Brandywine Virtual Academy • Your eSchool Solution

Course Catalog
2013-14

Note: Course offerings, providers and related assets are subject to change during the school year.

www.bvapa.org
BVA 2013-14 Academic Calendar

July 2013

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

July 4-5, 12, 19, 26
Office Closed (Summer Hours)

August 2013

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

Aug 2, 9, 16 Office Closed
Aug 13-15 Teacher Orientation
Aug 19-23 Teacher Inservice
(A School Not in session)
Aug 28 Student Orientation Opens

September 2013

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sept 2 Labor Day Holiday
Sept 3 First Day of School

October 2013

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

Oct 11 Teacher Inservice
(Classes are open)
Oct 14 School not in session
Oct 25 First Mkng Pd Ends
Oct 28 Second Mkng Pd Begins

November 2013

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

Nov 28-29 Office Closed
(School Not in session)

December 2013

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

Dec 23 Teacher Inservice
(Classes are open)
Dec 24-25 School Not in Session

Key:
- School Not in Session
- Student Orientation Opens
- Teacher In-Service, Classes Open
- Marking Period Begins
- Marking Period Ends
- First/Last Student Day

Register online! www.bvapa.org
Contents

About Brandywine Virtual Academy ........................................................................................................4
- What is BVA?
- Our Courses
- Our Teachers
- Our Students
- Course Catalog Key

BVA Computer Requirements .............................................................................................................5
- Minimum Hardware Recommendations
- Minimum Software Recommendations

Courses by Grade and Subject
Elementary Courses (K-5) .............................................................................................................6
Middle School Courses (6-8) .........................................................................................................14
High School Courses (9-12) ..........................................................................................................20
  - Arts & Humanities .................................................................20
  - English ....................................................................................21
  - Health & Physical Education .................................................23
  - Mathematics .........................................................................24
  - Science .................................................................................27
  - Social Studies .......................................................................28
  - World Languages ..................................................................30
  - Electives ................................................................................31
  - Supplemental Instruction ......................................................33
  - AP Course Offerings ..............................................................34
  - Credit Recovery ....................................................................35
About Brandywine Virtual Academy

The Brandywine Virtual Academy (BVA) is the ideal eSchool solution for students. BVA offers one-on-one access to teachers, a flexible schedule, and quality instruction in custom-designed courses. We are flexible in our course sequencing and offerings, allowing us to constantly meet the needs of our students.

Our Courses: BVA courses are designed to align with Pennsylvania Department of Education standards and accommodate multiple learning styles, abilities and intelligences. Each course is infused with robust vocabulary, teaching and reinforcement practice, real world situations and various assessment strategies. WebQuests, audio files, videos, podcasts, online textbooks and online discussion boards are some of the ways that technology is integrated in our curriculum. Courses are available 24 hours a day, seven days a week.

Our Teachers: Our instructional staff consists of full-time, highly qualified, Pennsylvania-certified teachers. Teachers are available to students during scheduled school days from 8 a.m. until 8 p.m., Monday through Thursday, and from 8:00 a.m. until 4:00 p.m. on Fridays. They communicate with students on a regular basis by phone, email, and in virtual offices. Students are encouraged to communicate with teachers about their own unique needs and situations, which in turn enables our teachers to individualize instruction and accessibility for each student.

Our Students: Our students come to us for various reasons. Some seek credit acceleration or recovery, others are drawn to the mix of creativity and technology offered in our arts & humanities courses, while others simply want the experience of taking an online course in a schedule that fits their needs. Students work through a course at their own pace, and a sample schedule is provided to assist with time management. Student progress can be tracked by parents and schools via our weekly email progress reports.

Catalog Key

All courses listed are available in a standard, or College Prep form, which is at the typical level for a learner on grade level. These are comprehensive courses that require writing and research projects. Students tackle problems that require more analytical thinking. Course projects and activities also demand more independent thinking and self-discipline than projects in Academic courses.

BVA students can choose from several other levels of mathematics, English, science, and social studies courses:

**Available in Credit Recovery Mode** Credit Recovery courses provide a comprehensive and flexible way to help students pass courses and get the credits they need to graduate. These courses include diagnostic unit tests that assess students’ understanding of fundamental content, directing them to review or move ahead accordingly. The course content is appropriately grouped into smaller topic areas containing streamlined instruction to increase retention and expand opportunities for assessment.

**Available at Academic Level** Academic courses—sometimes referred to as Foundations, or Anchors courses—provide the same content and standards in a simpler form that may be easier to read or presented at a slower pace. These courses are ideal for a student who struggles with the subject in question or is not certain they are reading on grade level.

**Available at Honors Level** Honors courses hold students to a greater degree of accountability, and demand even greater independence and self-discipline. Students synthesize and evaluate information and concepts from multiple sources and read texts typically assigned in college-level courses. Students also demonstrate college-level writing in essays that require analysis of primary and secondary sources, responsible use of evidence, and comprehensive citation of sources.

**Available at Advanced Placement Level** Advanced Placement courses may allow students to sit for an exam that tests their proficiency in a subject, earning them college credit for the course. See Page 30 of this catalog for a condensed list of all AP offerings.
Minimum Hardware and Software Recommendations

Before taking BVA courses, please verify that your computer meets the system requirements below. The minimum hardware recommendations are:

**Hardware:**

- Windows XP, Windows 7, Windows Vista, Windows 8
  - CPU: 2.0 GHz processor
  - Speakers or headphones and microphone
  - 1GB of RAM

- Macintosh OS 10.4 or higher
  - Intel Core Duo 1.83 GHz
  - Speakers or headphones and a microphone
  - 1GB of RAM

**Software:**

- Mozilla Firefox web browser, Adobe Acrobat Reader 8 or later
- The most recent version of following Plug-ins*:
  - Adobe Flash plugin
  - Shockwave for Director plugin
  - QuickTime Plug-in
  - Java Plug-in
  - Silverlight Plug-in
- Macintosh computers: GarageBand
- Windows computers: Audacity (free download)

- One of the following:
  - Microsoft Word, Microsoft PowerPoint (Email BVA Info for academic discount options)
  - LibreOffice for Macintosh or Windows, free download*

**Course-specific additional resources may be rented from BVA for an additional fee:**

- Digital Camera
- Headset
- TI 84+ calculator
- Macintosh with GarageBand for music courses
- Wacom Bamboo Tablet

Any software or hardware that is required in addition to the items mentioned above is listed at the end of the course description. This may include application software, which should be purchased and installed, or software included in textbooks that should be installed, but at no additional cost.

*NOTE:* Links and installation instructions can be found in the Software Installation Guidelines located online at http://www.cciu.org/BVAHardwareAndSoftware.
Our Elementary Program is taught by PA-certified, highly-qualified teachers, and your child works with a teaching support assistant for support with technology, pacing, and other questions. A full set of consumable materials is sent to your home to enhance the lessons and learning experience. Each course is also enriched by direct, embedded access to state-of-the-art activities and online resources from trusted providers such as BrainPop Jr.®, Discovery® Education, SkillsTutor™ and more. Students may enroll in up to eight (8) classes each year.

### Kindergarten

<table>
<thead>
<tr>
<th>ELEMENTARY COURSES</th>
<th>Grades K-5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LANGUAGE ARTS K</strong></td>
<td><strong>Provided by Connections Learning®</strong></td>
</tr>
</tbody>
</table>

In this course, students build a foundation for successful reading as they explore topics and apply reading, writing, speaking, and listening practices outlined in the Common Core State Standards and other state standards. Learning activities consist of phonics, listening, comprehension, and vocabulary instruction with daily exposure to books, including literature and informational texts. A combination of interactive and hands-on exercises encourages the development of fine motor skills. Students learn language skills as well as letter formation, and they practice these with drawing, dictating, and writing. By the end of kindergarten, many students will be reading, and all students should be able to recognize consonant as well as long and short vowel sounds.

**Course Materials (Provided):** *Reading Street, Scott Foresman, 2013, Letter Tiles, Course Guide* (Split into Parts A & B)

| **MATH K** | **Provided by Connections Learning®** |

In this course, mathematical thinking and problem solving are introduced. Students explore topics and apply mathematical practices outlined in the Common Core State Standards and other state standards. They learn how to identify numbers, write numbers zero to 20, and count to 100 by ones and tens. They also describe, sort, and compare objects and learn basic shapes. Stories and activities introduce addition and subtraction. A combination of interactive and hands-on exercises teaches students about money, time, fractions, and measurement.

**Course Materials (Provided):** *enVisionMATH, Scott Foresman- Addison Wesley, 2012, Math Manipulatives Kit, Course Guide* (Split into Parts A & B)

| **SCIENCE K** | **Provided by Connections Learning®** |

In this course, the student will explore the nature of science and how to solve problems, as well as investigate living and nonliving things. The student will learn how to study the surrounding world by observing, collaborating, and sharing with others. Using illustrations and labels, the student will identify the steps used to solve problems and use these steps to plan, design, and test a solution to a problem. Finally, the student will examine, describe, compare, and analyze the characteristics of living and nonliving things in order to complete portfolio assessments.

**Course Materials (Provided):** *interactive SCIENCE, Pearson, 2012, Science Kit, Course Guide* (Split into Parts A & B)

| **SOCIAL STUDIES K** | **Provided by Connections Learning®** |

Students learn the concepts of community, nation, and world in this course. They answer essential questions including: “How do people get what they need?”; “How is culture shared?”; and “How does life change throughout history?” A combination of interactive and hands-on exercises teaches students about personal responsibility, good citizenship, and basic geography. While learning about America’s past and important historical figures, students research their personal history and heroes.

**Course Materials (Provided):** *iTText (Online Textbook) myWorld Social Studies, Here We Are, Pearson, 2013, Social Studies Kit, Course Guide*

| **ART K** | **Provided by Connections Learning®** |

In this course, the student will explore color, line, and shape. A combination of interactive and hands-on studio projects encourages the student to create art, sharpen fine motor skills, and explore areas of interest in art. Artistic modes include drawing, painting, assembling, and sculpting.

