



Summer School Course Catalog 2020

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21CCCS Online Summer School

21st Century Cyber Charter School is making summer school courses available to all Pennsylvania students. Summer school classes can be taken entirely online for high school credit and middle school credit recovery. Courses are available as original credit for high school students taking a course for the first time and credit recovery for middle school and high school remediation. All of our courses are taught by full-time, PA certified teachers.

Courses are asynchronous and are available 24 hours a day, 7 days a week. Teachers are available Monday through Thursday 9am-1pm via phone, email, and Virtual Office. Students provide their own computer, software, and Internet connection.

Registration opens April 6, 2020 and closes on June 15, 2020. Original credit classes run from April 27, 2020 through July 30, 2020 at 3:30pm. Credit recovery classes run from June 22, 2020 through July 30, 2020 at 3:30 PM. Teachers will not be available to students during the period of June 8-19.

Students may enroll online at <https://db.21cccs.org/summerschool/>. Payment is via Authorize.net. Schools wishing to enroll students should contact Monica Frank - mfrank@21cccs.org or 484-875-5493 for registration and payment details.

Course costs:

Course Type	Credit Value	Cost	Credit Value	Cost
Original Credit	1.0	\$100.00	0.5	\$50.00
Credit Recovery	1.0	\$100.00	0.5	\$50.00

A \$10 shipping fee for textbooks and other course materials is in addition to above costs.

Drop periods are as follows:

- Original credit—by 3:30 pm 15 business days after registration, or start of course, whichever is later.
- Credit recovery—June 26, 2020 by 3:30 pm.

Shipping and PE kit fees are not refundable. Students are required to return textbooks within two weeks of end of course to avoid charges.

21st Century Cyber Charter School (21CCCS) has the best academic track record of any cyber charter school in Pennsylvania. Now in its 20th year, 21CCCS is creating programs to enable Pennsylvania public schools to expand offerings to their students, and to help train their teachers to become effective online instructors. For more information on these outreach programs, please contact info@21cccs.org.

High School Courses

*Courses with an asterisk have a credit recovery version available.

***English Composition**

1 Credit

This course is designed help students build their writing and communication skills. Students will write in the informative, argumentative, and narrative modes. Students will learn the writing process and take multiple pieces of writing through drafting, revision, and editing. Students will study other writers and model texts to learn writing techniques and craft moves. Students will be taught to use appropriate organizational strategies, precise language, and a variety of sentence structures. The course will teach students to use appropriate grammar, mechanics, punctuation, spelling, and sentence formation. Students will also continue to build their text analysis skills through the close study and analysis of fiction and nonfiction. The course will include readings, writing assignments, discussion boards, research, presentations, quizzes, and tests.

Texts: *To Kill a Mockingbird*, *I Am Malala*

Additional Honors Text: Choice Novel

***English Literature**

1 Credit

In this course, students will build their skills as readers and writers. Students will engage in close reading and analysis of fiction, nonfiction, drama and poetry. Students will build comprehension skills, as well as, vocabulary and word recognition skills. Students will learn about elements of fiction, nonfiction, drama and poetry including, but not limited to: theme, plot, setting, characterization, tone and mood, voice, text structure, symbolism and figurative language. Students will read across a wide variety of genres. In this class, students will build writing skills with a focus on responding to texts and supporting ideas with text evidence. The course includes readings, discussion boards, research, projects, essay assignments, quizzes, and exams.

Texts: *Fahrenheit 451*, *Romeo & Juliet*, *Chasing Lincoln's Killer/Manhunt*, *Lord of the Flies*

***American Literature**

1 Credit

In this course, students will read and analyze major works of American Literature from the pre-colonial times to the present. Students will analyze texts arranged thematically, rather than chronologically. Ideas students will explore include This Land is Your Land: The American Identity, Freedom and Oppression, American Dreams and American Nightmares, and Song of Myself: Identity, Conformity, and Society. Students will build their writing and research skills with a particular focus on responding to and analyzing literature. Students will explore many aspects of American literature: fiction, nonfiction, poetry, media, art, drama, the novel, and speech. The course includes readings, discussion boards, research, essays, group work, presentations, quizzes, and exams.

