



**Middle School Course Catalog
2019-2020**

**Main Campus:
126 Wallace Avenue
Downingtown, PA 19335**

**Satellite Campus:
221 Blue Spruce Way
Murrysville, PA 15668**

**484-875-5400
484-875-5404 (fax)
www.21cccs.org**

Welcome to the 2019-2020 School Year!
21st Century Cyber Charter School



21st Century Cyber Charter School (21CCCS) provides students with an excellent opportunity to receive an education and develop the skills needed to succeed in higher education or a career. There are many reasons 21CCCS is unique.

- 21CCCS teachers are Pennsylvania State certified in their subject area(s).
- Students are supported by significant, real-time contact with their teachers and staff.
- Virtual classrooms provide a high level of quality student-to-teacher interaction.
- Curriculum is developed and modified by the 21CCCS teachers and curriculum team, which focuses on student achievement.
- The 21CCCS Board of Trustees is composed of Intermediate Unit Executive Directors, Superintendents, from Bucks, Chester, Delaware, and Montgomery Counties, as well as, parent representatives.

Student success at 21CCCS depends on the following:

- Student motivation, attendance, commitment, and work completion;
- Support from the educational team;
- Regular communication between students, parents/guardians, and the educational team.

21CCCS staff and administration are dedicated to helping students achieve success. Working closely together will ensure an academically successful school year!

VISION STATEMENT

21st Century Cyber Charter School strives to be a premier school with successful students, engaged families and passionate educators working together to reach our full potential.

MISSION STATEMENT

21st Century Cyber Charter School is committed to providing a student focused cyber education in an encouraging, flexible and innovative environment where students and families are engaged in a community with caring and dedicated educators.

At 21st Century Cyber Charter School, we develop our Pennsylvania certified educators to deliver an online, rigorous, mastery based, standards aligned curriculum to prepare students to be productive, contributing members of society.

School Administration

TBD – Middle School Principal

Mrs. Erika Laidlaw – Assistant Principal

School Counselor

Ms. Ashley Cooke

School Nurse

Mrs. Megan Ebright

Course Schedule and Deadlines

21CCCS full-unit classes run over the course of the full year schedule, beginning with the first student day and ending on the last student day. The school year is divided into four quarters. Half-unit classes will run the length of one semester. A typical student schedule is comprised of 6 units.

Classes will close at 4:00 PM on the last day of each quarter. The end-of-quarter dates can be found on the Board-approved calendar. All work submitted by 4:00 PM will be included in the quarter grade calculation. No extensions beyond the close of classes will be granted. Deadline expectations are as follows:

- A student has a minimum of 45 days and a maximum of 90 days to complete a half unit course.
- A student has a minimum of 90 days and a maximum of 180 days to complete a one-unit course.

Students must submit their work prior to the last day of the quarter/semester. This allows them ample time to seek assistance from their teachers on assignments with which they are struggling. Students will not have access to their classes after 4:00 p.m. on the last day of the quarter/semester.

All 21CCCS and 3rd party classes will close on the last student day at 4:00 p.m. in accordance with the school calendar.

Program Placement & Course Selection

Middle School

All students in grades 6-8 are required to complete the core subjects of math, language arts, social studies, and science each year. Students must pass math, language arts, and one other core class (social studies or science) to be promoted to the next grade level. 21CCCS strongly suggests that middle school students keep a regular schedule and have the support of their parents/guardians.

Middle school students are scheduled according to the courses appropriate to follow their prior year's courses and current grade level. Students will be scheduled for the next most appropriate math course, regardless of grade level.

Adding/Dropping Courses

Students may add or drop a course(s) within the first ten school days of a student's enrollment in a class. It is the responsibility of the student to contact the School Counseling Department in writing if he/she wishes to add or drop a course.

Requests will be honored at the discretion of the school. If a student withdraws from a course more than 10 days after the scheduled start of the class or his enrollment in the class, he/she will receive an "F" on both his/her progress report and final report card.

Pathways

All 21CCCS middle school core subject classes are designed with pathways, each with a different level of rigor. Pathway selections must be made during the course selection process; however, based upon student performance during the course and with the approval of the principal, pathways can be changed if necessary based upon data. Performance on state assessments is also used to determine the appropriate pathway.

Intermediate Pathway

Intermediate level pathways are designed for the majority of our students whose skills and past performance is on grade-level.

Advanced Pathway

Advanced level pathways are designed for students whose skills, past performance, and interests demonstrate that they can successfully complete increasingly challenging academic work. Advanced work may include research and rigorous projects that require extensive reading requirements and analytical thinking. This level requires the student to be responsible, mature, and have strong study skills that enable the student to pursue independent learning.