**Course Materials (Provided):** *Art Kit*
EDUCATIONAL TECHNOLOGY AND ONLINE LEARNING K  In this course, students will explore the features of a draw and paint program as a tool to support emerging reading, writing, and mathematics skills. They will locate letters and numbers on the keyboard. A study skills unit will introduce them to listening and visualization skills that will support learning across the school day. Students will recognize safe and responsible use of technology resources so that they can become model digital citizens.

PHYSICAL EDUCATION K  In kindergarten, physical education encourages students to develop their fine motor skills, movement, and confidence to enjoy healthy physical activity regularly. A combination of interactive and hands-on activities teaches students essential skills. Students learn how to respect themselves and others while playing.

ADDITIONAL ELECTIVES AVAILABLE FOR THIS GRADE:  
Experiencing Music (Juilliard)  
See page 13 for details

Grade 1

LANGUAGE ARTS 1  In first grade, beginning readers work to become fluent readers. In the first semester, the students are taught to attack new words using a variety of decoding and contextual strategies. Students are given daily opportunities to apply these skills to decodable and authentic texts. They are taught to think about what they read through a variety of guided reading strategies. In writing, students create increasingly complex compositions and improve their handwriting.

Course Materials (Provided): Novel Ira Sleeps Over, Partial iText (Online Textbook) Reading Street I, Handwriting by Zaner-Bloser (2012), and Letter Tiles

MATH 1  In first-grade math, students will develop an understanding of numbers to 100 using a variety of models. In the first semester, the student is introduced to building strategies for addition and subtraction of whole numbers up to 18, students will also practice problem solving and reasoning skills. Hands-on activities and tools let students practice money and measurement concepts. We also explore geometry topics—shapes, congruence, and symmetry—as well as data analysis with picture graphs, data, and bar graphs.

Course Materials (Provided): Math Manipulatives Kit, iText (Online Textbook) enVisionMATH 1

SCIENCE 1  Science encourages students to explore the natural world. In the first semester, students will study Earth, its resources, and how to protect them. We will explore how plants and animals grow and change. We will create a model of a mountain and investigate the way sunlight affects leaves. Students will also learn about the scientific method and explore possible careers in science.

Course Materials (Provided): Science Kit, iText (Online Textbook) McGraw-Hill Science: A Closer Look 1

SOCIAL STUDIES 1  In the first semester, students will learn about the ways in which people contribute to their communities and work together to the benefit of all. This course explores the concepts of good citizenship, neighborhoods, and economics. We will also study maps, photos, biographies, illustrations, poetry, and music to help explain the concept of communities and extend the concept of community to the larger world.

Course Materials (Provided): iText (Online Textbook) Scott Foresman Social Studies: All Together

PHYSICAL EDUCATION 1  Each week, students learn new games and activities that are grouped in thematic units including Making Healthy Choices and Games Around the World. In addition to doing the activities described in the lessons, students have the option of participating in yoga or an individual or a team sport.

Course Materials (Provided): Yoga DVDs and Jump Rope
ART 1  Students expand their understanding of color, line, and shape. Activities include drawing, cutting, creating designs, and paper construction. The concepts of texture and three-dimensional forms are also introduced.

Course Materials (Provided):  Art Kit

EDUCATIONAL TECHNOLOGY AND ONLINE LEARNING I  In this course, students build on foundational skills while using software to draw, type, and format text, and create presentations to support academic skills. Students learn listening and organizational skills and set attainable learning goals. Students become responsible users of technology as they learn about Internet safety and appropriate online behavior.

ADDITIONAL ELECTIVES AVAILABLE FOR THIS GRADE:
Experiencing Music (Juilliard), Sign Language, Home Life, WebQuest  See page 13 for details

Grade 2

LANGUAGE ARTS 2  Students explore topics and apply reading, writing, speaking, and listening practices outlined in the Common Core State Standards and other state standards. They are given the opportunity to apply word-attack skills to increasingly complex texts and build their oral and sight vocabularies through daily instruction. While practicing new skills, students take part in activities based on selections they are reading. Students apply handwriting and grammar skills to frequent narrative, informational, and opinion pieces.

Course Materials (Provided):  Reading Street, Scott Foresman, 2008; Handwriting, Zaner-Bloser, 2012; The Grammar and Writing Practice Book; Language Arts 2 Course Guide; Language Arts: Practice Book  (Split into Parts A & B)

MATH 2  Students explore topics, and apply mathematical practices outlined in the Common Core State Standards and other state standards. Students use hands-on activities to study time, money, geometry, and fractions. They connect numbers to statistics using basic algebraic concepts and simple graphs. Students also investigate measurement topics such as weight, mass, capacity, time, and temperature.

Course Materials (Provided):  enVisionMATH, Scott Foresman-Addison Wesley, 2009; Math 2 Course Guide; Interactive Homework Workbook; Math: Transitioning to Common Core; Math Manipulatives Kit  (Split into Parts A & B)

SCIENCE 2  This course stimulates students’ curiosity about the world around them. They investigate energy and changing states of matter, such as liquid water changing to water vapor, and they create a weather chart. Students enjoy hands-on and virtual activities as they investigate the importance of water and vegetation in life science and explore forces in physical science.

Course Materials (Provided):  Science: A Closer Look, McGraw-Hill, 2008; Science Kit; Science 2 Course Guide; Science: Building Skills Reading and Writing Workbook  (Split into Parts A & B)

SOCIAL STUDIES 2  Your child will continue to explore basic concepts of history, geography, economics, and government, while discovering more about world cultures. In the first semester, students will practice basic map, chart, graph, and thinking skills. We will also introduce your child to ordinary people who showed good citizenship and to famous people who have influenced our country and the world.

PHYSICAL EDUCATION 2  Each week, students learn a new game or activity based on thematic units including Games You Can Make and Games Around the World. In addition to doing the activities described in the lessons, students have the option of participating in yoga or an individual or a team sport.

Course Materials (Provided):  Yoga DVDs and Jump Rope
ART 2 Students learn how the elements and principles of art are combined to create unique and expressive artwork. They explore how art is connected to other subjects such as science and math. Students also learn the basics of drawing, painting, and three-dimensional design.

Course Materials (Provided): Art Kit

EDUCATIONAL TECHNOLOGY AND ONLINE LEARNING 2 In this course, students use appropriate technology tools and resources to complete projects, and solve problems. Students use software to draw, write, organize, and present information and data. Students learn listening and organizational skills and set attainable learning goals. Students become responsible users of technology as they learn about Internet safety and appropriate online behavior.

ADDITIONAL ELECTIVES AVAILABLE FOR THIS GRADE:
State History, Experiencing Music (Juilliard), Gifted & Talented Literature Study 2, Sign Language, Home Life, WebQuest

See page 13 for details

Grade 3

LANGUAGE ARTS 3 Students explore topics and apply reading, writing, speaking, and listening practices outlined in the Common Core State Standards and other state standards. As they read critically and analyze literature and informational texts, they are also learning and applying new word-study skills. Writing progresses to paragraphs and, eventually, longer compositions. As they compose, students learn the five stages of writing: planning, drafting, revising, editing, and publishing. Students also begin to conduct short research projects.

Course Materials (Provided): Reading Street, Scott Foresman, 2008; Handwriting, Zaner-Bloser, 2012; The Grammar & Writing Book; Language Arts 3 Course Guide; Language Arts: Practice Book; Phonics and Spelling Practice Book (Split into Parts A & B) + Gifted & Talented Available

MATH 3 Third grade math provides the opportunity for students to explore topics and apply mathematical practices outlined in the Common Core State Standards and other state standards. Multiplication and division are introduced as well as adding and subtracting decimals. Students’ understanding of these operations continues to develop as they apply problem-solving strategies and mathematical reasoning to solve problems. Students use hands-on activities to explore geometric patterns, shapes, and solids. They also use tools to determine measurements including time and temperature. In the probability unit, students gather data, create graphs, and perform experiments.

Course Materials (Provided): enVisionMATH, Scott Foresman-Addison Wesley, 2009; Math 3 Course Guide; Interactive Homework Workbook; Math Manipulatives Kit (Split into Parts A & B) + Academic Version Available + Gifted & Talented Available

SCIENCE 3 Students explore the living world and the sky above. In life science, students begin by analyzing things that make up our living world and then study life cycles and the ecosystems. They study the composition of Earth as well as its location in relation to the sun and moon. In physical science, students investigate the properties of matter.

Course Materials (Provided): Science: A Closer Look, McGraw-Hill, 2008; Science Kit; Science 3 Course Guide; Science: Building Skills Reading and Writing Workbook (Split into Parts A & B) + Gifted & Talented Available

SOCIAL STUDIES 3 This course centers on the theme of community, focusing on history, along with civics, economics, and geography. Students compare communities and examine the American political system, including the Declaration of Independence, the U.S. Constitution, and the three branches of government, all within the context of a citizen’s rights and responsibilities. Students are introduced to economics by studying money, prices, and supply and demand, with a special emphasis on making good personal economic decisions.

Course Materials (Provided): Social Studies: Communities, Scott Foresman, 2008; Social Studies 3 Course Guide; Social Studies: Communities Quick Study (Split into Parts A & B)
PHYSICAL EDUCATION 3  By third grade, students are expected to understand and demonstrate clearly defined combinations of movements, and they learn one or more new activities each week. The students learn the importance of nutrition as it relates to health and physical fitness. Students also have the option of participating in yoga or an individual or a team sport.

Course Materials (Provided): Yoga DVDs and Jump Rope, Get Fit Handbook

ART 3  Students engage in arts and crafts that explore the characteristics of the four seasons. As they study the art of various cultures, they will be introduced to art history and art criticism. Students also use a variety of media to create two- and three-dimensional projects.