Texts: *The Great Gatsby*, *The Namesake*.

Honors Texts: *Crucible*, *The Awakening*

Elements of Language*1 Credit**

This course is designed to support students in building foundational reading and writing skills. The aim of this course is to prepare students to meet the demands of postsecondary literacy and communication. Students in this course will write for a variety of purposes. Students in this course will develop a deep understanding of their individual reading and comprehension process. They will develop strategies and skills to improve reading comprehension and fluency. Students will read and analyze texts including short stories, novels essays, non-fiction articles and poetry.

Novels: Where Things Come Back

Business Communications*1 Credit**

This course is designed to familiarize students with the many types of written and verbal communications that students will encounter in the business world. Students will also learn writing techniques, research skills, and proper grammar usage. Students will explore many aspects of business communications - business writing, technical documentation, advertising, resumes, verbal communication skills, interviewing, and much more. The course includes readings, discussion boards, research, and presentations.

Texts: How to Win Friends and Influence People, Who Moved My Cheese (for Teens)

Creative Writing**0.5 Credit**

This course will teach students the major components of the creative writing process by learning writing techniques and self-editing. The primary focus of the course will be on creating and completing various creative pieces. Students will explore many aspects of creative writing through writing activities and assignments geared towards helping students unlock their natural creativity. The course will also include readings, discussion boards, revision strategies.

Journalism**0.5 Credit**

Journalism is a course designed for students who are interested in exploring the field of journalism and developing their skills as a writer. This course will investigate the ethical and legal responsibilities of the press, as well as the various forms of media found today. Students will learn the fundamentals of writing hard news stories, feature stories, sports reporting and editorials. They will have numerous opportunities to create original articles throughout the course. Throughout this course, students learn the keys to conducting an interview and translating that information into an article ready for the press. As a final assignment, students will create a newspaper using the articles they have written throughout the course.

Algebra I*1 Credit**

In this course, emphasis will be placed on operations, linear equations, linear inequalities, linear functions, and data organization. Students will be asked to work with operations, real numbers and expressions, to write and solve linear equations and linear inequalities, to analyze and interpret functions, describe and compute slope, to analyze and interpret a scatter plot, and to use data displays in problem solving situations. Activities will include practice activities and unit exams. This course will prepare students to take the Keystone Algebra I Exam.

Algebra II*1 Credit**

The purpose of this course is to reinforce and extend students' knowledge of Algebra 1 as they apply variables, equations, and functions to more in-depth problem solving situations. This course will delve into various algebraic topics including: formulas, linear functions and graphs, patterns, counting theory, data analysis, radical expressions, rational exponents, imaginary numbers, quadratics and factoring, polynomial functions and equations, exponential and logarithmic functions, logarithmic properties and equations, and an introduction to absolute value functions, radical functions, and rational functions. This course will include interactive lessons, practice, quizzes, tests, and activities throughout the learning process.

Geometry*1 Credit**

Students will build upon basic geometry skills by extending ideas about the properties of lines and polygons. Review of the properties of triangles and other skills from Algebra I will show relationships between parts of geometric figures and solving for unknowns. Throughout the course, students will apply the math they learn to real-world situations. This course includes a midterm exam, and a final exam.

Consumer Math*1 Credit**

This course is a comprehensive review of the mathematical skills applied to personal finance and other consumer issues. Topics include whole numbers, fractions, percentages, basic algebra, charts and graphs. The course covers the most common consumer issues including finances, taxes, budgeting, insurance, and home ownership for example. By the conclusion of the course students will be able to compute wages, and taxes, budget for fixed and variable expenses, understand the cost of loans, compare and evaluate products and services for a best buy including larger items such as vehicles, and compare investment opportunities.

