

2024-2025  
Cornell Middle and High School  
Academic & Career Planning  
Guide



Reviewed on Nov. 3rd 2023

**School District of Cornell Nondiscrimination Notice**

The Cornell School District does not discriminate against students on the basis of sex, race, color, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional, or learning disability or handicap in its education programs or activities.

**REQUIREMENTS FOR GRADUATION**

Number of Credits Required for Graduation: 24 total credits, Required credits 15, Elective credits 9.

The classes and the number of credits needed are listed below:

1. A minimum of 24 credits will be required for graduation. Courses required within this total are as follows:

- a) 4 credits – English
- b) 3 credits - Mathematics
- c) 3 credits - Science
- d) 1 1/2 credits - Physical Education
- e) 3 credits - Social Studies including 1/2 credit American Government
- f) 1 semester – Health (grades 7-12)

3. All students will be required to take 7 credits each year. Study halls are at the Principal’s discretion. Some variations of the above requirements may be made by the Principal when long illnesses, a transfer student, or other extenuating circumstances make it necessary.

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5. Beginning in the 2016-17 school year, in order to receive a high school diploma a student must take, during the high school grades, a civics test comprised of 100 questions that are identical to the 100 questions that may be asked of an individual during the process of applying for U.S. citizenship by the United States Citizenship and Immigration Services. The student must correctly answer at least 60 of those questions. Students are allowed to retake a test an unlimited number of times in order to achieve a passing score. Students with disabilities who have an IEP must complete the test, but cannot be required to pass the test in order to graduate. A limited English proficient student must be permitted to take the civics test in the student’s language of choice. The civics test requirement also applies to students who are seeking a GED or high school equivalency diploma.

**4-YEAR COLLEGE PREP RECOMMENDATIONS**

English ..... 4+ credits

For example, the study of the English language and literature. Courses include Freshman English, composition, literature, rhetoric, and others. Most regular and advanced courses are accepted.

Mathematics ..... 4+ credits

For example, the study of mathematics, including algebra, geometry, and other mathematics courses with algebra or geometry prerequisites.

Science .....4+ credits

For example, the study of the theory and practice of natural sciences, including ecology, biology, chemistry, physics, astronomy, earth science, geology, and others. Courses often include a lab.

Social Studies ..... 3 credits

For example, the study of culture, history, political science, economics, sociology, and psychology, including world studies, United States history, economics, civics, and others.

Foreign Language..... 2 credits (Some universities)

Study of language and literature. For example: French, Spanish, Japanese, American Sign Language, and others.

Helpful websites: <http://www.uwhelp.wisconsin.edu/> and [www.wisconsinmentor.org](http://www.wisconsinmentor.org)

### **TECHNICAL COLLEGE PREP RECOMMENDATIONS**

English ..... 4 years

Mathematics.....2 years-Including Algebra

Science.....2 years-Some colleges/programs may have a specific science requirement.

Social Studies..... 3 years

Electives.....Computer skills and courses available in your areas of vocational interest

There are no general course admission requirements for Wisconsin technical colleges. However, individual programs may require specific courses for admission.

Helpful websites: [www.witechcolleges.org](http://www.witechcolleges.org)

For an updated weighted courses list please go to [cornellscholars.weebly.com](http://cornellscholars.weebly.com)

## **6th grade**

### **Social Studies 6**

Social Studies 6 introduces students to the beginnings of ancient civilization. We will trace the path of human origins in Africa and follow the path of migration around the Earth. This course will help students understand why we study history and the process in which we form conclusions about events in the past. Students will begin to learn about the major ancient civilization around the world and their cultures. Modern civilizations can trace their foundations to these ancient civilizations, and their cultures and histories teach us much about ourselves and the modern world in which we live.

### **Language Arts 6**

This course equips students with the essential language arts skills needed throughout their academic careers. Students read and analyze a variety of informational and fictional texts. Instruction and reading strategies accompany reading selections to help engage students in the text and sharpen their comprehension. Students express their ideas and knowledge using standard (formal) English in written and oral assignments. Writing expressive, analytical, and procedural compositions helps students develop communication skills necessary in today's world. Vocabulary is taught explicitly and through an array of vocabulary acquisition strategies that give students the tools to independently increase their vocabulary. Students study grammar, usage, and mechanics; and practice sentence analysis, sentence structure, and proper

**punctuation. The course includes discussion activities that engage students in the curriculum while creating a sense of community.**

### **Science 6**

In this course, students will understand that science is ongoing and inventive, and that scientific understandings have changed over time as new evidence is found. Students will investigate questions using scientific methods and tools, revise their personal understanding to accommodate knowledge, and communicate these understandings to others. Students will investigate these concepts in a lab setting.

### **Reading 6**

In this course, students will have time to read in class. They will use discussions in a small group setting to make connections/reflections. Students will also do a combination of independent reads, skills practice for academic reading and anchor text reading as a group

### **Science 7**

In this course, students will study natural hazards, climate and environmental change, groundwater, lakes, oceans, earthquakes, volcanoes, tectonics, minerals, fossils, soils, sediments, and rocks.

### **Math 6**

This course is structured to actively involve every student in the process of learning mathematics. The problem-based lessons provide a balance of basic skills, conceptual understanding, and problem solving strategies.

### **Careers 6**

This course incorporates an action-learning approach and uses techniques such as role-playing, small group discussions, and scenario analysis. During the career exploration lessons, the students engage in critical thinking as they delve into such topics as workplace communication, job searches, and professional analysis.

### **6th Grade Tech Ed--3418**

Class Focus: 6

Requirements: Safety Glasses (provided)

This course is designed to give students an introduction to a shop environment. Students will focus on safety in a shop environment. Students will learn about basic hand tools and their use along with basic power tools.

### **6th Grade PE**

This course is an integral component to a student's comprehensive education. It focuses on providing each student with the opportunity to develop skills, improve physical, social, and mental wellness. It is an opportunity to promote personal life-long health through exposure to a multitude of activities and recreation. Students will engage in team sports such as: Ultimate Frisbee, Dodgeball Variation Games, Kickball, Ping Pong, Tennis, Yard Games, Soccer, Volleyball, Flag Football, Basketball. *(Activities will be decided at the discretion of the teacher)* **7th Grade Health**

Course Description:

This class is designed to provide students with the most current health information while focusing on practical health skills that young people can use to develop and promote good health and wellness habits throughout their lives. Students will learn about specialized instruction in first aid techniques, cardiopulmonary resuscitation (CPR), and general safety procedures and behaviors along with the opportunity to become first aid and CPR certified. Additional topics include general health topics,

self-care, health effects of drug use, and effects of social media on physical, mental and emotional, and social health.

