

# Chrisman High School



## 2018- 2019 Course Descriptions & Graduation Requirements

# Chrisman High School Graduation Requirements:

## 27 Credits

### Total credits must include the following:

4 credits of English

3 credits of Math in High School

*(Must include 1 year of Math I  
and a class with Geometry in it)*

2 credits of Social Science

*(Must include 1 credit of American History  
and 1/2 credit of Civics)*

3 credits of Science

4 credits of PE (1 credit/year waived during Health & Driver's Ed)

1/2 credit of Health

1/2 credit of Divers Education (Offered, not Required)

1/2 credit of Resource Management (Consumers)

½ credit of Computers

*Plus electives chosen from Art,  
Music, Foreign Language, or Vocational  
classes (business, industrial technology,  
agriculture, or home economics).*

## Contents

Agriculture.....	4
Art.....	6
Business.....	8
Co-op.....	10
Driver's Education.....	11
English.....	12
Family and Consumer Sciences.....	14
Foreign Language (Spanish).....	16
Instrumental Music.....	17
Mathematics.....	18
Physical Education and Health.....	20
Science - Biological.....	21
Science - Physical.....	22
Social Studies.....	23

### General Information:

Students are required to enroll in a total of 8 class periods each semester.

All graded courses are considered when figuring the **honor roll**. High honors require all As, no A-s; honors require more As than Bs.

All graded courses are considered when computing **grade point average (GPA)** at the end of each semester. Grade point averages are used to determine **class ranks**.

Courses may be taken only once for **credit**.

Students may **drop** and/or **add** classes up to the 3rd day of the semester with the permission of the guidance counselor or principal.

Because enrolling students in all the classes they choose may not be possible due to conflicts in the master schedule or enrollment limits for some classes, students are asked to choose at least two **alternate** class choices at pre-registration.

## AGRICULTURE

### 18001A001 Introduction to Agricultural Industries 2 Sem. Grades: 9-12

This introductory course provides an opportunity for students to learn the organization of the agricultural industry; its major components; its economic influence at the state, national, and international levels; its scope; and its production applications. Basic concepts in animal science, plant science, horticulture, agricultural resources, and agribusiness management are included. Microcomputer applications are introduced. Agricultural mechanics skills necessary for roughing and framing construction. Supervised occupational experience programs and FFA activities are introduced and stressed.

### 18003A001 Basic Agriculture Science 2 Sem. Grades: 10-12

Prerequisite: Intro to Ag or Consent of Instructor

This second-year course builds on the basic skills and knowledge gained from the introductory course. Major units of instruction include advanced plant, animal, soil science and aquaculture. Applied math and science skills are stressed throughout the course. Introduction to science principles for production of animals and plants. FFA and SAE activities are also stressed.

### 18449A001 Basic Agricultural Mechanics 2 Sem. Grades: 11-12

Designed to develop student knowledge and skills in the area of agricultural mechanics, instructional units include operating equipment safely; welding with arc, Mig, and Tig welders; welding and cutting with oxy-acetylene; and maintaining and repairing small gasoline engines. FFA and SAE activities are stressed.

### 18053A001 Basic Horticulture Science 2 Sem. Grades: 10-12

Prerequisite: Ag Science or Consent of Instructor

Designed to develop students' knowledge and skills in the following areas: greenhouse production and management, nursery crop production, establishment and care of home garden and lawn, grafting, plant science, and floral and landscape design. Agribusiness units will be introduced in merchandising, advertising, displaying, and selling horticultural products. FFA and SAE are stressed.

### 18403A001 AG Construction & Technology 2 Sem. Grades: 9-12

Provides experiences related to the erection, installation, and maintenance of agricultural buildings and related fixtures. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to carpentry, building maintenance, concrete and electrical wiring. Instruction will include safety principles and practices; recognition of standard lumber sizes; surveying; foundation layout methods; building concepts and procedures; cost estimating; and blueprint reading.

### 18101A001 Animal Production/Science 1 Sem. Grades: 10-12

Prerequisite: Ag Science

Designed to take the Ag Science knowledge learned in Ag200 and apply it to production situations. Emphasis is placed on, but not limited to, the major crops and livestock of Illinois (e.g., corn, soybeans, beef cattle and swine). The class will also touch on the production of the minor crops and livestock as student interest and time dictate. This would consist of wheat, oats, vegetable or horticultural crops, dairy, horses, sheep or goats and poultry. The whole time we will explore how we can use our scientific knowledge to meet the different needs of the different classes of crops and livestock to maximize health and production. FFA and SAE are also stressed.

