



RCS Virtual High School Course Catalog

Ninth Grade Course Descriptions

English Language Arts

English/Language Arts 9 - #VC1052

English/Language Arts 9 integrates composition and literature as students develop reading, writing, listening, speaking and viewing skills. Students read and analyze literature within a thematic context and write compositions based on the readings. Students read literature from a variety of genres including novels, short stories, poetry, drama and non-fiction. Major pieces of literature students read and analyze include *To Kill a Mockingbird*, *Romeo and Juliet*, and portions of the *Odyssey*. Other literary options include *Speak*, *Lord of the Flies*, and contemporary literary selections. Students write in a variety of formats: argumentative, narrative, and literary analysis. Students are introduced to the research process.

Mathematics

Algebra 1 - #VC4164

Students will build upon the concepts learned in *Pre-Algebra* and apply them to solving and graphing multi-step linear equations and functions. Students solve and graph linear inequalities as well as linear and non-linear systems using a variety of methods. Students will solve quadratic equations in multiple ways. Radical equations will be explored including their connection to geometry. Students will learn to display and analyze data with measures of center and variation.

Geometry - #VC4602

Students apply alternate ways of reasoning mathematically, beyond *Algebra*, including analytical and spatial reasoning. They apply what they know about two-dimensional figures to three-dimensional figures in real-world contexts and deepen their understanding of shape and shape relationships. Students apply what they know about linear functions and coordinate graphing to coordinate geometry. Students study postulates, definitions and theorems, as well as deductive reasoning skills that can be applied to both mathematical and real-world problem contexts. Students will explore the probability of various types of events including independent, disjoint, and conditional.



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Algebra 2 - #VC4175

Students build upon the concepts learned in *Algebra 1* and *Geometry* and continue the study of various function families including polynomial, exponential, logarithmic, rational and trigonometric functions. In addition to extending the algebra strand, students are introduced to the concepts of inverse functions, sequences, and series. Students will develop and apply their understanding of circular trigonometry and its connections to triangular trigonometry. In addition, students will continue their work with probability through counting methods and binomial distributions. Methods of how to collect good data will be explored along with experimental design and making inferences.

Science

Physical Science - #VC6054

Physical Science addresses the Physical Science Performance Expectations of the Michigan Science Standards. Students develop an understanding of the major topics of chemistry and physics; including forces and motion, energy associated with heat, electromagnetic systems, light and sound and energy transformations, matter, changes in matter, energy transfer and conservation. Through a variety of laboratory experiences, students acquire the skills of inquiry and apply their understanding of scientific concepts.

Biology - #VC6004

Using the Michigan Life Science Performance Expectations as the framework, students identify the unique properties of living systems as they relate to cells and organic molecules. Students examine ecosystems and their characteristics. Students explain the process of genetic reproduction and how traits are inherited. Students define evolution and examine factors that influence population growth and decline. Students describe how different species of plants, animals and microorganisms that live today are related. Students participate in labs that reinforce the biological concepts learned.



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Social Studies

World History - #VC7332

This course introduces students to the study of the history of the world from the emergence of human society to post-World War II. Through the study of early societies from various parts of the world, students build a common memory of where mankind has been including decisions of the past, which account for present circumstances. Emphasis is placed on skills that enable students to evaluate evidence, develop comparative and causal analyses, interpret the historical record and construct sound historical arguments and perspectives on which informed decisions in contemporary life can be based. In addition, this course enables students to construct understandings about the record of human strivings, accomplishments and failures. These understandings are drawn from five spheres of human activity: social, scientific/technological, economic, political and philosophical. The integration of historical thinking skills and historical understandings throughout this course equips students to analyze issues and problems confronting citizens today.

Electives

Spanish 1 - #V02814

Students learn to communicate in a variety of situations, such as: listening, conversing, reading, writing, viewing and presenting. Students use language to gain understanding of people and cultures.

Spanish 2 - #V02824

The *Level 2* courses build upon the skills acquired in the *Level 1* courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures.

German 2 - #VC2424

The *Level 2* courses build upon the skills acquired in the *Level 1* courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures.



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French 2 - #VC2324

The *Level 2* courses build upon the skills acquired in the *Level 1* courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures.

