

Hanna Cyber Academy **(HCA)**



Middle School Curriculum Guide **2022-23 School Year**



Hanna Virtual Solutions

Electives

Art Appreciation Part 1 & Part 2 (0.5 Credits)

Grades: 8-12
Prerequisite: None
Materials: None

What makes an artwork a masterpiece? Why do artists create art? What is the difference between Rococo and Art Nouveau? In this course, students will discover the answers to these questions and more. We examine the elements of art and principles of design, and explore how artists have used these elements and principles in the creation of art for centuries.

MS Art Explorations (.5 credits)

Grades: 6-8
Prerequisite: None
Materials: Funny Photomaker (Free Download)

Introducing students to diverse areas in the arts can broaden their perspective on the arts in general. Arts Explorations encourages students to experience each of the modern arts disciplines including Visual Arts, Theatre, Music, Media Arts and Dance. Students will also be able to identify areas of special interest where they would like continued study and the ways that the arts can be a part of their career paths.

MS Health Part 1 & Part 2 (.5 credits)

Grades: 6-8
Prerequisite: None
Materials: None

This course will help the student understand the importance of making decisions that will affect his or her physical, emotional, mental, and social health. This course will provide students with the knowledge and resources they will need to make responsible informed decisions about their health. Students will have an opportunity to evaluate their own values, opinions, and attitudes about health.

MS Physical Education Part 1 & 2 (AE) (.5 credits)

Grades: 6-8
Prerequisite: None
Materials: None

Emphasis in this course is placed on the value of these sports as possible lifetime activities and on creating a clear explanation of the rules and basic principles of a variety of sports. The sports covered in this course are archery, bicycling, golf, skiing, tennis, volleyball, baseball, basketball, football, hockey, and soccer.

Information about the playing area and equipment, basic rules, safety considerations, and terminology for each sport are included in the discussions. For the most part, the information presented in each lesson applies to sports programs throughout most sections of the United States.

MS World Geography Part 1 & 2 (.5 credits)

Grades: 6-8
Prerequisite: None
Materials: None

In this exploratory course, students will get an overview of both physical and human geography. To start their studies students will define and describe the five themes of geography: location, place, region, human-environment interaction, and movement. The students will explore each of the major regions of the world—the Americas, Europe, Africa, the Middle East, Central and Eastern Asia, and Southern Asia and Oceania—while focusing on these five themes.

Music Appreciation Part 1 & 2 (.5 credits)

Grades: 8-12
Prerequisite: None
Materials: None

Students will gain a thorough understanding of music by studying the elements of music, musical instruments, and music history, as well as music advocacy. Students will be introduced to the orchestra and composers from around the world. They will be required to be a composer, performer, instrument inventor, and advocate.

Middle School 2D Studio Art (.5 credits)

Grades: 7-8
Required Material:

Various sizes of white drawing paper and colored paper, Paintbrushes in varying sizes, Rules and/or protractor, Erasers, Scissors, Miscellaneous household objects to use for still life art. A Digital camera, camera phone, or other type of camera

Paint: (at least two or more of the following): Tempera Paint, Watercolor, Oil Paint, Acrylic Paint, Ink Wash

Drawing Tools: (at least two or more of the following): Pastels, Markers, Crayons, Charcoal, Colored Pencil

Close your eyes and imagine you're standing in an art studio the smell of paint, the heat of the kiln, and the infinite creative possibilities that linger in the air. This is where art is born, and in 2D Studio Art, you'll learn how to bring your art visions to life. Whatever medium you prefer painting, drawing, photography this course will teach you the design elements and principles needed to create a work of art, explore your artistic inspirations, travel back in time to look at art in different cultures, and gain insight about the art of critiquing. If you've ever dreamed about making a living as an artist, this course

will give you the tools and background that you need to turn those dreams into a reality!

Middle School Career Exploration 1: Charting Your Path (.5 credits)

Grades: 6-8

How do you pick a career path when you're not sure what's even out there? This course allows you to begin exploring options in fields such as teaching, business, government, hospitality, health science, IT, and more! You'll align your interests, wants, and needs to career possibilities, including the required education for each. Let's find a pathway that works for you.

