

# **Warren High School**

## **Course Descriptions**

### **2022-2023**



**Ryan Lemley, Principal**

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**130 Warrior Drive  
Vincent, Ohio 45784  
740-678-2393  
[www.warrenlocal.org](http://www.warrenlocal.org)**

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### WHS CORE COURSES

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#### **Language Arts**

CP English 9 A/B  
Ramp Up English A/B  
CP English 10 A/B  
CP English 11 A/B  
CP English 12 A/B  
AP Seminar A/B  
AP Research A/B  
AP Language and Composition  
AP Literature and Composition  
CCP Composition 1 A  
CCP Composition 2 A  
CCP American Literature A  
CCP British Literature A  
CCP Technical Writing A  
CCP Speech A

#### **Math**

CP Algebra 1 A/B  
Geometry A/B  
CP Geometry A/B  
Algebra 2 A/B  
CP Algebra 2 A/B  
Mathematics Modeling and Reasoning A/B  
Applied Business Math A/B  
Foundations of Mathematics A/B  
Statistics A  
Trigonometry B  
CCP Technical Math A/B  
CCP Statistics A/B  
CCP College Algebra A/B  
AP/CCP Calculus A/B

#### **Social Studies**

CP Modern World History A  
CP Economics A  
CP American History A/B  
CP American Government A/B  
CCP American Government A

#### **Science**

CP Physical Science A/B  
Foundations of Physical Science A/B  
CP Biology A/B  
Foundations of Biology A/B  
CP Chemistry A/B  
CP Physics A/B  
Applied Science A/B  
Environmental Science A  
Physical Geology A  
Intro to Chemistry A/B  
CP Anatomy & Physiology A/B  
AP Biology A/B

#### **Business**

Business Foundations A – 10<sup>th</sup> grade

#### **Physical Education/Health**

Foundations of Physical Education A/B  
Health A

**Team taught courses are available in all core areas**

**A/B** = Year Long Course

**A** = Semester Course

**CCP** = College Credit Plus through WSCC

**AP** = Advanced Placement

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### WHS ELECTIVE COURSES

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#### **Art**

Art 1, 2 A/B  
Intro to Ceramics A  
Intro to 3D Design A  
Advanced Studio Art A/B

#### **Agricultural Education**

Agriculture Food & Natural Resources A/B  
Animal & Plant Science A/B  
Business Management for Agricultural and  
Environmental Systems A/B  
Environmental Science and Natural  
Resources A/B  
Food Science and Technology A/B  
A & E Capstone A/B

#### **Business**

Business Foundations A  
Human Resources Management A  
Legal Environment of Business A  
Management Principles A  
Marketing Principles A  
Business Applications & Economics A

#### **Engineering/Manufacturing Technologies**

Architectural Design - Drafting CAD A/B  
Architectural Design -Structural A/B  
Robotics A  
Mechanisms & Drives A  
Machine Tools (Woods) A/B  
Welding Technologies A/B  
Advanced Woods A/B

#### **Language Arts**

Drama A/B  
Reading A/B  
ACT Prep A  
Public Speaking A  
Creative Writing A/B  
French 1, 2, 3, 4 A/B  
Spanish 1, 2, 3, 4 A/B

#### **Leadership**

Leadership Excellence  
CCP Intro to Teaching  
CCP Education Seminar & Field Work

#### **Music**

Band A/B  
9<sup>th</sup> Performing Arts Primer  
10<sup>th</sup> Musical Concepts  
11-12<sup>th</sup> Music Ensemble and Composition  
Musical Engineering A/B  
Voice A/B  
Treble Chorus A/B  
Bass Chorus A/B  
Acapella A/B  
Bells 1, 2, 3 A/B

#### **Physical Education**

Athletic Fitness Training A/B  
Advanced PE A/B

#### **Social Studies**

African American History A/B  
American History through Film A  
Contemporary World Issues A/B  
Sociology A  
Psychology A/B  
Mock Trial A/B  
CCP Western Civilizations A  
AP United States History A/B

#### **Visual Arts**

Photography and Graphic Design A/B  
Multi Media Web Design A/B  
Digital Drawing and Animation A/B  
Visual Distribution A/B

**A/B** = Year Long Course

**A** = Semester Course

**CCP** = College Credit Plus through WSCC

**AP** = Advanced Placement

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### LANGUAGE ARTS

#### **CP ENGLISH 9**

113A .5CR

GRADE LEVEL: 9

113B .5CR

CP English 1 is an introduction to high school language arts, focusing on ninth grade English language arts skills as outlined by the Ohio Department of Education in New Learning Standards in preparation for Ohio's graduation requirements. Skills emphasized in this course include reading comprehension strategies for both fictional and nonfictional text, vocabulary acquisition, basic writing, usage, communication, media literacy, independent reading, study skills, and research. Summer reading is also an important component of this class.

#### **ENGLISH 9 RAMP UP**

113RA/RB .5 CR EACH

GRADE LEVEL: 9 AND 10 (BY RECOMMENDATION ONLY)

113/RLA/RLB .5 CR EACH

CP English 1 RU is a double-blocked language arts class designed for students who are two to three years below grade level in language arts according to standardized test scores. Students enrolled in this course will learn and review language arts standards not previously mastered. They will also be focusing on ninth grade English language arts skills as outlined by the Ohio Department of Education in New Learning Standards in preparation for Ohio's graduation requirements.

The intent of this course is to create competent readers and writers by total immersion in both reading and writing. The program rests on the following basis:

- improving students' access as well as ability to understand a wide variety of reading materials
- aiding students' selection and evaluation of these materials
- providing time in school to read, write, and discuss.

Students will, therefore, participate in an individualized reading and writing curriculum.

#### **CP ENGLISH 10**

123A .5 CR

GRADE LEVEL: 10

123B .5 CR

College Preparatory English 10 focuses on tenth grade Common Core content standards as outlined by the Ohio Department of Education in preparation for the end-of-the-year assessments. Within various thematic units, students will study all genres of fiction and nonfiction with an emphasis on literary analysis, vocabulary acquisition, reading comprehension, and media literacy. Writing components will include various styles of composition with an examination of rhetoric and persuasion. Students will complete a major research paper and summer reading as requirements of this class.

#### **CP ENGLISH 11**

132A .5 CR

GRADE LEVEL: 11

132B .5 CR

College Preparatory English 11 focuses on eleventh grade Common Core content standards as outlined by the Ohio Department of Education in preparation for the ACT end-of-course exam. Study includes all genres of American literature and nonfiction with an emphasis on vocabulary acquisition, reading comprehension, media literacy, and various genres of composition. Along with several thematic units in

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an anthology, major works in this class will include *The Great Gatsby*. Students are also required to complete a major formal research paper and summer reading as components of this class.

### AP LANGUAGE AND COMPOSITION

133A .5 CR

GRADE LEVEL: 11, 12

133B .5 CR

PREREQUISITE: A minimum of a B average in College Prep English 10, and an English teacher recommendation. Strong word processing skills are required.

The college credit component of this course is taught under the guidelines of the partner university. COMP 1 emphasizes the writing and revising process with essay mastery as the primary goal. Students write in descriptive, narrative, expository, and persuasive modes. COMP 2 emphasizes the development of rhetorical skills for literary analysis, critical appraisal, and academic research. Prerequisite: COMP 1 final grade of a C or better.

The AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing.

This course teaches students to read primary and secondary sources carefully, to synthesize materials from these texts in their own compositions, and to cite sources using conventions recommended by professional organizations such as the Modern Language Association (MLA), and the American Psychological Association (APA). As well as engaging in varied writing tasks, students become acquainted with a wide variety of prose styles from many disciplines and historical periods, and gain understanding of the connections between writing and interpretive skill in reading. Concurrently, to reflect the increasing importance of graphics and visual images in texts published in print and electronic media, students are asked to analyze how such images both relate to written texts and serve as alternative forms of texts themselves.

In addition, the informed use of research materials and the ability to synthesize varied sources (to evaluate, use, and cite sources) are integral parts of this course. Students move past assignments that allow for the uncritical citation of sources and, instead, take up projects that call on them to evaluate the legitimacy and purpose of sources used.

