

# Big Spring Cyber Middle School Courses 2020-2021

# **Middle School Course Sequencing**

6 <sup>th</sup> Grade		
Course descriptions begin page 3		
6 <sup>th</sup> Grade Social Studies (full year)	PE or Health (half year)	
6 <sup>th</sup> Grade Science (full year)	Elective (half year)	
6 <sup>th</sup> Grade Math (full year)		
6 <sup>th</sup> Grade Language Arts (full year)		
7 <sup>th</sup> Grade		
Course descriptions begin page 4		
7 <sup>th</sup> Grade Social Studies (full year)	PE or Health (half year)	
7 <sup>th</sup> Grade Science (full year)	Elective (half year)	
7 <sup>th</sup> Grade Math (full year)		
7 <sup>th</sup> Grade Language Arts (full year)		
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8 <sup>th</sup> Grade Social Studies (full year)	PE or Health (half year)	
8 <sup>th</sup> Grade Science (full year)	Elective (half year)	
8 <sup>th</sup> Grade Math (full year)		
8 <sup>th</sup> Grade Language Arts (full year)		

# **Middle School Electives**

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Art	2D Studio Art 1a: Introduction	EDynamic
Art	Digital Art and Design 1a: Introduction	EDynamic
Business	Keyboarding and Applications Comprehensive	Odysseyware
Business	Career Exploration 1: Introduction	EDynamic
Health & PE	Middle School Fitness	EDynamic
Health & PE	MS Health	AccelerateEd
Music	Exploring Music 1a: Introduction	EDynamic
Music	Exploring Music 1b: Using Your Instruments	EDynamic
Other	Journalism	EDynamic
STEM	Coding 1a: Introduction	EDynamic
STEM	Coding 1b: Learning Python and Javascript	EDynamic
STEM	Game Design 1a: Introduction	EDynamic
STEM	Game Design 1b: Creating a Game	EDynamic

#### **Middle School Course Descriptions**

#### 6th Grade Courses

6th Grade Language Arts	Length: Full Year
	Vendor: Odysseyware

Prerequisites: No prerequisite.

**Description:** Students will delve into texts that span the genres of narrative fiction, poetry, literary nonfiction, and informational texts to build reading, writing and thinking skills. Students will also develop their writing skills as they focus on the six traits while producing narrative, argumentative, and explanatory compositions, as well as creative pieces including poetry. The course concludes with students completing a full research report. With a strong emphasis on close reading instruction, writing and thinking activities, as well as speaking and listening tasks, this course will help students expand their understanding of literature while building 21st century skills. Multimedia and interactive elements are built into every lesson to ensure a high-level of student engagement.

**Required Materials:** In addition to the default course content, some projects may require paper and pencil or drawing supplies to complete the assignment. Writing assignments may require a graphic organizer to be printed out and used in the writing process. Projects (such as book reports or informational essays) may require students to acquire outside resources for research or reading.

6th Grade Mathematics	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** This is a Comprehensive is a full-year elementary math course focusing on number skills and numerical literacy, with an introduction to rational numbers and the skills needed for algebra. In it, students will gain solid experience with number theory and operations, including decimals and fractions. This course also integrates ratio relationships and proportional reasoning throughout the units, as well as introduces students to geometric and statistical concepts.

**Required Materials:** In addition to the default course content, some projects may require paper and pencil or drawing supplies to complete the assignment along with a calculator and protractor.

6th Grade Science	Length: Full Year
	Vendor: Odysseyware

Prerequisites: No prerequisite.

**Description:** 6th Grade Science is a basic intermediate course intended to expose students to the designs and patterns in the physical universe. This course expands on previous courses, providing a broad survey of the major areas of science. Some of the areas covered in 6th Grade Science include the study of plant and animal systems, plant and animal behavior, genetics, the structure of matter, light and sound, kinematics, planet earth, the solar system, and astronomy.

The curriculum seeks to develop the students' ability to understand and participate in scientific inquiry. The units contain experiments and projects to capitalize on children's natural curiosity. The students will explore, observe and manipulate everyday objects and materials in their environment. Students at this level should begin to understand

interrelationships between organisms, recognize patterns in ecosystems, and become aware of the cellular dimensions of living systems. Collectively, this should help students develop and build on their subject-matter knowledge base.