Special Education

The Progress Monitoring curriculum for grades 6, 7, and 8 is available for special education students. This course is aligned to the Pennsylvania Academic Standards and individual student IEP goals. Students will have live class and assignments in Moodle. All lessons align directly to individualized IEP goals.

Electives

6th and 7th grade students have the opportunity to choose three electives each year. 8th grade students may choose three electives or opt to enroll in only one elective and our Introductory Spanish course for a semester. All middle school students must complete at least one of each of the elective choices (art, music, technology education, study skills, and family and consumer science) during their middle school years here at 21CCCS. Students may enroll in any particular elective topic for a maximum of two quarters each year.

Notification for Sports Team Eligibility

Students who are members of a sports team in their home school district must continue to meet grade requirements to be a part of the team. In accordance with PIAA eligibility rules for student-athletes, students must be passing at least 4 full-credit subjects by Friday of each week. If a student fails to meet these requirements, he/she will lose participation eligibility until the necessary requirements are met. Once this has occurred, the student may resume participation on the team one week following when requirements were met.

If a school requires weekly grade updates for its athletes, it is the responsibility of the student to request such information each week. Students should submit their requests weekly to guidance@21cccs.org. Students should also include the name and email address of the person at their local school district who should be in receipt of their grades.

Course Sequence

6th Grade

- Language Arts 6 (1 unit)
- Math Principles (1 unit)
- Science 6 (1 unit)
- Ancient History Through Modern Times (.5 unit)
- PE/Health 6 (.5 unit)
- Guidance (.25 unit)
- Choice of three electives (.25 units each):
 - Family and Consumer Sciences
 - Art
 - Study Skills
 - Music
 - Technology Education

7th Grade

- Language Arts 7 (1 unit)
- Pre-Algebra (1 unit)
- Science 7 (1 unit)
- World Cultures (.5 unit)
- PE/Health 7 (.5 unit)
- Guidance (.25 unit)
- Choice of three electives (.25 unit each):
 - Family and Consumer Sciences
 - Art
 - Study Skills
 - Music
 - Technology Education

8th Grade

- Language Arts 8 (1 unit)
- Algebra 1A (1 unit)
- Science 8 (1 unit)
- American History I (.5 unit)
- PE/Health 8 (.5 unit)
- Guidance (.25 unit)
- Choice of Intro to Spanish (.50 unit) and one elective (.25 unit)
OR three electives (.25 unit each)
 - Family and Consumer Sciences
 - Art
 - Study Skills
 - Music
 - Technology Education

***All students must enroll in at least 6 units.**

COURSE OFFERINGS

Core Courses

* Classes with an asterisk next to the name have Pathways built into the curriculum.

Language Arts 6* - Grade 6 (required) - 1.0 unit

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* – Grade 7 (required) - 1.0 unit

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* – Grade 8 (required) - 1.0 unit

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, research skills, and the rules of proper grammar usage. Along with growing as writers, students will explore many genres of literature: fiction, nonfiction, poetry, 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, class discussions through live webcasts, research, collaborative group work, presentations, unit exams, and formal written essays.

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

Math Principles* – Grade 6 (required) - 1.0 unit

Topics will include exponents, factors, fractions, ratios, proportions, percentages, 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, exams and live online teacher-led sessions.

Course Materials: TI 30 Calculator (provided by the school)

Pre-Algebra* - Grade 7 (required) - 1.0 unit

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 percentages. 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, exams and live online teacher-led sessions.

Course Materials: TI 30 Calculator (provided by the school)

MS Algebra I A*- Grade 8 (required) - 1.0 unit

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, exams and live online teacher-led sessions.

Course Materials: TI 84 Calculator (provided by the school)

Science 6* - Grade 6 (required) - 1.0 unit

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, Chemistry, Physics, and Earth Science Standards that are provided by the Pennsylvania Department of Education (PDE).

Science 7* - Grade 7 (required) - 1.0 unit

This science course is designed to provide 7th grade students with a survey of sciences, which will include parts of Biology, Physics, 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, Chemistry, Physics, and Earth Science Standards that are provided by the Pennsylvania Department of Education (PDE).

Science 8* - Grade 8 (required) - 1.0 unit

This course is designed to provide 8th grade students with a solid foundation of basic Biology, Earth and Space Sciences, Physical Science and Chemistry 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, Chemistry, Physics, and Earth Science Standards that are provided by the Pennsylvania Department of Education (PDE).

Ancient History through Modern Times*- Grade 6 (required) - 0.5 unit

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* - Grade 7 (required) - 0.5 unit

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* - Grade 8 (required) - 0.5 unit

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.

Guidance 6 - Grade 6 (required) - 0.25 unit

This course will explore a variety of guidance topics including the following: bullying, cyber citizenship, conflict resolution, decisions and choices, and career and college exploration.

