and written papers. Additionally we will chart the development of American society in parallel to these two genres.

CAREER READINESS

Students will use several resources to explore possible career choices. They will have the opportunity to practice resume writing, interview skills, and job search techniques. The student will examine various education options including college, apprenticeship programs, and trade schools. Guest speakers will also be a part of the class. In addition to career exploration, the students will complete a 12 point industry recognized credential called NIMS. NIMS is part of FEMA and stands for National Incident Management System. It aims to better improve response to emergencies. The student will receive a certificate for future employment showing they are credentialed if they pass the test at the end of NIMS instruction. The students will also have the opportunity to earn the Ohio Means Jobs Readiness Seal. This seal distinguishes students who are prepared to contribute to the workplace to future employers.

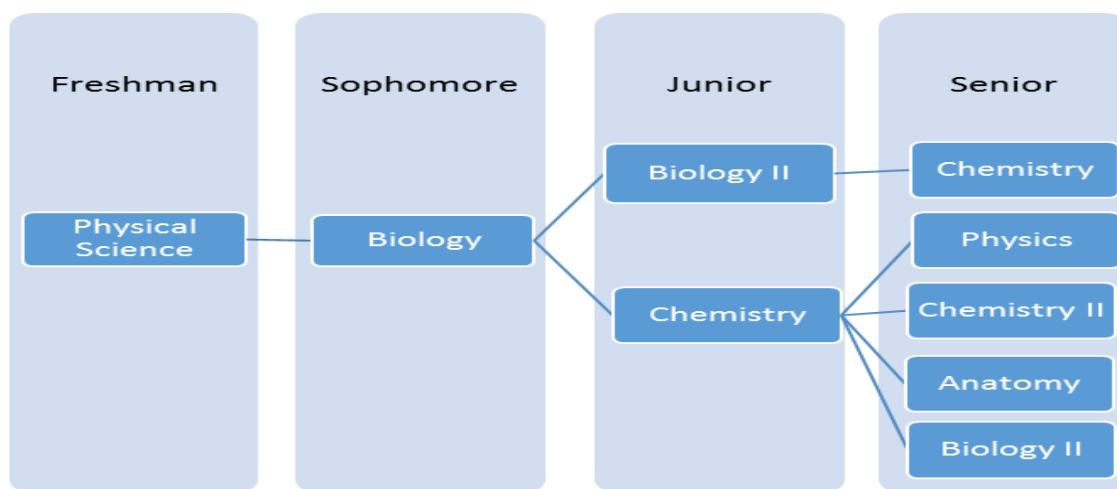
Career Based Intervention (CBI) Course of Study 3.0 Credits Grades 11 and 12

Career Based Intervention is a career technical education program designed for students in grades 11-12. The program’s goals are to help students improve academic competence, graduate from high school, develop employability skills, and implement a career plan in preparation for post-secondary education and/or careers. The CBI program also provides a combination of educational and work based learning opportunities for student success.

*The focus in CBI will be placed on examining topics and developing skills that will lead to success in the world of work. Topics and skill that will be explored and developed in CBI are researching careers, entrepreneurship, finding and applying for a job, interviewing skills, workplace ethics, teamwork and leadership, social security and taxes.

*Students must work a minimum of 15 hours per week in a place of employment outside the school. A job must be maintained throughout the entire school year to remain in the CBI program. Students must have their own transportation to their place of employment. Students may be granted early release privileges as determined by the administration for work purposes. This course is taken with any other state required courses needed to graduate. The CBI program is worth 3 credits a year.

SCIENCE DEPARTMENT



Physical Science 9 is the study of the inter-relationships between forces, matter and energy. This course will encompass a variety of teaching techniques, but will focus on a scientific inquiry approach. The scientific method of problem solving will be used in hands-on experiments, which will accompany the subject matter. Topics covered within the course include motion, forces, pressure, energy and energy conversions, the structure of matter, heat and heat transfer, the fundamentals of electricity, sound and light, and astronomy.

Biology I

1.00 Credit

PREREQUISITE: Physical Science 9

A lab fee of \$20.00 is required in this course. Biology I involves the study of the following topics: Biological Themes of Chemistry and Biochemistry, Prokaryotic and Eukaryotic Cell Structure, Cell Physiology (to include photosynthesis, respiration, mitosis and meiosis, and protein synthesis), Genetics and Heredity and Evolutionary Theory. In addition, the course will explore the Diversity and Interdependence of life including, Classification and Taxonomy, Ecosystems and Homeostasis in the environment. The course will then apply the aforementioned concepts to a study of bacteria, viruses, plants, fungi, invertebrate and vertebrate animals. Biology I is a lab course. Laboratory activities run in conjunction with class lectures. Lab projects include, but are not limited to the following: 1) Microscopy: use and care of the microscope and preparation of slides. 2) Drawings and Diagrams: an interpretation of what is seen in microscopy and dissection work. Students of Biology I will engage in the use of online computer resources throughout the course, thus students are required to have a signed Internet permission form on file.

