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Mr. Donald F.X. Keegan, Associate Superintendent for Business Services
Mr. David Lunden, Director of Instructional Leadership
Mr. Jason Nephew, Assistant Superintendent for Human Resources
Mrs. Donna Marie Norton, Executive Director for Data, Accountability and School Improvements
Mr. John Rice, Director of Instructional Support for CTE and Science
Ms. Valerie DiFlorio, Executive Director for Diverse Learning & Student Support
Ms. Lisa Goldberg, Director of Instructional Support for Diverse Learning
Mr. Gregory Stone, Director of Elementary Education
Mr. Timothy Bednarski, Director of Athletics and Co-Curricular Programs

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Sara Villnave Health
Amy Furlletti Mathematics
Mark Adamski Music
Mark Button Physical Education
Scott Sammon Science
Betsy Cusumano Social Studies
Sue Martignetti Special Education
Martin Miner Technology
Heather Puchtta World Languages

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Kristen Hill Assistant Principal
Charles Yonko Assistant Principal

NORTH SYRACUSE JUNIOR HIGH SCHOOL DEPARTMENT CHAIRS
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Todd Cook Business
Meg Brown English
Daniele Todisco Family and Consumer Science
Heather Yakowec Health
Kiersten Klem Mathematics
Darcie Bowden Music
Danielle Licata Physical Education
Kevin Eager Science
Katherine Carr Social Studies
Liz Cannella Special Education
Tim VanBeveren Technology
Shane Kelsen World Languages
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Please note: The following pages describe all of the
programs and courses offered at Cicero-North Syracuse
High School and North Syracuse Junior High School. If
there is insufficient enrollment for any course, that course
may be cancelled for the school year.
SCHOOL COUNSELING SERVICES
The school-counseling program is designed to enable students to benefit from the educational program, to implement career plans and to assist in their personal and social development. In all three areas, counselors provide information and direction for decision making by the student.

Counselors are required by the State Education Department to provide each student with an Annual Review. At this meeting, the student’s academic progress is reviewed; interests and goals are discussed and course selections for the following year are made.

The counseling staff is ready to answer questions you and your son or daughter may have about any phase of the academic programming, and what might be needed to achieve educational and career goals. The telephone numbers for the counseling offices are as follows:

Cicero-North Syracuse High School – 218-4100
North Syracuse Junior High School – 218-3600

NOTE: Levels of Instruction
AP Advanced Placement  R Regents
RH Regents Honors

All levels of instruction present content from Regents curricula.

GRADUATION REQUIREMENTS
A total of 22 credits are required for graduation from Cicero-North Syracuse High School. This includes two full credits of four years of physical education.

<table>
<thead>
<tr>
<th>REQUIRED COURSES/ CREDITS (22 Total)</th>
<th>REGENTS DIPLOMA</th>
<th>ADVANCED DESIGNATION REGENTS DIPLOMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Social Studies</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>World Languages</td>
<td>1 or 3*</td>
</tr>
<tr>
<td></td>
<td>Art/Music</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3.5</td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED REGENTS EXAMS</th>
<th>English Language Arts Regents</th>
<th>English Language Arts Regents</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1) Math Regents</td>
<td>Three (3) Math Regents</td>
<td></td>
</tr>
<tr>
<td>Global Studies Regents</td>
<td>Global Studies Regents</td>
<td></td>
</tr>
<tr>
<td>U.S. History Regents</td>
<td>U.S. History Regents</td>
<td></td>
</tr>
<tr>
<td>One (1) Science Regents</td>
<td>Living Environment Plus One (1) Other Science Regents</td>
<td></td>
</tr>
</tbody>
</table>

*Students acquiring five credits in specific courses in Art (one credit must be Studio Art), Music (four credits Performance, one credit Music Theory), BOCES, Business, Technology or Family and Consumer Science may be exempt from the 3-year World Languages requirement for an Advanced Designation Regents Diploma. They must have one year of World Languages.

EXAM REQUIREMENTS
All students must achieve one credit in a foreign language during grades 8–12. If the student has not earned one credit at the end of the 8th grade, the student may acquire that credit by passing the 6-week summer school course, if offered.

All students, other than those with IEP’s enrolled in special class, must take the Regents Exam(s) for the course(s) in which they are enrolled.

REGENTS EXAMINATION SCORES (REQUIRED)
Grade 9, 10, 11 and 12:
• Pass five Regents with grade of 65 or higher.
• Pass eight Regents with a grade of 65 or higher for Advanced Designation Diploma.

COLLEGE ENTRANCE TESTS
Many colleges require the submission of scores from a college admissions exam as part of their admission process. There are two College Board exams produced by different non-profit testing corporations (SAT & ACT). All colleges will accept scores from either SAT or ACT for admission purposes. Each college’s individual website states admission requirements. Each year’s testing schedule is listed in the counseling (Tips & Tools) and parent newsletters, which are on the CNS website. The testing schedules are available in the high school counseling offices. Online registration is required at www.sat.collegeboard.org and www.actstudent.org. Both the SAT & ACT may be taken more than once. It is recommended that students first take these examinations in the spring of their junior year. SAT and ACT scores have to be sent by the student to all colleges where they apply. Students contact SAT/ACT companies directly.

SAT I
The SAT I is a test that measures verbal, mathematical and writing abilities developed during the student’s years of education. These abilities are related to how well a student may be able to do academically in college.

ACT (American College Test)
The ACT is a test that measures skills and abilities that are highly related to success in college. The ACT measures the knowledge, understanding, and skills acquired through the student’s years of education in Science, Math, English, Reading and Writing.

SAT II
Each of the College Board Subject Tests measures knowledge and skills in a particular subject and a student’s ability to apply that knowledge. Highly competitive colleges require certain tests for admissions and certain colleges use these scores for placement purposes. Colleges list the required tests in their catalogs.
It is best to take this type of test soon after completing the highest level course taken in the subject being tested. Typically, if these tests were required, students would take two-three subject tests.