## 7th grade

### **7th Grade Tech Ed--3418**

Class Focus: 7

Requirements: Safety Glasses (provided)

This course is designed to give students a basic understanding of working with wood and metals.

Students will focus on safety in a shop environment. Students will learn basic power tool safety and will use these skills to layout and construct simple projects from wood and metal.

**Math 7:** On a daily basis, students in *Core Connections, Course 2* use problem-solving strategies, questioning, investigating, analyzing critically, gathering and constructing evidence, and communicating rigorous arguments justifying their thinking.

Students will be able to:

Use integers and complete operations with integers and rational numbers, including using the Order of Operations. Use diagrams and equal ratios to represent part-whole relationships. Use percentages and scale factors to determine percent increase or decrease, discounts, and markups. Use variable expressions to represent quantities in contextual problems. Simplify variable expressions by combining like terms and using the Distributive Property. Solve linear equations, including those with fractional coefficients and those with no solutions or infinitely many solutions. Solve and graph one-variable inequalities. Compare experimental and theoretical probabilities. Distinguish between dependent and independent events and calculate the probability of compound independent events. Represent probabilities of multiple events using systemic lists, area models, or tree diagrams. Design, conduct, and analyze surveys. Collect and compare data and describe the distribution of sets of data. Solve distance, rate, and time problems. Compare ratios and calculate unit rates.

### **English 7**

Each grade in the CommonLit 360 Curriculum includes at least one thematic unit, one novel or drama, one research and one argumentative writing unit. English 7 Thematic Units: Unit 1: Community and Belonging; Unit 2: Adolescence; Unit 3: Brown Girl Dreaming; Unit 4: Social Media: Risks and Rewards; Unit 5: Influential Voices; Unit 6: School Electives: Which Ones Matters Most? The curriculum structure and content are designed to foster the development of lifelong learning habits that students can carry with them beyond the classroom. Every lesson is designed around the unit's learning outcomes and aims to equip students with the skills necessary for successfully accomplishing the culminating task. In each lesson, students interact with one or more texts or pieces of essential unit content to develop the knowledge and skills required for success on the culminating task. To measure student understanding, each unit culminates in a task that assesses student understanding of core unit knowledge and skills. Throughout the unit, students engage in the writing process to refine this task so that they have a published product by the end of the unit.

### **Business 7**

Business 7 introduces students to the world of business and prepares them for the

economic roles of consumer, worker, and citizen. This course will serve as a background for other, more detailed business courses, such as marketing, business law, as well as preparation for future employment, financial literacy, and consumer decision making.

#### 7th Grade PE

This course is an integral component to a student's comprehensive education. It focuses on providing each student with the opportunity to develop skills, improve physical, social, and mental wellness. It is an opportunity to promote personal life-long health through exposure to a multitude of activities and recreation. Students will engage in team sports such as: **Ultimate Frisbee, Dodgeball Variation Games, Kickball, Ping Pong, Tennis, Yard Games, Soccer, Volleyball, Flag Football, Basketball.**

*(Activities will be decided at the discretion of the teacher) 7th Grade Health*

#### **Course Description:**

This class is designed to provide students with the most current health information while focusing on practical health skills that young people can use to develop and promote good health and wellness habits throughout their lives. Students will learn about specialized instruction in first aid techniques, cardiopulmonary resuscitation (CPR), and general safety procedures and behaviors along with the opportunity to become first aid and CPR certified. Additional topics include general health topics, self-care, health effects of drug use, and effects of social media on physical, mental and emotional, and social health.

### 8th Grade

#### **8th Grade Tech Ed--3418**

Class Focus: 8

Requirements: Safety Glasses (provided)

This course is designed to give students a more in depth understanding of working with wood and metals. Students will focus on safety in a shop environment. Students will learn more advanced power tool safety and will use these skills to layout and construct simple projects from wood and metal. Students will also learn basic welding safety and practice SMAW.

**Math 8:** On a daily basis, students in *Core Connections, Course 3* use problem-solving strategies, questioning, investigating, analyzing critically, gathering and constructing evidence, and communicating rigorous arguments justifying their thinking. Under teacher guidance, students learn in collaboration with others while sharing information, expertise, and ideas. The course helps students to develop multiple strategies to solve problems and to recognize the connections between concepts.

Students will be able to:

Represent a linear function with a graph, table, rule, and context and create any representation when provided by one of the others. Solve systems of equations by using tables and graphs. Symbolically manipulate expressions to solve problems including those with fractional coefficients. Solve contextual word problems using multiple strategies, including making tables, looking for patterns, drawing diagrams, and creating a table of guesses to assist with writing and solving a variable equation. Describe various geometric transformations on a coordinate grid. Represent data using scatterplots and describe associations. Collect and analyze data and make predictions based on the trend of the data. Compare ratios and calculate unit rates and slope ratios. Analyze the slope of a line graphically, numerically, and

contextually. Recognize and solve problems involving proportional relationships. Graph and analyze non-linear functions. Recognize and use the properties of similar figures to solve problems. Use the Pythagorean Theorem and its converse to solve problems in two and three dimensions.

### **English 8**

Each grade in the CommonLit 360 Curriculum includes at least one thematic unit, one novel or drama, one research and one argumentative writing unit. English 8 th Thematic Units: Unit 1: The Art of Suspense; Unit 2: Conveying Courage; Unit 3: Twelve Angry Men; Unit 4: Contact Sports: Worth the Risks?; Unit 5: Not That Different; Unit 6: The Debate Over School Start Time. The curriculum structure and content are designed to foster the development of lifelong learning habits that students can carry with them beyond the classroom. Every lesson is designed around the unit's learning outcomes and aims to equip students with the skills necessary for successfully accomplishing the culminating task. In each lesson, students interact with one or more texts or pieces of essential unit content to develop the knowledge and skills required for success on the culminating task. To measure student understanding, each unit culminates in a task that assesses student understanding of core unit knowledge and skills. Throughout the unit, students engage in the writing process to refine this task so that they have a published product by the end of the unit.