**18051A000 Plant Production/Science** 1 Sem. Grades: 9-12

Prerequisite: Ag Science and Horticulture Science

Plant Production/Science courses provide knowledge about the propagation of plants for food and fiber. These courses may cover such topics as soil science, irrigation, pest and weed control, food and fiber processing, and farm operations. They may also cover the knowledge and skills needed to produce all types of crops or may emphasize a particular area of the agricultural industry.

**18405A000 Particular Topics in Ag Mechanics & Construction** 1 Sem. Grades: 9- 12

Prerequisites: Ag Mechanics or Ag Construction & Technology

These courses examine specific topics related to agricultural mechanics and construction, such as specific vehicles or structures, rather than provide a general study of mechanics and construction techniques.

**18056A000 Particular Topics in Plant Systems Landscaping** 1 Sem. Grades: 9-12

Designed to develop students' knowledge and skills in the areas of physical and aesthetic principles of landscape design and overcoming landscaping problems.

**18201A001 Agribusiness Management** 2 Sem. Grades 11-12

Prerequisites: Intro to Ag, Ag Science or Consent of Instructor.

Instruction and examination of problems and concerns for both farm and agribusiness operation and management. Areas of study include marketing, financial analysis and planning, credit needs, insurance, taxes, depreciation, employer-employee relationships, and types of business organizations. Decision making is stressed. Crop, soil, and animal sciences are further explored. FFA is also stressed.

**18998A0001 Ag Cooperative Education** 2 Sem. Grade: 12

Agriculture, Food, and Natural Resources—Workplace Experience courses provide students with work experience in fields related to agriculture, food, and natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## ART

### **05151A000 Explorations in Art** 1 Sem. (first)

This class will explore the various types of art forms, ranging from painting and drawing to getting messy with clay learning new media techniques. Throughout the class, you will be the judges and critique artwork in order to gain understanding and to improve.

### **05155A000 Drawing/Painting I** 1 Sem. (first)

In this class you will get a basic introduction to drawing and painting. Artists will be introduced to a variety of media, such as tempera, acrylic, oil, and watercolor paints, as well as, graphite, colored pencils, pastels, India ink, and much more.

### **05155A000 Drawing/Painting 2** 1 Sem. (second)

Drawing and Painting 2 will dive deeper into drawing and painting, learning more about assorted techniques to create more advance drawings and paintings.

### **Advanced Drawing Description** 2 Sem.

An advanced drawing course built on the knowledge and skills learned in Drawing I & II and designed to help the students find their personal voice. We explore a variety of approaches and aspects in drawing that reveal the subjective in the objective, personal expression, as we search, destroy, and start again. While working from observation we go beyond representation to explore conceptual issues.

Prerequisite: Drawing I & II

### **05158A000 Sculpture** 1 Sem. (first)

Sculpture focuses on the creation of three-dimensional works, while working with several different types of media, such as clay, wood, metal, textiles, etc. For some projects, students will be required to use safety glasses and protective gear to protect them. Students will explore multiple types of sculptures, focusing on sculpture in-the-round, and relief sculptures. This class will also concentrate on display.

### **Multicultural Art** 1 Sem. (first)

This class will be focusing on geography and art. Together we will explore the world and the different types of art works. We will learn about modern and historical examples of artworks and then create our own interpretations based on them. This class will involve a variety of media, such as drawing, painting, ceramics (clay) etc.

### **05154A000 Experimental Art** 1 Sem. (second)

In this class you will take learning into your own hands. Students will have the opportunity to explore different art forms and create individual works of art. Together as a class, we dive into the working world of art and what it entails. (This class is limited to students who have already taken one art class.) We will use various types of media and work with many different materials.

### **05167A000 Photography (Photography)** 1 Sem. (second)

Photography is a newer class offered through the art program due to some amazing donations. Students will have the opportunity to use their own cameras or cell phone cameras. This class will explore materials, process, and techniques of taking photographs, as well as, famous and upcoming photographers. Students will learn about the operation of a camera, composition, lighting techniques, filters, camera angles and film development. This course will cover both black-and-white photography and color photography.

**05159A000 Ceramics/Pottery** 1 Sem. (second)

In this class students will explore the basic hand building techniques: pinch, coil and slab. Once these basic techniques have been mastered, students will investigate how these techniques can be combined to create interesting and unique functional and decorate artwork. Students will learn about the kiln, the chemical composition of clay and glazes, and how to create and finish their ceramic projects. They will also have the opportunity to throw on the throwing wheel.