Biology II

1.00 Credit

Grade 11 or 12

PREREQUISITE: Physical Science, Biology I

A lab fee of \$20.00 is required for this course. Course of study for Biology II will include the following topics: Microbiology including Bacteria, Fungi, Viruses and Protista, Invertebrate Zoology including the study of Entomology and other Arthropoda, Vertebrate Zoology including the study of Fish, Amphibians, Reptiles, Birds, Mammals and Animal Behavior. Finally, Basic Human Biology, and Environmental Sciences will be examined. Biology II is a laboratory course, with laboratory activities running concurrently with lecture and including the dissection and study of the internal and external structure of various invertebrate and vertebrate animals.

Chemistry

1.00 Credit

Grade 11 or 12

PREREQUISITE: Physical Science and Biology I

A \$20.00 lab fee is required for this course. Chemistry is an intense study of the composition, structure, and properties of matter and the changes it undergoes. Chemistry can be math intensive with a special emphasis on quantitative skills. The concentration areas are: matter, atoms, periodic law, bonding, chemical formulas, compounds and equations, Stoichiometry, and nuclear chemistry. Laboratory experiments will be performed annually with special emphasis on safety rules and proper techniques of laboratory experimentation. Chemistry will be taught to emphasize critical thinking skills and problem solving skills.

Chemistry II

1.00 Credit

Grade 12

PREREQUISITE: At least a “C” average in Chemistry

A \$20.00 lab fee is required for this course. Chemistry II is a lab intensive extension of topics covered in Chemistry with a further in-depth focus on quantitative analysis. Topics covered in this course will include solutions and properties of solutions, acids and bases, thermochemistry, and various properties and types of chemical reactions not covered in the first Chemistry Course. Students will be required to have an adequate understanding of topics covered in Chemistry in order to take this course and will be assessed immediately and regularly on previous material covered in Chemistry. An extra emphasis on proper laboratory technique and understanding is an additional key point in this course.

Human Anatomy and Physiology

1.00 Credit

Grade 11 or 12

PREREQUISITE: At least a “C” average in Chemistry and Biology I; can also take this course along with chemistry.

A \$20.00 lab fee is required. Human physiology is a basic human anatomy and physiology course. It deals with the structural make-up, and the functioning of the human body. The course begins with the structure and functions of human cells, then moves through the various organs and organ systems. Each organ system is broken down to describe cell, tissue, and organ make-up and the functioning of the system as a whole. Human physiology is a laboratory course. Labs deal with microscope work, as well as, cell and tissue structure, discussion and dissection work. Organs and organ systems are also studied in the lab portion of the course. Anatomy students will utilize online computer resources and computer software to prepare and present in class projects. Students are required to have a signed internet permission form.

AP Physics

1.00 Credit

Grade 12

PREREQUISITE: At least a “B” average in Chemistry or with special permission from the instructor. It is strongly recommended that Trigonometry/Pre-Calculus be a prerequisite for this course, but this course may be taken upon completion of Algebra II.

AP Physics 1 is an algebra-based equivalent to a first-semester college course in algebra-based physics. Students will have the opportunity to cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Algebra and Trigonometry are used throughout this lab-centered course with a strong emphasis on building a deep conceptual and mathematical understanding of these main physics principles. The class also focuses on solving a variety of challenging problems and developing higher-level analytical problem solving and lab based skills. Successful completion of this course will prepare students for the AP Physics I exam. It is expected that students electing to take this course take the AP exam, but it is not a requirement.

SOCIAL STUDIES DEPARTMENT

World History 9**1.00 Credit****Grade 9**

Students will begin the year studying the political, economic, and cultural institutions of the Enlightenment era as challenges to religious authority, monarchy and absolutism as they apply to the American Revolution, French Revolution, and Latin American wars for independence. Students will examine the technological changes of the Industrial Revolution and its effect on labor and industry. Students will focus on the global impact of Imperialism in Japan, China, India and Africa. Students will also study 20th Century topics such as World War I, The Russian Revolution, World War II, and the Cold War. Students will work with maps and be required to keep a notebook. Journal and essay writing will be requirements of the course along with the study of current events.

American History**1.00 Credit****Grade 10**

Students will approach American History in a thematic manner. Topics include: Civil rights, Progressivism, industrialization and the economy, protest movements, U.S. imperialism, foreign policy and the World Wars, and the Cold War. In addition to examining these themes, we will study the events of the past two decades. Students will be required to work with maps, write essays and keep a notebook. Learning will result from a blend of lectures, review games, individual discovery, music, videos, a courtroom simulation, cooperative learning experiences, textbook reading assignments, and handouts. Finally, throughout the year a very strong focus will be placed on developing academic language and preparing for standardized tests, especially the American History A.I.R.

Social Psychology**1.00 Credit****Grade 11 or 12**

PREREQUISITE: Junior / Senior status, a positive attitude, a strong work ethic and a desire to learn more about life and society.

Students will explore the basics of sociology coupled with psychology. They will study the five key concepts of sociology (power, culture, functional integration, social structure and social action) that are essential to understanding relevant life issues. Subject matter includes: deviance and crime, the life course, socialization, groups and organizations, social classes, race and gender issues, marriage and divorce, education, religion, health care, economics, politics and war, population and world-wide urbanization issues, as well as social change. Students will be required to keep a notebook and write essays. Learning will result from a blend of instructional methods including lectures, textbook reading assignments, handouts, queue-formatted discussions, cooperative learning experiences, music, films, review games, a courtroom simulation, classroom debates, and other critical thinking activities.