Middle School Career Exploration 2 (.5 credits)

Grades: 6-8

Imagine that it's 20 years from now. What career do you see yourself in? What do you imagine that you'll be doing? Will you be fighting forest fires or engineering the next rocket into space? With all the careers available, it can be difficult to narrow them down. In Middle School Career Explorations 2 we'll explore more careers and what they take to succeed. You'll learn more about what steps are needed to prepare for your career and how to compare the pros and cons of different career choices. Finally, you'll get the chance to try out parts of different careers to see if you're a perfect fit! None

Middle School Coding 1a: Introduction (.5 credits)

Grades: 7-8

Required:

Obvibase (requires login)

Scratch (requires login)

Lucidchart (requires login)

OnlineGDB (requires login)

Google Docs (requires login)

Do you find yourself wondering how your favorite apps, websites, and games were made? Maybe you want to try building your own. Well, now you can! In Middle School Coding 1a, you will learn all about the technology you use in your day-to-day life as well as explore how the internet functions. Get an introduction to the basics of computer science and discover how to create and build your very own website using HTML and CSS. You'll also become familiar with programming languages like JavaScript and Python Programming. You will leave the course with your very own portfolio of work that will showcase your skills and all that you've created.

Middle School Coding 1b: Learning Python and Javascript (.5 credits)

Grades 7-8

Required Material

OnlineGDB (login required)

Word processing software

Playcode.io (login required)

Obvibase (login required)

Google account (login required)

Lucidpress (login required)

Building on the prior prerequisite course, students will expand their knowledge of programming languages and web development by further exploring Advanced Python, HTML, and JavaScript. Students will also analyze the differences between web development and web application development, while growing their portfolios, which highlight everything learned and created in the course.

Middle School Digital Art and Design (.5 credits)

Grades 7-8

Required Material

Digital camera or camera phone

Drawing paper and colored pencils / markers or drawing software / animation software (will need to create a logo and a character that could be animated)

A computer or phone with a recording feature/app (will need to record a "radio" commercial)"

There are so many different types of art in this world fine art, classical art, visual art but the impact of digital art and design is all around us, often in ways that you probably aren't even aware of! After taking Digital Art and Design, you'll enjoy a deeper understanding and appreciation for all things digital as you explore this special genre of art found in everything from advertising to animation to photography and beyond. In this course, you'll learn about the evolution of art, the basic principles of art and design, and the role of art in politics and society. Additionally, you will actually create your own digital art and make it come alive. Give your creative side a boost with this Digital Art and Design course! "

Middle School Exploring Business (.5 credits)

Grades 6-8

Required Material

Video recording device, Camera, Audio recording device

Optional:

Art supplies, such as markers and large index cards

Illustration software

Printer

Are you interested in business, leading people, or making decisions to help a business be successful? While there are many different career choices in the field of business, in this course, you'll discover options such as management, human resources, business operations, information management, and accounting. Explore the skills you'll need, common tasks, the technology used, and characteristics of various business careers.

Middle School Exploring Health Science (.5 credits)

Grades 6-8

Required Material

Video recording device, Slide presentation software, Word processing software

Household props (will vary)

Various household items like cloth mask, cotton gloves, cleaner or antibacterial wipes, Rubber band, belt or fabric, Small square of paper or cotton ball, Container for vial
Mechanical pencil, Graph paper, Colored pencils
Chair with armrests, Additional chair

Where do healthcare workers spend their days? What do they really do? From cruise ships to sports arenas, you can find healthcare workers in many places that you might not expect. Explore this field, including what it would be like to work in a medical lab. Learn what it takes to keep you and your patients safe, and begin to learn about the human body and basic first-aid.