-[www.collegeboard.com](http://www.collegeboard.com)

### CP ENGLISH 12

142A .5 CR

GRADE LEVEL: 12

142B .5 CR

College Preparatory English 4 focuses on the twelfth-grade New Learning Standards as outlined by the Ohio Department of Education in preparation for the ACT end-of course exam. Study includes all genres of British literature and nonfiction with an emphasis on vocabulary acquisition, reading comprehension, media literacy, and various genres of composition. Along with several thematic units in an anthology, major works in this class include *Beowulf*, *The Iliad*, *Hamlet*, and *1984*. Students in the course are presented with various assignments that prepare them for the freshman year in college such as summer reading, a college application essay, formal analytical essays, and a major formal research paper.

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### AP ENGLISH LITERATURE AND COMPOSITION

143A .5 CR

GRADE LEVEL: 11, 12

143B .5 CR

PREREQUISITE: Grade of “C” or better in AP Language and Composition or grade of “B” or better in other English courses and recommendation by former English teacher

The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work’s structure, style, and themes, as well as such smaller scale elements as the use of figurative language, imagery, symbolism, and tone.

The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. The reading in this course builds upon the reading done in previous English courses. These courses include the in-depth reading of texts drawn from multiple genres, periods, and cultures.

Writing in this course is used to understand a piece of literary work and involves writing response and reaction papers along with annotation and freewriting. Writing to explain a literary work involves analysis and interpretation, and includes writing brief focused analyses on aspects of language and structure. Writing to evaluate a literary work involves making and explaining judgments about its artistry and exploring its underlying social and cultural values through analysis, interpretation, and argument.

Writing is an integral part of the AP English Literature and Composition course, for the AP Examination is weighted toward student writing about literature. Writing assignments focus on the critical analysis of literature and should include expository, analytical, and argumentative essays. [www.collegeboard.com](http://www.collegeboard.com).

\*This course may be taken in conjunction with the dual enrollment American Literature and British Literature courses with the DE courses as an independent study.

\*Although the majority of this course is in preparation for the AP Literature Exam in the spring, taking that exam is optional. Students and parents should review the benefits of taking this exam for possible college credit before making a decision. <https://aphighered.collegeboard.org/>

### AP SEMINAR

130A .5 CR

GRADE 10-12

130B .5 CR

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. – The College Board

Students enrolled in AP Seminar in tenth grade will receive English credit for the course in addition to the possibility of earning college credit by scoring a 3 or better on the AP Seminar exam in May.

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### AP RESEARCH

125A .5 CR

GRADE LEVEL: 10-12

125B .5 CR

PREREQUISITE: AP SEMINAR

AP® Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. A student taking AP Research may earn college credit by scoring at least a 3 on the AP Research Portfolio and Exam in May.

### CCP COMPOSITION 1

110A 1.0 CR

GRADE LEVEL: 11 – 12

3 HRS COLLEGE CREDIT

PREREQUISITE: MUST MEET COLLEGE PLACEMENT TESTING GUIDELINES

This course emphasizes the writing and revising process with essay mastery as the primary goal. Students read literary examples as models and write in descriptive, narrative, expository, persuasive, and poetic modes. A research essay written in APA style is a requirement to successfully complete this course.

### CCP AMERICAN LITERATURE

115A 1.0 CR

GRADE LEVEL: 11-12

3 HRS COLLEGE CREDIT

PREREQUISITE: GRADE OF “C” OR BETTER IN CCP COMPOSITION 1

This survey course introduces students to a broad range of American literature (print and film) involving works from the mid nineteenth century up to the present day. The works studied will include poetry, novels, short stories, and nonfiction essays. By reading and analyzing these works, students will learn about significant themes, conventions, literary movements, and historical events during this time period and will also strengthen their critical thinking and writing skills. Writers studied will include Walt Whitman, Emily Dickinson, Mark Twain, and Robert Frost

### CCP COMPOSITION 2

111A 1.0 CR

GRADE LEVEL: 11-12

3 HOURS COLLEGE CREDIT

PREREQUISITE: GRADE OF “C” OR BETTER IN CCP COMPOSITION 1

Students will employ the writing process introduced in Composition I. Composition II emphasizes the development of rhetorical skills for literary analysis, critical appraisal, and academic research. Students will read literary texts and create several expository and persuasive essays.

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### CCP BRITISH LITERATURE

112A 1.0 CR

GRADE LEVEL: 11-12

3 HOURS COLLEGE CREDIT

PREREQUISITE: GRADE OF "C" OR BETTER IN CCP COMPOSITION 1

This survey course introduces students to a broad range of British literature (print and film) involving works from the Early Romantic Period up to the present day. The works studied will include novels, short stories, poetry, and drama. By reading and analyzing these works, students will learn about various themes, conventions, literary movements, and historical events during this time period and will also strengthen their critical thinking skills. Writers studied will include Wordsworth, Dickens, Blake, Shelley, Austen, Yeats, and Heaney.

### CCP TECHNICAL WRITING

152A .5 CR

GRADE LEVEL: 10-12

3 HOURS COLLEGE CREDIT

PREREQUISITE: GRADE OF "C" OR BETTER IN DE COMPOSITION 1

This course strengthens students' composition skills and introduces them to workplace writing including layout and design, graphics, reports, summaries, memos, letters, and job search documents. Students analyze and synthesize data, practice oral and small group communication, and create a professional writing portfolio. Prerequisite: Composition 1.

### READING

114A .5 CR

GRADE LEVEL: 9-12

114B .5 CR

Reading is a developmental course which offers opportunities for students to improve rate of comprehension, vocabulary development, independent reading, study skills, and flexibility based on the purpose of the reading. Students learn to preview, skim, and scan effectively. Both fiction and nonfiction selections are available. Individualized formats are available to meet the needs of students.

### DRAMA

135A .5 CR

GRADE LEVEL: 9-12

135B .5 CR

Drama is a college preparatory class in which students may enroll and earn credit for four years. The course includes various levels of acting, oral interpretation, dramatic literature, set design, makeup, costuming, directing, and script writing. The acting component of this course requires students to participate in a fall and spring theatrical production. Plays by playwrights such as Sophocles, Shakespeare, Williams, Miller, O'Neill, Wilder, and Simon are a major component of this course. The class fee covers admission to various plays throughout the community.

### PUBLIC SPEAKING

138A .5 CR

GRADE LEVEL: 9-12

Public speaking is an introductory course where students learn to speak effectively in both formal and informal situations. They develop insights into the structure and purpose of the basic speech process and appreciate the importance that speech plays in daily living. Skills developed include discussion, group dynamics, audience analysis, speech delivery, listening, and oral interpretation.

### CREATIVE WRITING

157A .5 CR

GRADE LEVEL: 9-12

Writing is a skill that infuses everything we do in our academic and daily lives. It's a real art to be able to choose the exact right words to accurately express the ideas in our minds. Sometimes those ideas get

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

stuck somewhere around our elbow on the trip from the brain to the page and that journey only becomes easier with practice. While academic writing is the style we will be confronted with most often, all writing can be improved with originality, creativity, and personality. This class will offer students a space to refine this art, learn new ways to infuse writing with a personal touch, and have their work analyzed and critiqued by classmates with an equal desire to write something interesting. Students will be given a chance to practice and even perhaps publish narrative short stories, creative nonfiction, poetry, or any other form the students feel inspired to tackle themselves.

### **FOREIGN LANGUAGE**

**SPANISH 1** 116A .5 CR

GRADE LEVEL: 9-12 116B .5 CR

Basic conversation and grammar are taught, balancing the skills of listening, speaking, reading and writing. Hispanic culture is an integral part of the program, complete with video, CD's and tapes. Students have access to home practice by using a website that complements the text.

