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# **High School**

All core subject courses are aligned to the national standards. For math and English Language Arts, they are aligned to the Common Core. For science, Next Generation Science Standards, and for social studies, the C3 Framework from the National Council for Social Studies.

### **Social Studies**

Course and Description	Credits
Civics Being a citizen is more than just voting every four years. Civics focuses on how to be involved in local, state, and national government decisions that affect everyone's life. Projects may include publishing a political cartoon, attending a local government meeting, or submitting an amendment of the constitution.	0.5 credits
Civics <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Economics Everyone will spend and make money during their lives and economics will provide an understanding on how money affects individuals, groups of people, and our government. Projects may include starting your own business, evaluating your cities budget, or analyzing why the cost is so high on Air Jordan shoes.	0.5 credits
Economics <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
US History and Geography US History & Geography focuses on the concepts that underlie studying history and geography. Analyzing historical events of the United States are used to develop an understanding of spatial patterns, change, perspectives, causation, and other critical skills in geography and history. Projects may include analyzing why the car industry shrunk in Detroit, how World War I impacted your community, or designing a 9/11 monument.	1 credit
US History and Geography <b>Honors</b>	



Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
World History and Geography World History & Geography focuses on the concepts that underlie studying history and geography. Analyzing historical events across the world are used to develop an understanding of spatial patterns, change, perspectives, causation, and other critical skills in geography and history. Projects may include investigating the bubonic plague, predicting population growth issues, or comparing Imperialists governments to our current government.	1 credit
World History and Geography <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	

# Science

Course and Description	Credits
Biology Biology will cover the study of life. Students will develop their abilities of scientific investigations by applying principles of the scientific method to explore these core concepts. Projects may include writing to elected officials about environmental concerns, creating video scripts, designing an ideal animal environment, and a flipbook.	1 credit
Biology <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Chemistry Chemistry is the study of matter; its composition, structure, and properties. It includes the study of measurement, problem solving, classification of matter, energy, atomic structure, chemical formulas, chemical equations, phases of matter, gas laws, electron configuration, periodicity of elements, chemical bonding, and solutions. Projects may include learning about HVAC professionals, creating an energy packed trail mix, or analyzing the science of ice cream.	1 credit



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Chemistry <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Physics Physics includes the study of forces and motion, Newton's laws, gravitational interactions, energy, light, waves & sound, and electricity. This course should be considered necessary preparation for students interested in such careers as architecture, biomedical, technical studies of mechanics and electricity. Projects may include designing an ice pack, investigating the danger of using cell phones, and analyzing car crashes.	1 credit
Physics <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Anatomy and Physiology Students will learn about the structures and functions of the human body. They will explore the concept of homeostasis, the ways the body systems should function, and what happens when they don't function well. Projects may include investigating the hormones in milk, identifying ages and stages of human development, and learning about the body's defenses against disease.	1 credit
Anatomy and Physiology <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Earth and Space Science Earth and Space Science focuses on the study of space, geologic structures and forces, the waters on our planet, and the atmospheric forces that shape our world. Projects may include analyzing local community sinkholes, investigating local environmental issues, analyzing the geology of rock climbing, and creating 3D models of space.	1 credit
Earth and Space Science <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	



### **ELA**

Course and Description	Credits
English 09 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit
English 09 <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
English 10 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit
English 10 <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
English 11 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit
English 11 <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
English 12 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit
English 12 <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	



### Math

Course and Description	Credits
Algebra Readiness Students will learn about basic algebra concepts to prepare for Algebra 1 and Algebra 2. Projects may include preparing to buy a car, graphing art, and planning a dream vacation.	1 credit
Algebra 1 Algebra 1 includes the study of real numbers, expressions, equations and other algebraic concepts. Students demonstrate understanding through real-world projects that often include concepts from other courses such as Geometry or Physics. Projects may include authentic problems such as how to determine the best cell phone plan or calculate electrical costs for your home.	1 credit
Algebra 1 <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Algebra 2 Algebra 2 focuses on creating, graphing and interpreting functions to solve real-world problems. Projects may include how to keep data safe using cryptography, determine if a real asteroid will collide with earth, or choosing the best car to purchase.	1 credit
Algebra 2 <b>Honors</b> - Coming soon!	
Geometry Geometry focuses on the application of geometry to our world through concepts including geometric measurement, modeling, trigonometry, and congruence. Projects may include modeling the spread of a disease, designing a skate part, or using Minecraft to draft a real-world building.	1 credit
Geometry <b>Honors</b> Honors courses at Centric Learning cover the same content as the regular course, plus some additional material. Honors courses also require students to complete a mostly self-driven "capstone" project in order to finalize their credit.	
Precalculus	1 credit