**PSAT/NMSQT**
This test is given in the fall of the junior year. The scores are used for competition for National Merit Scholarships. Students hoping to attend college should take this exam for the following reasons:

1. To gain experience in taking a test similar to the College Board exams.
2. To be able to predict College Board scores from PSAT/NMSQT scores.
3. To see how a student compares with other college-bound juniors.
4. To help estimate a student’s chances of being admitted to and succeeding in the college of choice.
5. To compete for scholarships.
6. To use PSAT results to study for the SAT.

**COLLEGE PROGRAM OFFERINGS**
Cicero-North Syracuse High School offers a number of college level course programs in which qualified students can earn credit, allowing them to participate in college level course work while still in high school. The district presently participates in the Advanced Placement program, SU Project Advance, RIT, SUNY Oswego, Cazenovia College, the Adelphi College program in foreign language and course offerings associated with Onondaga Community College. The district is especially proud of this advanced college credit emphasis. Fees are set by the individual college or The College Board for AP tests.

The following college credit opportunities are available to students:

**Advanced Placement Program:**
College credits can be earned in the following courses up to a maximum of 8 hours per course:
- AP Biology
- AP Calculus
- AP Computer Science A
- AP Computer Science Principles
- AP Economics
- AP European History
- AP Language and Composition
- AP Literature
- AP Physics
- AP Psychology
- AP Spanish
- AP Statistics
- AP Studio Art A & B
- AP U.S. Government/Politics
- AP US History
- AP World History

**Adelphi/SUNY Oswego**
A maximum of 6 college credits can be earned in each of the following courses:
- French – Adelphi and SUNY Oswego
- Spanish – Adelphi and SUNY Oswego
*NOTE – 3-9 credits possible if you combine

**Cazenovia College**
Clothing Production 110

**SUNY/Cayuga Community College**
Foundations for College & Career Success

**SUNY/Onondaga Community College**
- Introduction to Business (BUS-101)
- Financial Accounting (BUS-105)
- Pre-Calculus with Trig (MAT-143)
- Pre-Calculus with Trig Honors (MAT-143)

**Rochester Institute of Technology Credit**
College credit from RIT can be obtained through the following Project Lead the Way courses:
- Civil Engineering & Architecture
- Computer Integrated Manufacturing
- Design and Drawing for Production B
- Digital Electronics
- Principles of Engineering

**Syracuse University (SUPA)**
Entrepreneurship
Presentational Speaking
Sociology
Sport Management
Money and Banking
Cybersecurity
Writing
Chemistry

**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September.**
ART

Graduation requirements for all students include one credit in Art or Music. The only Art courses that will satisfy this requirement are: Creative Crafts, Media Arts, and Studio Art 1. Studio Art 1 is the only approved class for satisfying the language requirement in an art sequence for an Advanced Regents Diploma.

Media Arts 1 Credit
Grade 9 40 Weeks
Media Arts is an introductory course designed to give students an understanding of the nature of art, the elements and principles of design and art trends through the use of traditional, digital and video photography.

Students will:
- Experience basic photography needs
- Manipulate photos in Photoshop
- Create graphics in Photoshop
- Work in the darkroom
Student should have access to working digital or DSLR. Project samples usually include: portraits, pop art, surrealism, logo design, digital; photos and photograms.

Creative Crafts 1 Credit
Grade 9 40 Weeks
Creative Crafts is an introductory course designed to give students an understanding of: the nature of art, the elements and principles of art; the history of the arts and crafts movement; how to critique artworks; and an understanding of decorative and functional craft items.

Students will learn to:
- Create silk paintings
- Manipulate wire with pliers and a jig
- Create slump work with ceramic clay and clays basic properties
- Use multiple ways of working with polymer clay
- Repousse and chase copper sheet metal
- Create complex macramé knots
- Weave beads
- Dye fibers
- Research art techniques
- Problem solve creatively and artistically
- Critique artworks
Project samples typically include: Radial design silk paintings, wire jewelry, ceramic speakers, bracelets, macramé jewelry, tie dye and shrink art jewelry sets.

Studio Art 1 1 Credit
Grades 9, 10, 11, 12 40 Weeks
This beginning art class is an introduction to the fundamentals of visual expression. It is designed to explore many different areas of art, design, drawing, painting, perspective, collage, printmaking and sculpture, to help students develop their artistic skills. This course is required for graduation and for those students who are working toward an art major sequence.

Students will:
- Learn how to draw using media such as pencil, charcoal, chalk and oil pastels.
- Learn basic printmaking techniques.
- Create 3D art.
- Learn how to paint with tempera, watercolor and acrylic.
- Learn how to problem solve creatively and artistically.
- Learn how to critique artwork and defend their statements and opinions both verbally and through written text.

Studio in Clay/Pottery 1 1 Credit
Grades 10, 11, 12 40 Weeks
Students will study both past and current trends in pottery. They will work with the potter’s wheel and hand building to create both functional and decorative ceramic ware. They will explore slab construction, coil building, and surface decoration to express their own style. This is an exciting class that allows students to acquire some great skills along with taking a look at the past work and techniques from other cultures.

Students will:
- Learn to throw on the pottery wheel
- Learn basic hand building techniques to create functional pottery forms
- Explore different surface design solutions for their projects.
- Learn kiln firing basics

Studio in Clay/Pottery 2 1 Credit
Grades 11, 12 40 Weeks
Prerequisite – Studio in Clay or Sculpture
This is the next level of skill building and design for the three dimensional art student who has successfully completed either Studio in Clay or Sculpture. Students will be exploring both functional and decorative ceramic forms as well as modeling clay for sculptures. The expectation is that students will engage in more challenging subject matter as well as processes. This is an art class that is intended for highly motivated students who are seriously interested in the study of working and discovering the three-dimensional form.
Students will:
- Advance their skills on the pottery wheel
- Advance their hand building techniques
- Create their own independent project ideas for either sculptural clay forms or functional clay forms.