Middle School Exploring Information Technology (.5 credits)

Grades 6-8

Required Material

Google Drive (requires login), Google Sites (requires login), Gmail (requires login)
Lucidpress (requires login), Obvibase (requires login), CodeSkulptor3, Webcamera

Are you interested in creating a website or app, or managing various technology solutions, but not sure where to start? If so, then it's time to explore the different career options available to you in IT and learn the foundations of IT to get you started. Examine various IT pathways of web and digital communications, information and support services, network systems, and programming and software development. Let's investigate which career pathway is right for you!

Middle School Exploring Music 1 Using Your Instruments (.5 credits)

Grades 6-8

Required material

Video recording device, and Audio recording device

What comes to mind when you hear the word 'music'? Do you think about your favorite band or artist? Or do you think about instruments and scales and chords? The word music means something different to everyone. Which is why in this Music course, there's a little bit of something for everyone! You will learn about how we hear music; how music affects our lives; important elements of music like rhythm, pitch, and harmony; different musical genres; singing and your voice; various instruments; music composition; and the history and culture of music over the years. Tune up your understanding and appreciation for all things music by signing up for this course!

Middle School Fitness (.5 credits)

Grades 6-8

Required material

Video recording device – either camera phone, iPad, computer camera – as long as video and sound can be recorded
Paper and pencils if student chooses to hand draw certain labs rather than using slide-show

presentation

Free weights or a free-weight substitute like canned soup or milk jugs

A ball for throwing, Flying disc, Hockey stick, golf club, or baseball bat and matching ball, Jump rope

Timer, Distance tracker or distance tracking app

Tennis racket, badminton racket, or ping-pong paddle

Volleyball or football

A friend or family member to act as a partner

Are you physically fit? What does being fit mean to you? Physical fitness is a lot more than just a number on a scale, and that's exactly what you'll learn in this course! This course will help you understand the basics behind what it means to be physically fit; allow you to gain a deeper understanding about how your body functions; learn the complex science behind exercise; explore what it means to be mindful and what inspires you, and determine how you can test your current level of fitness. Being and staying physically fit is a lifelong endeavor and, just like human beings, there are many complexities involved! Learning about and improving your physical fitness is a smart choice to make at any age – and by signing up for this course, you will be doing exactly that! Consider this course to be the first step on your exciting journey to understanding and improving your physical fitness!

Middle School Game Design 1a: Introduction (.5 credits)

Grades 7-8

Required material

Software Scratch (login required)

We all love to play video games but have you ever wanted to build your own? If you are interested in a career in technology but also want a creative outlet, Game Design might be the field for you. Learn how to build a game from the ground up in Middle School Game Design 1, an interactive and hands-on course that will teach you all the ins and outs of making your own game. You will learn the importance of game structure and discover what makes a game fun, challenging, and interesting to players just like you. You will also have the opportunity to explore the design and creative process involved in game creation, learn block-based programs, and experiment with character and story development. As a bonus, you will leave the course with a digital portfolio of everything you created in class.

Middle School Game Design 1b: Creating a Game (.5 credits)

Grades 7-8

Required material

Video recording device, Art supplies, Pen and paper

Scratch (requires login)

Word processing software

Lunapic

Leshy SFMaker

A friend or family member

Building upon the prior prerequisite course, students will further advance their knowledge of game design by taking this course. Delving into the development process, students will create details and add component pieces in a game while learning to prototype, troubleshoot, and test. Additionally, exploring

how to critique a game and advertise it will strengthen the student's ability to create a fully functioning game from start to finish.

Middle School Journalism (.5 credits)

Grades 7-8

Required material: None

Are you someone who likes to get the story straight? Do you always want to know more? Who? What? When? Where? How? These are the details that make for a great story. Knowing how to find these key facts and then write them up in a way that makes it easy for others to read about it is the skill of a true journalist. In *Middle School Journalism: Tell Your Story*, you'll learn how ask the right questions, look for the details, and find the story in any situation. You'll learn how to gather information effectively, organize ideas, format stories for media production, and edit your articles. Get ready to break that news!

Middle School Photography 1a (.5 credits)

Grades 6-8

Required material

*A Smartphone may be used for most required tasks; however, appropriate applications will need to be installed to allow the student to make the necessary adjustments to the camera mode, shutter speed, and aperture.