**SPANISH 2** 126A .5 CR

GRADE LEVEL: 10-12 126B .5 CR

PREREQUISITE: SPANISH 1

More basic grammar is taught. Grammar and vocabulary become more extensive as the student improves listening, speaking, reading, and writing skills. Hispanic culture remains an integral part of the program. Students have access to a website for home practice. Upon completion of the course, the successful student can enter intermediate Spanish on the college level.

**SPANISH 3** 136A .5 CR

GRADE LEVEL: 11-12 136B .5 CR

PREREQUISITE: SPANISH 2

Students round out the foundation course in grammar and are exposed to various types of literature, expand their vocabulary, and polish their skills in speaking, writing and listening comprehension. Students have home access to a website that complements the test.

**AP SPANISH 4** 146A .5 CR

GRADE LEVEL: 11-12 146B .5 CR

PREREQUISITE: SPANISH 3

Students gain a feeling of mastery of grammar, improve composition skills, become more fluent, and are able to read longer works of literature. Successful students can go to college and enter advanced classes or, through testing, validate their entire foreign language requirements. Students enrolled in this course have the option of taking the advanced placement test in Spanish

**FRENCH 1** 117A .5 CR

GRADE LEVEL: 9-12 117B .5 CR

The basics of the language are taught, enhanced by introduction to French culture. There is an attempt to place equal emphasis on reading, writing, speaking and listening skills. Extensive laboratory practice is enhanced by accompanying media materials.

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### **FRENCH 2**

127A .5 CR

GRADE LEVEL: 10-12

127B .5 CR

PREREQUISITE: FRENCH 1

This course begins where French 1 ended. Students are expected to have mastered previous material. Emphasis is equally placed on all four language skills: speaking, listening, writing, and reading. At this level, students master the use of past tenses. There is a short verb quiz each week and tests after completion of individual lessons. Short cycle assessments require using all four skills mentioned above. French culture and history lessons are also included. All material may be reviewed through use of the website that accompanies the text.

### **FRENCH 3**

137A .5 CR

GRADE LEVEL: 11-12

137b .5 CR

This course begins where French 2 ended. Students are expected to have mastered previous material. All four language skills—speaking, listening, writing, and reading—form the core of classwork and exams. Students will complete weekly verb quizzes, lesson tests, and short cycle assessments. Integration of various tenses and idioms already taught will be emphasized along with the acquisition of the future and conditional verb forms. French culture and history round out the coursework.

### **AP FRENCH 4**

147A .5 CR

GRADE LEVEL: 11-12

147B .5 CR

Listening and speaking skills are more sharply honed at this level and grammar is refined. In-depth reading skills are developed through reading of excerpts of French masterpieces in historical context, and writing is practiced through longer composition assignments. Finer aspects of culture are examined through use of video and audio materials. Extensive recordings done at home help to perfect pronunciation. Students may take the advanced placement test in French.

## **MATHEMATICS**

**(Four math credits are required for graduation - Algebra I, Geometry, Algebra 2, and Math Elective)**

### **CP ALGEBRA 1**

214A .5 CR

GRADE LEVEL: 9-12

214B .5 CR

This one period course stresses unifying concepts and properties that recur throughout mathematics, with rigorous treatment of such topics as: numeric and variable expressions; real number operations; equation solving; real world problem solving; polynomials; functions; and graphing.

### **CP GEOMETRY**

224A .5 CR

GRADE LEVEL: 9-12

224B .5 CR

PREREQUISITE: ALGEBRA 1 (INCOMING 8<sup>TH</sup> GRADERS MUST HAVE EARNED AN A OR B FOR EACH NINE WEEKS)

Students will receive a rigorous and complete study of geometry including parallel and perpendicular lines, right triangles and trigonometry, circles, transformations, conjectures and proofs.

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### GEOMETRY

226A .5 CR

GRADE LEVEL: 9-12

226B .5 CR

PREREQUISITE: ALGEBRA 1

Students will receive a complete study of geometry including parallel and perpendicular lines, right triangles and trigonometry, circles, transformations, conjectures and proofs.

### CP ALGEBRA 2

232A .5 CR

GRADE LEVEL: 10-12

232B .5 CR

PREREQUISITE: CP GEOMETRY (MINIMUM OF B AVERAGE)

This course is intended for students who have above average grades and plan to attend college. After a brief review of Algebra 1 the notion of a variable is used to study relations and functions. Graphing and the use of graphing calculators are used to clarify and relate mathematical ideas. Methods and ideas useful in advanced classes such as calculus are covered. Concepts learned are related to practical applications.

### ALGEBRA 2

231A .5 CR

GRADE LEVEL: 10-12

231B .5 CR

PREREQUISITE: GEOMETRY

Algebra 2 gives students wanting to go to college and focus on careers that are not math intensive the opportunity to extend their knowledge of algebra and geometry. Students will practice simplifying and solving functions, including linear, quadratic, exponential, and logarithmic and trigonometric functions. Graphing calculators are used to help students clarify their understanding of functions.

### MATHEMATICS MODELING AND REASONING

246 .5 CR

GRADE LEVEL: 11-12

246 .5 CR

PREREQUISITE: GEOMETRY

Critical thinking and reasoning are the primary objectives and outcomes of this advanced quantitative reasoning course. It includes the application of mathematical skills including algebraic methods to the analysis and interpretation of quantitative information (numbers in context) in real-world situations to make decisions that are relevant to daily life. Additionally, the course emphasizes interpretation, precision, representation, calculation, analysis/synthesis, use of assumptions and communication through student presentations and writing. Students combine problem solving with modeling to analyze real-life situations and devise solution strategies. These habits and skills cut across disciplines, promote perseverance, and provide a gateway into successful postsecondary education and a variety of careers. This course satisfies the Algebra 2 credit requirement for graduation.

### CCP COLLEGE ALGEBRA

232A .5 CR

GRADE LEVEL: 11-12

232B .5 CR

PREREQUISITE: CP ALGEBRA 2, MUST MEET COLLEGE TESTING GUIDELINES 4 COLLEGE CREDITS

This course is intended for students who have above average grades and plan to attend college. After a brief review of Algebra 1 the notion of a variable is used to study relations and functions. Graphing and the use of graphing calculators are used to clarify and relate mathematical ideas. Methods and ideas useful in advanced classes such as calculus are covered. Concepts learned are related to practical applications. Application-based course on functions and graphs, systems of linear equations, 3x3 determinants, factoring, quadratic equations and inequalities, exponents and radicals, and logarithms.

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### FOUNDATIONS OF MATHEMATICS

240A .5 CR

GRADE LEVEL: 12

240B .5 CR

PREREQUISITE: ALGEBRA 2

Foundations of Mathematics is designed to give students the opportunity to complete four credits of math. Students will review signed numbers, solve linear equations, study perpendicular and parallel lines and review the properties of triangles. They will work with different units of measurement and use them in the study of similar figures. Students will find the slope of a line and graph equation of lines. They will do transformations of geometric figures and equations. They will do an in depth study of right triangles including the Pythagorean Theorem and right triangle trigonometry. Students will be introduced to the idea of a function and study linear and quadratic functions.

### PRECALCULUS

233A .5 CR

GRADE LEVEL: 11-12

233B .5 CR

PREREQUISITE: CP ALGEBRA 2

The precalculus course is designed to show how mathematics applies to a variety of fields such as biology, business, chemistry, economics, engineering, finance, physics, the social sciences, and statistics. The course requires the use of graphing calculators for rigorous computation of graphical analysis of data. The idea of functions is expanded to a study of classes of functions (linear, trigonometric, variation, exponential, etc.). Some probability and statistics are included as preparation for courses other than calculus.

### CP CALCULUS

242A .5 CR

GRADE LEVEL: 11-12

242B .5 CR

PREREQUISITE: PRECALCULUS

The regular calculus course is designed to give students a basic foundation in calculus without the rigor or speed of the AP calculus course. Topics include functions represented in a variety of ways: graphical, numerical, analytical, or verbal. Also students study limits, derivatives, integrals, and the relationship between derivatives and integrals. Students will be introduced to various applications of these concepts, but the main focus of the class will be to prepare students for calculus at the college level.