Course Materials (Provided): Art Kit

EDUCATIONAL TECHNOLOGY AND ONLINE LEARNING 3  In this course, students use appropriate technology tools and resources to complete projects, manage information, and solve problems. Students use software to write, organize, analyze, and present information. Students learn listening and organizational skills and set attainable learning goals. Students become responsible users of technology as they learn about Internet safety and appropriate online behavior.

ADDITIONAL ELECTIVES AVAILABLE FOR THIS GRADE: State History, Discovering Music (Juilliard), Chinese I and II, Spanish I and II, Sign Language, Home Life, WebQuest

See page 13 for details

Grade 4

LANGUAGE ARTS 4  Students explore topics and apply reading, writing, speaking, and listening practices outlined in the Common Core State Standards and other state standards. They learn to understand vocabulary and read more independently. Basic writing skills are reinforced as students write longer, well-organized narrative, informational, and opinion compositions. Spelling, handwriting, and proper language usage are also emphasized. Daily spelling activities help students learn to spell and use words correctly.

Course Materials (Provided): Reading Street, Scott Foresman, 2008; The Grammar & Writing Book; Language Arts 4 Course Guide; Language Arts: Practice Book; Word Study and Spelling Practice Book

(Multimedia) Gifted & Talented Available

MATH 4  Students explore topics and apply mathematical practices outlined in the Common Core State Standards and other state standards. Mastery of basic skills helps students multiply two-digit numbers and divide three-digit numbers by one-digit divisors. Measurement covers both customary and metric units. Students also study geometry concepts including lines, angles, polygons, perimeter, area, and congruence. Fourth grade math also covers equations, statistics using data and graphing techniques, and probability concepts. Throughout the course, students practice problem-solving strategies and explain mathematical reasoning.

Course Materials (Provided): enVisionMATH, Scott Foresman-Addison Wesley, 2009; Math 4 Course Guide; Interactive Homework Workbook; Math Manipulatives Kit

(Multimedia) Academic Version Available Gifted & Talented Available

SCIENCE 4  Students in this course use the scientific method to complete hands-on and virtual explorations. In the area of life science, they explore the differences and similarities among organisms. In Earth science, students investigate the differences between rocks and minerals and explore forces and forms of energy. Students are also introduced to the idea of a career in science.

Course Materials (Provided): Science: A Closer Look, McGraw-Hill, 2008; Science Kit; Science 4 Course Guide; Science: Building Skills Reading and Writing Workbook

(Multimedia) Gifted & Talented Available
SOCIAL STUDIES 4  A regional approach is used to examine the geography and history of the United States in this course. During their studies, students learn how to use different types of maps and apply geographic skills and concepts. The course emphasizes the role of the individual in the community and the concept of change over time.

Course Materials (Provided): Social Studies: Regions, Scott Foresman, 2008; Social Studies 4 Course Guide; Social Studies: Regions Quick Study

PHYSICAL EDUCATION 4 By fourth grade, students are ready for more advanced instructions for both individual and partner activities. They understand rules and the importance of following them, and their hand-eye coordination has improved. Students learn the importance of nutrition and exercise as they relate to health and physical fitness. Students have the option of participating in yoga or an individual or a team sport.

Course Materials (Provided): Yoga DVDs and Jump Rope, Get Fit Handbook

ART 4  In this course, students are introduced to works of art from several continents. As they become more familiar with art elements and the principles of design, they learn how these are applied in creating visual art in diverse cultures around the world. In addition, students use various media to create two- and three-dimensional projects.

Course Materials (Provided): Art Kit

EDUCATIONAL TECHNOLOGY AND ONLINE LEARNING 4  In this course, students use appropriate technology tools and resources to complete projects, manage information, and solve problems. Students use software to write, organize, analyze, and present information. Students become responsible users of technology as they learn about Internet safety, appropriate online behavior, and effective search and website evaluation strategies.

STATE HISTORY  All students are introduced to the history of their state. They trace the timeline from Native Americans through the present while focusing on the state’s people, government, economy, resources, and geography. Through the course, students are introduced to analytical skills such as recognizing change and continuity over time and identifying cause and effect.

ADDITIONAL ELECTIVES AVAILABLE FOR THIS GRADE: State History (listed above), Discovering Music (Juilliard), Chinese I and II, Spanish I and II, Sign Language, Home Life, WebQuest

Grade 5

LANGUAGE ARTS 5  Students explore topics and apply reading, writing, speaking, and listening practices outlined in the Common Core State Standards and other state standards. Writing instruction focuses on structure, format, and grammar. Students use effective planning tools such as graphic organizers and outlines to create narrative, informational, and opinion compositions.

Course Materials (Provided): Reading Street, Scott Foresman, 2008; The Grammar & Writing Book; Language Arts 5 Course Guide; Language Arts: Practice Book; Word Study and Spelling Practice Book

(Split into Parts A & B)
MATH 5 Students explore topics and apply mathematical practices outlined in the Common Core State Standards and other state standards. The order of operations is discussed, and students learn to solve and write equations and inequalities. Students advance in geometry as they classify two- and three-dimensional solids; calculate the surface area and volume of regular and irregular figures; explore graphing and probability; create circle graphs; and make predictions based on statistics. Throughout the course, students practice problem-solving strategies and explain their mathematical reasoning.

Course Materials (Provided): enVisionMATH, Scott Foresman-Addison Wesley, 2009; Math 5 Course Guide; Interactive Homework Workbook; Math Manipulatives Kit

SCIENCE 5 Students continue to sharpen their investigative skills. In life science, students examine the living world, and in physical science, they explore characteristics of matter, sound, and light. Students also learn about Earth’s composition and the forces that shape its surface. The scientific method is reinforced, and careers in science are discussed.

Course Materials (Provided): Science: A Closer Look, McGraw-Hill, 2008; Science Kit; Science 5 Course Guide; Science: Building Skills Reading and Writing Workbook

SOCIAL STUDIES 5 In this course, students trace the history of the United States from the earliest Americans to the 21st century. Students practice map skills as they chart the growth of the nation and develop their ability to compare, sequence properly, and interpret sources. Students also study how geography has affected culture and historic events.

Course Materials (Provided): Social Studies: The United States, Scott Foresman, 2008; Social Studies 5 Course Guide; Social Studies: The United States Quick Study

PHYSICAL EDUCATION 5 By fifth grade, students understand the concept of fair play and playing by the rules. Respecting themselves and others is emphasized during cooperative physical education activities. Students learn the importance of nutrition and exercise as they relate to health and physical fitness. They have the option of participating in yoga or an individual or a team sport.

Course Materials (Provided): Yoga DVDs and Jump Rope, Get Fit Handbook

ART 5 Students are introduced to various works of art, and they become familiar with art elements and the principles of design. They examine how these elements and principles were applied to create visual art in different time periods and cultures. Students use assorted media to create two- and three-dimensional projects.

Course Materials (Provided): Art Kit

EDUCATIONAL TECHNOLOGY AND ONLINE LEARNING 5 In this course, students use appropriate technology tools and resources to complete projects, manage information, and solve problems. Students use software to write, organize, analyze, and present information. Students learn listening and organizational skills and set attainable learning goals. Students become responsible communicators and users of technology as they learn about intellectual property, Internet safety, and effective search and evaluation strategies.

ADDITIONAL ELECTIVES AVAILABLE FOR THIS GRADE:
State History, Discovering Music (Juilliard), Chinese I and II, Spanish I and II, Sign Language, Home Life, WebQuest

See page 13 for details
**Electives Available By Grade:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELEMENTARY COURSES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>STATE HISTORY</strong></td>
<td>All students are introduced to the history of their state. They trace the timeline from Native Americans through the present while focusing on the state's people, government, economy, resources, and geography. Through the course, students are introduced to analytical skills such as recognizing change and continuity over time and identifying cause and effect. can be taken in grades 2-5, depending on state requirements</td>
</tr>
<tr>
<td><strong>CHINESE (I AND II)</strong></td>
<td>Students learn Mandarin Chinese through conversations with a native speaker. Cultural explorations lead students to make connections between their cultures and those of people in the Mandarin-speaking world. These introductory courses use many interactive components to engage students with the Chinese language and culture. (The courses are offered for students in third, fourth, and fifth grades.) for grades 3-5</td>
</tr>
<tr>
<td><strong>EXPERIENCING MUSIC–A JUILLIARD ELEARNING COURSE</strong></td>
<td>Designed for students in grades K-2, this course introduces younger students to the basic components of music: melody and rhythm. Students use these components to explore their own voices through creating beats and rhythms. In addition, students use critical-listening skills to analyze music they hear as they participate in interactive experiences. With audio, visual, and interactive technologies provided by both The Juilliard School and Connections Education, the course provides a unique and advanced learning experience for students in these grades. for grades K-2</td>
</tr>
<tr>
<td><strong>DISCOVERING MUSIC–A JUILLIARD ELEARNING COURSE</strong></td>
<td>Designed for students in grades 3-5, this course teaches students fundamental musicianship skills from a Western-Classical approach, while aligning to national music education standards. The course challenges students to improve their listening, notation, analysis, performance, and improvisation skills. With audio, visual, and interactive technologies provided by both The Juilliard School and Connections Education, the course provides a unique and advanced learning experience for students in these grades. for grades 3-5</td>
</tr>
<tr>
<td><strong>GIFTED AND TALENTED LITERATURE STUDY 2</strong></td>
<td>This course, for second graders only, is organized by themes of friendship, responsibility, and bravery. The Junior Great Books® program, which is the basis for this course, employs the Shared InquiryTM method. This method enables students to discuss these themes and make interpretations. This approach to learning fosters a vibrant environment where students acquire the habits and strategies of self-reliant thinkers, readers, and learners. for grade 2</td>
</tr>
<tr>
<td><strong>HOME LIFE</strong></td>
<td>In this course, students select from a number of activities that develop their skills through fun, experiential learning projects. Activities include cooking, crafts, sewing, home maintenance, family outings, and genealogy. Projects for 2013-2014 include photography, textiles, and clothing. for grades 1-5</td>
</tr>
<tr>
<td><strong>SIGN LANGUAGE</strong></td>
<td>This course introduces students to the fundamentals of American Sign Language through the use of vocabulary, grammar, and conversation as well as basic signing and finger-spelling techniques. Special activities and exercises also help students understand the culture of the deaf and hard of hearing community. for grades 1-5</td>
</tr>
<tr>
<td><strong>SPANISH (I AND II)</strong></td>
<td>These highly interactive courses enable students to communicate with a native speaker and make connections between their culture and the culture of people in the Spanish-speaking world. Students further develop their Spanish communication skills as they study familiar topics such as school, clothes, and community. (These courses are offered for students in third, fourth, and fifth grade.) for grades 3-5</td>
</tr>
<tr>
<td><strong>WEBQUEST</strong></td>
<td>This interactive elective allows students to participate in a unique and individual WebQuest experience. The course is primarily based on students' collecting, submitting, and tracking their own data. In addition, students are able to share online their collected information with other students. for grades 1-5</td>
</tr>
</tbody>
</table>
Middle School Courses