Digital camera: "point and shoot" or above

USB cable, as needed to transfer photos

Audio recording device, Video recording device

An everyday household object (like a TV, refrigerator, etc.) and assorted food items

Backdrop (blanket, construction paper, sheet, etc.)

Word processing software, Slide presentation software, Online timeline creator

What do you think makes a photograph great? Do you want to take fun, interesting photographs of people, places, and pets to post for your friends or hang on your wall? Photo images are everywhere today. Sometimes we see hundreds in one day. But it's obvious that not all photographs are the same – some are definitely cooler than others. In *Middle School Photography: Drawing with Light*, you'll learn how to take those excellent, jaw-dropping photographs that you see in magazines and on your favorite social media sites. You'll learn the basics of using a camera and how to avoid common photography mistakes. Once you get the hang of this process, you'll be taking photos that will amaze your friends and have them wondering how you do it!

Middle School Photography 1b: Drawing with Light (.5 credits)

Grades 6-8

Required material

*A Smartphone may be used for most required tasks; however, appropriate applications will need to be installed to allow the student to make the necessary adjustments to the camera mode, shutter speed, and aperture.

Digital camera: “point and shoot” or above

USB cable, as needed to transfer photos , Pencil and paper

Audio recording device, Video recording device

An everyday household object (like a TV, refrigerator, etc.) and assorted food items

Backdrop (blanket, construction paper, sheet, etc.)

Word processing software, Slide presentation software, Online timeline creator

Free online photo editing software

Free graphic design software like Canva

What do you think makes a photograph great? Do you want to take fun, interesting photographs of people, places, and pets to post for your friends or hang on your wall? Photo images are everywhere today. Sometimes we see hundreds in one day. But it’s obvious that not all photographs are the same – some are definitely cooler than others. In *Middle School Photography: Drawing with Light*, you’ll learn how to take those excellent, jaw-dropping photographs that you see in magazines and on your favorite social media sites. You’ll learn the basics of using a camera and how to avoid common photography mistakes. Once you get the hang of this process, you’ll be taking photos that will amaze your friends and have them wondering how you do it!

Core Curriculum

MS Language Arts 6 Part 1 & 2

Required Novel- Seedfolks by Paul Fleischman and The Giver by Lois Lowry (students begin The Giver in the last module of part 1 and continue into part 2.)

Through a study of myths, fables, and folk tales from different cultures—as well as novels and other modern forms of narrative, students learn the elements common to all forms of literature and also the elements that are unique to each form. In lessons focused on writing and language study, students craft essays in several different modes and learn how to create the more formal style expected for school writing assignments. Lessons in this semester guide students to recognize and reproduce text structures and organizational patterns that work for different types of essays. The writing lessons also demonstrate the kinds of changes that students should make during the revising and editing stages of the writing process. Opportunities for teacher feedback are frequent, detailed, and varied.

MS Language Arts 6 Part 3 & 4

Required Novel- Esperanza Rising by Pam Munoz Ryan and, students must choose 1 from- Walk Two Moons by Sharon Creech, The Westling Game by Ellen Raskin, Freak the Mighty by Rodman Philbrick, True Confessions of Charlotte Doyle by Edward Irving Wortis"

The second semester of Language Arts 6 builds on the skills and concepts introduced in the first semester. Students tackle more difficult texts in Semester B and apply more advanced analysis skills to reading and writing tasks. They also study some of the more subtle aspects of language, such as the role of connotation and nuance in an author's word choices and how those choices affect readers. Reading assignments are selected, in part, to provide models for students' own writing in specific modes, forms, or genres. Several lessons demonstrate methods of sharing and publishing writing using 21st century technology.