Guidance 7- Grade 7 (required) - 0.25 unit

This course will explore a variety of guidance topics including the following: bullying, cyber citizenship, balancing responsibilities, coping skills, and career and college exploration.

Guidance 8 - Grade 8 (required) - 0.25 unit

This course will explore a variety of guidance topics including the following: choosing your destiny, relationships, conflict resolution, and college and career planning.

PE/Health 6 - Grade 6 (required) - 0.5 unit

This course is designed to help guide students in making decisions that meet his or her family goals and values. We encourage students to talk with family members in addressing the following topics: understanding health and wellness, taking charge of your health, physical activity and fitness, nutrition, personal health and consumer choices, personal safety, and the environment and your health. Weekly fitness activities and logs are used to cover concepts, and guide student choices and workouts.

Course Materials: MS PE Kit

PE/Health 7 - Grade 7 (required) - 0.5 unit

Building on the themes from PE/Health 6, this course covers the following topics: understanding health and wellness, taking charge of your health, physical activity and fitness, nutrition, personal health and consumer choices, personal safety, and the environment and your health. Weekly fitness activities and logs are used to cover concepts, and guide student choices and workouts.

Course Materials: MS PE Kit

PE/Health 8 - Grade 8 (required) - 0.5 unit

Building on themes from PE/Health 6 & 7, this course provides a more in-depth look at the following topics: understanding health and wellness, taking charge of your health, physical activity and fitness, nutrition, personal health and consumer choices, personal safety, the environment and your health, drugs, alcohol, and tobacco. Weekly fitness activities and logs are used to cover concepts, and guide student choices and workouts.

Course Materials: MS PE Kit

Electives

Art I - 0.25 unit

This class offers students the opportunity to explore visual expression through a wide variety of materials. Students will contemplate such questions as the choices artists make when they create and how materials affect art outcomes. Personal response and creativity are fostered and encouraged. The course will include weekly learning activities and assignments. Creating, sharing and forming opinions are the most important aspects of developing creative thinking. In this class the artist within will be nurtured, challenged, and strengthened.

Course Materials: Art Kit-Middle School

Art II - 0.25 unit

This class offers students the opportunity to explore art around the world. Come explore how cultures preserve identity through the creation of functional and non-functional works of art! Ancient techniques such as weaving and geometric design will promote critical thinking skills. Students will learn to use art media in new and fun ways. Including the creation of their very own sketchbook, weaving, and calligraphy. This course will take students on a journey of the world and the art that represents it, providing opportunity for students to expand their artistic talents.

Course Materials: Art Kit-Middle School

Prerequisite: Art I

Art III - 0.25 unit

This course will create a structure that allows students to reflect upon contemporary artists and their influences. Students will explore contemporary artists and their 21st century approaches to design. An art kit with materials will provide the typical creative outlet. Including sketchbook creation, painting, drawing, photography and much more. New technologies will be introduced, including computer aided design programs and photo editing software. The course will be based in studio work reflecting specific fields of visual and practical art. The course will involve research, design, execution and abstraction of architectural art.

Course Materials: Art Kit-Middle School

Prerequisite: Art II

Introduction to Spanish - Grade 8 - 0.50 unit

The purpose of this course is to provide an introduction to Spanish as a world language for beginners. The main goal for this course is for students to acquire a culturally contextualized working knowledge of and essential skills in level one Spanish, including the use of present tense verbs, introductory conversation skills, and basic vocabulary. This course aims at developing the student's use and understanding of the target language through listening, speaking, reading and writing, as well as building a solid foundation in preparation for more advanced studies. This course will include readings, discussion boards, webcasts, written and oral assignments, quizzes, unit exams, projects, and a final exam so that students may interact with the language in a variety of ways.

Music I - 0.25 unit

This course will explore the world of music in a variety of ways. Students will engage with different types of music by listening, analyzing, and forming and expressing opinions on different aspects of music. Students will create their own works of music with GarageBand, the digital audio workstation on their computer. They will also be introduced to a musical notation program that allows them to write music note by note. They will learn about elements of music including timbre, tempo, and dynamics and will also explore the music of ancient Egypt. No prior knowledge or experience is required for this class. This course has been designed to engage students of all levels.

Course Materials: GarageBand Application

Music II - 0.25 unit

Building off their experiences from Music I, students in this course will continue learning about music fundamentals and creating their own works of music. Along with GarageBand for the computer, students will also begin using GarageBand on the iPad. They will learn about form and repetition in music and will also explore the music of ancient China. In the final section of the class students will create original music for the soundtrack of a video game using the programming software Scratch.