### **MS Spanish (virtual)**

Immerse yourself in the beauty of the Spanish language and the richness of its diverse cultures. In the beginning Spanish course, you will learn basic grammar and vocabulary skills to help build your fluency and language proficiency. You will explore the culture of Spanish-speaking countries through engaging interactive games, videos, and audio recordings and apply what you learn through written practice, listening, and speaking exercises.

## **Tech Ed**

### **Woodworking 1--4887**

Credits: .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses, Material Fees May Apply

Woodworking 1 introduces students to the various kinds of woods used in industry and offers experience in using selected woodworking tools. Students construct one or more projects and prepare a bill of materials. Correct and safe use of tools and equipment is emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming familiar with various kinds of wood-finishing materials. Students will have required projects.

### **Woodworking 2--4887**

Prerequisites: Woodworking 1

Credits: .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses, Material Fees May Apply

Woodworking 2 continues from Woodworking1. Students design and construct one or more projects and prepare a bill of materials. Correct and safe use of tools and equipment is emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming familiar with various kinds of wood-finishing materials. Students will have required and student selected projects.

**Woodworking 3 IND--4888**

Prerequisites: Woodworking 1/2, Instructor Approval

Credits: .5

Semester

Class Focus: 11-12

Requirements: Safety Glasses, Material Fees Will Apply

Woodworking 3 will build upon skills learned in Woodworking 1 and 2. At this level, students will initiate project ideas, complete detailed drawings of their projects, and will then take the projects to completion.

**Welding 1--5632**

Credits: .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses, Welding Gloves, Clamping Pliers, Jeans, Leather Shoes/Boots

Description: Welding 1 enables students to gain knowledge of the physical and chemical properties, uses, and applications of various metals. Students gain skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas) and experience in identifying, selecting, and rating appropriate techniques.

**Welding 2--5632**

Prerequisites: Welding 1

Credit: .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses, Welding Gloves, Clamping Pliers, Jeans, Leather Shoes/Boots, Material Fees May Apply

Welding 2 enables students to expand their knowledge of the physical and chemical properties, uses, and applications of various metals. Students gain skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes) and experience in identifying, selecting, and rating appropriate techniques. Students read and interpret blueprints in order to identify, select, and rate appropriate techniques.

**Welding 3 IND--5633**

Prerequisites: Welding 1/2, Instructor Approval

Credits: .5

Semester

Class Focus: 11-12

Requirements: Safety Glasses, Welding Gloves, Clamping Pliers, Jeans, Leather Shoes/Boots, Material Fees Will Apply

Welding 3 will build upon skills learned in Welding 1 and 2. At this level, students will initiate project ideas, complete detailed drawings of their projects, and will then take the projects to completion.

**Metalworking--5657**

Credits: .5

Elective

Class Focus: 9-12

Requirements: Safety Glasses



Metalworking courses introduce students to the physical and chemical properties of various metals and the tools and equipment used to manipulate metal and form it into products. Students will develop planning, layout, and measurement skills; gain experience in cutting, bending, and/or welding metal; complete projects according to blueprints or other specifications; and may also learn how to polish and finish metals. Correct use of metalworking tools and equipment is stressed. Students may also begin to learn the basics of machining.

### **Machining 1--5652**

Credits: .5

Elective

Class Focus: 9-12

Requirements: Safety Glasses

Machining courses enable students to design and manufacture metal parts using various machine tools and equipment. Course content may include interpreting specifications using blueprints; preparing and using manual and computer numerical controlled (CNC) lathes and milling machines, shapers, and grinders with skill, safety, and precision; maintenance; developing part specifications; and selecting appropriate materials. Advanced course topics may include quality control; statistical process control; and application of measurements, metalworking theory, and properties of materials..

### **Machining 2--5652**

Prerequisites: Machining 1, CAD

Credits: .5

Semester

Class Focus: 10-12

Requirements: Safety Glasses

Machining 2 further develops skills and understanding from Machining 1 and enables students to design and manufacture metal parts using various machine tools and equipment. Course content may include interpreting specifications using blueprints; preparing and using manual and computer numerical controlled (CNC) lathes and milling machines, shapers, and grinders with skill, safety, and precision; maintenance; developing part specifications; and selecting appropriate materials. Advanced course topics may include quality control; statistical process control; and application of measurements, metalworking theory, and properties of materials..

### **Building Repair and Maintenance--4872**

Credits: .5

Semester

Class Focus:9-12

Requirements: Safety Glasses

Building Repair and Maintenance trains students to maintain commercial, industrial, and residential buildings and homes. Instruction is provided in the basic maintenance and repair of air conditioning, heating, plumbing, electrical, and other mechanical systems. Topics covered may include identifying and using hand and power tools safely; installing and repairing floor coverings, walls, and ceilings; installing and repairing doors, windows, screens, and cabinets; applying finishes to prepared surfaces; and repairing roofs, masonry, plumbing, and electrical systems.

### **Carpentry 1--4902**

Credits: .5

Semester

Class Focus:9-12

Requirements: Safety Glasses

Carpentry provides information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills.

### **Carpentry 2--4903**

Prerequisites: Carpentry 1

Credits : .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses

Carpentry 2 will expand on skills learned in Carpentry 1 and will focus on the application of these skills. Students will practice learned skills by completing projects like building garden sheds, installing cabinets, making repairs or modifications to existing buildings, and other instructor assigned projects.

### **Electricity Comprehensive--4747**

Credits: .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses

Electricity-Comprehensive provides a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. These courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, and cables; and estimating job costs. In this course, safety is stressed, and a career exploration component may be offered.

### **CAD Design and Software--3580**

Credits: .5

Semester

Class Focus: 9-12

Requirements: Safety Glasses

CAD Design and Software introduces students to the computer-aided drafting systems available in the industry. Students will design items in Fusion and produce products with the use of the CNC technology available. Students will also work on print reading.

## **Social Studies**

### **Current History**

Credits: .5 social studies

Semester

Class Focus: 10 - 12

Current History will be a semester long class. In Current History students will learn how to find and use unbiased, critically based sources to inform ourselves on current issues in our community, country, and

world. Students will have the opportunity to take part in a Model United Nations where they will choose a nation to represent in mock debates on global issues. By the end of this course students will be able to find and format credible research data as well as understand how to run and participate in formal meetings.