**Ceramics II Description** 2 Sem.

Ceramics II is a continued exploration of basic handbuilding and wheel throwing techniques. Emphasis on developing proficiency in clay use, surface applications, and kiln firings.

Prerequisite: Ceramics I

**05170 Art Portfolio** 1 Sem. (second)

Art Portfolio courses offer students the opportunity to create a professional body of work that reflects their personal style and talent. Students are often encouraged to display their work publicly.

## BUSINESS

### 10005A001 Information Processing - Word Processing      1 Sem.      Grades: 9-12

A one-semester course in the use and application of a word-processing package, using the same software being used in today's business world. Students will learn the skills necessary for employability in word processing.

### 10005A001 Information Processing - Spreadsheet      1 Sem.      Grades: 9-12

A one-semester course that includes a study of the commands, formulas, and basic functions of electronic spreadsheets. Students will learn how to use their skills in a realistic way by solving applications problems. The spreadsheets taught will include those most widely used in the business world today.

### 12104A001 Accounting I - Basic      2 Sem.      Grades: 9-12.

This course provides the student with double-entry accounting skills needed in their personal and business experiences. Financial information is classified, recorded, verified, and interpreted. Sole proprietorships, partnerships, and corporations are studied. Daily transactions, checking accounts, bad debts, payroll, depreciation, and financial statements are covered. Career opportunities are also discussed. Practice sets with business papers are used to simulate actual business records.

### 12104A002 Accounting II      2 Sem.      Grades: 10-12      Pre: Accounting I

Accounting II is a course that builds upon the foundation established in Accounting I. This course is planned to help students to develop deeper knowledge of the principles of accounting with more emphasis being placed on financial statements and accounting records. It is a study of previously learned principles as they apply to the more complicated types of business organizations: partnerships, corporations, branches, etc. The students may become familiar with such specialized fields of accounting as cost accounting, tax accounting, payroll accounting, and others. Some students may choose to do specialized accounting computer applications, and others may elect payroll clerk, data processing computer applications. Simulated business conditions may be provided through the use of practice sets. Skills are developed in the entry, retrieval, and statistical analysis of business data using computers for accounting business applications.

### 11104A000 Yearbook      2 Sem.      Grades: 9-12

Yearbook is a course in which students learn about the production of a yearbook. Students create the yearbook, start to finish, including advertisement sales, page layout, and yearbook sales. Students learn to use computer software to create pages in the yearbook, and learn some of the business of producing a high-end publication.

### 12001A001 Business and Technology Concepts      1 Sem – 1<sup>st</sup> Semester      Grades: 11-12

This course is an introductory course that provides students with basic business operations skills that can be applied in both personal and professional situations. Emphasis is placed on the exploration and description of basic business concepts and applications.

### 10201A000 Web Page Design I      1 Sem.      Grades: 9-12

The ins and outs of Adobe Dreamweaver. Students will maintain the district web page for the semester.

### 10201A000 Web Page Design II      1 Sem.      Grades: 9-12

Web Page Design II is an extension of Web Page Design I. Students will maintain the district web page for the semester.

**1216A001 Product Marketing**      1 Sem-1<sup>st</sup> semester      Grades: 9-12

Through this course students will learn about the selection of target markets; the controllable variables of the marketing mix including product place, price and promotion; and the uncontrollable variables including legal environment, economic environment, resources and objectives, cultural environment and the existing business structure. In addition, topics such as identifying markets, writing and displaying ads, selecting media, allocating budgets, and related advertising areas will also be covered. Particular emphasis is placed upon identifying the needs of the local advertiser and developing a unified campaign toward those needs.

**12053A001 Entrepreneurship**      1 Sem – 2<sup>nd</sup> semester      Grades: 9-12

This course concentrates on the management skills necessary for successful business operation. Students will study management strategies for developing and implementing business plans; structuring the organization; financing the organization; and managing information, operations, marketing and human resources.

**12051A000 Intro to Business**      2 Sem.      Grades: 9-12

Introductory Business courses survey an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the American economic system and corporate organization. Introductory Business courses may also expose students to the varied opportunities in secretarial, accounting, management, and related fields.