Pre-Calculus*1 Credit**

The purpose of this course is to prepare students for the study of Calculus. The major areas of study include: analyzing functions including power, polynomial, rational, exponential, and logarithmic functions; logarithmic properties and equations; right triangle trigonometry; trigonometric functions and graphs; trigonometric identities and equations; systems of equations and matrices; conic sections; parametric equations; vectors; polar coordinates; and sequences and series. This course will include vocabulary checks, practice, quizzes, tests, and projects. Prerequisites: Passing grade in Algebra I & II and Geometry. Recommended only for students who earned a B or above in Algebra II.

Introduction to Scientific Principles*1 Credit**

This course is an introductory course designed to introduce students to the basic concepts of science. Students will explore the history and nature of science with emphasis on fundamental concepts of biology, physics, and chemistry while exploring the relationship between science and everyday life.

Biology*1 Credit**

This course reinforces the Biological Science Standards created by the Pennsylvania Department of Education. This course includes a survey of biology, botany, zoology, cell physiology, microbiology, and genetics. Several extensive labs demonstrate first hand the concepts being taught in this class. At the conclusion of this course students should be able to: explain the structural and functional similarities and differences found among living things, explain the chemical and structural basis of living organisms, describe how genetic information is inherited and expressed, and explain the mechanisms of the theory of evolution. Activities will include small group work.

Earth and Space Science*1 Credit**

Earth and Space Science is the study of the processes that shape the Earth and explain the universe. This course will explore the four main branches of Earth Science, which includes the following: geology, oceanography, meteorology, and astronomy. In this Earth science course, students will learn in detail about the Earth's interior and the theory of plate tectonics. Students will use simulations, articles, visualizations, and other tools to explore Earth's systems and their interactions. Students will also explore the current theories that describe the formation of Earth, our Solar System, and the universe.

Physical Science*1 Credit**

This course stresses basic concepts and logical methods of chemistry and physics as they apply to daily life. Upon completion of this course, students will be able to: explain fundamental scientific principles, distinguish kinds and phases of matter, classify matter, recognize the role of atomic structure in chemical bonding, reactivity, and radioactivity, state the difference between forms and kinds of energy, describe the electromagnetic nature of matter, and use the concept of force and motion to solve real world problems. This course will include research, written assignments, a midterm exam, and a final exam.

Environmental Science*1 Credit**

Students will explore key topic areas including the application of the scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and governmental decisions involving the environment. Students explore actual case studies and conduct interactive activities, learning that political and private decisions about the environment and the use of resources require accurate application of scientific processes, including proper data collection and responsible conclusions. Activities will include webcasts, lab assignments and forums.

Introduction to Forensic Science**0.5 Credit**

Forensic science is the application of basic biological, chemical and physical science principles and technological practices to the purposes of justice in the study of criminal and civil issues. Major themes of study in this course will be pathology, anthropology, odontology, ballistics, trace evidence, entomology, DNA, fingerprints, impression evidence, questioned documents and forensic psychiatry/psychology. This course will present the scientific principles, basic laboratory and field methods forensic scientists use to solve problems. Students will take on the various roles of crime scene investigator, scientists and medical examiner in order to collect and evaluate evidence in a problem-solving environment. Prerequisites: Successful completion of Biology and Algebra I.

Astronomy**0.5 Credit**

The purpose of this course is to enable students to develop and apply knowledge of the universe and compare the conditions, properties, and motions of bodies in space. The course begins with an introduction to the history of astronomy and the scientists from ancient times to the modern age who have provided the basis for its study. Concepts within the course include: the electromagnetic spectrum, instruments used to explore space, interstellar and extra solar objects, origin of the universe, constellations, galaxies, nebulas and black holes. The course will end with the history of space exploration and provide insight into the space missions planned for the future. Students will be required to apply basic concepts learned from previous math and science courses to the study of astronomy.

American History II*1 Credit**

American History II begins during the period of reconstruction after the devastation left by the Civil War. From here, the course covers major wars, the roaring 1920's, Great Depression, Civil Rights and the Nixon Administration. Students work in unison with the teacher and each other through email and online chats to break down and analyze the political, social, and economic facets that changed radically from one presidential term to the next.