Precalculus gets students ready for higher level math by focusing on concepts like complex numbers, vectors, and functions. Projects may include creating a missile tracking system, creating mathematical artwork, or designing a fallout shelter.	
Precalculus <b>Honors</b> - Coming soon!	

# Other

Course and Description	Credits
Physical Education Students will learn about their relationship with health, fitness, and exercise. Projects may include the benefits of physical activity, exercise and the heart, and sportsmanship.	0.5 credits
Yoga Students will learn about the basics of yoga in this physical education elective. They will learn about the cultural and historical significance of yoga, as well as the mind and body benefits. Students will learn and practice the basics of breathwork, sun salutations, common yoga poses, and vinyasa flows with a certified yoga teacher as their video guide.	0.5 credits
Health Students will learn about health in a variety of forms, including the body and mind. Projects may include mental health, fitness, conflict resolution, and sexual health.	0.5 credits
Visual Art Students will have the chance to learn about famous artwork, describe art using artistic language, and try out new art techniques themselves. Many projects in other subject areas and courses integrate art strands, but there are standalone visual arts projects to complete this course, as well. Projects may include using everyday materials, critiquing artwork, and why people make art.	1 credit
Theater Arts Students will learn about theater as a form of art in a variety of ways. They will watch plays, learn about the elements of theater, and more. Projects may include recreating a play, bringing a script to life, and western versus eastern theater.	1 credit
Digital Photography Students will learn about digital photography as a form of visual art. They will learn the techniques of digital photography to curate their own portfolio. Projects may include ethics in photography, interpreting photographs, and creating an exhibit.	1 credit
Information and Communication Technology	1 credit



Technology strands are woven throughout a variety of projects in a variety of courses. There are also standalone technology projects students can work on to develop their twenty first century skills. Projects may include using the internet to conduct research or using a new technology tool to create a Final Product, such as an infographic or 3D model.	
Cooking Students will learn about food safety, nutrition, developing a recipe, and practical cooking skills. Projects may include starting a new restaurant or learning about diverse cultural cuisines around the world.	1 credit
Music Students will learn about musical theory, music history, and have the opportunity to make their own music. Projects may include analyzing the music of commercials and writing an original song.	1 credit
Psychology Psychology is the study of the human mind and behavior. Students learn how we develop habits, become addicted to chocolate, or develop during childhood. Projects may include practicing stress reducing techniques, teaching younger children how their brain develops, or designing an ethical psychological experiment.	1 credit
Personal Finance Students will learn about personal finance concepts such as budgeting, saving, taxes, and monitoring a bank account. Projects may include establishing an emergency fund, comparing careers and incomes, and the basics of investing.	1 credit
Career Development Students will learn about career options available to them and start to set goals and make plans to achieve their dream careers. Projects may include creating a resume, writing a letter for a scholarship application, and exploring interesting careers.	1 credit
Creative Writing Creative Writing is a slightly different take on English Language Arts than a standard ELA class. It focuses on narrative writing skills and using words and language in creative ways. Projects may include exploring different genre "worlds," writing an adventure story, and crafting an urban legend.	1 credit
Communications In the Communications course, students have projects focused on four topics: journalism, social media and marketing, workplace etiquette, and public speaking. The aim is to cover a variety of 21st century communication styles and skills to prepare students for their college and career experiences.	0.5 credit