20th Century American History**1.00 Credit****Grade 11 or 12**

PREREQUISITE: Junior / Senior status, a positive attitude, a strong work ethic and a desire to learn.

Students will examine the history of the U.S. via a focus on the various domestic and foreign policy influences of the four major global conflicts of the 20th Century: The Great War / World War I, World War II, the Cold War (with a serious look at the Vietnam Conflict), and the War on Terror. Often this will be accomplished through examination of primary sources, documentary series, and biographic studies. Sprinkled throughout, students will explore both current events and future U.S. global threats (e.g., international relations with China, Russia and Middle East nations), and even research various conspiracy theories surrounding the attacks of 9/11/2001. Students will be required to keep a notebook. Learning will result from a blend of instructional methods including daily current event presentations, lectures, textbook reading assignments, handouts, queue-formatted discussions, cooperative learning experiences, online research, music, analysis of historic cinematic documentaries, review games, a courtroom simulation, classroom debates, and other critical thinking activities.

AP U.S. Government and Politics**1.00 Credit****Grade 11 or 12**

PREREQUISITE: For admittance in this college level course, students must have earned a “B” or higher in 10th grade U.S. History and also have the approval of the class instructor.

In United States Government and Politics students will gain an analytical perspective on government and politics in the United States. This course will focus on the general concepts used to interpret U.S. government and politics and the analysis of specific examples. Students will become familiar with various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Additionally, students will become acquainted with a variety of theoretical perspectives and explanations for various behaviors and outcomes in U.S. government and politics. Topics include: Constitutional Underpinnings, Political Beliefs and Behaviors, Political Parties, Interest Groups, Mass Media, Governmental Institutions, Public Policy, Civil Rights, and Civil Liberties. Everything examined in this course is to prepare students for the A.I.R. Test and also the culminating AP Exam. Students will be expected to take lecture notes, keep a well maintained and organized notebook, speak and effectively communicate with the instructor and his/her peers and write a variety of essays and reports.

Government**1.00 Credit****Grade 11 or 12**

Students will examine the foundation of the American governmental system (emphasis will be placed on the American Revolution, the Declaration of Independence and the U.S. Constitution). Other areas to be studied include: Civil Rights and Liberties, the Congress, the Presidency, the Judicial system, the American Democratic process (with an emphasis on voting) and State and Local government. Students will be required to take notes from lectures and maintain a notebook throughout the year to prepare them for the **End of Year Exam and a Project Based Assessment**.

Cold War**0.50 Credit****Grade 11 or 12**

How distinct was the Cold War as a period in international history? “It was the first confrontation in which the major powers had the ability to destroy life on earth.” Beyond this fundamental distinction, the Cold War is marked by unique ideological, economic, military, and political features, which we will investigate through the aid of scholarly readings, films, and primary sources. Like any history, the interpretation of Cold War events, developments, and relations among political actors continues to change, as historians gain access to more declassified documents, more actors are willing to be interviewed, and – as time passes – we simply gain more perspective on the many dramatic events that took place between 1946 and 1989. These topics will include its origins; brinkmanship; the Sino-Soviet split; the USSR and its satellite states; Cold War culture; Cold War espionage and intelligence; détente; renewal of the Cold War (late 1970s-1985); the end of the Cold War; and Cold War legacies. Our goal is not to cover every facet of the Cold War in chronological order, but to target certain topics that will help us look at today's world. The class format in any given week will consist of class discussion and student presentations of primary sources, scholarly sources, and research projects.

History of Sports

0.50 Credit

Grade 11 or 12

Development of sports and their significance in American life during the 20th Century. With an emphasis on social, cultural, economic, and political impact of both spectator and participating sports.

Financial Literacy

0.50 Credit

***Required of all juniors**

Students will have an understanding of financial concepts, with practical application through activities and projects, will enable students to leave this course with applicable, useful skills for life. This course explores the basic personal financial needs of most individuals and emphasizes the basics of budgeting, saving, checking, investments, credit, credit cards, stock market investments, insurance, and paying and preparing income tax returns.

FOREIGN LANGUAGE DEPARTMENT

Spanish I

1.00 Credit

PREREQUISITE: “C” or better in Eighth grade English and reading courses as well as the recommendation of the Eighth grade English teacher.

A \$15 workbook fee is required. Students are introduced to the four skills required for foreign language acquisition, (i.e.), listening, speaking, writing and reading. A text and a workbook are used for the instruction and application of grammar in reading and writing. Classes are conducted in Spanish and in English to reinforce grammar lessons and to introduce cultural topics. Requirements are: class participation, homework, quizzes, and tests.