Grades 6-8

Arts & Humanities

Art I

.25 Credit

Grade 6
Offered in Fall

Provided by 21st Century Cyber Charter School

This class offers students the opportunity to learn about art’s past and present, and its modern significance. Artists will contemplate such questions as the choices artists make when they create and what motivates cultures to create art. Personal response and creativity are fostered and encouraged. The course will include weekly online learning activities and assignments. Creating, sharing and forming opinions are the most important aspects of this course. The class will culminate with a virtual gallery show with creating, sharing and forming opinions about art as learning goals.

Course Materials: Art Kit, Middle School (provided, included in tuition)

Art II

.25 Credit

Grade 7
Offered in Fall

Provided by 21st Century Cyber Charter School

This class offers students the opportunity to learn about choosing themes when creating art, as well as exploring art criticism. The creation of original artwork is a main focus. The course will include online learning activities, assignments, webcasts and podcasts. Art II allows students to research their interests and present extensive projects to other students in the course.

Course Materials: Art Kit, Middle School (provided, included in tuition)

Art III

.25 Credit

Grade 8
Offered in Spring

Provided by 21st Century Cyber Charter School

This course creates a structure that allows students to reflect upon and recognize the art-creation process. Students will explore and be in close touch with each step of the process of art creation. The entirety of this course will be based on studio work reflecting specific fields of visual and practical art. Research, design, execution and abstraction of architectural art is expected. The course will include online learning activities and assignments, webcasts and podcasts.

Course Materials: Art Kit, Middle School (provided, included in tuition), Photoshop Elements (BVA staff can install on your computer at no charge)

Music I

.25 Credit

Grade 6
Offered in Fall

Provided by 21st Century Cyber Charter School

This course is an introduction to learning about music of the past and present. The reasons people make music, how other cultures make music, melody and composition will be explored. Students will create original musical sketches and pieces. Creating, sharing and forming opinions are the most important components of Music I. The course will include weekly online learning activities and assignments, webcasts and podcasts.

Course Materials: GarageBand (Mac only; comes installed on BVA laptops) or Audacity (Free Software Download for Mac or PC)
### Music II

This course is an overview of the elements of music, a short review of form and structure and a development of a comprehensive list of prominent musical styles. Three styles of music will be reviewed for historical context and contemporary relevance. The course will include online learning activities, assignments, webcasts and podcasts. Music II allows students to research their interests and present extensive projects to other students in the course.

**Course Materials:** GarageBand (Mac only; comes installed on BVA laptops) or Audacity (Free Software Download for Mac or PC)

### Music III

This course introduces American musical genres and the major artists of each genre historically. Students will survey the emergence of popular musical forms and the roots of each form beginning in the early 1900s. Each major American musical form produced a number of important artistic innovators; these will be highlighted and interpretations of these contributions will be part of the course content. This course will push students to recognize the process one must take while being creative. The course will include weekly online learning activities and assignments, webcasts and podcasts.

**Course Materials:** GarageBand (Mac only; comes installed on BVA laptops) or Audacity (Free Software Download for Mac or PC)

### Core Courses

#### Language Arts I

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, including: 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, webquests, group work, and presentations.

**Textbooks:** *Around The World* by Matt Phelan, *Double Dutch* by Sharon Draper, *Something For Joey* by Richard E. Peck (provided, included in tuition)

#### Language Arts II

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, WebQuests, group work, and presentations.

**Prerequisite:** Passing grade in Language Arts I or equivalent course

**Textbooks:** *Stickman Odyssey*, *The Westing Game*, *Tangerine* (provided, included in tuition)
### Language Arts III

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grade</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>8</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

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. The class will explore many aspects 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 these styles. The course will include discussion boards, lecture and class discussion through live webcasts, research, WebQuests, group work, presentations, unit exams, and formal written essays.

**Prerequisite:** Passing grade in Language Arts II or equivalent course  
**Textbooks:** *Mockingbird* by Kathryn Erskine, *Chains* (provided, included in tuition)

### PE / Health I

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grade</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>6</td>
<td>Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

This course is designed to help guide students in making decisions that meet their 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. Study guides, flashcards, web activities, concept mapping, group discussion, and podcasts present concepts. Weekly fitness activities and logs are used to cover concepts and guide student choices and workout.

**Textbook:** *Teen Health Course 2* - Glencoe/McGraw Hill (provided, included in tuition) and MS PE Kit (provided at a fee of $24.00; does not need to be returned)

### PE / Health II

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grade</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>7</td>
<td>Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

Building on the themes from PE/Health I, 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. Concepts are presented through study guides, flashcards, web activities, concept mapping, group discussion, and podcasts. Weekly fitness activities and logs are used to cover concepts, and guide student choices and workouts.

**Prerequisite:** Health I  
**Textbook:** *Teen Health Course 2* - Glencoe/McGraw Hill (provided, included in tuition) and MS PE Kit (provided at a fee of $24.00; does not need to be returned)

### PE / Health III

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grade</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>8</td>
<td>Fall</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

Building on themes from PE/Health I & II, 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, building healthy relationships, tobacco, alcohol, drugs, and communicable diseases. Study guides, flashcards, web activities, concept mapping, and podcasts present concepts. Weekly fitness activities and logs are used to cover concepts and guide student choices and workouts.

**Prerequisite:** Health I and II  
**Textbook:** *Teen Health Course 2* - Glencoe/McGraw Hill (provided, included in tuition) and MS PE Kit (provided at a fee of $24.00; does not need to be returned)
## MIDDLE SCHOOL COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
<th>Grade</th>
<th>Offered</th>
<th>Provided by</th>
<th>Also available in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math Essentials 6</strong></td>
<td>1.0</td>
<td>6</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
<td></td>
</tr>
<tr>
<td><strong>Math Principles 7</strong></td>
<td>1.0</td>
<td>7</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Algebra</strong></td>
<td>1.0</td>
<td>8</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School or Odysseyware</td>
<td>CRx H</td>
</tr>
<tr>
<td><strong>Algebra I</strong></td>
<td>1.0</td>
<td>8</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School or Odysseyware</td>
<td>CRx H</td>
</tr>
</tbody>
</table>

### Math Essentials 6
This course is designed to be an integrated course of arithmetic and geometry concepts. Students will learn many topics related to developing flexibility in using numbers and creating a foundation for understanding advanced arithmetic and Algebra. Students will use number line graphs, data in problems, geometric figures, models, similar and congruent objects, patterns, linear equations, and algorithms for solving real-world problems. This course will include skill-based activities, labs, projects, WebQuests, journals, quizzes, exams and participation activities.

**Textbook:** *Math Essential: Course I - Prentice Hall* (provided, included in tuition)
**Suggested:** TI 30 Calculator (Not Provided)

### Math Principles 7
This course builds on arithmetic and geometry concepts gained in a sixth grade math course. Topics will include exponents, factors, fractions, ratios, proportions, percentages, probability, displaying data and graphing using the coordinate plane. Throughout the course, students will incorporate the math into real-world situations. This class will include webcast sessions, quizzes, and exams.

**Textbook:** *Math Essential: Course 2 - Prentice Hall* (provided, included in tuition)
**Suggested:** TI 30 Calculator (Not Provided)

### Pre-Algebra
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, and right triangles, graph equations, and find area and volume of various solids. Activities will include: lectures using webcast sessions, WebQuests, practice activities, scheduled small group work and unit exams.

**Textbook:** *Pre-Algebra - Prentice Hall* (provided, included in tuition). Book required for 21CCCS course only; no texts required for Odysseyware course.
**Suggested:** TI 30 Calculator (Not Provided)
**Prerequisite:** Passing grades in Math Principles 7 or equivalent course

### Algebra I
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 with real numbers and expressions, write and solve linear equations and inequalities, analyze and interpret functions, describe and compute slope, analyze and interpret a scatter plot, and use data displays in problem solving situations. Activities will include webcasts, WebQuests, practice activities, scheduled group work and unit exams. This course will prepare students to take the Keystone Algebra I Exam.

**Prerequisite:** Passing grade in Pre-Algebra; for Honors, grade of B or better in Pre-Algebra.
**Textbooks:** *Algebra I - Prentice Hall* (provided, included in tuition). Book required for 21CCCS course only; no texts required for Odysseyware course.
**Required:** TI 84 Calculator (Not Provided)
Algebra Concepts

This course is designed to build upon the essential skills of arithmetic as they apply to Algebra at a reduced pace. Students will consider the behavior of numbers as themselves, in expressions, in equations, and in inequalities. Students will look at the descriptive power of numbers in data, probability, and two-dimensional graphing. Students will use: integers and expressions to solve problems, decimals in equations, rational numbers, exponents, scientific notation, ratios, proportions, and percentages. Inequalities, graphing, area and volume of various solids, and right triangles will also be covered.