World Geography*1 Credit**

In the World Geography course students will examine, discuss, and apply the five major themes of Geography to compare different world regions. The course begins with an investigation of the five themes of Geography—Location, Place, Movement, Human-Environment Interaction, and Region—and an overview of the main concepts of Human Geography including population trends, migration, culture, political geography, and economic geography. As the course continues, students will apply their knowledge of the five themes and concepts of Human Geography to analyze and compare the following world regions: Europe, Latin America, Sub-Saharan Africa, Southwest Asia, South Asia, and East Asia. Activities will include assignments and interactive forums.

World History*1 Credit**

World History gives students the opportunity to visit the past, connect with the present, and look to the future. The course begins with the Renaissance and moves forward to cover the Scientific Revolution, exploration, Spain's Golden Age, the rise of Austria & Prussia and the Industrial Revolution. From here, students dive into more recent world history exploring the modernization of Japan, Latin America, Africa and the Middle East, WWI, Hitler and Nazi Germany and WWII. To conclude, studies of regional events since 1945 are reviewed. Students will be required to use their knowledge of history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, and social settings. This course will include research writing, and narrative writing.

***US Government & Economics**

1 Credit

In the American Government portion of the course, students will begin by reviewing the roots of American Democracy while examining different forms of government. Next we will introduce our founding fathers and the drafting and adoption of our Constitution. From there, students will investigate the three branches of our government and understand the checks and balances in place. Throughout the course students will gain knowledge of political participation and its importance on determining how our country will function and prosper. In the Economics portion of the course students will gain a broad overview of how economics shapes decisions made by individuals, groups of people, countries, and world institutions. Students will begin their study of Economics with an examination of the fundamental ideas that go into economic thinking and how markets work. From there, students will explore economic institutions and organizations, how economic output is measured, and what impact governments have on the market. Activities will include forums, simulations, project-based learning, and objective assessments.

Sociology

0.5 credit

The world is becoming more complex. How do your beliefs, values, and behavior affect the people around you and the world in which we live? Students examine social problems in our increasingly connected world, and learn how human relationships can strongly influence and impact their lives, by watching videos, reading articles, and learning more about our society

Psychology

0.5 Credit

Psychology is the scientific study of behavior and mental processes. It uses the scientific method to discover ways of understanding the complexities of human thought and behavior, as well as differences among people. Studying psychology gives students lifelong skills such as dealing with issues proactively, solving problems, learning, and nurturing healthy relationships. It helps students understand themselves, and deal with issues in their own lives such as inner conflicts, relationships with parents and peers, and intimacy. It also helps students understand societal problems like drug dependency, aggression, and discrimination. This course exposes students to the major topics found in the field of psychology. Students explore the scientific methods upon which psychology is based.

***Health**

1 Credit

This course is designed to familiarize students with different health topics for their physical, mental, emotional, and social health. This course will help students with decision-making skills, goal setting, and health skills. Mental and emotional health will be discussed throughout the course as well, leading into a relationship unit. Here, topics such as resolving conflicts will be discussed. We also will learn about Nutrition basics and managing weight and body image. In the medication, drugs and body unit, they will consider the implications of how these can affect the body and different body systems associated with this. Lastly, we will discuss communicable and non-communicable diseases on the environment and safety and prevention. Each of the concepts will be reinforced with outside readings. There will be a midterm and final exam.

Physical Education*0.5 Credit**

Physical Education is a comprehensive program designed to help teens take responsibility of their own activity, fitness, and health; and to prepare them to be physically active and healthy throughout their adult lives. Students will learn the underlying fundamentals for maintaining a healthy lifestyle. Students are required to complete weekly fitness journals which includes self-assessments and physical activities, which will provide them with the opportunity to be active. The course will cover benefits of lifelong fitness activities, injury and risk, cardiovascular and respiratory systems, skill-related and health-related fitness components, and fitness programing. After completing the course, students will be able to apply acquired knowledge about the benefits of physical activity to their overall health and wellness.