Spanish II

1.00 Credit

PREREQUISITE: A grade of “C” or better in Spanish I

A \$15 workbook fee is required. Spanish II expands and enhances the four skills of foreign language acquisition, (i.e.) listening, speaking, writing and reading used in Spanish I. Grammar is expanded to include all verb tenses as well as idiomatic expressions. A text, a workbook and a Spanish-English dictionary are used for instruction. Participation, conversation, vocabulary acquisition and instruction in the culture and geography of Spanish speaking countries are accelerated. Classes are conducted in Spanish and English to reinforce grammar, vocabulary and idiomatic study. Requirements are: class participation, homework, quizzes and tests, and paragraph writing in the target language.

Spanish III

1.00 Credit

PREREQUISITE: Must have completed Spanish I and II with a grade of “C” or better. Spanish III can only be taken after having completed Spanish I and II.

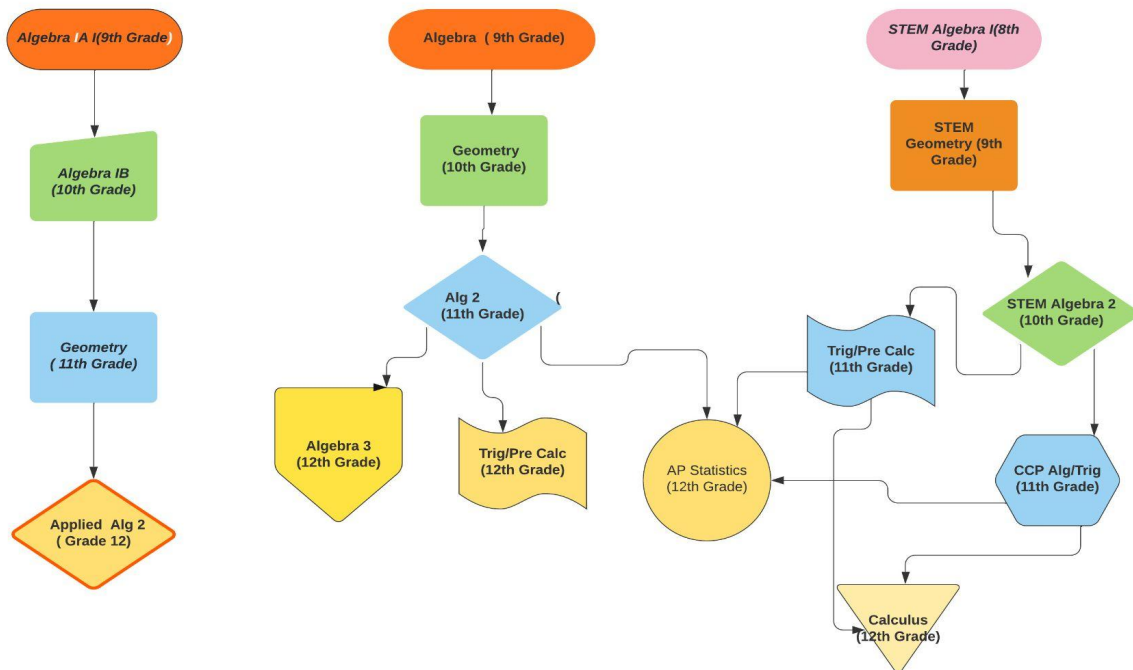
Spanish III uses the four skills of listening, speaking, writing and reading in depth. Experiences of Spanish I and II now become integrated. In addition to the text, students explore reading selections by Spanish writers during which they discuss and write about in Spanish. A workbook and a Spanish-English dictionary are used. Requirements are: class participation in Spanish only, homework which includes reading and writing, vocabulary quizzes, tests and a research project on a certain topic of Hispanic culture.

Spanish IV

1.00 Credit

PREREQUISITE: Must have completed Spanish I, II and III with a grade of “C” or better.

Spanish IV is an advanced continuation and integration of speaking, writing and reading in the language. Proficiency in translation, composition and oral skills is stressed. Focus is placed on music, art, daily living, and the politics of Spain. Requirements include class participation in Spanish, homework, oral and written quizzes and tests, as well as individual research projects.



MATHEMATICS DEPARTMENT

STEM Algebra I (8th grade)

1.00 Credit

Grade 8

PREREQUISITE: Advanced AIR math scores, grades earned in previous math courses, attendance, other forms of assessments and teacher recommendation

This course, offered to 8th graders, is a high school level course.

Students will earn graduation credit and grade point average (G.P.A.) will begin. The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades as described by the Common Core State Standards. The critical areas deepen and extend the understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards are applied throughout the course and together with the content standards and culminates with Ohio’s End of Course Exam. Additional mathematics (Common Core STEM standards) is included to support advanced courses in the areas of science, technology, engineering, and mathematics such as calculus, advanced statistics, or discrete mathematics. **A TI-84 Plus Graphing Calculator is required.**

Algebra I**1.00 Credit****Grade 9**

PREREQUISITE: Completion of Eighth Grade Math

Algebra I is a full year course. The fundamental purpose of this course is to formalize and extend the mathematics the students learned in Algebra as described by the Ohio Common Core state standards. The critical areas deepen and extend the areas of not only linear and exponential but also quadratic relationships by contrasting them with each other and by applying models to data that exhibit a linear, exponential or quadratic trend. Students engage in methods for analyzing, solving and using functions. The Mathematical Practice Standards are applied throughout the course in conjunction with the content standards and culminates with Ohio's End of Course Exam. Additional mathematics (optional Common Core STEM standards) is concluded to provide advanced courses in the areas of science, technology, engineering and mathematics such as calculus, advanced statistics or discrete mathematics. **Any TI- 84 Graphing Calculator series is required.**

Algebra 1A**1.00 Credit****Grade 9**

PREREQUISITE:: Placement based on completion of Eighth Grade Math, AIR Math test score, grades earned in previous math courses, attendance, other forms of assessments, and teacher recommendation. Students who have earned a D or F in 7-8th grade math courses will be required to take this course.