**Textbooks:** Algebra Concepts and Applications (provided, included in tuition)

**Required:** TI 84 Calculator (Not Provided)

6th Grade Science

This course is a hands-on, active experience. 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 water from fresh water to the ocean. In physical science, students explore matter, the Periodic Table, and carbon in detail. This course was designed to follow and reinforce the Pennsylvania Department of Education Biology, Physical Science, Chemistry, Physics, and Earth Science standards.

No additional materials or prerequisites are required for this course.

7th Grade Science

This science course will study a survey of sciences, which include parts of biology, physical science (chemistry, physics and astronomy), and earth sciences. Students will learn that science is everywhere and that there are many connections between each of the sciences and the real world. The course is designed for 7th grade students, regardless of their previous science experience. Activities will include webcasts, WebQuests, and small group work. This science course requires mastery of the basic concepts early in the course in order to understand and succeed later in the course. This course was designed to follow and reinforce the Pennsylvania Department of Education Biology, Physical Science, Chemistry, Physics, and Earth Science Standards.

**Prerequisite:** Passing grade in 6th grade science course

**Textbooks:** No texts are required for this course.

8th Grade Science

Prepare your middle school students for higher education with 8th Grade Science. Internet-based, this convenient course reviews physical science basics with dynamic lessons and interactive multimedia elements to increase information retention by today's tech-savvy students. Instruction includes the structure of matter, scientific measurement, the natural structures of the planet and their origins, fossils, the ocean, energy sources, and space exploration.

**Prerequisite:** Passing grade in 6th- and 7th-grade Science courses

**Textbook:** If honors, Science Explorer - Adventures (provided, included in tuition. Required for 21CCCS Honors course only; no textbooks needed for College-Prep version from Odysseyware.)
MIDDLE SCHOOL COURSES

Ancient History to Modern Times  1.0 Credit
Grade 6
Offered in Fall, Spring
Provided by 21st Century Cyber Charter School

This middle school World History course gives student the opportunity to explore history’s beginnings, ancient African and Asian civilizations, ancient and classical Greece, the world of ancient Rome, regional civilizations and empires, and medieval and Renaissance Europe. This exploration will occur through activities, WebQuests, geography, webcasts, forums and connections to today.

**Textbook:** Ancient Through Early Modern Times (provided, included in tuition)

World Cultures  1.0 Credit
Grade 7
Offered in Fall, Spring
Provided by 21st Century Cyber Charter School

The purpose of this course is to familiarize students with the major themes found in geography including location, place, human-environment interaction, movement and regions. The class will explore these aspects of geography in relation to our country and the world. This class will include webcasts, WebQuests, group work, and presentations.

**Textbook:** People, Places, & Change Intro to World Studies - HRW (provided, included in tuition)

American History I  1.0 Credit
Grade 8
Offered in Fall, Spring
Provided by 21st Century Cyber Charter School

American History I centers on the nature of the slave trade, colonization and the American Revolution. The development of the Constitution, the Civil War and the Great Depression are also covered. Through interrogating eyewitness accounts, examining clues, and searching for evidence, students will develop critical thinking skills (evidence-gathering, analysis, synthesis, evaluation) using a variety of learning styles. Students will complete this course using webcasts, WebQuests, small group work and discussion forums. There will be a comprehensive final exam.

**Textbook:** America: Pathways to the Present (provided, included in tuition)

Special Electives

Family and Consumer Science (MS)  0.25 Credit
Grade 8
Offered in Spring
Provided by 21st Century Cyber Charter School

This course is an overview of three important units in family and consumer science. In the first unit, financial and resource management, we will explore personal and consumer finances and decision making. In the second unit, students will learn ways to balance family, work, and community responsibility by learning about decision making, time management, and leadership. The final unit, food science and nutrition will introduce students to making good food choices, food handling and preparation, and understanding nutritional information. The course includes readings, discussion boards, webcasts, research, webquests, group work, projects, and presentations.

**Textbooks:** No texts are required for this course.
## Arts & Humanities

### Philosophy

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grades</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11, 12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

This course is designed to introduce students to the field of philosophy encouraging careful, analytical and critical thinking about some of the fundamental questions of human existence. Students are encouraged to engage in a dialogue about those questions and answers while studying traditional and modern approaches to the issues with an emphasis on discussion boards and postings. Some of the topics covered include: Epistemology, Rationalism, Empiricism, Idealism, Materialism, and Applied Ethics.

**Textbooks:** *Contemporary Perspectives On Perennial Issues 4th Edition* (provided, included in tuition)

### Web Design

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grades</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>9, 10, 11, 12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

This course includes several guided projects that enable students to develop their own website. Web design essentials are embedded throughout. Planning a web site, storyboarding, page design, layouts and templates are covered. Students learn to create backgrounds, headers, rollovers and pop-ups.

**Course Materials:** KompoZer (Not Provided), Photoshop Elements (can be installed by BVA Tech Support at no cost)

### Digital Photography

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grades</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>9, 10, 11, 12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

Through digital photography and graphic design lessons, students begin learning general photographic concepts. Composition skills are then added to photographs and image-editing techniques are practiced. Students also learn how to crop images, and use layers, color and lighting concepts, hue and saturation, exposures and special effects. Graphic design, artistic elements, and software skills are taught while producing graphic images. The concept of design as a matter of visual communication is embedded throughout the course. Students build a portfolio of work and explore the fields of photography, graphic arts, advertising, and illustration.

**Course Materials:** Digital Camera (Not Provided), Photoshop Elements (can be installed by BVA Tech Support at no cost)

### Art Appreciation

<table>
<thead>
<tr>
<th>Credit</th>
<th>Grades</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>9, 10, 11, 12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
</tbody>
</table>

The course is divided into three sections that cover Prehistoric art to the Middle Ages, the Renaissance to Postimpressionism, and Expressionism to present-day art. Students will learn to analyze art and gain a deeper understanding for the world around them. The course includes discussion boards, WebQuests, readings via online media and textbook, quizzes, chapter exams, and a final exam.

**Textbooks:** *The Art Book* (provided, included in tuition)

**Course Material:** High School Art Kit (provided, included in tuition)
Music Appreciation  .5 Credit
Grades 9, 10, 11, 12
Offered in Fall, Spring
Provided by 21st Century Cyber Charter School

This class offers students the opportunity to learn about music’s past and present, and its modern significance. Students will listen to music from the past and present, and also create original music using technology. Divided into three sections, this course will teach the basic concepts of music, a history of music and contemporary music. The course includes discussion forums, WebQuests, readings via online media and textbook, quizzes, chapter exams, and a final exam.

Textbooks: *The Art of Listening* (provided, included in tuition)
Course Materials: GarageBand (Mac only; comes installed on BVA laptops) or Audacity (Free Software Download for Mac or PC)

History of Rock & Roll  1.0 Credit
Grades 9, 10, 11, 12
Offered in Fall
Provided by 21st Century Cyber Charter School

This class offers students the opportunity to learn about music’s past and present, and its modern significance. Students will listen to music from the past and present, and also create original music using technology. This course is divided into eighteen section readings via online media and textbook, quizzes, chapter exams, and a final exam covering the definitive history of the most influential artists and their music.

Textbooks: *The Rolling Stone History of Rock & Roll, History of Rock Music* (provided, included in tuition)
Course Materials: GarageBand (Mac only; comes installed on BVA laptops) or Audacity (Free Software Download for Mac or PC)

English

English Composition  1.0 Credit
Grade 9
Offered in Fall, Spring
Provided by 21st Century Cyber Charter School
Also available in H CRx

This course is designed to teach students to effectively write informative and persuasive pieces. Students will learn the writing process and take multiple pieces of writing through drafting, revision and editing. Emphasis will be placed on the ability to write with focus and attention to the audience. Students will be taught to use appropriate organizational strategies, precise language, and a variety of sentence structures. The course will teach students to use proper grammar, mechanics, punctuation and sentence formation. The course will include readings, writing assignments, discussion boards, lectures through webcasts (Elluminate sessions), research, WebQuests, group work, presentations, and unit exams. This course will prepare students to take the Keystone Composition Exam.

Textbooks: *To Kill a Mockingbird, Persepolis: The Story of a Childhood* (provided, included in tuition); if Honors, add *The Other Wes Moore, Mockingbird - A Portrait of Harper Lee* (provided, included in tuition)

English Literature  1.0 Credit
Grade 10
Offered in Fall, Spring
Provided by 21st Century Cyber Charter School
Also available in H CRx AP

This course helps students build literary, reading, writing, vocabulary, and listening skills. Students will also learn writing techniques, research skills, and proper grammar usage rules. Building on skills from English Composition, the class explores many aspects of plot and setting, character, narrator and voice, comparing themes, irony and ambiguity, symbolization and allegory, poetry, and drama. The course includes readings, discussion boards, webcasts, research, webquests, group work, presentations, and unit exams.

Textbooks: *Pride & Prejudice, Devil in the White City, Macbeth (Parallel series)* (provided, included in tuition); if Honors, add *My Stroke of Insight* (provided, included in tuition); AP course may require textbooks (included in tuition).
Prerequisite: Passing grade in English Composition or equivalent course; for Honors, a grade of B or better in English Composition.
### American Literature 1.0 Credit

This course includes works of American literature with the purpose of familiarizing students with major authors and movements of American literature, from the pre-colonial times to the present. Students will also learn writing techniques, research skills and proper grammar usage rules. Students will explore many aspects of American literature: fiction, nonfiction, poetry, media, art, drama, the novel and speech. The course includes readings, discussion boards, webcasts, research, WebQuests, group work, and presentations.

**Textbooks:** Beloved, The Adventures of Huckleberry Finn, This Boy’s Life, The Great Gatsby, A Streetcar Named Desire (provided, included in tuition); if Honors, add The Catcher in the Rye, The Things They Carried (provided, included in tuition)

**Prerequisite:** Passing grade in English Literature or equivalent course; for Honors, a grade of B or better in English Literature.