**Required Materials:** Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

6th Grade Social Studies	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 6th Grade Social Studies focuses on World History, with an emphasis on Western Europe. Specifically, it covers World History from ancient civilizations through the end of the 20th century, highlighting the Middle Ages and the two World Wars. These areas of focus target three major content strands: History, Geography, and Social Studies Skills.

**Required Materials:** Internet, encyclopedia or other research materials, Paper, pencils, or other writing materials, Printer, Old magazines that can be clipped (if activity is chosen), Solid color ball, Balloon, paper mache, Take a trip to the library

#### 7<sup>th</sup> Grade Courses

7th Grade Language Arts	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 7th Grade Language Arts is a thematic study of literature that explores accounts of earth, space, and survival. Throughout this course, students will delve into texts that span the genres of narrative fiction, poetry, literary nonfiction, and informational texts. Students will demonstrate their understanding of various works by analyzing how common themes like exploration, innovation, and courage are able to transcend diverse time periods and genres. They will also develop their writing skills as they focus on the six traits while producing argumentative, narrative, and expository compositions. With a strong emphasis on close reading instruction, research activities, and speaking and listening tasks, this course will help students expand their understanding of literature while building 21st century skills.

To become critical consumers of text, students will be exposed to increasingly more complex texts to which they apply those skills. In English language arts, that critical content is both rigorous and relevant and includes high-quality contemporary works as well as the classics of literature. In English language arts, that content includes high-quality contemporary works, the classics of American literature, and the timeless dramas of Shakespeare.

**Required Materials:** Word processor, internet research resources, The Diary of Anne Frank (the play), Frances Goodrich and Albert Hackett; ISBN 978-0822203070, Drmastics Play Service, Inc. The True Confessions of Charlotte Doyle, Avi; ISBN 978-0-545-47711-6, Scholastic.

7th Grade Mathematics	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 7th Grade Math is designed to prepare junior-high students for Pre-algebra. This course focuses on strengthening needed skills in problem solving, number sense, and proportional reasoning. It also introduces students to integers, equations, and geometric concepts. Students will begin to see the "big picture" of mathematics and learn how numeric, algebraic, and geometric concepts are woven together to build a foundation for higher mathematical thinking.

Required Materials: Scratch Paper, Pencil, Paper, Protractor, Compass, and Ruler

7th Grade Science	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 7th Grade Science is a basic intermediate course intended to expose students to the designs and patterns in the physical universe. This course expands on the 6th Grade Science course, providing a set of basic scientific skills and a broad survey of the major areas of science. Some of the areas covered in this course include the scientific method, overview of the four major areas of science, mathematics in science, astronomy, the atmosphere, natural cycles, weather and climate, human anatomy and physiology, and careers in science. The curriculum seeks to develop the students' ability to be aware of and participate in scientific inquiry. The units contain experiments and projects to capitalize on the students' natural curiosity. The students will explore, observe and manipulate everyday objects and materials in their environment. Students at this level should show understanding of interrelationships between organisms, recognize patterns in systems, and expand their knowledge of cellular dimensions of living systems. Collectively, this should help students develop and build on their subjectmatter knowledge base.

**Required Materials:** Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

7th Grade Social Studies	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** World Civilizations examines the growth of human society from our earliest beginnings to the present. Students will study such topics as agricultural societies, ancient civilizations, empires, trade, and migration. Students will also gain practice in researching, using technology, and writing through various projects. In addition to the default course program, World Civilization includes alternate lessons, projects, essays, and tests for use in enhancing instruction or addressing individual needs.

**Required Materials:** Internet or other research material, word-processing software, Paper, pencils/other writing materials, A community, state or national newspaper, Blank map of the world, digital art software or scanner, digital presentation software, Dictionary, newspaper, featuring a section on world news

## 8th Grade Courses

8th Grade Language Arts	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 8th Grade Language Arts is a survey of literature that explores the work of various writers of different time periods through a historical lens. Students should enter this course with a foundation in analyzing, through a close study, various genres of literature and making connections with historical perspectives and the arts. In this course, students will build on these skills by studying a range of classic and contemporary literature to convey themes of American History, Natural History, World Civilization, and Air and Space. Students will also develop their writing skills while producing informative, argumentative, and narrative compositions. Supported by a balance of fictional and informational texts, students will learn and practice close reading, modeled reading, writing, speaking, and listening strategies.