**Studio in Clay/Pottery 3**  
**Grades 11, 12**  
**1 Credit**  
**40 Weeks**

**Prerequisite – Advanced 3-D Design**
This class is designed for the student who is interested in developing advanced work with 3D art design. Students will cover sophisticated techniques and processes. Advanced sculptural problems such as timing, gravity and weight will be explored in assignments that research fundamental 3D concepts. Students will be introduced to historic and contemporary examples of sculptural forms and media. Students who are enrolled in the Studio In Clay 3 course will parallel the requirements of a college level 3D studio class.

Students will:
- Further advance their skills to a proficient level on the potter wheel.
- Further advance their skills to a proficient level for all hand building techniques.
- Develop their own style and unique voice with their art work.
- Complete a 3-D portfolio for college applications.

**Advanced 2-D Studio**  
**Grades 10, 11, 12**  
**1 Credit**  
**40 Weeks**

**Prerequisite – Studio Art 1, Media Arts, or Creative Crafts**
Students are going to build on their basic art knowledge and skills that they learned in Studio Art 1, Media Arts or Creative Crafts. Students will solve advanced challenges in two-dimensional media. They will do in-depth work with drawing, painting, collage and printmaking. They will explore various working methods, both representational and abstract. New techniques, color theory and presentation will also be addressed.

Students will:
- Learn advanced printmaking techniques
- Become high level creative thinkers and problem solvers
- Learn about color and color theory
- Learn advanced painting techniques
- Learn about art history
- Work collaboratively
- Critique artwork. They will defend their statements and opinions both verbally and through written text.

**Portfolio Prep**  
**Grades 11, 12**  
**1 Credit**  
**40 Weeks**

This class is for those students who wish to develop a quality portfolio for college or art school. Art majors and students interested in architecture, fashion and design schools should consider this course. Although open to everyone, students are strongly encouraged to take this course during their junior year. Students will work independently in order to develop their own particular style. Ample time will be given for students to explore new media and go into depth with their artwork. Although there are no prerequisites, it is suggested that students have some prior experience from taking Studio 1, Media Arts or Creative Crafts.

Students will:
- Complete assignments that satisfy portfolio requirements for college admissions.
- Create drawings directly from life including still life and figure drawings.
- Learn linear perspective.
- Learn how to digitally photograph, mat and present their artwork.
- Learn to develop their own artistic style.
- Learn how to write an artist statement.
- Familiarize themselves with various historical and contemporary artists.

**AP Studio Art A & B**  
**Grades 11, 12**  
**1 Credit**  
**40 Weeks**

**Prerequisite – Studio Art 1 or any full year Art Class.**
This is an intensive portfolio prep class open to junior and senior art majors. Students must have taken two successful years of sequential art studio classes. The AP Program in Studio Art is intended for highly motivated students who are seriously interested in pursuing art in college. The requirements of the class are equivalent to an introductory college course in studio art. Students may choose to take AP Studio Art in drawing, two-dimensional design or three-dimensional design. Additional fee required for the AP portfolio review in May.

Students will:
- Submit a total of 24 pieces to the College Board (12 Concentration and 12 Breadth).
- Explore a “Concentration” consisting of 12 pieces that explore a central idea.
- Submit 12 “Breadth” pieces that show the student’s artistic range in a variety of approaches.
- Submit the portfolio using the online submission website.
- Send 5 original pieces from either section as “Quality” pieces to the College Board.
- Write an artist statement/narrative that explains the students concentration.  

Exam Fee: $98.00
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.*

**Advanced Graphic Art and Design**  1 Credit  
**Grades 10, 11, 12**  40 Weeks  
**Prerequisite – Intro to computer graphics and or Media Arts**  
In this advanced class, students will continue to use Photoshop and be introduced to industry software such as, Illustrator and InDesign, to create a wide variety of computer art and graphic design projects. Students will explore a variety of design and career options that will require the expertise you will gain in this class.  
**Students will:**  
- Delve deeper into the fine art of digital media as well as the graphic typographic side of design.  
- Learn advanced tips, tricks and skills.  
- Take Photoshop to a new level of professionalism.  
- Have opportunity to display work on video announcements.  
- Further diversify college and career ready skill to develop a well-rounded portfolio.  
**Projects may include but not limited to:**  
- Advertising principles and design  
- Digital portraiture/character illustration  
- Brand identity/packaging  
- Collage  
- Poster design  
- Simple animations

**Introduction to Computer Art and Design**  ½ Credit  
**Grades 10, 11, 12**  20 Weeks  
In this class, students will use Photoshop to create a variety of art and design created on computers. Students will create projects that include, but are not limited to: pixel illustration, logo and identity design, poster design, digital collages, photo restoration, t-shirt design, product mock-up creation, and more; the projects are current with what’s being created in the professional art and design world.  
- Either learn or continue to learn Photoshop. No prior experience necessary.  
- Use iMacs to become proficient in Photoshop in a short period of time.  
- Learn that Photoshop is an extremely useful tool no matter what field students are going into.  
- Diversify college-ready skills and have a helpful addition to their resumes.  
- Learn a variety of professional illustration and graphic design/typography skills and techniques.