### British and World Literature 1.0 Credit

This course includes works of British and World literature with the purpose of familiarizing students with major authors and movements of British and World literature, from the beginnings of written language to the present. Students will learn writing techniques, research skills, and proper grammar usage rules. Students will explore many aspects of British literature: fiction, nonfiction, poetry, media, art, drama, the novel, and speech. The course will include readings, discussion boards, webcasts, research, WebQuests, group work, presentations, and unit exams.

**Textbooks:** Elements of Literature 6th, Frankenstein - 1818 Text (provided, included in tuition); if Honors, add The Iliad or Hamlet, and Great Expectations or a novel by Jane Austen (provided, included in tuition)

**Prerequisite:** Passing grade in American Literature or equivalent course; for Honors, a grade of B or better in American Literature.

### Elements of Language 1.0 Credit

This course emphasizes different elements of language, in particular proper grammar usage, reading comprehension and writing skills. Students will read and respond to various types of writing, including articles, analytical essays, personal narratives, persuasive pieces and novels. Students will also brainstorm writing topics, engage in various pre-writing activities and compose pieces of writing. The course will include class forums, class lecture webcast sessions, research, presentations, exams, and cumulative projects.

**Textbooks:** Elements of Language 4th, Their Eyes Were Watching God (provided, included in tuition)

### Creative Writing 1.0 Credit

This course will teach students the major components of the creative writing process by learning writing techniques, peer editing and self-editing. The primary focus of the course will be on creating and completing various types of creative pieces, culminating with the completion of a “final” piece as designed by the student. Students will explore many aspects of creative writing through blogs, writing activities, and assignments geared towards helping them unlock their natural creativity. The course will also include readings, discussion boards, writing, webcasts, WebQuests and peer editing.

**Textbooks:** None.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
<th>Grades</th>
<th>Offered</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Communications</strong></td>
<td>1.0</td>
<td>11, 12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
</tr>
<tr>
<td>This course is designed to familiarize students with the many types of written and verbal communications they 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, blogs, webcasts, research, WebQuests, group work, and presentations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Textbooks:</strong> Who Moved My Cheese? (provided, included in tuition)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong> Passing grade in English Composition.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Health & Physical Education**               |        |                 |                 |                                              |
| **Introduction to Fitness**                  | .5     | 9, 10, 11, 12   | Fall, Spring    | 21st Century Cyber Charter School             |
| Fitness for Life is a comprehensive program designed to help teens take responsibility for 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 of a fit for life attitude. Students are required to complete a portfolio of fitness, which includes self-assessments and activities; this provides them with the opportunity to get active and build fitness. After completing the course, students will be able to utilize acquired knowledge about the benefits of physical activity to health and wellness, understand the biomechanical movement concepts that apply to fitness activities, know from personal experience the principles that define fitness and pursue fitness goals through physical activity. |        |                 |                                              |
| **Textbooks:** Fitness for Life - 5th Edition (provided, included in tuition) and HS PE Kit (provided at a fee of $24.00; does not need to be returned) |        |                 |                                              |

| **First Aid & Emergency Care**                | 1.0    | 9, 10, 11, 12   | Fall, Spring    | 21st Century Cyber Charter School             |
| This course will prepare students to make appropriate decisions regarding First Aid care and to act on those decisions. First Aid can save lives, reduce recovery time and quite possibly mean the difference between temporary disability and lifelong disability for the victim. Basic First Aid program participants will learn to recognize the signs and symptoms of injuries and sudden illness and more. This course will also cover the importance of leading a safe and healthy lifestyle, meet health class requirements, and provide students with the option to become Red Cross certified in CPR and First Aid. |        |                 |                                              |
| **Textbooks:** Responding to Emergencies (provided, included in tuition) |        |                 |                                              |

| **Health**                                   | 1.0    | 9, 10, 11, 12   | Fall, Spring    | 21st Century Cyber Charter School             |
| This course is designed to familiarize students with different health topics; they will consider the implications of decisions and behaviors on their physical, mental and emotional, and social health. These three health elements, and the way they are interconnected, constitute the health triangle. This course will help students gain knowledge and skills that will support their efforts to create and maintain a balanced health triangle. Each of the concepts will be reinforced with outside readings. A course requirement includes weekly written observations in a journal. There will be a midterm and final exam. |        |                 |                                              |
| **Textbooks:** Health - Glencoe (2009) (provided, included in tuition) |        |                 |                                              |
### Physical Education (.5 Credit)

**Grades:** 9, 10, 11, 12  
**Offered in:** Fall, Spring  
**Provided by:** Odysseyware

Designed for high school students, this semester-length elective focuses on sports performance in soccer, basketball, football, baseball, and volleyball. Students have the opportunity to participate in these sports on their own time, logging their activity, with the goal of integrating healthy fitness habits into their everyday lives. Technique, rules, and appropriate preparation are emphasized. This course offers students the opportunity to apply what they learn online to off-computer activities.

**Textbooks:** None.  
**Course Materials:** None required. Students may submit activities for approval to count toward activity hours; contact BVA to see if your sport or activity will count.  
**Prerequisite:** Passing grade in Introduction to Fitness

### Introduction to Anatomy & Physiology (1.0 Credit)

**Grades:** 11, 12  
**Offered in:** Fall, Spring  
**Provided by:** 21st Century Cyber Charter School

This class covers every major body system ranging from the skeletal system to special senses. With the complexity of the human body, each unit is covered using an outline to focus on the main topics. As students progress through the class, they will not only learn about each body system, but also how these body systems work together.

**Textbooks:** *Essentials of Human Anatomy & Physiology* (provided, included in tuition)

### Mathematics

#### Algebra Concepts (1.0 Credit)

**Grades:** 8, 9, 10  
**Offered in:** Fall, Spring  
**Provided by:** 21st Century Cyber Charter School

This course is designed to build upon the essential skills of arithmetic as they apply to Algebra at a reduced pace. Students will consider the behavior of numbers as themselves, in expressions, in equations, and in inequalities. Students will look at the descriptive power of numbers in data, probability, and two-dimensional graphing. Students will use: integers and expressions to solve problems, decimals in equations, rational numbers, exponents, scientific notation, ratios, proportions, and percentages. Inequalities, graphing, area and volume of various solids, and right triangles will also be covered.

**Textbooks:** *Algebra Concepts and Applications* (provided, included in tuition)

#### Algebra I (1.0 Credit)

**Grades:** 8, 9, 10  
**Offered in:** Fall, Spring  
**Provided by:** Odysseyware

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 with real numbers and expressions, write and solve linear equations and inequalities, analyze and interpret functions, describe and compute slope, analyze and interpret a scatter plot, and use data displays in problem solving situations. Activities will include webcasts, WebQuests, practice activities, scheduled group work and unit exams. This course will prepare students to take the Keystone Algebra I Exam.

**Prerequisite:** Passing grade in Pre-Algebra; for Honors, grade of B or better in Pre-Algebra.  
**Textbooks:** *Algebra I - Prentice Hall* (provided, included in tuition; required for 21CCCS Honors course only). No books needed for Odysseyware College-Prep and CRx versions.  
**Required:** TI 84 Calculator (Not Provided)

### Additional Information

- **Keystone Supplemental Available:** (see page 32)
### Algebra II 1.0 Credit

This course expands on the mathematical content of Algebra I and Geometry. Students will develop math skills through study of exponential and logarithmic functions, probability, statistics and elements of trigonometry. After completing the course, students are expected to be able to: solve equations, inequalities and word problems; solve systems of equations and inequalities; perform operations with matrices and determinants; simplify monomials polynomials, irrational numbers, and complex numbers; solve quadratic equations; and work with parabolas, circles, ellipses, hyperbolas and conic sections. Students will gain an understanding of real-world applications of these topics.

**Prerequisite:** Passing grade in Algebra I and Geometry; for Honors, grade of B or better in Algebra I and Geometry.

**Textbooks:** Algebra II - Prentice Hall (provided, included in tuition, required for 21CCCS Honors course only). No books needed for Odysseyware College-Prep and CRx versions.

**Required:** TI 84 Calculator (Not Provided)

### Geometry 1.0 Credit

This course will cover more than thirty math content anchors assessed on the 11th grade mathematics PSSA. 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. Geometrical proofs and inductive reasoning will be covered. Throughout the course, students will apply the math they learn to real-world situations. This course includes lecture through webcasts, three WebQuests, scheduled small group work, a midterm exam, and a final exam.

**Prerequisite:** Passing grade in Algebra I; for Honors, grade of B or better in Algebra I.

**Textbooks:** Geometry - Prentice Hall (provided, included in tuition; needed for 21st Century Cyber Honors course only; no textbooks for Odysseyware College-Prep or CRx version)

**Required:** TI 84 Calculator (Not Provided)

### Pre-Calculus 1.0 Credit

This course includes a detailed study of various algebraic and trigonometric functions and their graphs. The course goal is to prepare students for the study of calculus or to serve as a high school capstone course. The major areas of study are: linear, quadratic, polynomial and rational functions; exponential and logarithmic functions; trigonometric functions and analytic trigonometry; systems of equations, including matrices; polar coordinates; conic functions with an emphasis on parabolas, ellipses, and hyperbolas; and topics in discrete mathematics including sequences and series.

**Prerequisite:** Passing grade in Algebra I, Geometry and Algebra II; for Honors, grade of B or better in aforementioned classes.

**Textbooks:** Pre-Calculus - Glencoe/McGraw Hill (provided, included in tuition; needed for 21st Century Cyber Honors course only; no textbooks for Odysseyware College-Prep or CRx version)

**Required:** TI 84 Calculator (Not Provided)

### Introduction to Statistics 0.5 Credit

This nine-week course is designed as an introduction to statistics for high school sophomores, juniors or seniors. In this course, students will build upon algebra skills by working with frequency and probability distributions and applying them to real-world situations involving samples and populations. Students will be able to make inferences about these situations through the statistics they will learn.