### CCP CALCULUS

241A .5 CR

GRADE LEVEL: 11-12

241B .5 CR

PREREQUISITE: PRECALCULUS, MUST MEET COLLEGE TESTING GUIDELINES 4 HOURS COLLEGE CREDIT

Topics include functions represented in a variety of ways: graphical, numerical, analytical, or verbal. Also students study derivatives, integrals, the relationship between derivatives and integrals, limits, approximation and applications to modeling. Introduction to the Calculus sequence with emphasis on techniques and their applications. Topics covered: functions and limits, differentiations and integration, analytic geometry, vectors, transcendental functions, multiple integrals, and infinite series.

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### **APPLIED BUSINESS MATHEMATICS**

237A .5 CR

GRADE LEVEL: 11-12

237B .5 CR

PREREQUISITE: GEOMETRY

This class is designed to teach high school level content and extends the understanding of mathematics drawn from topics such as algebra, geometry, data analysis, probability and discrete math with an emphasis on application.

### **STATISTICS**

238A .5 CR

GRADE LEVEL: 11 -12

PREREQUISITE: CP ALGEBRA 2

This class is for the student who wants to learn the basics of statistics. The concepts of collecting data, data distributions, and understanding inference with data will be discussed. Many students will have to take a statistics class when they reach college and this class will give the student the groundwork needed to get started.

### **TRIGONOMETRY**

239A .5 CR

GRADE LEVEL: 11-12

PREREQUISITE: CP ALGEBRA 2

This class is for the student who wants to extend his/her knowledge of mathematics. It will continue where Algebra II leaves off and teach the concepts of right-angle trigonometry, the unit circle, the law of sines and cosines and the trigonometric identities in depth.

### **CCP TECHNICAL MATHEMATICS**

245A .5 CR

GRADE LEVEL: 11-12

245B .5 CR

PREREQUISITE: ALGEBRA 2

3 HOURS COLLEGE CREDIT

This course is designed for those students intending to pursue careers in the areas of automotive, diesel, and industrial technology. Includes a brief review of fractions, decimals, percents, and introduction to basic algebra with emphasis on evaluation of formulas and principles of ratio and proportion. Includes English and Metric systems. Selected topics from plane and solid geometry with emphasis on practical applications to measurement of length, area, and volume. Selected topics from statistics. A scientific hand-held calculator will be used to solve these problems. THIS CREDIT IS A NONTRANSFERABLE COURSE AND WILL BE ACCEPTED FOR CREDIT ONLY AT WASHINGTON STATE COMMUNITY COLLEGE. 3 Semester Credit Hours

### **CCP STATISTICS**

244A .5 CR

GRADE LEVEL: 11-12

244B .5 CR

PREREQUISITE: ALGEBRA 2

4 HOURS COLLEGE CREDIT

Introduction to the vocabulary, concepts, formulas, and presentation of statistics as applied to business and the sciences. This course focuses on measures of central tendencies and dispersion; probability; sampling practices and theory, and probability distributions with emphasis on binomial and normal distributions. Calculator usage will be incorporated into this course. 4 Semester Credit Hours

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### SCIENCE

#### **CP PHYSICAL SCIENCE**

311A .5 CR

GRADE LEVEL: 9

311B .5 CR

Physical Science is an introductory high school course that prepares students for higher level high school science classes. Elements of chemistry, physics and space science will be introduced. Topics covered in this course will include scientific procedure, atomic structure, chemical reactions and radioactivity. Motion, forces, energy, electricity, sound, light and the solar system will also be covered. Current issues in science will be explored. Mathematical applications relative to the fields of chemistry and physics will be a focal points in this course. This course requires a basic scientific calculator such as the TI-30x or similar.

#### **FOUNDATIONS OF PHYSICAL SCIENCE**

313A .5 CR

GRADE LEVEL: 9

313B .5 CR

This course is aligned with the ODE Core Science course content for Physical Science. While covering the same topics as those in CP Physical Science, it will do so more deliberately. It is designed for the student who found 8th grade science especially challenging.

#### **CP BIOLOGY**

321A .5 CR

GRADE LEVEL: 10

321B .5 CR

PREREQUISITE: CP PHYSICAL SCIENCE

This course is aligned with the ODE Core Science course content for biology. The course is lab oriented with outside readings and projects. Included in the course are learning laboratory safety, microscope skills, cell processes, genetics, ecology and scientific analysis. The animal and plant kingdoms will be studied and include a series of dissections.

#### **FOUNDATIONS OF BIOLOGY**

322A .5 CR

GRADE LEVEL: 10

322B .5 CR

PREREQUISITE: CP PHYSICAL SCIENCE

This course is aligned with the ODE Core Science course content for biology. While covering the same topics as those in CP Biology, it will do so more deliberately. It is designed for the student who found CP Physical Science especially challenging.

#### **CP CHEMISTRY**

331A .75 CR

GRADE LEVEL: 11-12

331B .75 CR

PREREQUISITE: CP BIOLOGY, ALGEBRA 1

This course is aligned with the ODE Core Science course content for chemistry. It is an introductory chemistry course for the college bound student. It emphasizes proper laboratory techniques, chemical theory and mathematical skills while covering atomic structure, chemical bonding, nomenclature, balancing chemical equations, gasses, acids and bases, and solution chemistry. This course is good preparation for college work in chemistry as well as work in practical fields such as medical terminology and nursing.

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### CP PHYSICS

341A .5 CR

GRADE LEVEL: 11-12

341B .5 CR

PREREQUISITE: ALGEBRA 2

This course is aligned with the ODE Core Science course content for physics. Physics is considered one of the basic sciences and is valuable to anyone considering academic pursuits beyond high school. Topics include motion, force, work and energy, heat, wave properties of sound and light, electricity and Magnetism, with other special topics introduced. This course is an algebra/trig based conceptual course with an emphasis on paper based and hands-on building projects that illustrate the principles of the standards.

### CP ANATOMY & PHYSIOLOGY

391A .5 CR

GRADE LEVEL: 11 – 12

391B .5 CR

PREREQUISITE: C OR BETTER IN CP BIOLOGY with Teacher Recommendation

The anatomy portion of this course will concentrate on the body systems with particular emphasis on human musculoskeletal systems. The physiology portion of this course will concentrate on the functions of various systems as applied to humans, including physiological adaptations to environment and regulatory functions. Inquiry activities will include various dissections. Students considering careers in medical fields will especially benefit from this class.

### APPLIED SCIENCE

.5 CR 330A

GRADE LEVEL: 11-12

.5 CR 330B

PREREQUISITE: CP BIOLOGY, ALGEBRA 1 OR CONCURRENTLY ENROLLED IN ALGEBRA 1

This course provides an exploration of four Ohio Core Science courses and is geared toward students who are career-bound or non-science majors in college. It will cover pertinent topics in environmental science, physical geology, chemistry and physics. Science-related careers important to local and regional industries will be investigated, and current societal issues will be addressed.

### ENVIRONMENTAL SCIENCE

.5 CR 334A

GRADE LEVEL: 11-12

PREREQUISITE: PHYSICAL SCIENCE, BIOLOGY

Environmental science incorporates biology, chemistry, physics and physical geology and introduces students to key concepts, principles and theories within environmental science. This includes earth systems such as wildlife and wilderness, energy resources, air and water pollution, as well as global issues such as human population and climate change. Investigations are used to understand and explain the behavior of nature in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications.

### PHYSICAL GEOLOGY

.5 CR 335A

GRADE LEVEL: 11-12

PREREQUISITE: PHYSICAL SCIENCE, BIOLOGY

Physical geology incorporates chemistry, physics and environmental science and introduces students to key concepts, principles and theories within geology. Topics covered in this course include minerals, rocks, the geologic timeline, stratigraphy, plate tectonics, and oceanography. Investigations are used to understand and explain the behavior of nature in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications.