## CO-OP

### 22153A001 Interrelated Co-op

2 Sem.

Grade: 12

Designed for seniors interested in pursuing careers in the various occupations. Students participate in 200 minutes per week of related classroom instruction and are released in the afternoons for their paid cooperative education work experience. Classroom instruction focuses on providing students with job survival skills, career exploration skills, and improving students' abilities to interact positively with others. The course content includes these areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, interpersonal relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. Written training agreements and individual student training plans are developed and agreed upon by the employer, student, and instructor-coordinator, all of whom also assume compliance with federal, state, and local laws and regulations.

*Student must be registered for the class no later than school registration in August. Application process must be completed before enrolling in the class. Student must be in good standing to be eligible for the class. Student must have enough credits for graduation, as they will lose 1 credit by being in this class. Student must have a job by the time school starts in the fall. Students are required to be at work from 1-4 pm each school day. Student will receive 1 credit for classroom work and 1 credit for working. Student, parent/guardian, and employer must complete provided paperwork and agree to terms and conditions of this program.*

## DRIVERS EDUCATION

### 08201A000 Drivers Ed

1 Sem.

Grades: 9-10.

Prerequisite: Must turn 15 years old during the quarter they are in the classroom phase AND must have passed at least 8 classes during the previous 2 semesters. If a student is a freshman, passing grades from the last semester of the student's 8<sup>th</sup> grade year will be counted.

The classroom phase of Driver Education is offered 1<sup>st</sup> and 3<sup>rd</sup> quarters. As required by the State of Illinois, the classroom phase consists of a minimum of 30 hours of clock instruction and the behind-the-wheel phase consists of a minimum of 6 hours drive time and 6 hours observation time. The behind-the-wheel phase of the course will be completed over a period of no less than 6 weeks. The semester grade will be a combination of the classroom grade and BTW grade. Instruction is aimed at attitude and skill development, with the goal being to create independent, responsible, and safe drivers. Students learn the fundamentals of basic vehicle control and maintenance, along with the importance of staying current with the IL Vehicle Code. Students are expected to complete an additional 50 hours (minimum) of driving under their parent/guardian supervision. Of the 50 hours at least 10 must be night driving. Students who do not complete the 50 hours with the parent/guardian, or the 6 hours with the instructor, cannot expect to receive a Graduated IL Driver License from the IL Secretary of State. Driver education students will be expected to receive a grade of 83% or higher to pass the class. Furthermore, prospective driver education students should know that missing 4 or more classroom sessions will result in immediate removal from the program. It is not possible to make up driver education classroom time. Students who do not pass the classroom phase, due to grade or absence, will be able to re-enroll in the classroom phase at the next available semester. An unexcused absence for a BTW session may result in the removal of the BTW privileges for 6 weeks.

## ENGLISH

### 01001A000 English/Language Arts I

2 Sem.

Grade: 9

English/Language Arts I (9<sup>th</sup> grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

### 01002A000 English/Language Arts II

2 Sem.

Grade: 10

Pre: English I

English/Language Arts II courses offer a balanced focus on composition and literature. Students learn about the alternative aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message. A 4-6 page research paper is required.

### 0103A000 English/Language Arts III

2 Sem.

Grade: 11

Pre: English II

English/Language Arts III courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

### 01003A000 College-Prep English 310

2 Sem.

Grade: 11

Pre: Grades of B or better in EN 100 and 200 AND Consent of the Instructor.

A continued comprehensive study of the English language focusing on American works and authors, this course includes in-depth studies of American literature, poetry, and novels; vocabulary; advanced grammar; oral communications; and the development of longer compositions with emphasis on clear thinking and expository writing. A five to seven page research paper is required.

### 01004A000 English/Language Arts IV

2 Sem.

Grade: 12

Pre: English III

English/Language Arts IV courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.

**01006A000 College-Prep/Dual Credit English 410**

2 Sem.

Grade:12

Prerequisite: Grade B or better in Eng 310, 18 or higher on both the Reading and English portions of the ACT Exam OR a 490 or higher on the Evidence-Based Reading and Writing (ERW) score of the SAT

**English 410** is a continued in-depth study of reading and writing designed to enhance student skills in both reading comprehension and written communication. Emphasis will be placed on clear focus, specific supports, organization, grammar, and writing style to include word choice, usage, and text structure. For fall semester Rhetoric 101, students will complete a DACC directed summary/response assignment to prove their ability to read, comprehend, summarize, and respond to written text. Spring semester Rhetoric 102 will focus on continued improvement of student writing skills and on writing as a process. Students will complete a DACC directed 10 page research paper and present this paper in class using appropriate technology effectively.

**01053A000 Literature**

1 or 2 Sem.