**Drawing and Color Theory**  ½ Credit  
**Grades 10, 11, 12**  20 Weeks  
This course focuses developing skills in drawing and painting while exploring color theory. It is designed for the needs of beginning art students as well as those majoring in art.  
**Students will learn:**  
- How to draw with charcoal, pencil, pastels, color pencils.  
- How to utilize color within drawings and paintings.  
- Color theory  
- How to paint using a variety of painting techniques.  
**Project examples include:**  
- Value Charcoal Still Life  
- “Unlocking the White” Color Pastel Still Life  
- Color Wheel, Color Systems and Color Juxtapositions  
- Watercolor Paintings  
- Reflection/Refraction Colored Pencil Drawing  
- Oil Pastel Landscapes  
- Cupcake Acrylic Paintings

**Metal – Smithing and Glass Jewelry Design**  ½ Credit  
**Grades 10, 11, 12**  20 Weeks  
This comprehensive course will involve cold and hot metal work as well as enameling, slumped and stained glass techniques. Students will gain an understanding of traditional and contemporary jewelry construction and assembly. Classes will create original and exciting one of a kind pieces from quality materials.  
**Students will learn:**  
- How to manipulate different types of metal.  
- How to work with glass.  
- Create jewelry using wire.  
- How to utilize found objects within their jewelry.  
**Project examples include:**  
- Stamped Sterling Silver with Soldering  
- Enameled Copper Pendants  
- Modern Art Fused Glass  
- Wrapped Wire Rings  
- Jig Earrings and Bracelets  
- Recycled Scrabble Tile Jewelry and Epoxy Resin
Beginning Photography 1 Credit
Grades 10, 11 - Priority 40 Weeks
Grade 12 only with Art Teacher recommendation or Art as sequence
MUST have a 35mm film camera at start of course and a digital camera.
This is an introductory photography course, with the emphasis on black & white photography. 50% of the hands-on work will be film and darkroom and 50% will be digital technology. Written work and research are also a part of this course.
Students are required to have access to a working 35mm analog film camera (SLR camera recommended & preferred) and a digital camera to be used throughout the year.

Students will learn:
- How to properly use a film camera and a digital camera.
- How to develop black and white film into negatives and how to make prints in the darkroom from their negatives.
- The basics of Photoshop CS5 for digital editing and re-touching.
- Art criteria important to any photographer: composition, elements and principles of design and the study of light.
- How to critique a photograph and defend their statements and opinions both verbally and through written text.
- The history of photography.
Students who successfully complete this course can advance to Intermediate Photography.

Intermediate Photography 1 Credit
Grades 11, 12 40 Weeks
Prerequisite - Successfully completed Beginning Photography – MUST have a minimum of an 80 average in Beginning Photography (or Photo teacher recommendation).
MUST have a 35mm SLR film camera and a digital camera (not cell phone camera).
The second in our photography course series, this is an intermediate photography course where students will utilize the knowledge and skills obtained in Beginning Photography to further explore the photographic process as an artistic medium. 40% of the hands-on work will be film and darkroom and 60% will be digital technology. At the start of the year, students are required to have their own working 35mm analog film SLR camera, as well as their own digital camera to be used throughout the year.

Students will:
- Exhibit proficiency in a variety of photographic processes.
- Incorporate strong time management skills to multi-task with multiple ongoing projects.
- Explore photographic career options.
- Create work for juried art competitions and local art exhibits.
- Produce a portfolio of work to exhibit their developing individual photographic style.
Students who successfully complete this course can advance to Advanced Photography.

Advanced Photography 1 Credit
Grade 12 40 Weeks
Prerequisite – Enrollment only with teacher recommendation and successfully completing Beginning Photography and Intermediate Photography.
The third in our photography course series, this is an advanced photography course where students will work in the same format as Intermediate classmates while creating more in-depth art and individualized projects. This course is geared for the student who is planning on photography as a career option. At the start of the year, students are required to have their own 35mm analog film SLR camera, as well as, their own good quality digital camera to be used throughout the year.

Students will:
- Exhibit mastery of a variety of photographic processes and styles with high quality visual imagery.
- Incorporate strong time management skills and self-directed study to multi-task with multiple ongoing projects.
- Design and execute quarterly independent proposal projects.
- Document a yearlong subject matter or theme photographically.
- Create work for juried art competitions and local art exhibits.
- Show mastery of an individual style of photography as evidenced in the body of work throughout the year.
- Assemble two portfolios of work. One portfolio will be created in December for the Scholastic Art Competition and one will be created in May as a project based final exam.
- Be college or career ready to further explore photography beyond their CNS experience!
Portrait and Figure Drawing  
Grades 10, 11, 12  
½ Credit  
20 Weeks  
This course is designed for students that would like to concentrate on the study of the human face and figure. 
Students will:  
• Build a solid foundation of basic anatomy in art from multiple methods, including live models.  
• Study how other artists have solved the problem of drawing people.  
• Learn a variety of drawing methods including: gesture, contour line, gridding and building up human form from simple shapes.  
• Work with a variety of art materials including pencil, charcoal, pastel and conte.  
• Develop their own style of drawing heads and figures.

Sculpture  
Grades 10, 11, 12  
½ Credit  
20 Weeks  
During this course, students will explore and learn a variety of three-dimensional media. Students will incorporate the elements and principles of design through clay and other materials such as metal, wood, stone, and plaster. This is a fun and exciting course where students will study both contemporary and historical techniques to create Sculptures. 
Students will:  
• Use both subtractive and additive methods 
• Explore organic and geometric forms 
• Create representational and abstract pieces 
• Explore various surface treatments, textures and techniques.

Video Production 1  
Grades 10, 11, 12  
1 Credit  
40 Weeks  
This is a basic course in filmmaking and video production techniques used in the design and production for electronic media. Students will learn video production and how to properly use various pieces of equipment necessary for making television programs. Students will gain knowledge of hardware, pre-production planning, field production and group dynamics. Production teams will work together to plan, design, coordinate and produce a wide range of projects. Students will gain knowledge in studio production, sound production, field production, camera operations, electronic editing, scene lighting and electronic graphic design. 
Students will:  
• Use the school’s equipment or their own to plan, shoot and edit a wide variety of video projects. 
• Be prepared to be able to compete with college level professionalism. Countless students visit after their first year of (reputable) film school and say how over prepared they were, which allowed them to get that much further ahead. 
• Learn professional techniques on professional grade MacPro computers. 
• Learn how to build and use DIY video equipment and props. 
• Be able to create their own soundtracks and scores (music) or choose from the thousands I have. 
• Create Foley sound effects or choose from the thousands I have. 
• Upload their work to YouTube and start making a professional name for themselves, and possibly make money. 
• Work in groups or individually 
• Diversify college ready skills for a well-rounded resume. 
• Have the opportunity to display work on the video announcements. 