Health - #VC3002

This one semester health course assists students in making independent, informed decisions concerning their physical, mental and emotional well-being. The students become actively engaged in a course that integrates class instruction and relevant application of concepts. An individualized behavioral and fitness profile introduces the concepts of total wellness as students develop their personal goals within the course throughout their lives. The health components emphasize goal setting, decision making, and advocacy skills directly associated with adolescent risk behaviors. Building on the knowledge and skills gained in the class, students utilize the appropriate strategies in a variety of relevant applications while gaining competence and confidence in their abilities. Throughout the course the concept of lifelong optimal wellness is reinforced and applied.

Physical Education - #VC3009

Students begin by evaluating the health and fitness goals to promote optimal wellness. Students participate in a variety of aerobic activities; such as cycling, pilates, yoga, tae bo, tai chi, power walking, water aerobics, jogging, step aerobics, cardio boot camp, circuit training, jump roping and stress reduction to maximize cardiovascular fitness. Students participate in a pretest and post test to determine aerobic fitness, muscular strength and endurance, flexibility and body composition. Using the National Standards for Physical Fitness, students pretest on the five fitness categories and set goals based on the results. At the end of the semester, students post test to measure the results of their goals. Students gain competence and confidence in their abilities as leaders. Through participating in group activities, students develop skill in cooperation and sportsmanship. Throughout the course, the concept of lifelong fitness is emphasized.

Art - #VC5509

Students will develop critical thinking, problem solving, reasoning, analysis, interpretation and conceptual synthesis. The focus is on research practices, interrogative questioning, creativity, artistry, curiosity, imagination, innovation and personal expression. The projects require perseverance, self-direction, planning, self-discipline, adaptability, and initiative. The



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acquisition of these skills help prepare students for a future of 21st Century challenges and changes.

Business Functions and Operations - #VC0332

Business Functions and Operations is a business course that provides the framework for pursuing additional business courses. This course acquaints students with the five functions of business: Production, Merchandising, Operations, Accounting and Finance, and Management. Students will also explore concepts in economics, entrepreneurship, human resources, risk management, credit, and careers in business. Business skills including communication, interpersonal dynamics, presentation, and critical thinking skills are emphasized.

High School Music - #VC5109

This course includes the study and analysis of basic elements of music--melody, harmony and rhythm. Through the lens of choral music or instrumental music, students will study scales, rhythms, intervals, chords and harmonic progressions. Ear training and sight-reading are included as part of the course work and there are opportunities to study arranging and composition. Students will choose to study a band or orchestra instrument or a choral music experience in this class.

Tenth Grade Course Descriptions

English Language Arts

English/Language Arts 10 - #VC1072

English/Language Arts 10 integrates composition and literature as students continue to develop skills in reading, writing, listening, speaking and viewing. Students read and analyze American literature within a thematic and chronological context and write compositions based on the readings. Students read American literature from a variety of genres including novels, short stories, poetry, drama and non-fiction. Major pieces of literature students read and analyze may include *The Crucible*, *Of Mice and Men*, *Fahrenheit 451*, *Pudd'nhead Wilson*, and *The House on Mango Street*. Students write in a variety of formats: argumentative, narrative, and literary analysis. Students continue to build research skills.



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Mathematics

Geometry - #VC4602

Students apply alternate ways of reasoning mathematically, beyond *Algebra*, including analytical and spatial reasoning. They apply what they know about two-dimensional figures to three-dimensional figures in real-world contexts and deepen their understanding of shape and shape relationships. Students apply what they know about linear functions and coordinate graphing to coordinate geometry. Students study postulates, definitions and theorems, as well as deductive reasoning skills that can be applied to both mathematical and real-world problem contexts. Students will explore the probability of various types of events including independent, disjoint, and conditional.

Algebra 2 - #VC4175

Students build upon the concepts learned in *Algebra 1* and *Geometry* and continue the study of various function families including polynomial, exponential, logarithmic, rational and trigonometric functions. In addition to extending the algebra strand, students are introduced to the concepts of inverse functions, sequences, and series. Students will develop and apply their understanding of circular trigonometry and its connections to triangular trigonometry. In addition, students will continue their work with probability through counting methods and binomial distributions. Methods of how to collect good data will be explored along with experimental design and making inferences.

Precalculus - #VC4724

Students extend and apply concepts from *Algebra 2* to solve problems involving function families including trigonometry and exponential, logarithmic, polynomial, quadratic and rational functions. Students apply their understanding of matrices and polar coordinates and apply them to modeling and solving real-world problems. Students are introduced to limits and the formal definition of the derivative in preparation for a college-level calculus course.