Algebra 1A (Part 1 of 2) is a full year course. The fundamental purpose of this course is to allow more time for students to formalize and extend the mathematics the students learned in the middle grades as described by the Ohio Common Core state standards. The critical areas deepen and extend the areas of linear and exponential relationships by contrasting them with each other and by applying linear and exponential models to data that exhibit a linear or exponential trend. Students engage in methods for analyzing, solving and using functions. The Mathematical Practice Standards are applied throughout the course in conjunction with the content standards. Ohio's End of Course exam is not taking until completion of Algebra 1B. **Any TI- 84 Graphing Calculator series is required.**

Algebra 1B**1.00 Credit****Grade 10**

Prerequisite: Completion of Algebra IA

Algebra 1B (Part 2 of 2) is a full year course. The fundamental purpose of this course is to allow more time for students to formalize and extend the mathematics the students learned in Algebra 1A as described by the Ohio Common Core state standards. The critical areas continue to deepen and extend the areas of not only linear and exponential but also quadratic relationships by contrasting them with each other and by applying models to data that exhibit a linear, exponential or quadratic trend. Students engage in methods for analyzing, solving and using functions. The Mathematical Practice Standards are applied throughout the course in conjunction with the content standards and culminates with Ohio's End of Course Exam. **Any TI- 84 Graphing Calculator series is required.**

Geometry**1.00 Credit****Grade 9 or 10**

PREREQUISITE: Algebra I

Geometry is a full year course that is the second year of a four year core curriculum. The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades as described by the Common Core State Standards. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The Mathematical Practice Standards are applied throughout the course in conjunction with the content standards. **A TI-84 Plus Graphing Calculator is required.**

STEM Geometry

1.00 Credit

Grades 9

PREREQUISITE: An A or B in STEM Algebra I

STEM Geometry is a full year course that is the second year of a four year core curriculum. The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades as described by the Common Core State Standards. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The Mathematical Practice Standards are applied throughout the course and together with the content standards. Additional mathematics (optional Common Core STEM standards) is included to support advanced courses in the areas of science, technology, engineering, and mathematics such as calculus, advanced statistics, or discrete mathematics (as indicated by (+) in the learning standards). **A TI-84 Plus Graphing Calculator is required.**

Algebra II

1.00 Credit

Grade 10 or 11

PREREQUISITE: Geometry

Algebra II is a full year course that is the third year of a four year core curriculum. Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions as described by the Common Core State Standards. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards are applied throughout the course and together in conjunction with content standards. **A TI-84 Plus Graphing Calculator is required.**

STEM Algebra II**1.00 Credit****Grades 10 or 11**

PREREQUISITE: An A or B in STEM Geometry

STEM Algebra II is a full year course that is the third year of a four year core curriculum. Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions as described by the Common Core State Standards. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards are applied throughout the course and together with the content standards. This course will include STEM standards. Additional mathematics (optional Common Core STEM standards) is included to support advanced courses in the areas of science, technology, engineering, and mathematics such as calculus, advanced statistics, or discrete mathematics (as indicated by (+) in the learning standards). **A TI-84 Plus Graphing Calculator is required.**

Algebra III**1.00 Credit****Grade 12**

PREREQUISITE: Algebra II or Quantitative Reasoning

Algebra III is a full year course that is the fourth year of a four year core curriculum. Algebra III is a full year course that is the fourth year of a four year curriculum. It is intended for the student who is not ready to move onto Trigonometry/Pre-Calculus, but who wants to improve his/her math skills for post-secondary education. Topics discussed throughout the year include: the study of functions and their graphs; complex numbers; rational expressions; conic sections; sequence and series; trigonometry in radians and degrees including unit circle values; trig identities, right triangle Trigonometry; Law of Sines; Law of Cosines. **A TI-84 Plus Graphing Calculator is required.**

Trigonometry/Pre-Calculus**1.00 credit****Grade 11 or 12**

PREREQUISITE: A "B" or better in STEM Algebra II or Algebra II and teacher recommendation.

Trigonometry is taught during the first section of this year-long course. Topics covered are: Trigonometric functions, circular functions, their graphs, their properties, oblique triangles, sinusoidal variations, vectors and complex numbers.

Pre-Calculus is the second section of the course. Topics covered include a review and further in-depth review of algebraic and geometric concepts, the study of limits and continuity, and Calculus formulations including derivatives, integrals and their applications, logarithmic functions and exponential functions. **A TI-84 Plus Graphing Calculator is required.**

CCP College Algebra 1510**1.00 Credit****Grade 11 or 12**

PREREQUISITE: You must be admitted to YSU and accepted into this course. YSU requires at least a Math ACT score of 27 or 46 on the ALEKS math placement test.