MS Language Arts 7 Part 1 & 2

Required Novel- Julie of the Wolves by Jean Craighead George and Poetry Speaks Who I Am

Student must choose 1 Novel from- A Day No Pigs Would Die by Robert Peck, Where the Red Fern Grows by Wilson Rawls, Nothing But the Truth by Avi, The Cay by Theodore Taylor, A Christmas Carol by Charles Dickens

Through analysis of written, spoken, and multimedia texts, students will become more critical consumers of information and of various forms of media. They will also synthesize and organize ideas to prepare structured essays in several different modes, including narrative, persuasive, and expository. Each lesson will guide students in learning and applying specific strategies for reading and writing different types of texts. A review of basic English mechanics is included in many of the writing lessons, along with a discussion of levels of formality required for different purposes and audiences. This course provides instruction in many modalities, including audiovisual presentations and videos, interactive

activities, projects, and discussions. Opportunities for teacher feedback are frequent, detailed, and varied.

MS Language Arts 7 Part 3 & 4

Student must choose 1 Novel from- A Day No Pigs Would Die by Robert Peck, Where the Red Fern Grows by Wilson Rawls, Nothing But the Truth by Avi, The Cay by Theodore Taylor, A Christmas Carol by Charles Dickens

Required Novel- The Outsiders by S.E. Hinton, Poetry Speaks Who I Am

The second semester of Language Arts 7 builds on the skills and concepts introduced in the first semester. Students tackle more difficult texts and themes in Semester B, and the level of analysis demonstrated and required is more in-depth. In this part of the course, students study the English language closely—both its history and evolution, and the less obvious ways it can be used to convey meaning. The reading assignments are selected to guide students in understanding how language can be used to convey broader themes in poetry, drama, and humorous or satirical texts. Students continue to develop their writing skills through multi-draft assignments and projects. Emphasis in this semester is on recognizing the multiple levels of meaning that any word or phrase might convey, and in writing one's own texts with these concepts in mind.

MS Language Arts 8 Part 1 & 2

Required Novel- Roll of Thunder, Hear My Cry by Mildred D. Taylor

Student must choose 1 Novel from- My Brother Sam is Dead by Christopher Collier, Across Five Aprils by Irene Hunt, The Ox-Bow Incident by Walter Van Tilburg Clark, That was Then, This is Now by S.E. Hinton, The Pearl by John Steinbeck

During the first semester of this year-long course, students will read and analyze various kinds of written texts, include novels and short fiction, informational texts representing a wide range of topics and forms, and several one-act plays. Lessons in Semester A will also guide students in writing their own narratives and essays, using the readings in the course as both examples and sources of ideas for reflection, analysis, and argument. Students will learn better ways to discuss their thoughts and perceptions with others—they will practice their skills in collaborative discussions as well as informal journal entries, presentations, and speeches. Writing assignments include personal narratives, analytical and persuasive essays, and an original one-act play. Special emphasis is placed on reading in certain content areas, such as science and history, as well as understanding and thinking critically about news and media sources.

MS Language Arts 8 Part 3 & 4

Required Novel- Diary of a Young Girl by Anne Frank and Poetry Speaks Who I Am

Student must choose 1 Novel from- My Brother Sam is Dead by Christopher Collier, Across Five Aprils by Irene Hunt, The Ox-Bow Incident by Walter Van Tilburg Clark, That was Then, This is Now by S.E. Hinton, The Pearl by John Steinbeck"

In Semester B, students will examine the role of historical autobiographies and diaries in our understanding of history. In the process, they'll study the impact of point of view on nonfiction texts. Students will be given opportunities to write autobiographical narratives of their own and then asked to connect their experiences to universal themes or philosophical positions, which they explore through writing about them. In the second half of the semester, students will study the relationship between poetic expression and several conventions of language, including syntax, voice, sentence types, and punctuation. Next, they will explore the nature of creativity, the processes that tend to produce good literature, and the features of experimental and multi-genre forms of fiction. Near the end of the semester, students will reflect on their own growth and development throughout the year, compiling a portfolio that illustrates the progress they've made. Finally, students will consider what high school will ask of them and how they might fulfill those expectations, having gained a better understanding of their strengths as well as areas ripe for continued learning and progress.