### **Criminal Justice Transcribed Credit**

Credits: .5 social studies

Semester

Class Focus:

Criminal Justice is a semester-long Dual Credit course examining the criminal justice system and law enforcement agencies from both a historical and current perspective. Criminal Justice is an in depth look at the history of the criminal justice system; philosophy of law enforcement; civil and criminal law; local, state and federal law enforcement; career opportunities.

### **European History**

Credits: .5 social studies

Semester

Class focus: 9-12

European History is a History course covering the Age of Exploration to the Modern Era. We will study how various events such as the World Wars and the rise of Communism shaped the world. An emphasis will be placed on cause and effect and how the events covered in the class pushed us to where we are today.

### **Street Law**

Credits: .5 social studies

Semester

Class Focus: 10-12

Street Law is a semester-long social studies elective. Street Law will focus on our national, state and local legal systems. The content will be conveyed in a practical format to allow students to gain the knowledge necessary to survive in our law-saturated society. Students will engage in the study of criminal, civil, contract and family law. A strong emphasis will be placed on written work in the form of case studies and mock trials. We will touch on broad and specific legal topics to give students a better understanding of law and how it affects you in real life.

### **World Wars**

Credits: .5 Social Studies

Semester

Class Focus:9-12

World Wars is an in depth look at WWI, the interwar period, and WWII. We will be focusing on the causes and effects of the wars as well as the heroes and villains that fought in the wars. This class also includes a final project called a Mobile Museum where students choose a hero or villain from the era. Students will research the personal and historical information about their character and create an exhibit on the person.

### **World Studies II**

Credits: .5 social studies

Semester

Class Focus: 10-12

World Studies is a World History course covering the Age of Exploration to the Modern Era. We will study how various events such as the World Wars and the rise of Communism shaped the world. An emphasis will be placed on cause and effect and how the events covered in the class pushed us to where we are today.

## Math

### **Algebra**

Credits: 1 math

Year

Class Focus: 9

Algebra aims to deepen and extend student understanding built in previous courses by focusing on developing fluency with solving linear equations, inequalities, and systems. These skills are extended to solving quadratic equations, exploring linear, quadratic, and exponential functions graphically, numerically, symbolically, and as sequences, and by using regression techniques to analyze the fit of models to distributions of data.

Students will be able to: Representations of linear, quadratic, and exponential relationships using graphs, tables, equations, and contexts. Symbolic manipulation of expressions in order to solve problems, such as factoring, distributing, multiplying polynomials, expanding exponential expressions, etc. Analysis of the slope of a line multiple ways, including graphically, numerically, contextually (as a rate of change), and algebraically. Solving equations and inequalities using a variety of strategies, including rewriting (such as factoring, distributing, or completing the square), undoing (such as extracting the square root or subtracting a term from both sides of an equation), and looking inside (such as determining the possible values of the argument of an absolute value expression). Solving systems of two equations and inequalities with two variables using a variety of strategies, both graphically and algebraically. Representations of arithmetic and geometric sequences, including tables, graphs, and explicit or recursive formulas. Use of exponential models to solve problems, and to compare to linear models. Use of function notation. Statistical analysis of two-variable data, including determining regression lines, correlation coefficients, and creating residual plots.

### **Geometry**

Credits: 1 math

Year

Class Focus: 10

Geometry is the study of the properties, measurement, and relationships of points, lines, angles, surfaces, and solids. The course focuses on solving equations in real life situations through manipulation and graphing. Students will be competent in the following area: Geometric transformations (reflection, rotation, translation, dilation) and symmetry. Relationships between figures (such as similarity and congruence) in terms of rigid motions and similarity transformations. Properties of plane figures. Proofs of geometric theorems (investigating patterns to make conjectures, and formally proving them). Using coordinates to prove geometric theorems. Modeling with geometry. Measurements of plane figures (such as area, perimeter, and angle measure). Theorems about circles, including arc lengths and areas of sectors. Measurements of three-dimensional solids (such as volume and surface area). Tools for analyzing and measuring right triangles, general triangles, and complex shapes (such as the Pythagorean Theorem, trigonometric ratios, and the Laws of Sines and Cosines). Geometric constructions (with compass and straightedge). Using algebra to formulate and solve equations arising from geometric situations. Probability (independence and conditional probability, compound events, expected value, and permutations and combinations).

## **Advanced Algebra**

Credits: 1 math

Year

Class Focus: 10 - 12

This course is required for four-year college admission.

Students need to have completed Algebra and Geometry in order to take this course. Students will be introduced to and apply in realistic problems the following topics: functions, sequences, exponential functions, parabolas, cubics, and other parent graphs, linear systems, logarithms and other inverses, polynomials and general systems, probability, and trigonometric functions. This course will help prepare you for college mathematics. Graphing calculators are used extensively.

## **Math for Technical Trades- Transcribed Credit**



Credits: 1 math

Year

Class Focus: 11-12

This course will study how technicians use arithmetic and algebra as problem solving tools. Topics include arithmetic skills with integers, decimals, and fractions. Algebraic skills involving equations, word problems, percents, and technical formulas will focus on the needs of the students' professional studies. There are 5 units to this course: whole number and decimal arithmetic, fraction/ratio/proportion/percent, measurement and conversion, signed numbers and formula manipulation, and geometry/trigonometry. If you receive a C or higher you will also receive credit at CVTC.

## **Math Recovery**

Credits: 1 math

Year

Class Focus: 10-12

This course is for students that need to recover a high school math credit. If a student has failed Algebra or Geometry, they may take this course. This course covers key concepts in both Algebra and Geometry. The first semester will focus mainly on Algebra concepts and the 2nd semester will have an emphasis on Geometry concepts.

## **Music**

### **Band**

Credits: 1

Year

Class Focus: All

The primary intent of the Cornell Band is to help students learn to understand and appreciate music through performance and to study music as an art form. We accomplish these goals through rehearsal and performance experiences and by practicing and developing our skills and expanding our understanding of music. The high school band course develops students' technique for playing brass, percussion and woodwind instruments and covers a variety of music literature styles, and is focused on public performance.

### **Chorus**

Credits: 1

Year

Class Focus: 9-12

This course provides students the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop choral techniques and the ability to sing parts.