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### **INTRO TO CHEMISTRY**

.5 CR 331A

GRADE LEVEL: 11-12

.5 CR 331B

PREREQUISITE: PHYSICAL SCIENCE, BIOLOGY

Intro to Chemistry is a one period, non-lab class that gives the student an introduction to the science of chemistry. It includes the basic concepts of the CP chemistry course including atomic structure, chemical bonding, nomenclature, balancing chemical equations, stoichiometry, gasses, acids and bases, and solution chemistry, but does not go into these topics as deeply. A basic understanding of algebra I is essential to mastery of many concepts in this course. While CP chemistry is more appropriate for the four-year college-bound student, this course helps fulfill the science requirement for graduation and is beneficial for those entering community college or the workforce after graduation.

### **AP BIOLOGY**

323A .5 CR

GRADE LEVEL: 11-12

323B .5 CR

PREREQUISITE: B or better in CP Biology, Chemistry Recommended

The AP Biology course is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions.

## **SOCIAL STUDIES**

### **CP MODERN WORLD HISTORY**

415A 0.5 CR

GRADE LEVEL: 9

This required course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. The concepts of historical thinking will be enhanced through locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

### **ECONOMICS, GLOBALIZATION AND PERSONAL FINANCE**

417A .5CR

GRADE LEVEL: 9

This required course explores the fundamentals that guide individuals and nations as they make choices on how to use limited resources to satisfy their wants and needs. It will explain how these choices have created globalization and how it affects the world today. Lessons concerning economics and finances will be developed from successful practices, as well as mistakes that have been made in history, and during current times. It will also examine how individuals can avoid mistakes that were made in history and learn to manage their money and other resources effectively for a lifetime of financial security.

### **FINANCIAL LITERACY**

416A .5 CR

GRADE LEVEL: 9

The high school course prepares students to understand financial literacy concepts and helps them to become savvy consumers who can avoid scams, prepares students to make sound financial decisions, provides an overview of different types of insurance and how they protect individuals, explains how to create budgets and plan for unexpected expenses and provides an introduction to investing.

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### **CP AMERICAN HISTORY**

431A .5 CR

GRADE LEVEL: 10

431B .5 CR

CP American History is a required course which examines the history of the United States of America 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 attend to the challenges of tomorrow. Understanding how these events came to pass and their meaning for today's citizens is the purpose of this course. The concepts of historical thinking will be enhanced through locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

### **CP AMERICAN GOVERNMENT**

442A .5 CR

GRADE LEVEL: 11

442B .5 CR

How the American people govern themselves at national, state and local levels of government is the basis for this course. It is a study of the U.S. government, the problems of democracy, civics, and the American political process. Students will be able to examine and explain political science as the study of the principles and conduct of various forms of government.

### **CCP AMERICAN NATIONAL GOVERNMENT POLS1020**

443A 1 CR

GRADE LEVEL: 11-12

3 HOURS COLLEGE CREDIT

Survey of all aspects of our democratic system; emphasis on the Constitution, the three branches of government, civil rights and liberties, and foreign policy.

### **AFRICAN AMERICAN HISTORY**

422A .5 CR

GRADE LEVEL: 10-12

422B .5 CR

This class will be a study of the African American experience in United States history. The class will begin with a unit on the civilizations of Africa. The class will then study the African slave experience through the Civil War. It will then trace the continuing quest for freedom and equality of African Americans in American culture.

### **AMERICAN HISTORY THROUGH FILM**

427A .5 CR

GRADE LEVEL: 11-12

PREREQUISITE: CP AMERICAN HISTORY

Explore American history through analyzing the portrayal of feature films and documentaries. Students will explore how events, individuals and eras are depicted in film. Students will comparatively analyze the historical accuracy of the selected films, the interpretation of history by the film-maker, and consider what films can teach us about society's view of history.

### **CONTEMPORARY WORLD ISSUES**

444A .5 CR

GRADE LEVEL: 11-12

444B .5 CR

The dynamics of global interactions among nations and regions present issues that affect all humanity will be the focus of CWI. These dynamics include: competing beliefs and goals; methods of engagement; and conflict and cooperation. Contemporary issues have political, economic, social, historic and geographic components. Approaches to addressing global and regional issues reflect historical influences and multiple perspectives.

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### **SOCIOLOGY**

428A .5 CR

GRADE LEVEL: 10-12

Sociology is an elective course that studies human society and social behavior. Sociology will study the basic nature of society and the relationship between society and the individual, focusing on society functions, organization, and the impacts upon individuals and groups. Social relations, social interaction, social structure, and social change will be examined. Students are introduced to key issues addressed by contemporary sociologists; class, race, gender, sexuality, religion, globalization, education, healthcare, crime, the media, and the environment.

### **PSYCHOLOGY**

441A .5 CR

GRADE LEVEL: 11-12

441B .5 CR

This Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and the phenomena associated with many of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice.

### **CCP WESTERN CIVILIZATIONS**

429A 1.0 CR

GRADE LEVEL: 10-12

3 HOURS COLLEGE CREDIT

The examination of civilization in the Mediterranean, India, and China; Greek and Roman eras; the beginning of Christianity, the Byzantine Empire; the rise of Islam, Buddhism, and Hinduism; Feudalism; the rise of the Christian Church; Scholasticism and the universities; the Renaissance and the Reformation; the rise of the cities in Europe and Asia; the age of exploration.

### **AP UNITED STATES HISTORY**

432A .5 CR

GRADE LEVEL: 11-12

432b .5 CR

This course is an introductory college-level U.S. history course. Students cultivate their understanding of U.S. history from c. 10,000 BCE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

### **MOCK TRIAL**

410A .5 CR

GRADE LEVEL: 9-12 with recommendation

410B .5 CR

Mock Trial is a competition based course created in conjunction with The Center for Law Related Education. The student will be trained in critical thinking, procedures of the courts, and the preparation of a trial which will be presented in a competition. In this class we believe in educating and empowering Ohio's youth to be active members and protectors of our democracy. The goal is to improve society by developing citizens empowered with an understanding of our democratic system.

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### HEALTH and PHYSICAL EDUCATION

#### **HEALTH**

821A .5 CR

GRADE LEVEL: 10

The Health course is held for one semester during sophomore year and is a graduation requirement. The content is primarily concerned with those behaviors that contribute directly to optimal health while reducing the risk of disease. This includes the four domains of health, physical, social, emotional and behavioral. At the conclusion of this course, students will have a better understanding of major health concepts, a sense of responsibility for one's own health, and the necessary skills to implement desirable health behaviors and attitudes. Key concepts and topics include mental and emotional health, substance abuse prevention specifically learning about prescription drugs and opioids, nutrition along with healthy cooking, sexual health including STDs and HIV/AIDS education.

#### **FOUNDATIONS OF PHYSICAL EDUCATION**

811A .25 CR

GRADE LEVEL: 9

811B .25 CR

The Foundations of Physical Education course promotes general physical education activities, lifetime activities, team sports, individual sports and low organized games. The desired outcome of participation in this course is: increased cardiovascular endurance, muscular strength, coordination, self-esteem, leadership skill development, cooperation skills and personal hygiene. This course meets the graduation requirement for physical education.

#### **ADVANCED PHYSICAL EDUCATION**

813A .25 CR

GRADE LEVEL :10-12

813B .25 CR

PREREQUISITE: Completion of Foundations of Physical Education (or equivalent)

The Advanced Physical Education course is an extension of Foundations of Physical Education. Students will gain an increased knowledge and adaptation in the practical nature of teamwork, cooperation skills, game strategies, sportsmanship and game officiating.

#### **ATHLETIC FITNESS TRAINING**

BOYS 834A/B .25 CR

GRADE LEVEL: 9-12

GIRLS 835A/B .25 CR

Designed to meet the needs of Warren High School athletes, this course is an extension of the Athletic Department with a focus on strength and conditioning. The desired outcome is knowledge and practical application of training in strength, agility, speed, power, flexibility and conditioning. The practical application of these skills should be a carry over into the student athlete's sport. This course can be used to meet the graduation requirement for physical education.