Topics include real numbers, equations, and inequalities, linear, quadratic, polynomial, exponential, and logarithmic functions, graphing techniques, systems of equations, and applications. 4 semester hours.

CCP Trigonometry 1511

1.00 Credit

Grade 11 or 12

PREREQUISITE: You must be admitted to YSU and accepted into this course. YSU requires at least a C in College Algebra 1510 and a minimum Math ACT score of 27 or ALEKS math placement score of at least 46.

Topics include algebraic structure and graphs of trigonometric functions and inverse trigonometric functions, angle measurements, similar triangles, trigonometric identities, vectors, complex numbers, polar coordinates and solving trigonometric equations with applications. 3 semester hours.

AP Statistics

1.00 Credit

Grade 12

PREREQUISITE: Students must have completed Algebra II with at least a “B” average or have permission from the instructor.

This is a course designed for students from different disciplines who desire introduction to statistical reasoning. The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible to receive college credit and/or placement into advanced courses in college. **A TI-84 Plus Graphing Calculator is required.**

CCP Calculus

1.00 credit

Grade 12

PREREQUISITE: “C” or better in College Algebra and CCP Trigonometry and at least a 29 on the Math ACT or a 76 on the ALEKS placement test. This course is offered through Youngstown State University. Students must be admitted to YSU to participate in this class.

This course is an introduction to college calculus. Topics include a thorough study and application of functions, limits, differentiation, and integration. Emphasis will be placed on higher order thinking skills and application problems.

Computers and Technology

Computers 10**0.5 credit****Required by all Sophomores**

Graphic Design is an introduction to digital imaging and computer-based art. Students will explore different avenues of visual communication, self-expression, and creative problem solving through the creation of commercial, interactive, and fine art. All work is based upon the study, aesthetics, purpose, and criticism of digital art forms. The basics of Pixelmator and Affinity Photo will be discussed and implemented.

Multi-Media I**0.5 Credit****Grades 11 and 12**

Students will be responsible for the daily operations of the Mineral Ridge TV Production Studio facility. The students will learn about the equipment used in the studio, how to run the TV studio efficiently and how to shoot an interview from in-front and behind the camera. The students will also learn how to be an anchor on the daily news broadcast. The students will practice and improve their speaking skills, which are extremely important to life after high school. All students are expected to anchor the daily news during the school year.

Multi Media II**0.5 Credit****Grades 11 and 12**

This course will focus on using various types of technology to create multimedia projects that will be incorporated in the afternoon video announcements. Students will learn video editing using Final Cut Pro X and Motion 5. Students will become proficient in video editing techniques such as the use of blue/green screens. Also, students will be responsible for the behind the scenes jobs such as camera operators, sound, lighting, directors, producers, etc.

3D Printing I - Innovation, Creativity and Design Thinking 0.50 Credit Grades 11 and 12

A \$10 fee is required. Innovation, Creativity and Design Thinking (ICDT) is an inquiry-focused, problem-based course that explores the facets of creativity, design and innovation which affect mankind's ability to grow, change and adapt and ultimately, to survive. Technical, scientific and practical roles and processes of creativity, design, critique, brainstorming and innovation will be presented. Students will have experiential opportunities using design and creation applications and methodologies in a technology-rich environment. The 21st century skills of collaboration, critical thinking and communication are embedded in this course. Students will learn to critically assess their own work and the work of others from a global perspective, understanding that the communication of design is influenced by cultural and environmental context. Students, individually, and as members of a multidisciplinary team, will innovate and design products and solutions to real-world scenarios, evaluate through an iterative process and then create their designs through remote use of digitally controlled prototyping equipment. ICDT is based on the INVENTORcloud technology platform which consists of hardware technology and software applications.

Prerequisite:3D Printing I

A \$10 fee is required. Creative Entrepreneurship explores how emerging ICT, social media, and technologies such as 3D printing, additive manufacturing and rapid prototyping are transforming career and entrepreneurial opportunities. Using the technical, team building and project development skills learned in the prerequisite Innovation, Creativity and Design Thinking, students learn how to apply creative thinking, pursue entrepreneurial opportunities and affect their futures with emerging technologies. Students learn how to write a 21st century business plan, investigate different forms of entrepreneurial financing, the influence of crowd-sourcing and how the history of entrepreneurship affects entrepreneurship of today. They invent, design, and build a product and then learn how to create a business opportunity using social media and 21st century enabling technologies. This course is based on Innovation, Creativity & Design Thinking, the prerequisite course. ICDT explores the facets of creativity, design and innovation which affect mankind's ability to grow, change and adapt and ultimately, to survive. Scientific and practical roles and processes of creativity, design, critique, brainstorming and innovation are presented. The 21st century skills of collaboration, critical thinking and communication are embedded in ICDT. Students learn to critically assess their own work and the work of others from a global perspective, understanding that the communication of design is influenced by cultural and environmental contexts. These skills are applied to problem-based challenges where teams solve problems and use CAD programs to create virtual prototypes which are then produced with a rapid prototyping lab including 3D printing and additive manufacturing equipment.