Video Production 2  
Grades 11, 12  
1 Credit  
40 Weeks  
Prerequisite – 85 or above Video Production 1  
Continue to master your filmmaking skills in this full year class. VP2 is run pretty much the same as Video Production 1, but with even more self-direction. 
Students will:  
• Take all of the skills and techniques learned in Video Production 1 to the next level of professionalism in regard to sounds design, lighting, practical and visual effects, directing and editing, prop building and design, and more. 
• Learn more professional, higher level editing techniques 
• Learn VFX (video effects) and advanced “green screen” techniques and applications 
• Have the opportunity to create an extremely strong and competitive portfolio of films 
• Create a professional looking web series that could be the start of a lucrative (money making) business 
• Be able to display their work on the CNS Morning Show.
• Be more prepared, in regards to filmmaking, than many if not most high schools. At CNS, we have the unique opportunity to offer two levels of full fear filmmaking classes in our art department. Many schools who have a video program, only offer it as a part of another class. Take advantage of this amazing opportunity.

Social Media for the Arts ½ Credit
Grades 10, 11, 12 20 Weeks
This course provides visual and performing artists with the skills to promote their art in today’s competitive market. Artists will learn how to reach and effectively communicate with their target audience.

This course includes:
• Fine art photography and mobile phone app editing
• Artist gallery application/musician electronic press kit creation/Etsy shop
• Social media responsibility and etiquette with Facebook and Instagram building
• Creating Snapchat filters
• VSCO

Studio in Printmaking ½ Credit
Grades 10, 11, 12 20 Weeks
This course explores the exciting and dynamic process of creating multiples of images through printmaking media such as woodcut, etching, spray paint stencil art, and monotype. Students will use the etching press and hand printing methods to transform photographs or drawings into colorful prints that explore pop culture, graffiti art, portraits, abstraction and more. This course is for students who enjoy step by step processes and working with their hands.

This course includes:
• Creating artwork inspired by artists such as Andy Warhol, Banksy, and Shepard Fairey
• Making editions of color and black and white prints on paper and fabric or clothing
• Matting and displaying artwork
• Exploring the origins and traditions of printmaking throughout the world

Media Communication 2 1 Credit
Grades 10, 11, 12 40 Weeks
Prerequisite: Media Communication 1
Continue to sharpen your on-air and/or off-air skills as you help create, produce and broadcast the CNS Morning Show. In this project based learning class, you will specialize in one or several areas of the production process. You will also begin to lead small groups and, eventually, an entire set crew. Like in Media Communication 1, you will create and produce special interest videos which will be featured on the CNS Morning Show.

Students will:
• Learn to work as a team to create and produce the CNS Morning Show as well as other “op ed” personal/special interest video projects.
• Begin to lead production teams and will begin to produce an entire show.
• Learn about on-air and off-air aspects of production. Students will still NOT be required to be on camera on the Morning Show.
• Sharpen skills in problem solving, decision making, creative thinking and leadership.
• Have the opportunity to create their own sideshow altogether to be played either on the Morning Show or online.

Upon completion of this course, students will have the opportunity to take Media Communication 3.
Medial Communications 3 1 Credit
Grades 11 and 12 40 Weeks
Prerequisite: Media Communication 1 and 2
Continue to sharpen your on-air and/or off-air skills as you create, produce and broadcast the CNS Morning Show. In this project-based learning class, you will specialize in one or several areas of production process. You will also lead groups and an entire set crew. Like in Media Communications 1 and 2, you will create and produce special interest videos which will be featured on the CNS Morning Show.

Students will:
- Create and produce the CNS Morning Show as well as other “op-ed” personal/special interest video projects
- Lead production teams and produce entire shows
- Sharpen skills in problem solving, decision making, creative thinking and leadership
- Continue to make content for their own side show to be played either on the Morning Show, YouTube, or elsewhere online.
**BUSINESS**

- Business courses are designed to meet the needs of both college-bound students and those seeking entry-level employment.

### COMPLETE COURSE OFFERINGS and CREDITS

<table>
<thead>
<tr>
<th>NSJH</th>
<th>C-NS</th>
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<tbody>
<tr>
<td>Digital Communication I*</td>
<td>½</td>
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<tr>
<td>CFM</td>
<td>½</td>
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<tr>
<td>Introduction to Marketing**</td>
<td>½</td>
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<tr>
<td>MS Word 1 &amp; Google Docs</td>
<td>½</td>
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<tr>
<td>Digital Communication II**</td>
<td>½</td>
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<tr>
<td>CEIP</td>
<td>½</td>
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<tr>
<td>*Only offered at NSJHS – Grade 8</td>
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<tr>
<td>**Only offered at NSJHS – Grade 9</td>
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- Students may earn a CTE (Career and Technical Education) Endorsement on their diploma in one of the areas listed below. Five (5) credits are needed including the core requirements. Students can select from the entire business course offerings to fulfill the credit requirements. In addition, students must pass a core exam showing proficiencies in selected areas.