Nutrition**0.5 Credit**

This course will begin by addressing some of the basic components of nutrition, then will delve into a variety of topics related to health and nutrition. Students will compare fad diets and look at the implications of poor nutrition. The course will teach students how to decipher food labels and how to plan nutritious meals. Students will investigate processed food and how it affects their health. After completing this course, students will have a strong working knowledge of what to eat to improve their health.

Personal Finance**0.5 Credit**

This course uses basic arithmetic skills to explore how the use of money impacts us personally in the world in which we live. Topics include finance, taxes, budgeting, banking, and home/car ownership. Examples of wages, income deductions, insurance, checking and saving accounts, credit, housing expenses, auto expenses, recreational spending, and the cost of transportation are studied. In the second half of the class, investing in your future is explored. Topics include school financing, debt and debt recovery, retirement planning vehicles and investing in stock and bond markets. At the course's conclusion, students will have been exposed to essential financial concepts and financial terms. In addition, this course will help students achieve a better awareness of the world economy and how they may interact with it for a bright and prosperous future.

Study Skills**0.5 Credit**

Students will investigate best practices for learning as a cyber student. Organization, effective approaches to time management, and using tools to boost efficiency and productivity. Students will explore learning strategies, using research, and interpreting information to help them across the different subject areas.

Middle School Courses

Language Arts 6 – Course Recovery - Grade 6

The purpose of this course is to build a solid foundation in the reading, writing, vocabulary, and grammar skills that students will find essential throughout their lives. Students will also learn writing techniques, research skills, and test-taking skills. The class will explore many aspects of literature: fiction, nonfiction, poetry, media, art, the novel, and speech. Students will use the five steps of the Writing Process (prewriting, drafting, revising, editing, and publishing). The course will include readings, discussion boards, webcasts, research, group work, and presentations.

Course Materials: From the Mixed-Up Files of Mrs. Basil E. Frankweiler, Walk Two Moons, Escape: The Story of the Great Houdini, and The Schwa Was Here
Advanced Pathway: Roll of Thunder, Hear My Cry and A Wrinkle in Time

Language Arts 7 - Course Recovery - Grade 7

The purpose of this course is to familiarize students with elements of literature from various genres. Students will also learn writing techniques, research skills, and the rules of proper grammar usage. The class will explore many aspects of literature: fiction, nonfiction, poetry, media, art, drama, the novel, and speech. Students will use the five steps of the Writing Process (prewriting, drafting, revising, editing, and publishing). The course will include readings, discussion boards, webcasts, research, group work, and presentations.

Course Materials: The Crossover, Phineas Gage: A gruesome but true story about brain science, The Wednesday Wars, A Long Walk To Water
Advanced Pathway: No Fear Shakespeare: The Tempest, Sugar Changed the World, and The Boy Who Harnessed the Wind.

Language Arts 8 - Course Recovery – Grade 8

The purpose of this course is to build a solid foundation in the reading, writing, and grammar skills that students will find essential throughout their lives. Students will also learn writing techniques, gain research skills, and practice the rules of proper grammar usage. Along with growing as writers, students will explore many genres of literature: fiction, nonfiction, poetry, Greek mythology, media, drama, the novel, oral traditions, and speech. This course will teach both narrative and persuasive writing, and the elements of each of these styles. Students will also become better speakers and listeners by participating in discussion boards, lectures, research, presentations, unit exams, and formal written essays.

Course Materials: Brown Girl Dreaming, The Book Thief, Wonder, and Pax

Math Principles - Course Recovery – Grade 6

Topics will include exponents, factors, fractions, ratios, proportions, percents, probability, displaying data, and graphing using the coordinate plane. Throughout the course, students will incorporate math into real-world situations. This class includes online lessons, projects, practice, quizzes, and exams.