Grades: 9-12

This Literature course will cover various pieces of work such as, but not limited to Classic American, Gothic, Monster, and Contemporary Literature. Students will improve their critical thinking skills as they determine how literature reflects society of the time. Oral discussion of assigned reading will be a large part of the course, and written composition will often be required.

**01151A000 Public Speaking 100**

1 Sem.

Grades: 9-12

Public Speaking courses enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include, but are not limited to, research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

**01104A000 Creative Writing**

1 Sem.

Grades: 9-12

Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft.

## FAMILY AND CONSUMER SCIENCES

### 22201A001 FCS LIFE SKILLS

2 Sem.

Grades: 9-12

This is a miscellaneous class that touches on all subjects taught in the FCS curriculum. Freshmen may take this class for one semester only, or may take both semesters. 1<sup>st</sup> Semester focuses on Family & Foods; this includes a cooking unit, and is a prerequisite to Foods & Nutrition. 2<sup>nd</sup> Semester focuses on Clothing & Textiles and Child Care. It is recommended before taking Parenting and Clothing classes.

### 19201A001 Clothing & Textiles I

1 Sem

Grades: 9-12

If you want to learn to sew, this is the class for you. Along with studying clothing trends and fabric history, you will complete at least two sewing projects this semester.

### 19203A001 Advanced Sewing

1 Sem

Grades: 9-12

Prerequisite: Clothing & Textiles 1

This class is mostly self-directed. You choose your clothing or textile projects, and set your timeline with the instructor's guidance. If you like hands on work and would like to choose your own projects, this class is for you.

### 22211A001 Living Environments

1 Sem.

Grades: 10-12

Designed to help students understand their housing needs and to help in making decisions about their home, this course includes: 1. how homes fulfill human needs through design; 2. housing styles from colonial to modern times; 3. the value of good design, home construction, the relation of a house to natural resources and environment; 4. furnishings and interior design; 5. budgets, mortgages, and other financial aspects of housing; 6. career opportunities in the trades and professions related to housing.

### 22207A001 Adult Living

1 Sem.

Grades: 10-12

Designed to help students achieve life satisfaction through responsible decision making as they prepare to become adults in the home, community, and workplace. Students explore relationships, communication skills, goal setting, and coping skills, as well as other topics.

### 22204A001 Parenting

1 Sem

Grades: 10-12

This class focuses on the responsibilities of parenting and explores the fetal development process through birth.

### 19052A001 Child Development

1 Sem

Grades: 10-12

This class explores the development of the child from birth through the preschool years. Studies include children with special needs.

### 22211A001 Home Design & Interiors

1 Sem

Grades 11-12

If you love HGTV, you should enjoy this class. We will study the history of housing, learn about floor plans and planning space, and we will learn about and complete projects with arranging and decorating the interiors of rooms.

### 22207A001 Independent Living

1 Sem

Grades 11-12

This is primarily a discussion class. You will discover more about yourself and you will learn how to form healthy relationships with others.

**16054A001 Foods & Nutrition I**

1 Sem

Grades: 11-12 & Soph. with **FCS Life Skills**

We will mostly focus on health and nutrition. We learn about measuring, equivalents and kitchen organization. Some cooking is done as we approach the holiday season. This class is a prerequisite to Foods and Nutrition II.

**16054A002 Foods & Nutrition II**

1 Sem

Grades: 11-12

Prerequisite: Foods & Nutrition I

We will explore each of the food groups and prepare foods from each group.

**22210A001 Resource Management**

1 Sem

Grade: 12

REQUIRED

We will learn about the U.S. economy and how it works. We will learn about resources you have available to you and how you can manage them most effectively. Much of the class will focus on the power of your earning, spending and saving decisions.

You may join FCCLA if you are enrolled in an FCS class, or with permission of Mrs. Phipps.

## FOREIGN LANGUAGE - SPANISH

### 06101A000 Spanish I

2 Sem.

Grades: 9-12

Spanish I introduces the students to the Spanish language and culture through listening, speaking, reading and writing. An array of vocabulary and the present tense will be introduced throughout the year. By the end of the year, students will be able to communicate simple sentences and phrases either by speaking or written expression.

### 06102A000 Spanish II

2 Sem.

Grades: 10-12

Pre: Spanish I with at least a "C-", and receive clearance from guidance counselor and teacher.

Spanish II is a continuation from Spanish I and expands on students' previous knowledge of the language and culture. Students will continue to focus on the present tense in the first semester and start the past tense during the second semester. Vocabulary will continue to be a focus.