### **Music Appreciation**

Credits: 1

Year

Class Focus 9-12

Music appreciation is a year long high school level class that explores music of various styles through listening and performance experiences. Styles of music covered will be classical, music theater, jazz, popular, etc. Experiences will include the exploration of the origins of various Western music styles, how they are created, and the social and economic impact of music both locally and globally. Students will have the opportunity to guide the direction of the class and explore content that is meaningful to them.

### **Physical Education**

#### **Individual Sports**

Credits: .5 phy ed.

Semester

Class Focus: 9-12

This semester course is designed to offer the students a wide variety of cardiovascular, muscular endurance and strength, flexibility and fitness planning skill building methods and activities in order to enhance personal wellness. Units covered are Fitness Component, Tennis, Frisbee Golf, Yard games, Pickleball, Table Tennis, Badminton, Shuffleboard, Bowling (possible fee required), and Archery.

#### **Outdoor Physical Education**

Credit: .5 phy ed.

Semester

Class Focus: 9-12

This class provides an excellent way for students to learn necessary skills and participate in an array of physical activities geared for the outdoors. Units covered are Fitness Component, Horseshoes, Frisbee Golf / Tricks, Croquet, Biking (bike required), Bocce Ball, Golf (fee required), Hiking/Orienteering, Winter survival. Team sports include Speedball, Football, Frisbee (Football, softball, ultimate), Diamond Games, Recreation Games, and Flickerball. We will be going outside for all activities so students should wear clothes that are appropriate for the cold and snowy weather. Activities will vary depending on the number of students enrolled.

#### **Team Sports 1**

Credit: .5 phy ed.

Semester

Class Focus: 11-12

This course is designed for team activities that encourage a lifetime of fitness, sportsmanship, sport skill development, teamwork and activity through enjoyment in leisure sport. Examples of activities include: Soccer, Basketball, Floor Hockey, Team Handball, Volleyball, Flag football, Dodgeball Games, Box ball, and Flickerball.

### **Weight Training and Conditioning**

Credit: .5 phy ed.

Semester

Class Focus: 9-12

Course provides an emphasis on free weights, Olympic lifting, multiple joint movements and plyometric work including auxiliary lifts and circuit programs. Participants will also perform lateral agility, speed, jumping, and flexibility workouts. Participants will track their progress throughout the semester to see their growth in strength and endurance.

### **Stress/Wellness**

Credit: .5 Elective

Semester

Class Focus: 9-12

Course Description:

This class is designed to provide students with information and techniques on identifying and reducing stress. Students will also learn about the impact their daily wellness choices may have on their stress levels. This class will focus on practical health skills that young people can use to develop and promote good health and wellness habits throughout their lives.

### **7 Senses of Me**

Credit: .5 Elective

Semester

Class Focus: 9-12

Course Description:

Did you know that the human body actually experiences 7 different senses instead of 5?! In this class, students will learn psychological and health related topics and participate in experimental findings, theoretical interpretations, and demonstrations relating to the 7 different senses- Sight, Hearing, Smell, Taste, Touch, Vestibular(movement) and Proprioception(body position). Perceptual psychology will also be discussed in relation to the different senses.

### **Life Skills:**

Credit: .5 Elective

Semester

Class Focus: 10-12

Course Description:

Growing up and being an adult is not easy at times. This course introduces topics that students may not always hear about or are discussed with the people they are around. Topics include First Aid/CPR Training, Personal Safety and Security, Managing Finances, Relationships, Careers, and Personal Well-Being.

### **Dance Fitness:**

Credit: .5 Elective phy ed.

Semester

Class Focus: 10-12

Course Description:

Students will have a blast learning choreographed fitness dance routines using a combination of upper, lower, and cardio exercises that are all in sync to the coolest bass pumpin' music. Different dance workout videos including Hip Hop Dance, Folk Dance, Jazz Dance, Modern Dance, Square and Line Dances will be used throughout the course. Dance Fitness provides simple choreography and repetitive dance moves

that any student can quickly learn. This style will help students understand the basic elements of dance while also getting in a good workout.

### **Phy Ed 9**

Credit: 1 phy ed.

Year Long

Class Focus: 9

Course Description:

This course is an integral component to a student's comprehensive education. It focuses on providing each student with the opportunity to develop skills, improve physical, social, and mental wellness. It is an opportunity to promote personal life-long health through exposure to a multitude of activities and recreation. Students will engage in team sports such as: **Badminton, Ultimate Frisbee, Dodgeball Variation Games, Kickball, Ping Pong, Tennis, Outdoor Yard Games, Soccer, Volleyball, Flag Football, Basketball.** *(Activities will be decided at the discretion of the teacher)*

### **Sports Theory**

Credits: ½

Elective

Semester

Class Focus: 10-12

This class is designed for 10-12th graders looking to expand their knowledge of a variety of sports. Potential units: Types of Sports, Sport Creation, the history of sports and the Olympics, sportsmanship, professional sports vs. society, Sport Psychology, how to officiate of a variety of sports, successful coaching philosophies, and basic principles in athletic training.

## **English**

### **English 9**

Credit: 1 English

Year Long

Class Focus: 9

Each grade in the CommonLit 360 Curriculum includes at least one thematic unit, one novel or drama, one research and one argumentative writing unit. English 9 th Thematic Units: Unit 1: Following the Crowd; Unit 2: People and the Environment; Unit 3: Animal Farm; Unit 4: The Science of Branding: Why We Buy?; Unit 5: Parents and Children; Unit 6: Graffiti: Art or Crime? The curriculum structure and content are designed to foster the development of lifelong learning habits that students can carry with them beyond the classroom. Every lesson is designed around the unit's learning outcomes and aims to equip students with the skills necessary for successfully accomplishing the culminating task. In each lesson, students interact with one or more texts or pieces of essential unit content to develop the knowledge and skills required for success on the culminating task. To measure student understanding, each unit culminates in a task that assesses student understanding of core unit knowledge and skills. Throughout the unit, students engage in the writing process to refine this task so that they have a published product by the end of the unit.