**Prerequisite:** Passing grade in Algebra I and Geometry

**Textbooks:** Elementary Statistics - Prentice Hall (provided, included in tuition)

**Required:** TI 84 Calculator (Not Provided)
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grades</th>
<th>Offered in</th>
<th>Provider</th>
<th>Prerequisite</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Accounting</strong></td>
<td>.5</td>
<td>10, 11, 12</td>
<td>Fall</td>
<td>21st Century Cyber Charter School</td>
<td>Passing grades in Algebra I and Geometry</td>
<td>Accounting: A Practical Approach - Prentice Hall (provided, included in tuition)</td>
</tr>
<tr>
<td><strong>Consumer Math</strong></td>
<td>1.0</td>
<td>11, 12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
<td></td>
<td>Mathematics - Business &amp; Personal Finance (provided, included in tuition)</td>
</tr>
<tr>
<td><strong>Senior Math Anchors</strong></td>
<td>1.0</td>
<td>12</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
<td>Passing grades in Algebra I and Geometry</td>
<td>T.I. 84 calculator (Not Provided)</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Physical Science</strong></td>
<td>1.0</td>
<td>9, 10, 11</td>
<td>Fall, Spring</td>
<td>21st Century Cyber Charter School</td>
<td></td>
<td>Physical Science: Concepts In Action and Physical Science Kit (both provided, included in tuition)</td>
</tr>
</tbody>
</table>
Earth & Space Science

1.0 Credit

This course is designed to help students develop an understanding of the Earth, its features and processes, resources, weather, and water resources. Earth Science will use visualizations showing animations, simulations, satellite images, and other interactive graphs with explanatory text, enabling students to see the processes of Earth Science at work. This course focuses on the physical features and properties of the earth and the universe, and their relationship to earth’s living things and society. Students will be required to apply basic concepts learned in previous science courses to the study of the earth. The course includes readings, discussion boards, webcasts, research, WebQuests, presentations, and unit exams.

Prerequisite: Passing grade in Physical Science
Textbooks: Earth Science – Glencoe (provided, included in tuition)
Application Download: Google Earth (Free software download)

Biology

1.0 Credit

Take a technology-rich leap into the amazing world of biology! Lessons look at taxonomy and the classification of plants and animals and culminate with an exploration of the human body, habitats, ecosystems and biotechnology. A minimum of two-thirds of simulated projects must be completed for this course to be considered a laboratory science course (college preparatory). If less than two-thirds of the projects are completed, but the student still manages to pass the course, the transcript will list the class as a non-lab course. Please note that non-lab science courses do not meet the entrance requirements of many colleges.

Prerequisite: Passing grade in Physical Science
Textbooks: Biology- Exploring Life (provided, included in tuition, required for 21CCCS Honors course only). No books needed for Odysseyware College-Prep and CRx versions. AP course may require additional textbooks (included in tuition).
Equipment: None; the lab simulator is accessed online with a provided account.

Chemistry

1.0 Credit

Chemistry is a survey course that includes the major topics in the fields of matter and energy. This course employs virtual labs where students do their experiments in an online simulator. A minimum of two-thirds of the simulated projects must be completed for this course to be considered a laboratory science course (college preparatory). If less than two-thirds of the projects are completed, but the student still manages to pass the course, the transcript will list the class as a non-lab course. Please note that non-lab science courses do not meet the entrance requirements of many colleges.

Prerequisite: Passing grades in Physical Science and Biology; for Honors, grade of B or better in aforementioned courses.
Textbooks: A lab simulator account is provided and included in tuition. No books needed for Odysseyware College-Prep and CRx versions. AP course may require additional textbooks (included in tuition).
Equipment: None; the lab simulator is accessed online with a provided account.
**Physics**

1.0 Credit

Students explore physics concepts using laboratory activities, videos, software, and websites. The purpose of this course is to provide opportunities to study the concepts, theories, and laws governing the interaction of matter, energy, and forces, and their applications to the real world through exploratory investigations and activities. This course is intended for college-bound students with strong mathematical skills. Using conceptual laboratory investigations, students will focus on: energy, thermodynamics, conservation of energy, momentum, kinematics, force and motion waves, electricity and magnetism, matter, space and time, and interactions among science, technology, and society. Activities will include webcasts, lab assignments and small group work.

**Prerequisite:** Passing grade in Biology and Chemistry

**Textbooks:** *Physics Principles and Problems* - Glencoe (provided, included in tuition); AP course may require additional textbooks.

**Suggested:** TI 84 Calculator (Not Provided)

**Grades:** 10, 11, 12

**Offered in:** Fall, Spring

**Provided by:** 21st Century Cyber Charter School

**Also available in:**
- AP from Aventa K12

---

**Environmental Science**

1.0 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 hands-on, unit-long research 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 small group work.

**Prerequisite:** Success in previous high school science course and a teacher/school counselor recommendation

**Textbooks:** *Environmental Science: Your World Your Turn* and Environmental Science Kit (both provided, included in tuition). Kilowatt meter included in Kit; must be returned at end of course. AP course may require additional textbooks.

**Grades:** 11, 12

**Offered in:** Fall, Spring

**Provided by:** 21st Century Cyber Charter School

**Also available in:**
- AP from Aventa K12

---

**Social Studies**

**World History**

1.0 Credit

This course is a survey of world history. Students start at the beginning of human societies, with the earliest civilizations, and continue to the present day. Students will be exposed to a variety of cultures with a focus on events in East Asia, South Asia, and Europe. The course concludes with a look at today's modern world and the issues facing the post war era. The course features a combination of asynchronous content and online web sessions with a live teacher each week.

**Textbooks:** *Animal Farm* (provided, included in tuition, required for 21CCCS Honors course only). No books needed for Odysseyware College-Prep and CRx versions. AP course may require additional textbooks (included in tuition).

**Grades:** 9, 10, 11, 12

**Offered in:** Fall, Spring

**Provided by:** Odysseyware

**Also available in:**
- H from 21st Century Cyber Charter School
- CRx from Odysseyware
- AP from Aventa K12
World Geography 1.0 Credit

In this course, students will discuss and compare the five major themes of geography and how these themes are unique to different regions throughout the world. The five major themes include: locations, places, human-environment interaction, movement and regions. Students will apply these themes in North America, South America, Europe, Asia, and Africa. In addition to the five major themes, students will discuss different cultures, political environment and economic conditions in the various regions. Activities will include webcasts, WebQuests, weekly online learning activities and assignments.

Textbooks: World Geography – McDougal (provided, included in tuition); if Honors, add The World Is Flat, Three Cups of Tea (provided, included in tuition)
Application Needed: Google Earth (free software download)

American History II 1.0 Credit

Study American History, also referred to as U. S. History, from the Civil War to the present-day century in this course. Begin at World War I and explore through the roaring 1920s, the Great Depression, World War II, and complex issues in the United States from the 1940s to 1990s. The course features a combination of asynchronous content and online web sessions with a live teacher each week.

Textbooks: The American Reconstruction to the 21st Century (provided, included in tuition, required for 21CCCS Honors course only). No books needed for Odysseyware College-Prep and CRx versions.
Prerequisite: Passing grade in American History I

U. S. Government .5 Credit

This course is a comprehensive view of the principles of the American government, focusing on the formation and workings of our political system and the role of the individual citizen. Emphasis is placed on foundations of government, essential documents and primary sources, the three branches of government, state and local governments, comparative politics, and the role of the individual citizen. Students participate in various webquests, forums, novel, a research paper, and a final exam. By the end of the course, students will have an overall summary of civic roles, responsibilities, and duties of the individual citizen.

Textbooks: Civics in Practice (provided, included in tuition). AP course may require additional textbooks (included in tuition).

Economics .5 Credit

This course gives students a comprehensive and practical view of how the principles of economics impact their daily lives. Additional emphasis is placed upon fulfillment of needs and wants, supply and demand, business cycles, the workforce, changes in the economy and governments role in economy. A comprehensive final exam concludes the course. Students participate in WebQuests, geography, webcasts and discussion forums throughout the course.

Textbooks: Civics in Practice (provided, included in tuition). AP course may require additional textbooks (included in tuition).
Psychology

Psychology is the scientific study of behavior and mental processes. This course exposes students to the major topics found in the field of psychology. 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. Students explore the scientific methods upon which psychology is based. Students participate in WebQuests, geography, webcasts and discussion.

Textbooks: Invitation to Psychology - 3rd Edition (provided, included in tuition). AP course may require additional textbooks (included in tuition).

World Languages

Mandarin Chinese

1.0 Credit each

Grades 9, 10, 11, 12
Offered in Fall, Spring

Provided by 21st Century Cyber Charter School

The purpose of this course is to provide an introduction to Modern Standard Chinese (Mandarin) as a foreign language for beginners. The main goal for this course is for students to acquire a culturally contextualized working knowledge of, and essential skills in, introductory Chinese. This course aims at developing four basic skills: listening, speaking, reading and writing, and also 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. Upon completion of this course, students will have mastered a set of essential sentence patterns and a vocabulary of approximately 350 words. In addition, this course will help students achieve a better awareness of Chinese culture and society, which will form an important aspect of a truly global perspective.

Textbooks: Integrated Chinese Part 1 or 2 Traditional, Integrated Chinese Part 1 or 2 Workbook, Integrated Chinese Part 1 or 2 Character Workbook (provided, included in tuition)

Required Equipment: Wacom Tablet, Microphone and headset (Supplies Not Provided)

Prerequisite: Must pass Chinese I to take Chinese II.

Spanish

1.0 Credit each

Grades 9, 10, 11, 12
Offered in Fall, Spring

Provided by Odysseyware (Levels I and II) and Aventa K12 (Levels III and IV)

Also available in:

AP

from Aventa K12

Take your high school students outside the boundaries of the classroom and into the colorful language of Spain with Spanish I, or polish world language skills in Spanish II. These year-long courses explore this world language through a look at communication, culture, connections, comparisons, and community. Each lesson includes learning games, video clips, and audio recordings by Spanish speakers to boost comprehension.