### 06103A000 Spanish III

2 Sem.

Grades: 11-12

Pre: Spanish II with at least a "C-", and receive clearance from guidance counselor and teacher.

Spanish III begins to focus more on the writing and speaking skills, as well as utilizing previous knowledge from Spanish I and II. Grammar will be emphasized, greater than vocabulary, as student's transition from the present tense into the past tense. Once mastery is achieved in the past tense, students will move to the future and conditional tenses.

### 06104A000 Spanish IV

2 Sem.

Grade: 12

Pre: Spanish III with at least a "C-", and receive clearance from guidance counselor and teacher.

Spanish IV is designed to prepare students for entry level college Spanish courses and will focus primarily on grammar and review from the previous three years of study. Students will continue to practice their speaking, writing, listening skills. Once mastery is achieved, students will move to the subjunctive form of verb conjugation.

## INSTRUMENTAL MUSIC

### 05101A000 General Band

2 Sem.

Grades: 9-12

General Band helps develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of non specified band literature styles (concert, marching, orchestral, and modern styles). The Chrisman High School Band is designed to offer as many varied experiences in instrumental music as possible. Students are required to perform in the pep and concert bands. Gifted students have the opportunity to participate in Solo and Ensemble contest and to audition for various Honor Bands. Jazz band is optional and will be offered when the instrumentation allows. All students are required to play all major scales and complete various music theory units.

### 05109A000 Class Percussion

1 Sem

Grades: 9-12

This course is open to all students regardless of experience level and is designed to give students a chance to try both percussion instruments and the guitar in a stress free environment, especially if they have never played them before. Class Percussion teaches students how to properly play the drum and other percussion instruments by ear and by reading music, as a group. There are no performances and grades are based upon both participation and bi-weekly written tests and playing exercises. Percussion Theory is a 1 semester class during 1<sup>st</sup> semester only.

### 05108A000 Guitar

1 Sem

Grades: 9-12

This Guitar course introduces students to the fundamentals of music and guitar-playing techniques, such as strumming and chords. This course may also include more advanced guitar-playing techniques.

### 05106A000 World Drumming/Instrumental Ensembles

1 Sem

Grades: 9-12

Instrumental Ensembles is intended to develop students' technique for playing percussion instruments in a small ensemble group. The Instrumental Ensemble course may cover one or more instrumental ensemble or band literature styles. Students will learn to play music from Africa, South America, the Caribbean Islands, Pacific Islands and other obscure regions of the world on hand drums and other hand held instruments. Students also learn about the history and culture of each region. The class is intended for students with no or little musical experience and can be accommodated for those who are experienced.

### 05116A000 Musical History/Appreciation

1 Sem

Grades: 9-12

Music History/Appreciation will survey different musical styles and periods with the intent of increasing students' enjoyment of musical styles and/or developing their artistic or technical judgment. Music History/Appreciation courses may also focus on developing an understanding of a particular style or period. This is a listening based music appreciation class where students learn to identify the major types of music throughout the world by sound, style, form and content. Students will spend the majority of every class listening to music in an effort to identify musical styles and forms by sound and taking notes accordingly. Students will also participate in class discussions about musical preferences based on regions of the world and on personal tastes.

## MATHEMATICS

### 02051A000 Foundations for Math 1      2 Sem.      Grade: 9

Prerequisite: Teacher recommendation.

An in-depth study of Algebra I concepts and review of foundational skills.

### 02301A000 Math 1      2 Sem.      Grades: 8-10

Pre: Recommendation of the 7<sup>th</sup> grade math teacher needed to take this class in 8<sup>th</sup> grade.

Develops an understanding in manipulative skills for applications to life's everyday problems, prepares the student for other courses in math and science, develops an understanding of the structure of various number systems, and builds skills in the operations with rational numbers, graphing and slope, linear equations with one or two variables, simple algebraic expressions, operations with radical expressions, factoring polynomials, solving quadratic equations, relations, absolute value, exponents, working with functions, exponential functions, rational equations, ratios, proportions, percents, inequalities, and solving system of equations, probability and data analysis.

### 02302A000 Math 2      2 Sem.      Grades 9-12

Prerequisite: Math I

Math 2 involves the study of quadratic and exponential functions represented algebraically, graphically, numerically in 21 tables and by verbal descriptions. Students write equivalent radical, rational and quadratic expressions to reveal information using properties of exponents, completing the square, and/or factoring. Students define similarity using transformational geometry and use this definition to prove geometric theorems. Students learn and apply trigonometric ratios, the Pythagorean Theorem and the relationship between sine and cosine to solve problems. Students recognize, calculate and use conditional probability and independence.