### ART

#### **ART 1**

511A .5 CR

GRADE LEVEL: 9-12

511B .5 CR

Art 1 will be an introduction for students with no previous art background and a reinforcement and further exploration for those students with previous classes in art, into the following art media and techniques: dry media (pencil, charcoal, crayon, etc.), wet media (painting, etc.), printmaking, collage, construction, carving, modeling, crafts and multicultural arts. For students to gain the full benefit of Art 1, they should enroll for the entire year, as no projects are repeated.

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### **ART 2**

521A .5 CR

GRADE LEVEL: 10-12

521B .5 CR

PREREQUISITE: ART 1 OR BY PERMISSION

Art 2 will be a more involved, in depth continuation of Art 1 in the following art media and techniques: dry and wet media, printmaking, collage and construction, carving and modeling, crafts and multicultural arts. Students should enroll for the entire year.

### **INTRO TO CERAMICS**

510A .5 CR

GRADE LEVEL: 10-12

510B .5 CR

PREREQUISITE: ART 1 OR 2 OR BY PERMISSION

Introduction to Ceramics will explore the three basic hand building methods; pinch, coil, and slab as well as learning to use the potter's wheel. Early projects will build skills for more challenging projects later in the class. The use of clay in various cultures throughout history and in the contemporary art world will be examined. Ceramic design, production, glazing and firing will be emphasized. Students will produce functional and non-functional ceramics.

### **INTRO TO 3-D DESIGN**

542A .5 CR

GRADE LEVEL: 10-12

542B .5 CR

PREREQUISITE: ART 1, 2, OR BY PERMISSION

In 3-D Design students will develop technical skills in the use of various media such as plaster, clay, wire, paper and found objects. They will create original, three dimensional artworks using modeling, carving, assemblage, and casting methods. Students will also develop a basic understanding and appreciation of historical and contemporary sculpture. Hand and power tools will be used in this class under strict teacher supervision. Small to large scale sculptures created from found materials will be made to display and take home.

### **ADVANCED STUDIO ART**

512A .5 CR

GRADE LEVEL: 9-12

512B .5 CR

PREREQUISITE: BY EXAMINATION

This course is a curricular based course for identified talented visual art students. This course is designed as an extension of the regular visual art program to: foster individual artistic growth; cultivate the creative abilities and traits; explore an in depth study (i.e. materials, techniques, mediums) of artistic philosophy and methodology; and provide an avenue for tangible expression of the individual visual student/artist. Students will be required to keep a journal. Class is for the entire year only.

## **LEADERSHIP**

### **LEADERSHIP EXCELLENCE**

411 A .5 CR

GRADE LEVEL: 10-12

PREREQUISITE: Recommendation, Member of Student Organization, Review of Council

Students will identify five key practices of leadership based on the Ohio State University

Student Leadership Excellence curriculum. Skills will include leading a group, building trust with others, establishing core values, fostering collaboration, and practical application of life skills. A practicum is required for completion of the course.

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### **CCP INTRODUCTION TO EDUCATION EDUC 1000**

412A 1.0 CR

GRADE LEVEL: 11-12

3 HOURS COLLEGE CREDIT

Introduction to the teaching profession and college education program. This course explores the purposes, organizations, and outcomes of schooling from the perspectives of the field of social foundations of education. The focus of the course revolves around four themes: aims of education and role of schools in democratic society, economic legal and political context of schools, culturally responsive and inclusive education, and ethics and professionalization. These themes will be examined through selected readings and field experiences. Professional portfolios will be started and transfer options discussed.

### **CCP EDUCATION SEMINAR AND FIELD WORK EDUC 1560**

413A .33 CR

GRADE LEVEL: 11-12

1 HOUR COLLEGE CREDIT

Classroom observation for students preparing to enter the teaching profession. Students must attend a seminar on campus and complete 40 hours of field work. Students must clear an FBI/BCI background check to participate. Students gain knowledge and experience necessary for initial understanding of concepts and practices presented in education courses.

## **MUSIC**

### **INSTRUMENTAL BAND**

GRADE LEVEL: 9-12

Instrumental Band is a yearlong class open to all students who desire to participate. There are two divisions of the instrumental music class: marching season and concert season. Marching season involves participation in class rehearsals, after school rehearsals and performances at football games, parades, competitions, and concerts. Members of the marching band also participate in summer activities. Concert season involves participation in class rehearsals, concerts and competitions. After school rehearsals for Concert Band may be required occasionally. Students also have the opportunity to work on solo and ensemble music and may elect to participate in competition for this. After school activities beyond marching season may also include Pep Band and Jazz Band. You must be a member of the concert band to participate in Jazz Band. Pep Band is open to any and all students who wish to play. Additional fees will be associated with the participation in the Marching Band.

### **PERFORMING ARTS PRIMER - Freshman Band**

500A .5 CR

GRADE LEVEL: 9

500B .5 CR

In this first course for the Performing Arts pathway, students examine how music, dance and theatre disciplines connect to create a production. They compare and contrast different genres, social contexts and cultural aspects of dance, music and theatre from early Greek to present day. They learn the role of stagecraft, including new and emerging technology.

### **MUSICAL CONCEPT – Sophomore Band**

501A .5 CR

GRADE LEVEL: 10

501B .5 CR

From warm up skills to complex rhythmic and technical passages, students combine theory and technique to sing or play at least one musical instrument. They recognize different harmonic, rhythmic

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and melodic structures based on culture, era and style. They write, read and understand musical symbols. Other topics include scales and mode studies, dictation, transcriptions and. Students provide and receive performance critiques.

### **MUSICAL ENSEMBLE AND COMPOSITION – Junior and Senior Band**

502A .5 CR

GRADE LEVEL: 11-12

502B .5 CR

In this course, students compose music and perform in groups. They sight read music, blend and balance ensemble instrumental and/or vocal performance and respond to cues with an understanding of stage presence and choreography. They score an original musical piece using notation and sequencing software. Talent and self-confidence is strengthened through practice, social interaction, self/peer critique and performance.

### **MUSICAL ENGINEERING**

518A .5 CR

GRADES: 9-12

518B .5 CR

Students put music theory and basic music skill into practice as they engineer sound for live and recorded production. They create, capture, edit, mix and synchronize music into audio and video tracks of various formats. Topics include acoustics, reflection, absorption of sound and reverberation. Students create products based on research of audience sensitivity and need and do so in compliance with laws related to intellectual property and competition.

### **VOICE**

514A .5 CR

GRADE LEVEL: 9-12

514B .5 CR

Voice Class is a year-long course designed to introduce and reinforce the basic skills of reading music. Taught with an emphasis in singing, voice class covers basic music theory and proper voice production. Participation in concerts, the spring production, solo and ensemble festival, and class singing are major class activities. Students are expected to participate in all of the above activities, many of which occur outside of school hours. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring. This course is a prerequisite for Treble Chorus and A Cappella.

### **TREBLE CHORUS**

524A .5 CR

GRADE LEVEL: 9-12

524B .5 CR

PREREQUISITE: VOICE OR AUDITION

Treble Chorus is a year-long course for high voices where vocal techniques and music reading skills are reinforced. Music theory skills will continue to be built, with emphasis on daily sight-reading. Treble choir music from the Renaissance to the present is studied, along with popular music of multiple time periods. Participation in concerts, the spring production, solo and ensemble festival, choir contests, and class singing are major class activities. Students are expected to participate in all of the above activities, many of which occur outside of school hours. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring. Auditions are held in the spring of each year.

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### **BASS CHORUS**

534A .5 CR

GRADE LEVEL: 9-12

534B .5 CR

Bass Chorus is a year-long course for low voices where vocal techniques and music reading skills are reinforced. Music theory skills will continue to be built, with emphasis on daily sight-reading. Bass choir music from the Renaissance to the present is studied, along with popular music of multiple time periods. Participation in concerts, the spring production, solo and ensemble festival, choir contests, and class singing are major class activities. Students are expected to participate in all of the above activities, many of which occur outside of school hours. Recently, Bass Chorus has also traveled to perform the national anthem at college and national basketball games. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring.