### **English 10**



Credit: 1 English

Year Long

Class Focus: 10

Each grade in the CommonLit 360 Curriculum includes at least one thematic unit, one novel or drama, one research and one argumentative writing unit. English 10 th Thematic Units: Unit 1: Coming of Age; Unit 2: Science Fiction and Social Commentary; Unit 3: Things Fall Apart; Unit 4: The Fashion Industry: Past to Present; Unit 5: War Stories; Unit 6: Free Speech and Social Media. The curriculum structure and content are designed to foster the development of lifelong learning habits that students can carry with them beyond the classroom. Every lesson is designed around the unit's learning outcomes and aims to equip students with the skills necessary for successfully accomplishing the culminating task. In each lesson, students interact with one or more texts or pieces of essential unit content to develop the knowledge and skills required for success on the culminating task. To measure student understanding, each unit culminates in a task that assesses student understanding of core unit knowledge and skills. Throughout the unit, students engage in the writing process to refine this task so that they have a published product by the end of the unit.

### **English 11**

Credit: 1 English

Year Long

Class Focus: 11

Each grade in the CommonLit 360 Curriculum includes at least one thematic unit, one novel or drama, one research and one argumentative writing unit. English 11 th Thematic Units: Unit 1: Novel: The Great Gatsby; Unit 2: Their Eyes Were Watching God; Unit 3: The Social Contract. The curriculum's structure and content are designed to foster the development of lifelong learning habits that students can carry with them beyond the classroom.

Every lesson is designed around the unit's learning outcomes and aims to equip students with the skills necessary for successfully accomplishing the culminating task. In each lesson, students interact with one or more texts or pieces of essential unit content to develop the knowledge and skills required for success on the culminating task.

To measure student understanding, each unit culminates in a task that assesses student understanding of core unit knowledge and skills. Throughout the unit, students engage in the writing process to refine this task so that they have a published product by the end of the unit.

### **Speech CVTC -**

Credit: .75 English

Semester

Class Focus: 12

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course.

### **Oral Interpersonal Communications CVTC -**

Credit: .75 English

Semester

Class Focus: 12

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

## Agriculture

### **Agri-Science 1**

Credits: .5

Semester

Class focus: 9 – 12

May be used as a science .5 credit

Agriculture is still a major employer in the United States, with 19% of the workforce employed in Agri-science careers. This course is an introduction to Agri-science. Topics covered will be; “What is Agri-science?” and its importance to society. A soil science unit will be covered with students developing a soil and water management plan for a tract of land. A unit on leadership will also be covered in which we will learn basic parliamentary procedure. This course will also address FFA and Supervised Agricultural Experience

### **Production Animal Science**

Credits: .5

Semester

Class focus: 10 – 12

May be used as a science .5 credit

This course explores the many aspects of food animal production including dairy and beef cattle, sheep swine, dairy and meat goats, and poultry. Students will learn to identify the major breeds and to evaluate conformation of each species. General principles of animal nutrition, housing, health management, reproduction, and marketing will be covered plus specific requirements for each species. Hands-on activities include ration formulation, development of meat animal production plans and design of animal housing. Farm field trips will demonstrate the animal management principles covered. Class presentations by producers, veterinarians, ration advisors and others will increase student awareness of career opportunities in food animal production. This course will also address FFA and Supervised Agricultural Experience.

### **Companion Animal Science**

Credits: .5

Semester

Class focus: 10 – 12

May be used as a science .5 credit

This course provides students with practical knowledge of pet care and explores career opportunities in the pet industry. Care, management and, where appropriate training of traditional pets such as cats, dogs, birds, fish, guinea pigs and hamsters; working animals like dogs and exotic animals such as reptiles and amphibians will be addressed. Topics include nutrition, health management, reproductive management, diseases, and safety. Students will be exposed to a wide variety of pet and companion animals in the classroom or on tours and will hear presentations and observe demonstrations by veterinarians, other animal care workers such as kennel owners, trainers and groomers. This course will also address FFA and Supervised Agricultural Experiences.

### **Veterinary Science**

Credits: .5

Semester

Class Focus: 10 – 12

Veterinary Science explores the career field of animal medicine. Students will learn hands-on the job of a veterinarian. Areas of Study and Laboratories involve biosecurity and animal handling/ safety, Latin medical terminology, animal surgeries and treatments and care techniques. Students

will study the various animal anatomy and physiology similarities and differences. Animal health evaluation along with major disease issues affecting today's pets and production animals are vital for any animal owner or medical worker to understand. Students may work with a local veterinarian through a job shadow program to see the day to day work schedule involved. Animal species to be studied include cattle, horses, pigs, sheep, cats, dogs and exotic pets.

### **Food Science 1**

Credits: .5

Semester

Class focus: 10 – 12

Are you always hungry? Would you like to know more about your ready-to-eat microwave entree, fast food, your parent's home-cooked meal, and grandma's holiday spread? Then you need to know how to make those foods. The first step in food science is to identify a need, occasion or audience. You will get to cook, bake, and create. We will take raw ingredients and develop savory foods that will accompany your taste palette into the future. Also, find your way around the kitchen, practice safety, and discover your inner foodie. How will your eating habits be influenced for the rest of your life? Classroom presentations by food industry workers will provide students with information about career opportunities in food science and culinary. This course will also address FFA and Supervised Agricultural Experiences.

### **Food Science 2**

Credits: .5

Semester

Class focus: 10 – 12

This course addresses the processing of raw agricultural products into finished foods ready for the consumer. Students will learn to identify the major retail cuts of beef, pork and lamb. They will learn the processes of food preservation by freezing, canning, fermentation, and dehydration of meats, vegetables, grains and dairy products. Other areas covered will be quality control and food safety. Students will practice food processing and preservation techniques in hands-on laboratories and tour area food processing plants to observe processing, quality control and assurance of food safety. Classroom presentations by food processing industry workers will provide students with information about career opportunities in food science. This course will also address FFA and Supervised Agricultural Experiences.

### **Forestry**

Credits: .5

Semester

May be used as a science .5 credit

Class Focus: 9 – 12

Private landowners account for over 60% of the forestland ownership in Wisconsin. Forests are a vital part of our Agriculture Industry here in Wisconsin, providing jobs for thousands of workers. In this course students will investigate the importance of our forests. We will cover topics such as Forestry careers, tree identification, tree physiology, timber cruising, legal land description, forest management, chainsaw safety and proper tree felling techniques. Numerous outside labs will be conducted and time will be spent at the school forest. This course will also address FFA and Supervised Agricultural Experiences.