### 02303A000 Math 3      2 Sem.      Grades 10-12

Prerequisite: Math 1 & 2

Math 3 involves the study of polynomial, rational, logarithmic and trigonometric functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent polynomial, rational, trigonometric and logarithmic expressions to reveal information and key features. Students make geometric constructions and apply geometric concepts and trigonometric ratios to describe, model and solve problems. Students distinguish among sample surveys, experiments and observational studies to determine and interpret data.

### 02151A000 Finite Mathematics      1 Sem.      Grades: 11-12

Prerequisite: Math 2

This class is a junior/senior level class. The prerequisite for this class will be a passing grade in Algebra 2, although a student who has passed Intermediate Algebra may take it with special permission from a math teacher. This class is intended for students who are college bound but have a Math, Science, or Engineering field in mind. We cover topics that will help students prepare for a freshman level math class in college such as College Algebra, Set Theory, Ratio and Proportion, Rational and Irrational Numbers. We also cover topics that are practical to their lives after high school such as Income Taxes, Sales Taxes, Simple Interest, and Compound Interest.

**02151A000 Probability and Statistics**    1 Sem. (Spring)    Grades: 11-12

Prerequisite: Math 2

This class is a junior/senior level class. It is not required that students take finite before this class, but they must have passed Algebra 2. Probability and statistics will be especially beneficial to students who are going to go into a business related field, but also for any student who has an interest in probability. We will discuss topics such as how to take a survey, analyze and present its results, odds and probabilities.

**020110A000 Pre-Calculus**    2 Sem.    Grades: 11-12

Pre: Geometry & Algebra II Honors or Algebra II

We will begin students' exploration of calculus with trigonometry and advanced algebra. During this process we will cover linear relations and functions, systems of linear equations and inequalities, advanced graphing, polynomial and rational functions, trigonometric functions and their graphs, trigonometric identities and their equations, vectors and parametric equations, polar coordinates and complex numbers, conics, exponential and logarithmic functions, sequences and series, combinatorics , and statistics and data analysis.

**02121A000 Calculus**    2 Sem.    Grade: 12

Pre: Completion of Pre-Calculus and Teacher Recommendation

Students will explore limits, continuity, and derivatives for functions of one variable, applications of the derivative, the definite integral, and applications of the integral in order to develop a solid foundation for more advanced math courses beyond high school.

## **PHYSICAL EDUCATION AND HEALTH**

### **08001A000 Physical Education**

Required: 3 years

Grades: 9-12.

The PE course provides students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: teams sports, individual/dual sports, recreational sports, and fitness/conditioning activities. This course will be more “game” driven by playing multiple sports throughout the school year.

### **08051A000 Health Education**

Required: 1 Sem.

Grades: 9-10

This course is designed to provide students with the accurate information they need to make positive decisions about their health, both now and in the future. Topics covered include mental health, including self-esteem, managing stress and mental disorders; social health, including family and peer relationships and violence prevention; nutrition, exercise and fitness; substance abuse, including tobacco, alcohol and other drugs, reproduction and heredity, including abstinence education, teen pregnancy and STDs; infectious diseases, community and environmental health; and safety and first aid. This class is required for graduation.



## PHYSICAL SCIENCES

### 03160A000 Physical Science

2 Sem.

Grades: 9-10

One year of the 3-year science requirement for graduation, this course provides an opportunity for students to explore the two main branches of physical science--physics and chemistry. Basic concepts covered in physics include motion, work, energy, heat, waves, sound, light, color, electricity, and magnetism. Basic concepts covered in chemistry include the structure of matter, properties of matter, atoms, and families of atoms, atomic bonds, organic chemistry, chemical reactions, acids, bases, and salts. These concepts are covered through lecture, demonstrations, and laboratory exercises. Careers in this area are also discussed.

### 03008A000 Earth and Space Science

2 Sem.

Grade: 11

Earth and Space Science courses introduce students to the study of the earth from a local and global perspective. In these courses, students typically learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer. Advanced topics often include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet.