# Middle School

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### **Social Studies**

Course and Description	Credits
Social Studies 06 Social Studies 06 focuses on the concepts of geography. Students use basic map reading skills, as well as critical engaging in thinking about deep, compelling questions. Projects may include looking at supply chains for the NCAA, agriculture, and African history and geography.	1 credit
Social Studies 07 Social Studies 07 focuses on the concepts that underlie studying world history and geography. Analyzing historical events of the world are used to develop an understanding of spatial patterns, change, perspectives, causation, and other critical skills in geography and history. Social Studies 07 focuses on ancient world history. Projects may include acting as a historical researcher, writing historical fiction, and conducting a public debate.	1 credit
US History 08 U.S. History 08 focuses on the concepts that underlie studying history and geography. Analyzing historical events of the United States are used to develop an understanding of spatial patterns, change, perspectives, causation, and other critical skills in geography and history. U.S. History 08 focuses on the 1754 - 1877 period. Projects may include creating a public service announcement, writing an argumentative essay, and creating a historical blog.	1 credit

### Science

Course and Description	Credits
Science 06 Science 06 focuses on building students' scientific understanding of physical sciences. This includes the properties of matter, chemical reactions, energy transfer, and conservation of	1 credit



energy. Projects may include designing a roller coaster using kinetic and potential energy and understanding properties of solids, liquids, and gases.	
Science 07 Science 07 focuses on building students' scientific understanding of life science concepts. This includes basic cellular functions, ecology, and more. Projects may include modeling a cell, understanding genetic inheritance, and exploring the process of pollination.	1 credit
Science 08 Science 08 focuses on building students' scientific understanding of earth and space science. This includes geology, astronomy, and meteorology concepts, in addition to others. Projects may include analyzing carbon footprints, looking at the planets as heavenly bodies, and understanding the water cycle.	1 credit

# **ELA**

Course and Description	Credits
English 06 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit
English 07 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit
English 08 In English Language Arts, students demonstrate the four aspects of language use: reading, writing, speaking, and listening. Students demonstrate these skills by completing projects focused on these skills or through cross curricular projects in other subjects areas.	1 credit

## Math

Course and Description	Credits
Math 06	1 credit



Math 06 focuses on proportional relationships, rational numbers, expressions, linear equations, scale drawings, and drawing inferences about populations. Projects may include remodeling a room, planning a party, and designing packaging for products.	
Math 07 Math 07 focuses on proportional relationships, rational numbers, expressions, linear equations, scale drawings, and drawing inferences about populations. Projects may include tracking a company ledger, designing an object in Minecraft, or plan a city development.	1 credit
Math 08 Math 08 focuses on formulating and reasoning about expressions and equations, grasping the concept of a function, and analyzing two- and three-dimensional space and figures. Projects may include the mathematics of photography, designing a computer, and creating a wheelchair ramp.	1 credit

### Other

Course and Description	Credits
Physical Education 07 Students will learn about their relationship with health, fitness, and exercise. Projects may include muscle physiology, flexibility, and healthy body image.	0.5 credits
Physical Education 08 Students will learn about their relationship with health, fitness, and exercise. Projects may include sports, exercise routines, and healthy work outs.	0.5 credits
Health MS Students will learn about keeping healthy bodies. Projects include sleep, friendships, peer pressure, nutrition, exercise, and hydration, mental health, goal setting, sun safety, and more.	0.5 credits
Visual Art MS Students will have the chance to learn about famous artwork, describe art using artistic language, and try out new art techniques themselves. Many projects in other subject areas and courses integrate art strands, but there are standalone visual arts projects to complete this course, as well. Projects may include creating a virtual art gallery, community artwork, and crafting an artist's statement.	1 credit
Theater Art MS	1 credit



Students will learn about theater as a form of art in a variety of ways. They will watch plays, learn about the elements of theater, and more. Projects may include how real life inspires theater, warming up for acting, and evaluating theatrical performances.	
Information and Communication Technology MS Technology strands are woven throughout a variety of projects in a variety of courses. There are also standalone technology projects students can work on to develop their twenty first century skills. Projects include an introduction to the learning	1 credit



# **Elementary School**

All core subject courses are aligned to the national standards. For math and English Language Arts, they are aligned to the Common Core. For science, Next Generation Science Standards, and for social studies, the C3 Framework from the National Council for Social Studies.