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Science

Biology - #VC6004

Using the Michigan Life Science Performance Expectations as the framework, students identify the unique properties of living systems as they relate to cells and organic molecules. Students examine ecosystems and their characteristics. Students explain the process of genetic reproduction and how traits are inherited. Students define evolution and examine factors that influence population growth and decline. Students describe how different species of plants, animals and microorganisms that live today are related. Students participate in labs that reinforce the biological concepts learned.

Chemistry - #VC6314

The structure and behavior of matter is studied. Topics include: atomic theory, periodic table, bonding, energy, problem solving, measurements, chemical reactions, gas laws, equilibrium, solutions and acids and bases. Laboratory work is intended to help develop and support topic areas. A large part of the course requires a comprehensive understanding of Algebra.

Social Studies

U.S. History - #VC7212

This year-long course introduces students to the history of the United States from the 1900s to the present. Students examine the major themes of history. The course divides the twentieth century chronologically into eras and explores the emerging issues of the twenty-first century. Using primary and secondary sources, students identify major events from United States history, place them on a timeline and analyze their causes and effects. They compare conflicting accounts of the past and express informed judgments about significant events that shaped the nation. Students analyze and present historical data.

Electives

Spanish 2 - #VC2824

The *Level 2* courses build upon the skills acquired in the *Level 1* courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures.



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German 2 - #VC2424

The *Level 2* courses build upon the skills acquired in the *Level 1* courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures.

French 2 - #VC2324

The *Level 2* courses build upon the skills acquired in the *Level 1* courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures.

Spanish 3 - #VC2834

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

German 3 - #VC2434

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

French 3 - #VC2334

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

Health - #VC3002

This one semester health course assists students in making independent, informed decisions concerning their physical, mental and emotional well-being. The students become actively engaged in a course that integrates class instruction and relevant application of concepts. An individualized behavioral and fitness profile introduces the concepts of total wellness as students



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develop their personal goals within the course throughout their lives. The health components emphasize goal setting, decision making, and advocacy skills directly associated with adolescent risk behaviors. Building on the knowledge and skills gained in the class, students utilize the appropriate strategies in a variety of relevant applications while gaining competence and confidence in their abilities. Throughout the course the concept of lifelong optimal wellness is reinforced and applied.

Physical Education - #VC3009

Students begin by evaluating the health and fitness goals to promote optimal wellness. Students participate in a variety of aerobic activities; such as cycling, pilates, yoga, tae bo, tai chi, power walking, water aerobics, jogging, step aerobics, cardio boot camp, circuit training, jump roping and stress reduction to maximize cardiovascular fitness. Students participate in a pretest and post test to determine aerobic fitness, muscular strength and endurance, flexibility and body composition. Using the National Standards for Physical Fitness, students pretest on the five fitness categories and set goals based on the results. At the end of the semester, students post test to measure the results of their goals. Students gain competence and confidence in their abilities as leaders. Through participating in group activities, students develop skill in cooperation and sportsmanship. Throughout the course, the concept of lifelong fitness is emphasized.

Art - #VC5509

Students will develop critical thinking, problem solving, reasoning, analysis, interpretation and conceptual synthesis. The focus is on research practices, interrogative questioning, creativity, artistry, curiosity, imagination, innovation and personal expression. The projects require perseverance, self-direction, planning, self-discipline, adaptability, and initiative. The acquisition of these skills help prepare students for a future of 21st Century challenges and changes.

Business Functions and Operations - #VC0332

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High School Music - #VC5109

This course includes the study and analysis of basic elements of music--melody, harmony and rhythm. Through the lens of choral music or instrumental music, students will study scales, rhythms, intervals, chords and harmonic progressions. Ear training and sight-reading are included as part of the course work and there are opportunities to study arranging and composition. Students will choose to study a band or orchestra instrument or a choral music experience in this class.

Eleventh Grade Course Descriptions

English Language Arts

Applications of Composition - #VC1035

In this semester composition course, students expand on writing skills developed in the tenth grade. Students write in a variety of formats: literary analysis, argumentation, rhetorical analysis, and research based. Students demonstrate the ability to properly cite, document sources, and synthesize information. Other writing units may include compare and contrast, narrative, and college admissions test preparation. Major pieces of literature students read, analyze, and respond in writing to may include *Cyrano de Bergerac*, *A Separate Peace*, *Death of a Salesman*, *Catcher in the Rye*, *1984*, *The Color of Water*, *A Lesson Before Dying*, and *Night*.