MS Science 6, 7, 8 Part 1 & 2

Materials: Basic Kitchen Lab Supplies

Science 6th, 7th, and 8th is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature of science. The course focuses on both the understanding and application of science topics. It includes a variety of assignments that help students apply their knowledge of science concepts. Throughout each module, there are multiple opportunities for formative assessment.

MS Science 6, 7, 8 Part 3 & 4

Materials: Basic Kitchen Lab Supplies

Science 6th, 7th, and 8th is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester B builds on the concepts learned in the first semester and prepares the learners with the building blocks needed to dive deeper into earth and space science, life science, and physical science.

MS Math 6 Part 1 & 2

Students begin the first semester of this course with a review of basic addition, subtraction, multiplication, and division of whole numbers. More complex concepts are built on these basics. Students learn how to add, subtract multiply, and divide integers, decimals, and fractions. The course also includes lessons on ratios and proportions.

MS Math 6 Part 3 & 4

The second semester of Math 6 introduces students to the order of operations and how to use them in solving application problems. Building on these concepts, students are then introduced to the basics of algebra and algebraic expressions. Students then learn how to apply these problem-solving skills to percents and solving single and multiple step equations. An exploration of Geometry, probability and statistics concludes the second semester.

MS Math 7 Part 1 & 2

In this first semester, students work with problem-solving skills, beginning algebra skills, geometry, decimals, fractions, data analysis, number theory and patterns, percent, and integer use. Projects measure the student's ability to integrate and apply the course objectives.

MS Math 7 Part 3 & 4

In this continuation of the first semester, students work with fractions; unit conversions; proportions and rates; percent's; geometry topics including lines, angles, polygons, polyhedrons, perimeter, area, surface area, volume, and transformations; squares and square roots; permutations and combinations; and probability. Real-life application of concepts is emphasized in all units.

MS Math 8 Part 1 & 2

Required Material: Ruler, Protractor, Compass

The first semester of Math 8 will help students move from the world of simple mathematics to the exciting world of Algebra and Geometry and will provide them with a concrete understanding of the basics for algebraic thinking. Students will develop a deeper understanding of the math concepts they have already learned and will stretch their thinking by solving real world problems.

MS Math 8 Part 3 & 4

Required Material: Ruler, Protractor, Compass

The second semester of Math 8 builds on the concepts learned in the first semester and prepares students with the building blocks needed to dive deeper into the exciting world of Algebra and Geometry.

MS Social Studies 6 Part 1 & 2

The first semester of 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.

MS Social Studies 6 Part 3 & 4

In the second semester of Social Studies 6, students will continue to examine ancient civilizations and their cultures. In this semester we will continue to trace the path of human civilization from the Mediterranean through the Eastern world. An emphasis will be placed on critical thinking and connecting themes in history to our modern world.

MS Social Studies 7 Part 1 & 2

This study of the history of the United States emphasizes how ideas, events, and philosophies have shaped the nation. Students will learn about America's past while mastering the skills of historical interpretation. Study begins with the earliest arrivals of people and ends with the conclusion of the Civil War.

MS Social Studies 7 Part 3 & 4

This course is a continuation of the first semester with an emphasis on how historical ideas, events, and philosophies have shaped the United States. Beginning with Reconstruction, this course uses the same skill development approach to guide students through U.S. history to the present.

MS Social Studies 8 Part 1 & 2

In this course students will understand the significance of government, law, and politics. They will examine the United States foundational documents and how they shaped the United States government. Students will examine the purposes and functions of federal and state government, law, and political systems. Learners will evaluate their role and civic responsibility to their families, communities, and country including voting and being a productive member of society. Learners will follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and Power Point presentations to enhance and reinforce learning. Learners receive frequent feedback from teacher and peers through discussions.

MS Social Studies 8 Part 3 & 4

This course takes a more individualistic approach as students closely examine topics such as the justice system, local government, the environment, and the economy. Learners will understand the role that they play in each of these topics and the differences that they can make. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society including interpersonal skills and respecting differences in others including disabilities. By the end of semester B students will have a deeper understanding of their civic responsibilities as well as the difference one individual can make in society.