All elementary school projects integrate math, ELA, and science and/or social studies into each project. There are twelve projects to complete in a year to cover all grade level content. Projects are all four modules and include a culminating Final Product for students to demonstrate their understanding of the project's driving question. Project sequences are driven by the mathematics skills taught and used in them, with meaningful, rigorous ELA, science, and social studies connections woven in as they are relevant.

#### **Third Grade**

#### **Projects and Description**

Below is a list of third grade projects in the recommended sequence:

- Fossils, a Hint from the Past Students will take on the role of an archaeologist and get to explore the fossil record. They will consider the purposes of rounding numbers in conjunction with estimating the age of a fossil, and they will get to read a novel dealing with a favorite childhood fossil dinosaurs.
- **Save the Planet** Students will explore some of the problems that humans may have caused on Earth, as well as ingenious, creative solutions that people have come up with to help save the planet, in particular using super cool magnets.
- **Animals Have Families, Too** Students will consider the meaning of family in a much broader sense than the traditional definition, and they will connect this idea to "families" in the animal kingdom. Students will also focus on learning new vocabulary, an important reading skill and crucial for other other subjects, too.
- **Build a Zoo** Students will continue their exploration of the animal kingdom as they read about another fictional animal's story and apply their new learning about division to design enclosures for a zoo. Students will also explore the intersection of climates in both science and social studies.
- **Abracadabra** Students will take on the role of a magician as they make connections between math, patterns and the concept of force to create their own magic trick.
- **Planning a Garden** In combining information about area, life cycles and change over time, students will work as a botanist to logically plan out a garden. The students will use integration of ideas from informational texts to help support their planning.
- **New In Town** Students will act as a city planner as they create a new city. They will learn and apply information about shapes and perimeter and will develop an understanding of creating and using maps.
- Order Up While working through a novel study to focus on key ideas and details, students will



incorporate information about fractions to design a restaurant. They will learn about the engineering required to create an oven and a cooler. They will learn how to understand and convey their opinions while developing questionnaires.

- **Down on the Farm** In the role of an agricultural farmer, students work on using the measurement of length and knowledge about traits to develop a farm. They will dive into word study and learn about the importance of idea integration using different texts.
- **Need for Speed** As students zoom through this project while assuming the role of a race car driver, students will learn about the transportation of goods and ideas. They will learn about telling time, developing and sharing an opinion and identifying key ideas.
- **Under the Sea** Students will act as marine biologists to learn about habitats and how they change. They will apply that information while learning about volume and mass. Narrative and figurative language will be explored as students gain a new understanding of the craft and structure of literature.
- **Natural Disasters** While working through understanding the craft and structure of an engaging informational series, students will learn about catastrophic events and severe weather. They will act as meteorologists to develop bar graphs and incorporate technology and notetaking to convey their information.

#### **Fourth Grade**

#### **Projects and Description**

Below is a list of fourth grade projects in the recommended sequence:

- **Bridge Building** Students are introduced to geometry concepts and they apply this knowledge to designing a bridge. After working through the engineering process, they create and present a slideshow proposal of their work.
- **Difference Makers** Students learn about "difference makers" by studying a biography, in addition to learning about how the US government works. They consider how they can make a difference in their own communities and by participating in civic duties.
- **Reduce Reuse Recycle** Students explore data and ways to represent and work with large numbers as they consider their carbon footprints. They also consider the instruction of science and civics as they explore environmental policy making.
- **Heroes All Around Us** Students consider what it means to be a hero, both by reflecting on their own lives and heroes, as well as through a novel study. Further, they connect their learning about animal and plant adaptations to the animal characters they read about.
- **Video Games: Good or Bad?** Students are introduced to the long division algorithm and make the connection between mathematical algorithms and coding algorithms. They have the opportunity to code their own video game, as well as engage in research and persuasive writing about their own screen time limits.
- **Plan a Vacation** Students put their learning about adding, subtracting, multiplying, and dividing together to solve word problems associated with planning a vacation. They learn about countries around the world from a variety of perspectives, including that of an economist considering international trade implications.
- **Hidden Treasures** Students zero in on their own community and connect science, social studies, ELA, and art through photography. Students will learn about light and their community in order to