### **A CAPPELLA**

544A .5 CR

GRADE LEVEL: 10-12

544B .5 CR

PREREQUISITE: VOICE OR TREBLE OR BASS, AND AUDITION

A Cappella is a year-long course for mixed voices which is a continuation and culmination of the studies of Treble Chorus and Bass Chorus; the study of vocal techniques, part singing, and music reading is refined. Advanced music theory and ensemble singing skills will be built, with continued emphasis on daily sight-reading. Mixed part music of four to eight parts from the Renaissance to the present is studied, along with popular music of multiple time periods. Participation in concerts, the spring production, solo and ensemble festival, choir contests, and class singing are major class activities. Students are expected to participate in all of the above activities, many of which occur outside of school hours. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring. Auditions are held in the spring of each year.

### **BELLS 1**

517A .5 CR

GRADE LEVEL: 9-12

517B .5 CR

Bells 1 is a year-long course designed to teach basic music reading skills through the art of English handbell ringing. Handbell techniques, ringing methods, and a historical survey are the objectives of this class. Various ringing exercises will be studied, and a variety of handbell literature will be performed. This literature will include arrangements of classical music, hymn tunes, and popular music from the Renaissance to the present, as well as original compositions for handbells. Students are expected to participate in various concerts and activities, many of which occur outside of school hours. Students must have a pair of black cotton handbell gloves which will be purchased from the choral department at the start of the year. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring. Class enrollment is limited to 13 students.

### **BELLS 2**

527A .5 CR

GRADE LEVEL: 9-12

527B .5 CR

PREREQUISITE: BELLS 1 OR AUDITION

Bells 2 is a year-long course designed as a continuation of the studies and objectives taught in Bells 1. Expanded techniques and more advanced music theory will be studied, and a variety of handbell literature will be performed. This literature will include arrangements of classical music, hymn tunes, and popular music from the Renaissance to the present, as well as original compositions for handbells. Students are expected to participate in various concerts and activities, many of which occur outside of school hours. Students must have a pair of black cotton handbell gloves which will be purchased from

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the choral department at the start of the year. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring. Class enrollment is limited to 13 students. Auditions are held in the spring of each year.

### **BELLS 3**

537A .5 CR

GRADE LEVEL: 10-12

537B .5 CR

PREREQUISITE: BELLS 1 OR BELLS 2, AND AUDITION

Bells 3 is a year-long course designed as a continuation and culmination of the studies and objectives taught in Bells 2. Advanced techniques and music theory will be studied, and a variety of handbell literature will be performed. This literature will include arrangements of classical music, hymn tunes, and popular music from the Renaissance to the present, as well as original compositions for handbells. Bells 3 performs extensively throughout the school year, especially at Christmastime; students are expected to participate in all of these concerts and activities, many of which occur outside of school hours. Students must have a pair of black cotton handbell gloves which will be purchased from the choral department at the start of the year. Concert uniforms are required, some parts of which are school-assigned, and some parts of which the student will be responsible for acquiring. Class enrollment is limited to 13 students. Auditions are held in the spring of each year.

## **AGRICULTURAL EDUCATION**

The Agricultural Education Department offers instruction that will introduce the student to the over 300 careers associated with the business of agriculture. The Agriculture Industry employs more Americans than any other business. The introductory class, Agriculture, Food, and Natural Resources, gives students a broad view of how animals and plants are managed in order to provide the food and fiber needed by man, as well as the maintenance and preservation of our natural resources. The advanced classes provide more in-depth investigation of animal and plant sciences and the agribusiness opportunities that support the production of quality agricultural products. The FFA Student Organization provides activities to develop the student's interpersonal and leadership skills. Students will have opportunities to practice hands-on skills with many of the topics discussed throughout the program.

### **AGRICULTURAL, FOOD & NATURAL RESOURCES**

611A .5 CR

GRADE LEVEL: 9-12

611 B .5 CR

This first course in the Agricultural and Environmental Systems career field. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry. The course includes the development of a Supervised Agricultural Experience (SAE).

### **ANIMAL & PLANT SCIENCE**

629A.5 CR

GRADE LEVEL: 10-12

629B.5 CR

PREREQUISITE: AGRICULTURAL, FOOD & NATURAL SCIENCES

This is the second course in the Agricultural and Environmental Systems Pathway. Students will apply knowledge of animal and plant science to the agriculture industry. They will be introduced to the value

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of production animals relative to the agricultural marketplace. Students will engage in animal classification and selection, body systems, along with animal welfare and behavior in relation to the production of animals. Students will learn principles of plant anatomy and physiology, and the role of nutrition, deficiencies and growing environment on plant production. Throughout the course, business principles and professional skills will be examined. The course includes the continuation of a Supervised Agricultural Experience (SAE).

### **BUSINESS MANAGEMENT FOR AGRICULTURAL & ENVIRONMENTAL SYSTEMS**

634A .5 CR

GRADE LEVEL: 11-12

634 B .5 CR

PREREQUISITE: AGRICULTURAL, FOOD & NATURAL RESOURCES

Students will examine elements of business, identify organizational structures and identify and apply management skills while developing business plans, financial reports and strategic goals for new ventures or existing businesses. Students will use marketing concepts to evaluate the marketing environment and develop a marketing plan with marketing channels, product approaches, promotion and pricing strategies. Throughout the course, students will apply concepts of ethics and professionalism while implicating business regulations will be identified. The course includes the continuation of Supervised Agricultural Experience (SAE).

### **ENVIRONMENTAL SCIENCE FOR AGRICULTURAL AND NATURAL RESOURCES**

635A .5 CR

GRADE LEVEL: 12

635B .5 CR

PREREQUISITE: ANIMAL AND PLANT SCIENCE

Students will study relationships between organisms and their environment. Principles of biogeochemical cycles, airwaterland relationships, nonpoint pollution, and wetlands will be applied. Students will examine fundamentals of resource development, agriculture sustainability, energy needs and pollution control. They will analyze and interpret data gathered from studies on the ecosystem. Throughout this course, students will develop responses to environmental problems and develop management strategies for responsible conservation and resource development. The course includes the continuation of a Supervised Agricultural Experience (SAE).

### **AGRICULTURE & ENVIRONMENTAL SYSTEMS CAPSTONE**

636A .5 CR

INDEPENDENT STUDY

636B .5 CR

GRADE: 12

PREREQUISITE: ANIMAL AND PLANT SCIENCE

Students apply Agricultural and Environmental Systems program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships. Students who enroll in this course require concurrent enrollment in one of the following: Livestock Selection, Nutrition, and Management, Mechanical Principles, Energy Systems Management, Forestry and Woodland Ecosystems, Environmental Science for Agriculture and Natural Resources, or Business Management for Agricultural and Environmental Systems. The course includes the continuation of a Supervised Agricultural Experience (SAE)

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### **FOOD SCIENCE AND TECHNOLOGY**

617A .5 CR

GRADE: 11-12

617B .5 CR

Students will examine the research, marketing, processing and packaging techniques applied to the development of food products. Learners will examine nutrient content and their chemical makeup, while applying principles of chemistry to the development of food products. They will examine and implement food safety, sanitation, and quality assurance protocols. Government regulations and food legislation will be examined and the implications to food science and technology will be identified. Students will also be using the skills learned in class to practice and prepare food.

## **BUSINESS**

### **BUSINESS FOUNDATIONS 141000**

619A .5 CR

GRADE LEVEL: 9-12

Students will obtain knowledge and skills in fundamental business activities. They will acquire knowledge of business processes, economics and business relationships. Students will use technology to synthesize and share business information. Employability skills, leadership and communications and personal financial literacy will be addressed. Students will be introduced to basic business concepts. Topics include economics, business management, leadership, the global economy, the role of consumers, and financial management.

### **LEGAL ENVIRONMENT OF BUSINESS 142010**

641A .5 CR

GRADE LEVEL: 9-12

Students will examine all aspects of business law including the judicial system, differences between types of laws and origins of laws, administrative and employment laws and laws impacting individuals as well as businesses. Students will also research real estate and debtor and creditor laws and regulations. Students will learn to support attorneys by conducting legal research and preparing fully-compliant legal documents, compliance and contract law will be emphasized.