### 03101A000 Chemistry I

2 Sem.

Grades: 11-12, 10 w/ consent of instructor

Pre: Biology, Physical Science, Algebra I, and Geometry

This course involves studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gasses; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

### 03151A000 Physics

2 Sem.

Grades: 11 (with Consent of the Instructor) and 12

Pre: Biology, Physical Science, Chem I, Math 1, Math 2

The major units in this course are measurement and problem solving, velocity and acceleration, concurrent and parallel forces, two-dimensional and periodic motion, conservation of energy and momentum, phases of matter, heat measurement and engines, waves, sound waves, nature of light, electricity, and magnetism. These concepts and how they relate to everyday life are presented through lecture, demonstrations, and laboratory experiments. Careers in this area are also discussed.

### 03102A000 Chemistry II

2 Sem.

Grades: 11-12

Pre: Biology, Physical Science, Chem I, Algebra I, Math 1, Math 2

The major units of instruction in this course which builds on the concepts and knowledge gained in Chemistry I are chemical equilibrium, chemical kinetics, oxidation, reduction, reactions, nuclear chemistry, analytical chemistry, and a more in-depth look at many of the concepts and their relationships to everyday life. Careers in this area are also discussed.

## **SOCIAL SCIENCES**

### **04051A000 World History**                      1 Sem.                      Grades: 9-12

Focuses on the history of man from pre-history to Middle Ages. Topics include early civilizations of the Fertile Crescent, Seven Wonders of the Ancient World, Ancient Egypt, Greece, Ancient Olympics, and Rome.

### **04055A000 Modern European History**   1 Sem.                      Grades: 9-12

A continuation of SS110 that focuses on Europe. From a feudal society to the rise of nation states to the Renaissance & Reformation on into the 20<sup>th</sup> Century. Topics included are industrialization, unification of Germany & Italy, Napoleonic Wars, the Great War, and the rise of dictators.

### **04001A000 World Geography**                      1 Sem.                      Grades: 9-12

A study of countries, continents, and the people of the world. Topics included are the effects of climate, landforms, resources, and history of nations, with an emphasis on culture and current events.

### **04061A000 East Asian History**                      1 Sem                      Grades: 9-12

East Asian History will delve into the histories of the far eastern countries from the earliest settlements of humans through the modern world with focuses on political history, culture, comparison to the west, & international relations. Areas of study will include, but are not limited to Japan, China, Korea, India, and Vietnam.

### **04062A000 World Religions**                      1 Sem                      Grades: 9-12

This class's purpose is to critically consider various religions across the world. We will consider the strengths, weaknesses, & attracting factors of multiple major world religions as well as understanding the basic similarities & differences across all religions. We will objectively look at & discuss these religions with a purpose of educating students about other religions, not converting them. These religions may include Protestant, Christianity, Catholicism, Agnosticism, Buddhism, Hinduism, Confucianism, Islam, & Judaism, among others.

### **04101A000 American History**                      2 Sem.                      Grade: 10

#### **REQUIRED**

Required for graduation, this course includes a study of the beginning of American all the way into the 20<sup>th</sup> century. Topics included are Columbus, English Colonies, Revolutionary War, Louisiana Purchase, Civil War, Wild West Outlaws/Lawmen, Transitional America, WWI, Roarin' 20's, Great Depression, New Deal and WWII.

### **04161A000 Economics**                      1 Sem.                      Grades: 10-12

This course will give students a greater understanding of economics ranging from the individual microeconomics to the global economy macroeconomics. Units of study include supply & demand, labor unions, scarcity, inflation/deflation, banking, monetary/fiscal policy, GDP, & international trade.

### **04258A000 Sociology**                      1 Sem.                      Grades: 10-12

This course introduces students to the sociological approach to understanding human behavior. We consider how life experiences, attitudes, and values are shaped by membership in social categories such as social class, race/ethnicity, sex, sexuality, nationality. We will look at topics such as crime, food, global interaction, relationships, violence, and technology.

**04103A000 Contemporary History**      1 Sem      Grades: 11-12

Pre: 2 Semester of American History

A continuation of SS300 that focuses on modern American history from post-WWII into the present day. Topics included are the Cold War, Korean War, Vietnam War, Civil Rights Movement, Gulf War, comparison and contrasting culture (music, sports, etc.) through the decades, and the study of current events.

**04106A000 Contemporary U.S. Issues**      2 Sem.      Grades: 11-12

Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

**04161A000 Civics**      1 Sem.      Grade: 12

**REQUIRED**

Required for graduation. A study of the aspects of citizenship, its rights and duties. Throughout the course we will focus on how people can and should play an active role in government and the importance each citizen contributes to society. Topics include voting, running for office, law, flag code, obeying laws, and civic contribution to our local community. Class will also include the US Constitution Test, which is also required to pass for graduation.