Pre-Algebra - Course Recovery – Grade 7

This course will provide a foundation for Algebra I. Course topics include: real numbers and linear equations, linear inequalities, factoring, fractions, graphing and some elements of geometry. Students will study rational number forms, integers, measurement, and draw conclusions about problem solving. They will be asked to provide written explanations that illustrate his or her thinking and process for solving problems. After completing the course, students will be able to use: integers and expressions to solve problems, decimals in equations, rational numbers, exponents, scientific notation, ratios, proportions, and percents. They will also be able to solve: equations, inequalities, right triangles, graph equations, and find area and volume of various solids. This class includes online lessons, projects, practice, quizzes, and exams.

MS Algebra I A - Course Recovery - Grade 8

This course builds upon pre-algebra skills by expanding on knowledge of variables or the “unknown.” Students extend their knowledge by using abstract thinking to understand mathematical concepts. Topics include radicals, greatest common factor, least common multiple, absolute value, exponents, operations with polynomials, linear equations, systems of equations, inequalities, and functions. Students are introduced to and assessed on the topics through various lessons, activities, practices, tests, and projects. This class includes online lessons, projects, practice, quizzes, and exams.

Science 6 - Course Recovery - Grade 6

This course is an interactive experience with simulations and virtual labs. The sixth grade science course employs the scientific method in many contexts as students design and carry out experiments to answer a variety of questions. Throughout the course, students actively investigate patterns of living things, cells and microbes, matter, chemical changes, and temperature. In the area of life science, students will study cells, bacteria, plants and animals. In earth science, students will study the spheres, weather, and space. In physical science, students explore matter, the periodic table, and carbon in detail. This course was designed to follow and reinforce the Biology, Physical Science and Earth Science Standards that are provided by the Pennsylvania Department of Education (PDE).

Science 7 - Course Recovery – Grade 7

This science course is designed to provide 7th grade students with a survey of sciences, which will include parts of Biology, Physical Science, Earth and Space, and the Nature of Science. Students will learn that science is everywhere and that there are many connections between each of the sciences and the real world through a variety of activities and assignments, including discussion boards, simulations and virtual labs, small group work, and writing assignments. This course was designed to follow and reinforce the Biology, Physical Science and Earth Science Standards that are provided by the Pennsylvania Department of Education (PDE).

Science 8 - Course Recovery – Grade 8

This course is designed to provide 8th grade students with a solid foundation of basic Biology, Earth and Space Sciences and Physical Science concepts and skills while preparing them for a high school science course. Students will master these skills while relating them to real life situations through a variety of activities and assignments, including discussion boards, small group work and a graphing, researching and writing assignment. This course was designed to follow and reinforce the Biology, Physical Science and Earth Science Standards that are provided by the Pennsylvania Department of Education (PDE).

Ancient History through Modern Times – Course Recovery – Grade 6

This middle school World History course gives students the opportunity to explore history's beginnings, world religions, and how civilizations impacted not only other civilizations in the ancient world, but the modern world today. Ancient Rome, Greece, India, and China are explored. This will occur through activities, forum discussions, geography studies, webcasts, and real-world connections to today's current events.

World Cultures – Course Recovery – Grade 7

World Cultures will examine major themes in geography, culture, and history throughout the course of the year. Students in this course will examine major themes of geography, such as location, place, movement, and regions. This course will also take close looks at the interaction between humans and their environments and the regions they call home. This relationship will allow students to learn more about human geography by examining ethnic groups, cultures, and the diverse history of other countries. This course will utilize current event articles, close reading, group work, web research, and presentations to explore these different aspects of the World Cultures curriculum.

American History I – Course Recovery – Grade 8

America has a long and fascinating history. This class will take students to the very beginning of its journey. From the explorers that landed in North America, to the founding fathers of our nation, this course will challenge students to take on different perspectives and determine the cause-and-effect relationship of America's early development. American History I will take students through the trials and tribulations of seeking independence, to the struggles of launching a new nation. As a conclusion to the class, students will investigate the growth and impact that slavery had on America's economical development, setting the stage for causes of the Civil War. Students will develop their skills as critical thinkers as they explore primary and secondary documents. This course will include reading, writing, research and speaking assignments.