Literature of the Strange and Mysterious - #VC1322

Students in this semester literature course analyze the literary elements found in mystery, fantasy, suspense, science fiction, and horror. Students examine the similarities and differences among these genres. Reading a wide variety of short stories and novels, students identify the literary devices the author uses to achieve a desired effect and examine the ideas, theories and assumptions behind the literature. Literary options may include *Murder on the Orient Express*, *Cat's Cradle*, *Dracula*, *Kindred*, *The Hobbit*, and *The Adventures of Sherlock Holmes*.

Myths - #VC1222

This semester literature course examines myths over time and across cultures. Students explore how archetypes in myths symbolize human experience and embody the spiritual values of a culture. Through reading and analyzing myths, students address fundamental and thoughtful questions. Through the study of myths, students better understand our connection to other people at a time when the welfare of each culture depends on the attitudes and actions of other cultures.



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Students deepen their understanding of the myths, compare myths across cultures and explore connections of myths to their own lives through discussion, writing assignments, projects and journals. Cultures of study may include Greek, Roman, Norse, Egyptian, Native American, Chinese, Sumerian, and Babylonian, among others.

True Stories - #VC1452

Students in this semester literature course analyze the elements of nonfiction storytelling and distinguish between literary truth vs. non-fictional truth. Students will be presented a variety of contemporary non-fiction works (from multiple genres and in multi-media) that exposes them to a diversity of life experiences and will offer the opportunity to examine author's craft in conveying truth in narrative form.

Mathematics

Algebra 2 - #VC4175

Students build upon the concepts learned in *Algebra 1* and *Geometry* and continue the study of various function families including polynomial, exponential, logarithmic, rational and trigonometric functions. In addition to extending the algebra strand, students are introduced to the concepts of inverse functions, sequences, and series. Students will develop and apply their understanding of circular trigonometry and its connections to triangular trigonometry. In addition, students will continue their work with probability through counting methods and binomial distributions. Methods of how to collect good data will be explored along with experimental design and making inferences.

Precalculus - #VC4724

Students extend and apply concepts from *Algebra 2* to solve problems involving function families including trigonometry and exponential, logarithmic, polynomial, quadratic and rational functions. Students apply their understanding of matrices and polar coordinates and apply them to modeling and solving real-world problems. Students are introduced to limits and the formal definition of the derivative in preparation for a college-level calculus course.



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Science

Chemistry - #VC6314

The structure and behavior of matter is studied. Topics include: atomic theory, periodic table, bonding, energy, problem solving, measurements, chemical reactions, gas laws, equilibrium, solutions and acids and bases. Laboratory work is intended to help develop and support topic areas. A large part of the course requires a comprehensive understanding of Algebra.

Earth and Space Science - #VC6512

Astronomy and Geology is an advanced course, which addresses Earth systems, structure and space. Students develop an understanding of the major topics of geology and astronomy including energy in Earth systems, the rock cycle, models and plate tectonics, volcanoes and earthquakes, early history of the universe, planetary geology, stellar evolution, geologic dating and climate change. Through a variety of laboratory experiences, students acquire the skills of inquiry, reflection, social implications and apply their understanding of scientific concepts.

Physics - #VC6424

This course is recommended for students who wish to enter technical areas of study such as engineering, architecture and medicine. Basic topics include motion, forces, energy, electricity, magnetism and waves. The course emphasizes the development of analytical thinking skills.

Wilderness Survival - #VC6282

This elective course explores the problems of surviving various situations that may arise during a wilderness experience. The primary goal of the course is to develop a problem solving strategy to manage fear as well as the physiological response of the body to heat and cold stress.

Social Studies

Economics - #VC7862

This semester course introduces the discipline of economics. The focal point of the course is the study of human wants in relationship to limited resources. Students deepen their understanding of basic economic concepts and apply them to national and international problems. In addition to their study of macro-economics, students study personal finance and business in a free market economy. They learn about the banking system, stock market, taxation, productivity, marketing and advertising. Using a variety of media; students compile, analyze and present statistical data



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pertinent to economic problems. Students use their knowledge of economics to make informed decisions as consumers and to participate as citizens in deciding matters of economic policy.