To become critical consumers of text, students will be exposed to increasingly more complex texts to which they apply those skills. In English language arts, that critical content is both rigorous and relevant and includes high-quality contemporary works as well as the classics of literature. The content includes high-quality contemporary works, the classics of American literature, and the timeless dramas of Shakespeare.

**Required Materials:** Word processor, internet research resources, Vincent Van Gogh: Portrait of an Artist (biography), Jan Greenberg and Sandra Jordan; ISBN 978-0440419174 Yearling Books.

8th Grade Mathematics	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 8th Grade Math (Pre-algebra) is an introductory algebra course designed to prepare junior-high school students for Algebra I. The course focuses on strengthening needed skills in problem solving, integers, equations, and graphing. Students will begin to see the "big picture" of mathematics and learn how numeric, algebraic, and geometric concepts are woven together to build a foundation for higher mathematical thinking.

Required Materials: Scratch paper

8th Grade Science	Length: Full Year
	Vendor: Odysseyware

Prerequisites: No prerequisite.

**Description:** 8th Grade Science is a basic intermediate course intended to expose students to the designs and patterns in the physical universe. This course expands on previous courses, providing a set of basic scientific skills and a broad survey of the major areas of science. Some of the areas covered in this course include the structure and properties of matter, measurement and mathematics of science, geology, oceanography, natural cycles and resources, science today and tomorrow, and astronomy.

The curriculum seeks to develop the students' ability to be aware of and participate in scientific inquiry. The units contain experiments and projects to capitalize on the students' natural curiosity. The students will explore, observe and manipulate everyday objects and materials in their environment. Students at this level should show understanding of interrelationships between organisms and the environment, recognize patterns in systems, and

expand their knowledge of cellular dimensions of living systems. Collectively, this should help students develop and build on their subject-matter knowledge base.

**Required Materials:** Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

8th Grade Social Studies	Length: Full Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** 8th Grade Social Studies focuses on American History, covering the subject from early exploration through the present day, with special emphasis given to the Civil War and to inventions and technology of the 19th and early 20th centuries. These areas of focus target three major content strands: History, Geography, and Government and Citizenship.

**Required Materials:** Internet, encyclopedia or other research materials, Paper, pencils, or other writing materials, Printer, word processing software, chart/graph-creation software, Digital presentation software

## **Elective Course Descriptions**

2D Studio Art 1a: Introduction	Length: Half Year
	Vendor: EDynamic

Prerequisites: No prerequisite.

**Description:** In this introduction to 2D Studio Art, students will learn how to bring art visions to life and harness creative possibilities. Students will be required to understand the principles of design, the use of tools and color, as well as understand the influence of world art and culture. The successful student will enhance their understanding of art and its role in the world.

#### **Required Materials:**

- Various sizes of white and colored drawing paper
- Paintbrushes in varying sizes
- Empty cans or jars to wash paintbrushes
- Ruler and/or protractor
- Erasers
- Scissors
- Miscellaneous household objects to use for still life art
- Digital camera, camera phone, or other type of camera
- Paint: (at least two or more of the following) Tempera Paint; Acrylic Paint; Watercolor; Ink Wash; Oil Paint
- Drawing Tools: (at least two or more of the following) Pastels; Charcoal; Markers; Colored Pencil

Digital Art and Design 1a: Introduction	Length: Half Year
	Vendor: EDynamic

Prerequisites: No prerequisite.

**Description:** In this course students will be required to discern various types of animation, understand the use of sound and music as art, and the role of art in politics and society. Once completed, the successful student will develop his or her own digital art to start building a portfolio

**Required Materials:** Digital camera or cell phone with a camera feature (requires uploading digital photographs taken by student); Drawing paper and colored pencils or markers or drawing software (requires creating a logo)

Keyboarding and Applications Comprehensive	Length: Half Year
	Vendor: Odysseyware

**Prerequisites:** No prerequisite.

**Description:** Keyboarding and Applications is a semester-long elective that teaches students keyboarding skills, technical skills, effective communication skills, and productive work habits. In this course, students will learn about proper keyboarding technique. Once students have been introduced to keyboarding skill, lessons will include daily practice of those skills. Students will gain an understanding of computer hardware, operating systems, file management, and the Internet. In addition, they will apply their keyboarding skills and create a variety of business documents, including word processing documents and electronic presentations.