ART DEPARTMENT

Drawing I**0.50 CREDIT****Grades 9, 10, 11, 12**

A \$15 fee is required. This course will focus on applying the elements and principles of art and design with basic fundamentals of drawing by using various mediums. Drawing techniques that will be introduced: observation drawing, expressive drawing, pen and ink techniques, and 2D design, while using various tools and materials.

Drawing II**0.50 CREDIT****Grades 9, 10, 11, 12**

PREREQUISITE: Drawing 1

A \$15 fee is required. This course will focus on applying the elements and principles of art and design with basic fundamentals of drawing by using various mediums. Drawing techniques that will be introduced: observation drawing, expressive drawing, pen and ink techniques, and 2D design, while using various tools and materials. This course builds upon the skills learned in Drawing I with more in depth approach to learning more advanced drawing skills.

Painting I**0.50 CREDIT****Grades 9, 10, 11, 12**

PREREQUISITE: None

A \$20 fee is required. This course will focus on applying the elements and principles of design with basic fundamentals of painting by using various painting techniques. Students will be introduced to several painting mediums while exploring art history and cultural painting styles.

Painting II**0.50 CREDIT****Grades 9, 10, 11, 12**

PREREQUISITE: Painting I

A \$20 fee is required. This course will focus on applying the elements and principles of design with basic fundamentals of painting by using various painting techniques. Students will be introduced to several painting mediums while exploring art history and cultural painting styles. This course builds upon the skills learned in Painting I with a more in depth approach to learning more advanced painting skills.

3D Design**0.50 CREDIT****Grades 11, 12**

PREREQUISITE: Drawing I / Painting I

A \$20 fee is required. This course is recommended for students who have an interest in three-dimensional design. It provides students with fundamental knowledge and diverse experience necessary for success in additional 3D art classes. This course encourages students to develop their natural artistic talents. Assignments emphasize design, craftsmanship, and problem solving. Units explore the fundamentals involved in tile mosaics, sculptures, paper mache, art history, clay projects, assemblages, etching, and metals.

AP Studio Art**1.00 CREDIT****Grades 11 or 12**

Prerequisite: Teacher approval

A \$25 fee is required. This course will teach the serious art student advanced skills and the practical experience of art. AP Studio Art is not based on a written exam, but instead students submit a portfolio of at least 20 pieces of art for evaluation at the end of the school year. Studio Art students are expected to be independent thinkers who can apply their knowledge of art elements and principles to their work, regardless of media. Students should be able to demonstrate mastery of advanced level design skills and concepts, as well as analyze work through ongoing critical analysis of group and individual critiques. Students choose the portfolio (2D Design or Drawing) they will submit to the AP Board for review.

Ceramics**0.50 CREDIT****Grades 11, 12**

PREREQUISITE: Drawing I / Painting I

A \$20 fee is required. This course builds upon prior knowledge with an emphasis on developing a greater understanding of art and application of the Elements of Art and Principles of Design. Specific projects will be assigned with an emphasis given to design and craftsmanship. The focus will be on hand building construction i.e. coil, slab, thrown, and other ceramic projects.

Digital Imaging and Printing**0.50 CREDIT****Grades 9, 10, 11, 12**

Prerequisite: CP Photography/Drawing I/Painting I

\$20 fee is required. This course explores the unlimited possibilities of creating works of fine, digital and wearable art through Digital Media. The digital imaging curriculum is project based, while considerable consideration will be given to the development of visualization skills, including the study of light. Students will learn about image manipulation, digital based video editing and digital printing

A \$20 fee is required. This course explores the possibilities of the phone as the modern day camera. Having the camera present at all times allows for the documentation of everyday life and the idea that art and imagery are all around you. This course will heighten student's sensory skills, leading to better images and opening up a new form of photography. With the cell phone and the use of the computer, students will create new art forms based upon assignments given to them specifically to be photographed in day-to-day situations. Students will acquire photographic skills in composition, computer rendering techniques in such programs as Photoshop and will create imagery suitable for internet and gallery display.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

Health 9

0.50 Credit

Students in Health 9 will have the opportunity to:

- A) Explore a variety of health topics to reinforce and acquire health facts and knowledge.
- B) To discuss desirable physical, mental, emotional, and social practices which promote optimal health.
- C) To develop strategies to make effective decisions on matters pertaining to personal and community health.

The health course is a requirement for graduation from Mineral Ridge High School.

Physical Education 9

0.25 Credit

Students enrolled in Physical Education 9 will have the opportunity to develop an understanding, awareness, appreciation and interest in the following areas:

- A) Physical Fitness Activities
- B) Individual and Team Sports
- C) Rhythmic Activities
- D) Racquet Activities

Physical Education 10

0.25 Credit

Physical Education 10 is an activity course offered to 10th grade students. Students will have the opportunity to develop and improve skills and knowledge in the following areas:

- A) Physical Fitness Activities
- B) Individual and Team Sports
- C) Rhythmic Activities
- D) Racquet Activities

NOTE: All 3 above listed courses are required courses in order to graduate from Mineral Ridge High School unless you are using a PE waiver in place of gym.