American Government - #VC7584

This semester class deepens students' knowledge of national, state and local government in America. Students review the philosophical foundations of democratic government in the United States. The structure and functions of national and state government under the American federal system are studied. Students strengthen their understanding of the legal rights and accompanying responsibilities shared by all citizens of our constitutional democracy. They explore American political behavior. Through discussions and writing, they practice making reasoned decisions about matters of public policy. Students are encouraged, but not required, to take the advanced placement exam for this course; which takes place in May.

A.P. U.S. Government & Politics - #VC7592

The purpose of *AP U.S. Government and Politics* is to give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. politics. Students examine a variety of theoretical perspectives and explanations for various behaviors and their outcomes. In addition to the text, each unit includes reading and interpreting relevant primary documents and national current events. Each unit culminates with a multiple choice section and at least one free response question. Both the multiple choice and the free response questions require students to analyze and interpret major topics from the unit. Students are encouraged, but not required, to take the advanced placement exam for this course; which takes place in May.

Electives

Spanish 3 - #VC2834

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.



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German 3 - #VC2434

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

French 3 - #VC2334

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

Health - #VC3002

This one semester health course assists students in making independent, informed decisions concerning their physical, mental and emotional well-being. The students become actively engaged in a course that integrates class instruction and relevant application of concepts. An individualized behavioral and fitness profile introduces the concepts of total wellness as students develop their personal goals within the course throughout their lives. The health components emphasize goal setting, decision making, and advocacy skills directly associated with adolescent risk behaviors. Building on the knowledge and skills gained in the class, students utilize the appropriate strategies in a variety of relevant applications while gaining competence and confidence in their abilities. Throughout the course the concept of lifelong optimal wellness is reinforced and applied.

Physical Education - #VC3009

Students begin by evaluating the health and fitness goals to promote optimal wellness. Students participate in a variety of aerobic activities; such as cycling, pilates, yoga, tae bo, tai chi, power walking, water aerobics, jogging, step aerobics, cardio boot camp, circuit training, jump roping and stress reduction to maximize cardiovascular fitness. Students participate in a pretest and post test to determine aerobic fitness, muscular strength and endurance, flexibility and body composition. Using the National Standards for Physical Fitness, students pretest on the five fitness categories and set goals based on the results. At the end of the semester, students post test to measure the results of their goals. Students gain competence and confidence in their abilities as leaders. Through participating in group activities, students develop skill in cooperation and sportsmanship. Throughout the course, the concept of lifelong fitness is emphasized.



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Art - #VC5509

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Twelfth Grade Course Descriptions

English Language Arts

12th Gr. Composition - #VC1046

In this course, students expand on writing skills developed in eleventh grade. Students write in a variety of formats with a focus on various genres of writing in college courses. Students apply theories of literary criticism in a written literary analysis essay. Students research and develop a multimedia presentation based on a theme, issue, or genre. Students will understand how satire



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is used to respond to current issues. Additional units may include analyzing rhetorical devices in non-fiction and media, analyzing and writing memoir, and analyzing literary devices through close reading. Major pieces of literature students read, analyze, and respond in writing to may include *Othello*, *Hamlet*, *The Glass Castle*, *As I Lay Dying*, and *The Adventures of Huckleberry Finn*.

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Mathematics

Precalculus - #VC4724

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Electives

Spanish 3 - #VC2834

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

German 3 - #VC2434

This course builds upon the skills acquired in the *Level 2* courses and continues to deal with communication and culture. In addition, students use language to acquire new information and knowledge in other disciplines. Students also use language to begin to participate in local and international communities.

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Production, Merchandising, Operations, Accounting and Finance, and Management. Students will also explore concepts in economics, entrepreneurship, human resources, risk management, credit, and careers in business. Business skills including communication, interpersonal dynamics, presentation, and critical thinking skills are emphasized.

High School Music - #VC5109

This course includes the study and analysis of basic elements of music--melody, harmony and rhythm. Through the lens of choral music or instrumental music, students will study scales, rhythms, intervals, chords and harmonic progressions. Ear training and sight-reading are included as part of the course work and there are opportunities to study arranging and composition. Students will choose to study a band or orchestra instrument or a choral music experience in this class.