**Required Materials:** Word processing software, Presentation software

Career Exploration 1: Introduction	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** No prerequisite.

**Description:** How many times have you heard, "What do you want to be when you grow up?" When you close your eyes and picture yourself in the future, what do you see? Police officer? Doctor? Farmer? Pilot? Teacher? Really, the possibilities are endless. And with so many careers to pick from, it can be confusing knowing where to start your search. In Middle School Career Exploration 1, you will have the chance to explore more than 15 different career areas including energy fields, human resources, the law, transportation, and more. Discover which careers you might enjoy the most and which ones you'll be best at!

Required Materials: none

Middle School Fitness	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** No prerequisite.

**Description:** 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! Middle School Fitness helps you understand the basics of being physically fit and allows for a deeper understanding of your body's functions. You will learn about the complex science behind exercise and determine how you can test your current level of fitness. Explore what it means to be mindful and discover what inspires you. Improving your physical fitness is a smart choice to

make at any age, and by signing up for this course, you will be taking the first step on your exciting journey to understanding and improving your physical fitness.

Required Materials: none

MS Health	Length: Half Year
	Vendor: Accelerate Education

Prerequisites: None

**Description:** 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.

Required Materials: None

MS Physical Education	Length: Half Year
	Vendor: Accelerate Education

Prerequisites: None

**Description:** To improve and maintain optimum health, it is necessary for people of all ages to participate in physical exercise. There is little doubt that, in addition to students in schools, the number of adults participating in sports and recreational activities in the United States has increased in recent years. Physical education is much more than just fitness and exercise. A well-planned program will cause you to think and express your emotions about different situations. In addition, a good program can make a valuable contribution to your education. These experiences will help you develop a sense of wellness.

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.

**Required Materials:** None

Exploring Music 1a: Introduction	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** No prerequisite.

**Description:** Throughout this course, students will learn the fundamentals of music and its place in human life. Its origin will be analyzed, and students will develop listening skills for a greater understanding of music. Capitalizing on the use of rhythm, pitch, and melody, the student will begin to learn how to read music.

Required Materials: none

# Exploring Music 1b: Using Your Instruments Length: Half Year Vendor: EDynamic

**Prerequisites:** Prerequisite:

Middle School Exploring Music 1a: Introduction

**Description:** Building upon the prior prerequisite course, the student will become more proficient at recognizing the structure of music. The student will learn of the various instrument families and their place in music, explore the evolution of music and its genres, and establish the basics of how to compose music. Students seeking a path in the music industry will find this course an indelible resource.

Required Materials: none

Journalism 1a: Introduction	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** No prerequisite.

**Description:** Are you someone who likes to get the story straight? Do you always want to know more? Who? What? When? Where? Why? How? Journalism provides us with the answers to these questions. The skill of a true journalist is knowing how to find these key facts and being able to write them up in a way that makes it easy for others to read. In Middle School Journalism 1a: Introduction, you'll learn the elements of a good news story, how to gather credible information, and how to organize that information into a newsworthy article that others will want to read.

Required Materials: none

Coding 1a: Introduction	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** No prerequisite.

**Description:** 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.

**Required Materials:** Multiple websites are utilized in this course that require creating a free account.

Coding 1b: Learning Python and Javascript	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** Middle School Coding 1a: Introduction

**Description:** 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 ad web application development, while growing their portfolios, which highlight everything learned and created in the course.

#### **Required Materials:**

Browser-based software that may need a login

Repl.it: https://repl.it/

Game Design 1a: Introduction	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** No prerequisite.

**Description:** 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.

Required Materials: none

Game Design 1b: Creating a Game	Length: Half Year
	Vendor: EDynamic

**Prerequisites:** Prerequisite:

Middle School Game Design 1a: Introduction

**Description:** 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.

Required Materials: • Art supplies: paper, markers, scissors, glue, popsicle sticks

• Video recording device