### **MANAGEMENT PRINCIPLES 141025**

624A .5 CR

GRADE LEVEL: 9-12

Students will apply management and motivation theories to plan, organize and direct staff toward goal achievement. They will learn to manage a workforce, lead change, and build relationships with employees and customers. Students will use technology to analyze the internal and external business environment, determine trends impacting business, and examine risks threatening organizational success. Ethical challenges, project management and strategic planning will also be explored.

### **MARKETING PRINCIPLES 144000**

640A .5 CR

GRADE LEVEL: 9-12

Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Technology, leadership, and communications will be incorporated in classroom activities.

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### **BUSINESS APPLICATIONS AND ECONOMICS 141005**

639A .5 CR

GRADE LEVEL: 9-12

Students will develop fundamental knowledge and skills in business administration. They will examine business activities, business processes and forms of business ownership. Students will acquire an understanding of economic principles such as supply and demand, division of labor and competition. They will identify current trends, issues and conditions impacting business and determine the impact of the global environment on business operations. Innovation, technology, leadership and communications will be addressed.

### **HUMAN RESOURCE MANAGEMENT 142035**

625A .5 CR

GRADE LEVEL: 9-12

Students will develop human resources strategies to obtain, retain, and effectively use talent throughout the organization. Students will utilize technology to create job applications, job descriptions, and job profiles to support the talent acquisition process. They will learn to recruit applicants, administer employment assessments, conduct background investigations, and make and communicate hiring decisions. Students will also develop employee handbooks and establish performance improvement processes. Rewards and recognition practices, relationship management and compliance will be addressed

## **ENGINEERING AND MANUFACTURING TECHNOLOGIES**

### **ARCHITECTURAL DESIGN SITE AND FOUNDATIONS PLANS (DRAFTING/CAD)**

713A .5 CR

GRADE LEVEL: 9-12

713B .5 CR

Students use advanced architectural design concepts to construct design models including perspective drawings for final presentations. Students use orthographic/pictorial projection, freehand technical sketching and computer-aided drafting (CAD) tools to create site foundation and section plans that include topographical details and schedules. Additionally, students perform zoning analysis, develop preliminary plot plans, and construct grading and utilities plans that include legal descriptions and cut and fill volumes.

### **ARCHITECTURE DESIGN- STRUCTURAL AND MECHANICAL/ELECTRICAL/PLUMBING**

714A .5 CR

GRADE LEVEL: 9-12

714B .5 CR

Students will use architecture design principles to organize and arrange structures to create a perspective of a building. Students will use orthographic/pictorial projection, freehand technical sketching and computer-aided drafting (CAD) skills to generate floor and wall plans, elevations, sections, details and schedules. Students will develop sets of structural framing and mechanical working drawings that include plumbing, HVAC and electrical power and lighting plans.

### **ROBOTICS**

340A .5 CR

GRADE LEVEL 11-12

Students will learn about basic electric circuits and microcontrollers in order to program and control simple mechanisms and robots. Students will also learn about industrial robotic operations and system configurations and have the opportunity to code, compile and debug industrial robots using ladder logic and teach pendants.

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### MECHANISMS AND DRIVES

344A .5 CR

GRADE LEVEL: 11-12

Students will learn the strategies and practices of machine operation and machine applications and how machine components such as gears, belts, sprockets, bears, clutches, couplings, springs etc. contribute to the application for which the machine is designed. They will also examine the basic drives of such mechanisms as electric motors and hydraulic & pneumatic actuators.

### MACHINE TOOLS (WOODS)

717A .5 CR

GRADE LEVEL: 9-12

717B .5 CR

This course introduces students to all aspects of machining applications in manufacturing. Students will perform routine calculations, interpret basic drawings, begin the process of performing accurate measurements and be able to plan simple machining processes. Students will learn the fundamental principles and practices of cutting, drilling and grinding using modern machine tools, hand tools and precision measuring instruments.

### WELDING TECHNOLOGIES

737A .5 CR

GRADE LEVEL: 10-12

737B .5 CR

Students will use fundamental welding principles involving shielded metal arc, oxyacetylene, gas tungsten, and gas metal arc welding in the flat, horizontal, and vertical positions. An emphasis is given to electrode selection, equipment setup, operating procedures, welding inspection, and testing. Students will learn joint designs and layout and will be introduced to welding codes and standards. Additional topics include employability skills and an emphasis will be given to personal safety.

### ADVANCED WOODS

727A .5 CR

GRADE LEVEL: 10-12

727B .5 CR

PREREQUISITE: MACHINE TOOLS OR BY PERMISSION

Advanced Woods allows the student to develop a higher skill level in woodworking by building more complex pieces. Through teacher directed projects, students will experience the construction of wood projects that require participants to machine and finish wood to a finer degree of quality. A more advanced approach with woodworking machinery will be fostered by encouraging students to work more independently. Typical projects may include decorative shelves, a step stool, small tables and simple cabinets.

## VISUAL ARTS

### PHOTOGRAPHY COMPOSITION AND GRAPHIC DESIGN 340150

719A .5 CR

GRADE LEVEL: 9-12

719B .5 CR

Aesthetics and techniques are essential to producing a good photograph. This course focuses on capturing and manipulating images in digital photography. Topics include color theory, mechanics of image capture, image manipulation, and print production. Students shoot photographs in various studio and indoor and outdoor settings. This is the introductory course that develops skills needed for digital editing and design.

## WARREN HIGH SCHOOL COURSE DESCRIPTIONS 2022 - 2023

### DIGITAL DRAWING AND DESIGN 340325

722A .5 CR

GRADE LEVEL: 10-12

722B .5 CR

The focus of this course is on merging different types of media on the Internet. Students combine text, still photography, audio, videography and graphic arts to create interactive Web pages. They demonstrate creative, digital storytelling accessible from multiple platforms. Students learn project management and marketing. They learn how to create Web content that is accessible by individuals with visual disabilities.

### MULTI MEDIA WEB DESIGN 340160

720A. 5 CR

GRADE LEVEL: 11-12

720B .5 CR

The focus of this course is on merging different types of media on the Internet. Students combine text, still photography, audio, videography, and graphic arts to create interactive Web pages. They demonstrate creative, digital storytelling accessible from multiple platforms. Students learn project management and marketing. They learn how to create Web Content that is accessible by individuals with visual disabilities.

### VISUAL DISTRIBUTION 340330

723A .5 CR

GRADE LEVEL: 10-12

723B .5 CR

Students analyze customer preferences to determine product creation, production and delivery. From screen printing, vinyl decals, stickers, buttons, banners, posters, embroidery, and vehicle wrap to a spot varnish that adds spark to an annual report cover, students learn techniques to enhance product uniqueness in the graphic arts industry. They compare the differences of customer impact between using traditional mass distribution to individual consumer targeting. Among strategies engaged are Variable Data Imaging (VDI), Quick Response (QR) codes and email blasts.

## WORK EXPERIENCE

### CAREER BASED INTERVENTION

725A .5 CR

GRADE LEVEL: 11-12

725B .5 CR

This CBI related instruction course is based on the Career Based Intervention Technical Content Standards and connects academic and career success. The Career Based Intervention Technical Content Standards contain 13 content units that represent the knowledge, skills, and abilities students need to be successful leading up to and upon graduation from high school. CBI classroom instruction will provide appropriate and effective resources and technology for individual instruction in a smaller group setting that meets students' needs. Students must meet state identified disadvantaged categories to qualify.

### WORK BASED LEARNING

7251A .5 CR

GRADE LEVEL: 11-12

7251B .5 CR

This course must be taken concurrently with Career Based Intervention. The CBI work-based learning component can be fulfilled through:

- Paid co-operative work-based learning experiences
- Non-paid career exploration opportunities (examples: job shadowing, short-term field experiences, internships, volunteering & community service, and/or service learning)
- A combination of both students in paid co-operative work-based learning experiences will also be given the opportunity to participate in non-paid experiential learning experiences that reflect their long-term career goals, if the goal is unrelated to the paid co-operative work-based learning experience.