Textbooks: None. AP course may require additional textbooks (included in tuition).

Required Equipment: Audacity Software (Free Software Download)

Prerequisite: Must pass Spanish I to take Spanish II, and so forth.
## Electives

### Careers 101  
**0.5 Credit**

In this course, students will use an informative and interactive process to explore career and life options that fit their individual interests, needs and skills. Students begin with an examination of their own interests, aptitudes, achievements and personality styles. Then, they explore potential career matches, examining job market information, conducting informational interviews, and plotting training and educational paths.

**Textbooks:** *What Color Is Your Parachute? for Teens* (provided, included in tuition)

---

### Personal Finance  
**0.5 Credit**

In this course, students will use an informative interactive process to learn how money impacts the world in which we live. Do you know if your future career will meet the demands of your lifestyle? Do you know why we pay taxes? Do you understand how credit cards work? Do you know how to spend money without going into debt? This course will teach you how to manage your money properly in order to achieve financial success. You will learn how to avoid common financial mistakes, as well as how to invest for your future. Upon completion of this course, students will have mastered a set of essential financial concepts and a vocabulary of financial terms. In addition, this course will help students achieve a better awareness of the global economy, which may help promote accountability and responsibility.

**Textbooks:** None

---

### Driver Education  
**0.25 or 0.33 Credit**

The purpose of this course is to provide the academic components to prepare students for the written drivers’ exam. The main goal of this course is for students to acquire driver knowledge and review important information on operating a vehicle and how to stay current with today’s laws. The course is designed to familiarize students with different driving topics; they will consider the implications of decisions and behaviors that impact their physical, mental, and social wellbeing. Each concept is reinforced with study guides, movies and outside resources. The mission of the course is to teach students the knowledge needed to be a safe, and to be prepared to take the Pennsylvania written exam. This course is designed as an independent study that students work on with limited teacher interaction.

**Textbooks:** None

---

### Graduation Project  
**0.5 Credit**

The Graduation Project is a requirement for all Pennsylvania high school students. The Pennsylvania Department of Education states, "The purpose of this culminating project is to assure that students are able to apply, analyze, synthesize and evaluate information and communicate significant knowledge and understanding." This course offers a challenging learning experience allowing he or she to create a uniquely personal product. Through the learning activity, he or she will demonstrate their highest quality results both in scope and breadth. The course supports diversity and varying learning styles, and encourages enterprise and personal ownership of a task. It promotes self-esteem and self-confidence through successful project completion, and promotes accountability and responsibility.

**Textbooks:** None
### Keyboarding

**0.25 Credit**  
**Grades:** 9, 10, 11, 12  
**Offered in:** Fall, Spring  
**Provided by:** 21st Century Cyber Charter School

Keyboarding is a .25 credit course designed to increase students’ keyboarding skills. This self-paced course provides students with correct keyboarding techniques and typing procedures. This course is ideal for students who wish to improve their 21st century computer communication skills or for individuals who simply want to improve their typing speed and accuracy.

**Textbooks:** None

### Drawing

**.5 Credit**  
**Grades:** 9, 10, 11, 12  
**Offered in:** Fall, Spring  
**Provided by:** 21st Century Cyber Charter School

New offering! This course focuses on the technical skill of drawing. The coursework is designed to improve any student’s ability to draw, regardless of prior drawing experience. This class will use a wide variety of artistic examples, from old masters to contemporary artists. Students will draw from observation and complete 10 finished drawings for the course. Instruction formats will be given through demonstrations, guided practice, and critiques. Students will learn how to draw by focusing on specific, individual elements of drawing to increase his or her skill set. Lessons in line, value, shape/form, texture, positive/negative space, composition, and perspective are also included.

**Course Materials:** Drawing Kit (provided, included in tuition)

### Introduction to Forensic Science

**0.5 Credit**  
**Grades:** 9, 10, 11, 12  
**Offered in:** Fall, Spring  
**Provided by:** 21st Century Cyber Charter School

New offering! This course examines the graphic novel, a genre that has grown in popularity in recent years. Students will study history, fiction, classic literature, and science fiction through these inventive books, which combine literary texts with illustrations. In addition to analyzing these texts, students will be able to create their own stories and comics. The course may include readings, discussion boards, webcasts, group work, projects, and presentations. Although these books are carefully selected for literary and artistic value, parents should be aware that some may contain images, language, or moments of violence that may not align with their personal values. If you are concerned about the content of these books, please contact the school to discuss your concerns with the teacher.

**Textbooks:** Forensic Science Fundamentals & Investigations (provided, included in tuition)  
**Prerequisite:** Must pass Biology.  
**Materials:** Forensic Science Kit (provided, included in tuition)

### Graphic Novel Seminar

**.5 Credit**  
**Grades:** 11, 12  
**Offered in:** Fall, Spring  
**Provided by:** 21st Century Cyber Charter School

New offering! This course examines the graphic novel, a genre that has grown in popularity in recent years. Students will study history, fiction, classic literature, and science fiction through these inventive books, which combine literary texts with illustrations. In addition to analyzing these texts, students will be able to create their own stories and comics. The course may include readings, discussion boards, webcasts, group work, projects, and presentations. Although these books are carefully selected for literary and artistic value, parents should be aware that some may contain images, language, or moments of violence that may not align with their personal values. If you are concerned about the content of these books, please contact the school to discuss your concerns with the teacher.

**Textbooks:** Laika, King Lear, Katman, I Kill Giants, American Born Chinese, Maus (provided, included in tuition)  
**Course Materials:** Smart Notebook and Comic Life software programs (Not Provided)
**Family & Consumer Science (HS)**

*0.5 Credit*  
*Grades 9, 10, 11, 12*  
*Offered in Fall, Spring*  

*New offering!* This course explores finances, personal and family responsibilities, and food science in three units. The first unit, financial and resource management, will investigate financial decision making, how to choose a job, and managing annual gross income. In the second unit, students will learn ways to balance family, work, and community responsibilities by covering teamwork and the family life cycle. The final unit, food science and nutrition, will review diets and nutritional needs, food engineering, and meal planning. The course includes readings, discussion boards, webcasts, research, webquests, group work, projects, and presentations.

**Materials:** None

---

**Parenting & Child Development**

*0.5 Credit*  
*Grades 9, 10, 11, 12*  
*Offered in Fall, Spring*  

*New offering!* This course focuses on issues related to parenting and child development. The course begins with time management (balancing parenthood with other responsibilities) and problem solving. Students will then progress through units covering the challenges faced by parents, the stages of development in infants and children, parenting styles, prenatal health care, special needs children, child care and families in crisis.

**Textbooks:** Reading Magic (provided, included in tuition)

---

**Supplemental Instruction**

---

**Supplemental Keystone Algebra 1**

*0.25 Credit*  
*Grades 8, 9, 10, 11*  
*Offered in Fall, Spring*  

*New offering!* Keystone Algebra 1 is an Algebra 1 course that explores the topics of greatest common factor, least common multiple, exponents, absolute value, polynomials, equations, inequalities, linear representations, probability, and displaying data. This course is designed to provide supplemental instruction for students that have already completed Algebra 1 but were unsuccessful on the Algebra 1 Keystone Exam.

**Textbooks:** None

---

**Supplemental Keystone Biology**

*0.25 Credit*  
*Grades 9, 10, 11*  
*Offered in Fall, Spring*  

*New offering!* Keystone Biology is a biology course that explores the topics of the scientific method, basic nutrition, cells, genetics, DNA, RNA and protein synthesis, human influences, evolution, and genetic engineering. This course is specifically designed to provide supplemental instruction for students who have already completed Biology but were unsuccessful on the Biology Keystone Exam.

**Textbooks:** None
# AP Courses for College Credit

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
<th>Offered in</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Art History</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Biology</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Calculus AB</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Calculus BC</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Computer Science A</td>
<td>.5 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP English Language</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP English Literature</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Environmental Science</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP European History</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP French Language and Culture</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Macroeconomics</td>
<td>.5 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Microeconomics</td>
<td>.5 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Physics B</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>.5 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Spanish Language and Culture</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP Statistics</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP U. S. Government</td>
<td>.5 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP U. S. History</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
<tr>
<td>AP World History</td>
<td>1 Credit</td>
<td>Fall, Spring by Aventa (K12)*</td>
</tr>
</tbody>
</table>

Please note: AP Exams for these courses will need to be proctored on-site at your school district or with a BVA team member. You will need to report to a physical location at a specific date and time to take your exam.
## Credit Recovery for a second chance

<table>
<thead>
<tr>
<th>Course</th>
<th>Recommended for</th>
<th>Offered in</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>Grade 9</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>English Literature</td>
<td>Grade 10</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>American Literature</td>
<td>Grade 11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>British and World Literature</td>
<td>Grade 12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Introduction to Fitness</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Health</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Algebra I</td>
<td>Grades 8-10</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Algebra II</td>
<td>Grades 9-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Geometry</td>
<td>Grades 9, 10</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>Grades 11, 12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Biology</td>
<td>Grades 9-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Grades 10-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>World History</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>World Geography</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>American History II</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Civics and Government</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>Economics</td>
<td>Grades 9-12</td>
<td>Fall, Spring</td>
</tr>
</tbody>
</table>

Please note: Students must have attempted the course once during their high school career and not passed to be eligible to take the Credit-Recovery version of that course.
The Chester County Intermediate Unit will not discriminate in employment, educational programs or activities based on race, color, religion, national origin, age, sex, disability, marital status or because a person is a disabled veteran or a veteran of the Vietnam era. Reasonable accommodations will be provided for employees and program participants who are disabled. For information regarding civil rights or grievance procedures, contact Maureen Linahan, Title IX and Section 504 coordinator, at (484) 237-5086/DeafRelay@cciu.org; or in writing at the Chester County Intermediate Unit, 455 Boot Road, Downingtown, PA 19335.