- create a photo essay.
- **Tiny House** Students will explore how to live efficiently and effectively, while also learning about area, perimeter, and the mathematics of interior design. They will understand how energy is transferred and converted to power a home, and they will get to design their own energy transforming device.
- **Changes to Earth** Students will get to learn a lot about geology in this project as they explore rock layers, fossils, erosion, and maps of Earth's features. They will connect the idea of timelines and models to mathematical number lines.
- **Learning Through Music** Students will look at music as poetry and fractions in this unique project. They will understand examples of figurative language and consider how fractions, though sometimes difficult, are part of their everyday lives in ways they may never have considered.
- **Start a Lemonade Stand** Students will read about a fictional "lemonade war" while considering the very real economics concepts associated with running a lemonade stand. In addition to the social studies skills, they will see how mathematics is crucial in business, too.
- **Transitions** Students will consider what it means to learn and grow through a focus on personal narratives. As they are approaching fifth grade, students will reflect on their learning journeys so far and set goals for the journey ahead.

#### Fifth Grade

#### **Projects and Description**

Below is a list of fifth grade projects in the recommended sequence:

- The Power of Water and Numbers Students will start off the year with a deep review, as well as adding to their knowledge of place value concepts. They will connect their mathematical learning with an understanding of just how vast the water system on Earth is, and how access to clean water is an important humanitarian consideration.
- **Out of this World** Students will imagine life on other planets! They will explore the distance of the sun and stars, model seasonal changes, multiply large numbers, and compare literary themes. They will get to apply their learning to opinion writing.
- **Native American History** Students will learn about the rich Native American history and present-day culture in the US, while also understanding the devastating effects that the US government and colonists had on Native American populations.
- **Cycles of Life** Students engage in ecological studies related to the role that plants and animals play in food chains and food webs. Students will get to study an ecosystem in Florida to make literary connections to their new biology knowledge.
- **People Who Inspire** Students will learn about many diverse, inspirational people, particularly one refugee from Vietnam and her move to the US as they read her memoir. They will also get the chance to research and write their own biography about someone who inspires them, and then turn it into a mini documentary.
- **Greener Faster Further** Students will learn all about automobiles, what powers them, and the engineers who work on them. They will practice informational text skills while also learning about how important measurement and conversion is in engineering and design. Students will have many opportunities to actually build, test, and refine their own designs, too.
- What's the Matter? Students will learn about volume and the properties of matter. Through a



novel studyl, they will discover that "believing is seeing" as many of the properties of matter are not visible characteristics. They will graph points on a coordinate plane and create a board game based on the novel.

- **Down to Earth** Students will focus on gravity and the benefits to humans of that force. They will read informational texts and engage in mini-experiments that show gravitational force at work. Using patterns of numbers, students will create ordered pairs and practice graphing on a coordinate plane. Finally students will learn programming through Scratch and create an animation teaching others about gravity.
- **Birth of Today's USA** Students will add and subject fractions while they learn about the development of the United States of America. Through informational articles, they will explore the ways the USA has been shaped by events. They will create an opinion essay related to the History of the country.
- **Iron Chef** Students will discover the Science and Math within cooking as they don their chef's hats! They will practice multiplying and dividing fractions as they learn about recipes and ingredient measurements. Students will create an informational essay related to creating a favorite meal.
- **Green Thumb** Students will explore their responsibilities to nature and the environment as they learn about environmental concepts such as deforestation and pollution. They will plot on a line graph within Mathematics and learn how to be stewards of nature as they create a children's book to share with others.
- The Adventure of Life Students will begin to prepare for the transition to middle school as they learn about how others have dealt with change. Through two short works of literature, students will gain perspective and work to create their own short memoir essay.