Course Materials: GarageBand Application

Prerequisite: Music I

Music III - Grade 8 - 0.25 unit

This course continues the journey of learning music fundamentals while creating original works. Students will gain basic keyboarding skills and make connections between modern music and music of the past.

Course Materials: GarageBand Application

Prerequisite: Music II

MS Family & Consumer Science I - 0.25 unit

Family and Consumer Science I will allow students the opportunity to achieve skills in practical areas of life such as careers, design and sewing and building self esteem/self-confidence/ and self-image. Students will learn about interpersonal relationships and the skills needed to enhance independent living. They will learn some of the skills necessary to balance family and career. Students will have the opportunity to examine various careers in the unit on Career Pathways. Here, students will explore various careers in preparation for future FACS classes. The course includes readings, discussion boards, webcasts, research, group work, projects, and presentations.

MS Family & Consumer Science II - 0.25 unit

Family and Consumer Science II will allow students to investigate areas such as Teen Life. In this segment students will examine healthy expression of emotions. This will include some STEM activities on how the body reacts during different emotions. Included in this unit are positive ways to deal with daily teenage life. Students will learn the difference between peers, and different types of friendships. Each unit will be dedicated to a specific and practical skill that students will encounter in life. Students can learn child development and care skills, allowing them to apply these skills to babysitting. Students will explore the scientific theories behind these new breakthroughs. They will have the opportunity to explore interior design and integrate some technological advances into their homes. The course includes readings, discussion boards, webcasts, research, group work, projects, and presentations.

Prerequisite: MS Family & Consumer Science I

MS Family & Consumer Science III - 0.25 unit

Family and Consumer Science III covers the basic concepts of financial and resource management, family life, food science and nutrition, and child development. The financial and resource unit will explore advantages and disadvantages of teenage employment and maintenance of consumer goods and services. Students will discuss culture and traditions, review services available to families and learn about the family life cycle during the family life unit. Digestive process, nutrients and energy, and food chemistry are topics covered in the food science and nutrition unit. Students will investigate childcare options and stages of reading in the child development unit. This course includes readings, discussion boards, webcasts, research, group work, projects, and presentations.

Prerequisite: MS Family & Consumer Science II

Study Skills I- 0.25 unit

This course will focus on online learning strategies to help students achieve success in their new middle school cyber environment. Students will learn to organize their computers and schoolwork to achieve positive results. How to use lessons in conjunction with assignments will be addressed. In the Reading unit, students will learn the necessary skills to read their lessons and take notes. Students build skills in test taking strategies and active listening in a cyber setting and how to apply the appropriate strategy when needed. The course will include readings, class forum discussion boards, research, group work, projects, and presentations.

Study Skills II - 0.25 unit

This class will focus on short term planning, managing stress, how to study, finding the time and place to study, and critical thinking skills. In the units on finding a time and place to study students will learn the importance of designating a workspace for study and how to organize it. In this same unit they will learn how to effectively use short term planning to assure everything is completed on time. The unit on critical thinking will give students an opportunity to practice the skills reading academic text and understanding this material at an in depth level. This unit will also focus on how to study and what a student must do to be successful. The importance of goal setting and how to achieve those goals will be addressed. Students will also examine ways to deal with stress. They will learn healthy ways to express and manage the stresses of life. The course includes readings, class forum discussion boards, interactive web activities, research, group work, projects, and presentations.

Prerequisite: Study Skills I

Study Skills III - 0.25 unit

This class will help students develop the necessary skills to grow and achieve academically. In this course students will explore units such as time management to aid in successfully completing assignments in an appropriate timeframe. Students will also learn various strategies to read the text in depth and assimilate this information with the class material. These skills will help students as they move into high school and will be introduced to more detail oriented research based projects. The course includes readings, class forum discussion boards, interactive web activities, research, group work, projects, and presentations.

Prerequisite: Study Skills II

Technology Education - Computer Science for Innovators and Makers - 0.25 unit

Project Lead the Way Computer Science for Innovators and Makers is a nine-week unit of study. This unit will allow students to discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout the unit, students will learn about programming for the physical world by blending hardware design and software development.

Technology Education - Design & Modeling - 0.25 unit

Project Lead the Way Design & Modeling is a nine-week unit of study. Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design an inclusive playground.

Prerequisite: Technology Education – Computer Science for Innovators and Makers

Technology Education - App Creators- 0.25 unit

Project Lead The Way App Creators is a nine-week unit of study. The unit introduces students to the field of computer science and the concepts of computational thinking, through the design and coding of mobile apps. Students are challenged to be creative and innovative, as they collaboratively design and develop mobile solutions to engaging, authentic problems. Students experience the positive impact of the application of computer science to society as well as to other disciplines, particularly biomedical science.

Prerequisite: Technology Education – Computer Science for Innovators and Makers