### COURSE/CORE REQUIREMENTS FOR CTE ENDORSEMENT

(5 Business Credits Total)

<table>
<thead>
<tr>
<th>MARKETING</th>
<th>INFORMATION TECHNOLOGY</th>
<th>FINANCE</th>
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<tbody>
<tr>
<td>Career &amp; Financial Management (CFM) (1/2) AND Intro to Marketing (1/2) OR Intro to Business (1) *</td>
<td>CFM (1/2) AND Intro to Marketing (1/2) OR Intro to Business (1)*</td>
<td>Money and Banking (1) OR Intro to Marketing (1/2) OR Intro to Business (1)*</td>
</tr>
<tr>
<td>Entrepreneurship (1) OR SUPA Entrepreneurship (1) **</td>
<td>Microsoft Word 1 &amp; Google Docs (1/2)</td>
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</tr>
<tr>
<td>Sports and Entertainment Mkt. (1)</td>
<td>Digital Communication (1/2)</td>
<td>OR Financial Accounting (1)*</td>
</tr>
<tr>
<td>3 Core Credits Plus 2 Additional Credits</td>
<td>Video Game Design and Promotion (1/2) 3 Core Credits Plus 2 Additional Credits</td>
<td>Wall Street (1/2) Financial Analysis (1/2) 3 Core Credits Plus 2 Additional Credits</td>
</tr>
</tbody>
</table>

* Three (3) SUNY/OCC credits available upon completion of course(s).
** Three (3) SUPA Credits
*** Four (4) SUPA Credits
Digital Communications I ½ Credit
Grade 8 Only 40 Weeks
Meets Once Every Four Days

Students will:
- Prepare for a continuous e-learning and re-skilling process.
- Discover the framework for 21st century skills in a creative and innovative environment.
- Be introduced to any new district software platforms while combining them with various digital tools.
- Advance both MAC and PC computer skills.
- Learn how to work more productively in their classes.
- Develop skills to effectively communicate personally and professionally in the digital world.
- Learn the capabilities and operation of high-tech hardware, software, as well as web resources to develop proficiency using a variety of computer input and output technologies.

Digital Communications II ½ Credit
Grade 9 20 Weeks
Computers and business – the two constants in today’s work environment. This half-year course is designed to enhance and develop your business communication and presentation skills. Upon completion of course, students will have developed proficiency in both computer software and communication skills. This class will allow students to enter the job market with a competitive edge.

Students will:
- Develop and enhance business communication and technology skills to prepare for a successful transition into college and the workplace.
- Locate, organize, understand, evaluate and analyze information using PC software, MAC software and online resources.
- Create projects/presentations using Prezi, iMovie, Pages, Glogster
- Understand the role of social bookmarking sites and social learning networks.
- Generate QR Codes and develop an understanding of a QR code reader and how they are used in business.

Introduction to Marketing ½ Credit
Grade 9 20 Weeks
This course describes the role of workers and consumers in our economic society; basic concepts of human relations and decision-making are covered. Learned concepts and skills have direct application to the business workplace. Topics include the free enterprise system, economic principles, human relationships, values/ethics, problem solving, dealing with conflict and an introduction to business/marketing occupations.

Students will:
- Learn business and marketing themes throughout the course.
- Develop a general business vocabulary.
- Identify core concepts of marketing strategies based on product, price, place and promotion objectives.
- Demonstrate business problem-solving skills.

Career and Financial Management (CFM) ½ Credit
Grades 8, 9, 10, 11, 12 20 Weeks
Career and Financial Management is for those students interested in knowing more about career exploration and the financial responsibilities that come with it. This course provides students with invaluable employability skills and knowledge of the workplace. No matter what one’s career plans are, this course offers the skills and knowledge necessary to develop them to their fullest potential. Career and Financial Management (CFM) is a one-half unit Career and Technical Education (CTE) course required for students in all New York State Approved CTE Programs. It is also commonly included in locally developed CTE sequences. CFM can be taught as a stand-alone course or integrated within an approved CTE program.

Students will:
- Explore individual personal skills needed for employment.
- Learn what it takes to be an effective employee.
- Learn the skills employers are looking for (from book 10 Things Employers Want You to Learn in College).
- Match career exploration with personal skills and qualities.
- Create a resume and cover letter.
- Fill out job applications.
- Participate in interviews.
- Learn time management skills.
- Explore major laws and regulations related to employment.
- Do personal budgeting.
- Explore checking and savings accounts.
- Learn how to use credit wisely.
Career Exploration Internship Program (CEIP) ½ Credit
Grades 11, 12 20 Weeks

CEIP applications are available from your Counselor, Business teacher, or in the Career Center.
Are you looking for an opportunity to take a closer look at a career choice? Unsure of your career path? CEIP will assist you in developing the knowledge and skills needed to help you make an informed career decision.

Students will:
- Complete a CEIP application and interview with the CEIP Coordinator for admission to the program (required*)
- Complete a skills based resume, cover letter and reference list, and practice job interviewing techniques.
- Investigate a career of interest through research and completion of a 10-week internship at a worksite for required total of 54 hours.
- Prepare and deliver a final presentation of the knowledge and skills learned at the work site
- Create a portfolio on the internship experience
- Apply for internship during spring prior to internship year.

Entrepreneurship 1 Credit
Grades 10, 11, 12 40 Weeks

Learn how to identify unique business opportunities and create and build new business. You will explore the creative and innovative practices of successful entrepreneurs. The Syracuse small business community is an integral part of this course. You will analyze a variety of business models and apply the strategies and processes learned to start a business of their own.

Students will:
- Learn how to recognize business opportunities
- Explore and analyze successful business models
- Identify steps in the entrepreneurial process in relation to successful businesses, both locally and globally
- Learn about successful entrepreneurs and their businesses through field trips, guest lectures, articles, case studies, and videos
- Identify methods of raising capital and financing a business
- Learn about building a new venture team
- Prepare pro forma financial statements
- Explore marketing strategies essential to company growth
- Apply the entrepreneurial process by writing a business plan and starting your own business.

Introduction To Business (BUS 101) 1 Credits
Grades 11, 12 40 Weeks

This is an introductory course designed to give the student an overview of the impact of business on society. The course is intended to aid the student in obtaining a clear understanding of the way in which contemporary business functions through the interrelationships of marketing, management and finance.

Students who successfully complete this course may earn three SUNY college credit hours at Onondaga Community College.

Leadership 1 Credit
Grades 11, 12 40 Weeks

Do you want to enroll in a course that makes a difference at CNS and develops skills that will be needed after graduation? This course will have an impact on your life well beyond your days at CNS.