### **Wildlife Management**

Credits: .5

Semester

Class Focus: 9 - 12

Did you ever wonder what kind of duck that was or what is that pawed up area under that tree? This course is designed to acquaint you with the outdoors and the wildlife species in our area. We will cover topics such as upland game birds and their management, duck identifications, whitetail deer, game laws, predators and orienteering. We will cover how we can improve wildlife habitat on our own property. Our motto will be: Leave no child inside.

## **Greenhouse Management**

Credits: .5

Semester

Prerequisite: Horticulture is recommended

Class Focus: 11 - 12

This course will teach proper greenhouse management techniques with an emphasis on developing work based skills in students. Students will learn all aspects of proper greenhouse management including seed starting, transplanting, fertilizing, container selection and design, media types, and environmental controls. Students will be responsible for managing the school greenhouse and conducting a bedding plant sale from planting to marketing. Students will spend much time in the greenhouse completing hands-on activities.

## **Horticulture Transcribed Credit**



Credits: .5

Semester

May be used as a science .5 credit

Class Focus: 10 – 12

This course will cover topics about horticulture. Plant terminology, parts, functions and why horticulture is such a growing industry. Students will use their knowledge to grow things in the greenhouse and help with the poinsettia sale towards the end of the semester. Students can choose to take this course for CVTC transcribed credit. Students that choose to do this will be required to do more rigorous activities to meet the CVTC requirements for the credits.

## **Floriculture**

Credits: .5

Semester

Horticulture is a beautiful division of the agriculture industry with subdivisions of floriculture and landscaping. Flowers, plants, and outdoor spaces enhance our living and work spaces. Skills you will practice include floral design, plant identification, design principles, exterior and interior-scaping techniques, site assessment, and landscape maintenance. You will be implementing horticulture theories and applying them into real-life scenarios at school, home, and around our community. Test your creative mind by creating holiday and special arrangements along with designing a landscape. This course will also address FFA and Supervised Agricultural Experiences

## **Business**

### **Leadership Excellence for Business Transcribed Credit**



Credits: .5

Semester

This course provides you with an opportunity to develop strong self-awareness through personal changes and enhancement. Strong professional skills are the foundation for success, leading you to strengthen the core communication and interpersonal skills necessary to achieve excellence in business. The concepts from this course will become a basis of your increased ability to solve problems, relate well with others, and build individual effectiveness and personal accountability for results. Through personal assessments and feedback surveys, you will explore your own ability to be effective, learning where to focus your energies to have greater influence. You will learn where you can act with confidence, helped by discovering where you and others see your strengths and areas for development.

### **Retail Management/School Store**

Credits: .5

Semester

The course highlights the everyday mechanisms necessary to operate a successful retail establishment. The student is taught to evaluate methods for promoting merchandise, supervising employees, handling customer needs, and maintaining inventories. Other duties include operating and managing our school store, ordering inventory, and pricing products.

### **Accounting I Transcribed Credit-**

Credits: .5

Year

Class Focus: 11-12

YOU NEED THIS CLASS if you are thinking about going to college for business or marketing. Accounting introduces students to the basic concepts and terms of accounting. This course prepares the learner to analyze records, summarize and interpret accounting information. This course focuses on business transactions, financial statements, merchandising business transactions, special journals, internal controls, receivables and plant assets. The learner will prepare accounting transactions for a practice set, including month end transactions and preparation of the financial statements. Students can choose to take this course for CVTC trans-scripted credit. Students that choose to do this will be required to do more rigorous activities to meet the CVTC requirements for the credits.

### **Advanced Microsoft Office Transcribed Credit**

Credits: 1

Year

Class Focus: 10-12

Advanced Microsoft Office is a continuation of Microsoft Office where students will utilize the PC based Microsoft Office Suite, an integrated software package focusing on the Word (word processing), Excel (spreadsheet), PowerPoint (presentation) and Access (database) programs. Students learn to use many of the more detailed features within Microsoft Office to create professional documents, worksheets, reports and integrated files. **At the end of the course, students will have the option to become certified in the Microsoft Office programs.**

### **Principles of Management Transcribed Credit-**

Credits: .5

Semester

Class Focus: 11 - 12.

YOU NEED THIS CLASS if you are thinking about going to college for business or marketing. Students will learn business leadership. Areas of study will include planning, organizational structure, leadership styles, and effects of decision making. Students can choose to take this course for CVTC trans-scripted credit. Students that choose to do this will be required to do more rigorous activities to meet the CVTC requirements for the credits.

### **Innovative Business Mindset Transcribed Credit**

Credits: ½

Elective

Semester

Class Focus: 10- 12

In this course, students will define the traits and mindset of entrepreneurs. Students will use tools to determine their personal entrepreneurial traits. Students will examine a variety of entrepreneurial companies (small, social, and global.) Students will understand the difference between entrepreneurs and entrepreneurs. Students will evaluate existing business plans.

### **Marketing Principles Transcribed Credit-**

Credits: .5

Semester

Class Focus: 10-12

Marketing is a basic introduction to the scope and importance of marketing in the global economy. Lessons will relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management. Students can choose to take this course for CVTC trans-scripted credit. Students that choose to do this will be required to do more rigorous activities to meet the CVTC requirements for the credits.

### **Microsoft Office Suite Transcribed Credit**



**Credit:** ½

**Elective**

**Semester**

**Class Focus: 9**

The goal of this course is to provide an introduction to Microsoft Office Suite and how it is used in academic and business environments. The students will become familiar with the Office user interface and use it as they work with Word, PowerPoint, Excel, and Access.

### **Sports and Entertainment Marketing**

Credits: .5

Elective

Semester

Class Focus: 9-12

In Sports and Entertainment Marketing, you will develop a fundamental knowledge of marketing that relates sports and entertainment industries, and career possibilities available in the industries. You will also develop the necessary entry skills for a career in the sports and entertainment fields. Sports & Entertainment Marketing is a course designed to teach marketing concepts through (applied to) the sports and entertainment industry. Marketing is a tool that has allowed the U.S. economy to become highly successful internationally. The basic functions of marketing product/service management, distribution, selling, marketing information management, financing, pricing, and promotion will be covered. In addition to marketing overview, this course is designed to show how advertising, sales, and event marketing and communications are important.