If you are planning on participating in 2 seasons of high school athletics or marching band, you could choose to use a PE waiver to fulfill your PE graduation requirement. Come to the office to pick up the required paperwork at the end of your 8th grade year.

Advanced Physical Education**0.25 Credit****Grade 11 or 12**

PREREQUISITE: Physical Education 9 and Physical Education 10

Advanced Physical Education is an elective class for juniors and seniors. Activities will include traditional competitive sports, fitness and lifelong leisure activities. Some activities will require participation outside of class time. Advanced Physical Education will emphasize the importance of movement for health, relaxation, and enjoyment. Physical activity will be encouraged as a healthy lifelong lifestyle choice.

Athletic Training**0.25 Credit****Grade 11 or 12**

The Athletic Training Course is designed with the following goals established through the course of study which include: A) To enable students to become aware of responsibilities and career opportunities in the field of athletic training. B) To provide students with basic facts relative to the prevention, recognition, evaluation and care of common athletic injuries. C) To enable students to develop appropriate safety and first aid skills for dealing with illness and injuries.

Strength & Conditioning**0.25 Credit****Grades 11 or 12**

This elective course will focus on sports related strength training and athletic conditioning utilizing the weight room, jump stretch, and other training equipment. Emphasis of curriculum will be placed on each student's choice of sport(s) and tailored to their level of ability. The course is suitable for those who are new to weightlifting and fitness and are anxious to learn about it, in season and out of season athletes, and/or anyone who wants to improve his or her health and wellness during the school day.

Ethics in Sports**0.25 Credit****Grades 11 or 12**

This elective course will explore ethical issues in sports, including the value of winning, violence in sports, and intercollegiate athletics and their impact on education. Students will learn through film and lectures some of the fundamental ethical issues raised by sport, ranging from investigation of the nature of sports to see what values, if any, sports do and should promote and the educational significance of sports especially in higher education in the U.S, violence in sports, gender equity in sports, and the ethics of using performance enhancing drugs.

Lifetime Sports**0.25 Credit****Grades 11 or 12**

This semester course is designed to introduce and provide opportunities for students to develop the basic and intermediate skills in a variety of sports/activities and conditioning. The content articulates the knowledge, skills, and confidence students need to maintain meaningful physical activity throughout their lifetime. Badminton, Ping Pong, Bocce, Cornhole, Volleyball, Ultimate Frisbee and many other activities will be offered during this course.

Stress Management**0.25 Credit****Grades 11 or 12**

A practical and hands-on elective course that will help to provide the tools and build the skills needed to manage or reduce stress. Students will learn and practice a variety of meditation and yoga techniques to focus the mind, reduce stress and improve overall wellness. When practiced regularly meditation has been proven to lead to many personal changes that improve mental and physical health.

MUSIC DEPARTMENT

Concert and Marching Band

1.00 Credit

Grades 9, 10, 11, 12

PREREQUISITE: Completion of 5-8 grade bands or competency on a band instrument determined by the director

Required marching band rehearsals begin at the end of July or the beginning of August. The marching band performs popular music for football games, band nights, and pep rallies. All band students are required to play in marching band with the exception of varsity football players or because of a medical excuse. Concert band performs at two concerts (Christmas & Spring) and a band competition held in March. Grades are based on participation, playing given assignments, and attendance at performances. There will be a fee associated with this class.

Concert Choir

1.00 Credit

Grades, 9, 10, 11, 12

PREREQUISITE: Completion of 5-8 chorus, 5-8 bands, or audition

The choir at Mineral Ridge High School performs at two evening concerts (Christmas & Spring). Attendance at these performances is mandatory and part of the grade. Students will learn to sing in a variety of styles including pop, secular, sacred, and folk music. The fundamentals of singing (breath control, diction, etc.) notation, basic music theory, ear training, and sight singing will be taught. Grades are based on participation, attitude and attendance at performances, as well as in-class worksheets and quizzes. There will be a fee associated with this class.

History of Rock Music I

0.50 Credit

Grades 9, 10, 11, 12

This course is designed to familiarize the student with the history of Rock music. Prominent players and groups of each era will be covered, as well as sociological, economic and cultural factors that shaped the many styles of Rock music. Classroom activities will include listening, analyzing, writing, class discussions, research, and presentations. This class will focus on artists and groups from the Rhythm and blues of the late 1940's through the soul music of the 1960's.

History of Rock Music II

0.50 Credit

Grades 9, 10, 11, 12

PREREQUISITE: Completion of History of Rock Music I

This course is a continuation of History of Rock Music I. Prominent players and groups of each era will be covered, as well as sociological, economic and cultural factors that shaped the many styles of rock music. This class will focus on the psychedelic rock music of the 1960's and 1970's and continue through the rap music of the late 1990's and 2000's

Music Appreciation

1.00 Credit

Grades 9, 10, 11, 12

Music Appreciation will focus on the various aspects of listening to music. This class will focus on elements of music such as melodies and harmonies, the softness or loudness of music, its speed, and the mood the music creates. Rhythms and musical themes will also be explored in all types of music, including classical music, jazz, folk music, and rock music.