Students will:
- Learn how to effectively lead any type of group in and out of high school.
- Develop skills such as time management, communication, community building, and crisis management.
- Run the “STAR” Leadership Program by organizing the after-school seminars held for the entire school.

SUPA Entrepreneurship** 1 Credit
Grades 11, 12 40 Weeks

Syracuse University Project Advance (SUPA)*
This is a Syracuse University Project Advance course that earns 3 credit hours. Students who enroll in the course are required to register for college credit and must pay current rate of tuition*. This course will provide you with an understanding of entrepreneurship and the vital role it plays in a global economy.

Students will:
- Assess, explore and critique entrepreneurship.
- Focus new venture creation
- Learn to recognize viable business opportunities.
- Create an innovative business model.
- Learn about successful entrepreneurs and innovative business models through field trips, school/business partnerships, videos, interviews, articles and case studies.
- Analyze how a variety of successful business owners navigated the entrepreneurial process and learn to apply these strategies to create a business.

**Must register for SU Credit and pay current rate of tuition ($345/course).
**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than
50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September.

Personal Law ½ Credit
Civil and Criminal Law ½ Credit
Grades 10, 11, 12 20 Weeks
Are you interested in the laws that protect you as a consumer and a citizen? Are you inquisitive about the criminal justice system in the United States? These two half-year courses will allow you to discover how the legal system operates and affects you as a citizen.

Personal Law (Fall)
- Credit and Bankruptcy
- Origins of Law
- Contract Law
- Fraud
- Employment Law
This course is NCAA approved.

Civil and Criminal Law (Spring)
- Criminal Law
- Civil Law
- Ethics
- Court System
This course is NCAA approved.

Criminal Justice ½ Credit
Grades 11, 12 20 Weeks
Prerequisite – Successful completion of Business Law A (Personal Law) and B (Civil and Criminal Law)
Are you looking to pursue a career in the Criminal Justice field? This growing field includes an introduction to our system of government that upholds our legal system. This ½ year course will introduce students to law enforcement, the court systems, and the corrections system within our country. Students interested in exploring this field will be prepared for the transition to post-secondary studies.

Course Objectives:
- The development and current operation of the criminal justice field
- Discussion of future trends
- Contemporary issues in law and law enforcement
- Sentencing guidelines
- Judicial systems and various other forms of justice
- Emphasis will be placed upon career exploration within this wide open field

OCC Financial Accounting (BUS 105) 1 Credit
Grades 11, 12 40 Weeks
Prerequisite: Must pass MAT 087 (i.e.: College Level Math Placement Exam or Algebra 2)
This is the first accounting course required of all college business/accounting majors. This class will also give you the skills to maintain financial records for your own business. You will learn how to analyze and record business transactions and complete the accounting cycle for a corporation. You will also learn how to prepare and read financial statements and use Excel and QuickBooks accounting software programs.

If you successfully complete this course, you may earn three SUNY College credit hours at Onondaga Community College.

Financial Analysis ½ Credit
Grades 10, 11, 12 20 Weeks
This advanced class picks up where Wall Street leaves off -- but anyone can take -- there is no prerequisite. It delves into more complex financial securities and reinforces Wall Street concepts. It also provides a deeper career exploration piece.

Students will:
- Explore the future and option market
- Explore a career in finance
- Study and take practice financial exams. Series 6, 7 and 63
- Learn what it takes to become a CFP
- Create portfolios using advance strategies and securities

Money and Banking (Your money, your future) 1 Credit
Grades 10, 11, 12 40 Weeks
Prerequisite: Successful completion of one prior business class with a final average of at least an 85%
Money: how you manage, invest, keep and grow it. Students will learn how financial institutions operate, bank services offered, investment strategies and the credit system. You will apply the concepts learned while operating the Northstar Branch of the CORE Federal Credit Union.

You will apply financial literacy concepts to minimize the cost of financing, obtain credit, manage debt and create budgets, while making investment decisions to create and sustain your desired lifestyle. You will also learn how to market and promote your product.

In addition, students will:
- Select a career and a company in a select city in which to live and work.
- Calculate gross pay and net pay.
- Develop a working budget.
- Learn banking procedures and options.
- Learn the process of selecting an apartment and purchasing furnishings.
- Finance a car and learn the necessary steps for operating a vehicle in New York State.
- Explore the life stages such as marriage and children (if preferred).
- Understand the process of purchasing a house and the necessary upkeep.
- Learn the process of purchasing insurance policies that are necessary to protect your family and assets.
- Explore scenarios of changing careers and the effects of it on finances.
- Learn various methods of investing.
- Plan for retirement.
- Learn how to make decisions to maintain your chosen lifestyle and stay financially fit.

- File tax forms and know who has to file taxes and why
- Learn various methods of investing
- Learn how to develop a plan for retirement
- Learn how to make informed financial choices with regard to your professional and personal life
- And more

**Must register for SU Credit and pay current rate of tuition ($345/course).**

**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September.**

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**SUPA Money and Banking**
1 Credit
Grades 11, 12
40 Weeks

**Syracuse University Project Advance (SUPA)**

This is a Syracuse University Project Advance Course that earns 3 credit hours. Students who enroll in the course are required to register for college credit and must pay the current rate of tuition*. This course will provide you with an understanding of the economics of personal finance and the vital role it plays in your future. The world of personal finance can be overwhelming – from financial institutions, credit cards, mortgages and more. This course is here to explain the essential information you need to know to make financially smart decisions for the rest of your life. This course focuses on the foundations of financial planning. Students will learn how financial institutions operate, bank services offered, investment strategies and the credit system. You will apply the concepts learned while operating the Northstar Branch of the CORE Federal Credit Union. This course provides a unique experience to learn from the inside how financial institutions function.