### **Foundations in Business Writing, Traditional Business Writing, and Managerial Business Writing- transcribed credit**



Credits: 1/2

Elective

Semester

Class Focus: 10-12

This is a sequence of three courses:

**The first course, Foundations in Business Writing**, develops students into successful communicators in the business office. Students will develop professional skills, apply grammar skills, examine formats, and identify word usage errors in a variety of business documents.

**The second course, Traditional Business Writing**, develops students into successful communicators in the business office. Students will apply proofreading and grammar skills as they analyze

word usage errors and critique and edit a variety of business documents.

**The third course, Managerial Business Writing**, develops students into successful communicators in the business office. The course will include intense drill and review of proofreading, editing, and formatting. Students will use these skills to properly format and compose a variety of business documents.

## **Computers 6**

This course is designed to give you, the students, an overview of Computer Applications including current terminology, introduction to computer hardware, software applications, and procedures. You will learn and develop skills in these subjects: Keyboarding, file management and digital organization, digital citizenship, Google Docs, Google Sheets, and Google Slides.

## **Foreign Language**

### **Spanish I & II CVTC**



Credits: 1

Each semester

Class Focus: 9-12

This course provides an introduction to the Spanish language through the basic development of the four core language components: listening, speaking, reading and writing. It provides students with the basic conversational and communicative strategies necessary to carry out simple yet meaningful tasks common in everyday social interactions. Further, it exposes students to many cultural aspects of the Spanish speaking world. This second semester introductory course is a continuation of Spanish 1. It focuses on development of listening, speaking, reading, and writing skills, and the further development of basic conversational and grammatical tools introduced in the first semester. It also focuses on the expansion of students' cultural awareness with regard to the Spanish-speaking world.

## **Science**

### **Chemistry II**

Credits: 1

Year

Prerequisite: Chemistry 1

Class Focus: 11 & 12

This weighted course is designed for those students pursuing further education at the technical or college level, especially those pursuing careers related to science. This course is intended to give the student an exposure to the lab skills, study skills and knowledge required of a student entering chemistry at the college level. Units include organic chemistry, nuclear chemistry, electrochemistry, biochemistry, inorganic chemistry, and kinetics and reaction mechanisms.

### **Human Anatomy and Physiology**

Credits: 1

Year

Class Focus: 10- 12

The weighted class should be taken by anyone who is planning on entering a health care field or who is going to college. Topics covered in this class include: anatomical planes and position terms, basic chemistry, cellular biology, tissues and membranes, microbiology, and systems of the human body including the integumentary, muscular, skeletal, nervous, sensory, and endocrine system.

### **Field Ecology**

Credits: 1

Year or by Semester (½ credit)

Class Focus-9-12

Topics of study include: Chemical water testing, stream analysis based on invertebrate collection and identification as bioindicators, goldenrod-parasite study and graphing opportunity, forest analysis and a formal publication-worthy lab report, forest health indicators study, wildlife management unit, population studies and survival unit, supernatural ecology, lichen study, tree taxonomy experiences, environmental problem unit, land ethics and nature awareness activities and readings from Aldo Leopold's Sand County Almanac, phenology and nature weather indicator activities and readings from Kenny Salwey's Last River Rat, activities and readings pertaining to public relations cover-ups from Sheldon Rampton's satirical book, Toxic Sludge is Good for You, phenology journal project, coverage of Wisconsin bird and frog calls,

secrets of bass fishing unveiled, groundwater model tutorials and activities, lessons in nature photography, lessons in scrapbooking experiences in nature, lessons in backpacking, environmental song lyric analysis activity, and coverage of the spring wildflowers and of WI ducks.

### **Chemistry I**

Credits: 1

Year

Class Focus: 10

This course is designed for those students pursuing further education at the technical or college level, especially those pursuing careers in a science related field (i.e., medical, welding, cosmetology, environmental, etc.). This class is intended to give the student an exposure to the lab skills, study skills and knowledge required of a student entering chemistry at the college level. The topics include the phases and the properties of matter, changes to matter, calculating theoretical and experimental yield, calculating percent error, defining, sorting, and explaining the Periodic trends, mapping out electron configurations and orbital diagrams, calculating energy, wavelength, and frequency, periodic symbol analysis, predicting ionization trends, assigning oxidation numbers, classifying, writing and balancing chemical equations and word expressions, performing stoichiometry, analyzing solutions, thermochemistry, identifying and mapping out acid base reactions, differentiating the acid base theories, and performing titrations. A calculator is required for this class.

### **Biology**

Credits: 1

Year 9

This required freshman year science class focuses on life from a cellular level to an organismic level. Topics include the ways of science and the scientific method, cell chemistry, cell structure and function, cellular transport, photosynthesis, ATP and cellular respiration, protein synthesis, genetics and inheritance, genetic engineering, genetic condition presentation project, the theories of evolution (evidence and limitations of), taxonomy, microbiology, animal behavior, and vertebrates.

### **Advanced Biology**

Credits: 1

Year 10-11.

Prerequisite: Biology and Human Anatomy and Physiology

Class Focus: Open to Grades 11-12 with approval.

This weighted course is a continuation of Human Anatomy and Physiology. It covers the remaining units and body systems - blood, the heart, systemic circulation, immune system, respiratory system, digestive system, urinary system, and the reproductive system. Students who take this course are typically enrolled in the Health Care Academy through CVTC for half the day.

### **Science 8 (Physical Science)**

Credits: 1 - Middle School

Year: 8

This is a preparatory course for physics and chemistry. Units include measurement and the metric system, motion, force and friction, forces in fluids, simple machines and mechanical advantage, energy and power, thermal energy, atoms and bonds, chemical reactions, acids and bases, solutions, and dimensional analysis. A calculator is required for this class that can handle the power of ten operation.

### **Science 7**

Credits 1 - Middle School

Year: 7



This course covers three main topics - atmosphere and weather, earth science, and astronomy (space science). The weather and atmosphere unit covers the following topics atmospheric layers, air pressure, heating of the earth, local and global winds, moisture in the atmosphere, cloud classification, weather map interpretation, weather symbol analysis, weather fronts, and climate. Earth science units include crustal movement and deformation, plate tectonics, earthquakes and volcanoes, and minerals and the rock cycle. Space science unit includes the sun, the solar system, the lunar phases and eclipses, stars and galaxies classification and information. The opening unit covers the basics of the scientific method.