**Students will:**
- Set short-term and long-term financial goals
- Learn how to set and work within a budget
- Calculate gross and net pay
- Learn banking procedures and options
- Explore the insurance industry (health, car, life, etc.)
- Understand the process of applying for a mortgage

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**Wall Street**
½ Credit
Grades 10, 11, 12
20 Weeks

Wall Street is an investment class where students explore securities and the concept of investment returns and personal financial strength.

**Students will:**
- Explore career choices and budgeting.
- Define and prioritize Risk Capital.
- Investigate stocks, mutual funds and other securities.
- Review financial statements.
- Use chart strategies to identify financial health.
- Create portfolios using the chart strategies.

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**Sports and Entertainment Marketing**
1 Credit
Grades 10, 11, 12
40 Weeks

Sports Marketing is one of the fastest growing fields in business. Come and join us as we further explore this industry in this project based course.

**Students will gain knowledge in:**
- Basic principles of marketing.
- Applying principles to the sports and entertainment world.
- Buying and selling.
- Managing, advertising and promoting products.

Utilize your capacity for imagination and creativity to gain a competitive advantage in this field that is on the rise.
Sports Media 1 Credit
Grades 11, 12 40 Weeks
Prerequisite – Successful completion of Sports and Entertainment Marketing
Are you interested in a career in sports, as an announcer, blogger, broadcaster, or reporter? Then this course is for you. This course is designed for students who are interested in continuing to investigate further career opportunities within the sports media industry, including online sites, newspapers, radio, TV, and social media. There may be opportunity for students to work with the CNS Athletic Department.
Students will learn:
- Role of sports media industries
- Impact on sports organizations
- Professional ethics in the sports and media industries
- Theories of sport communication and leadership
- Development of personal branding campaigns
- Social responsibility in the sports media workplace

SUPA Sport Management 1 Credit
Grades 11, 12 40 Weeks
Prerequisite – Successful completion of Sports and Entertainment Marketing
Are you looking to work in the sports industry? If so, then this is the course for you! This college-level course is designed for the student who intends to work in the sport industry at the management level.
Students will:
- Identify and describe the unique characteristics and dimensions of sports
- Examine some of the major problems/issues facing sport managers.
- Develop a knowledge and understanding of what is involved in the management of sports.
- To apply the foundation and principles of sport management to various aspects of the sport industry.
- Understand the social and ethical responsibilities involved in managing sport organizations and events.
- Identify career opportunities in the sports industry and how to prepare for them.

*Must register for SU Credit and pay current rate of tuition ($345/course).
**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September.

Video Game Design and Promotion ½ Credit
Grades 10, 11, 12 20 Weeks
Interested in exploring a career path as a video game programmer, animator or video game designer in one of the fastest growing industries in the world?
Students will:
- Use the innovative 3-D programming software called ALICE.
- Create and populate virtual worlds with objects and characters.
- Use animation to create movies, commercials, and simple games. Learn about various careers in the video game industry.

Microsoft Word 1 & Google Docs ½ Credit
Grades 9, 10, 11, 12 20 Weeks
Keyboarding applications are a must have in this fast-paced digital world that we live in. In this course, learn the basics of using both Microsoft Office Suite & Google Drive, while improving your keyboarding and word processing skills. This course will also introduce the student to the basics of Google Drive striving for a paperless environment. Google Apps are fast becoming the world’s most popular online tools. This course allows for an opportunity to learn some valuable new skills in one of these applications-Google Docs. This hands-on class will give you a technology background to better prepare you for college, a job or even challenges that you may face in a virtual classroom.
Students will:
- Learn to key and format documents such as letters, resumes, memos, data tables, bulleted and numbered lists, and reports.
- Learn how to activate a Google account and set up for instant access to your documents.
- Learn how to use Google Docs to improve productivity
- Be able to edit a document that someone else has produced in real time
- Be able to share a document in order to collaborate on a task
- Learn to upload and use the documents they already created in Microsoft Office into a Google format
- Understand how to send and retrieve documents online
- Learn to master both Microsoft Words & Google Doc’s easy, powerful document-editing and formatting tools
- Learn to collect and share documents securely online with fellow classmates and teachers
- Learn how to access Google Docs from a computer or mobile device
Use communication skills and learn how they are incorporated in the 21st century.

Increase keyboarding speed and accuracy by taking online timed writing assessments.

### Microsoft Word 2 & Google Docs

**½ Credit**

**Grades 10, 11, 12**

**20 Weeks**

**Prerequisite: Microsoft Word 1 & Google Docs**

For students with keyboarding and word processing skills, this course provides the opportunity to learn and communicate using the Microsoft Office Suite, Google Drive and other relevant applications. It offers an overview of the role of technology in society and provides an introduction to digital and information technologies, concepts and terminologies.

**Students will:**
- Use web applications such as Google Docs, Sheets, Slides and Microsoft Word, Excel, Access, PowerPoint and other software, as applicable to learn, search and organize research, and present findings.
- Discuss the community, legal and ethical issues related to digital devices and the internet.
- Will have opportunities to develop research and critical thinking skills.
- Be introduced to continuously evolving and emerging digital technologies and their effects on society.
- Demonstrate the skills needed to be an informed digital citizen, achieve academic and workplace success and participate in an increasingly globalized environment.

### Work Experience Cooperative Marketing

**½ - 1 Credit**

**Grades 10, 11, 12**

**20-40 Weeks**

Students enrolled in any business course are eligible to participate in earning work experience cooperative credit towards graduation.

- planned and coordinated with a classroom program of related instruction and matched with the student’s paid, part time employment
- enrolled in a ½ year course are expected to complete 150 hours of employment
- students enrolled in a full year course are expected to complete between 150-300 hours
- successful completion of coursework, fulfillment of required work hours and recommendations from employer and instructor are required of each student employee

(150 hours = ½ credit – 300 hours = 1 credit)

### Work Experience Cooperative Office

**½ - 1 Credit**

**Grades 10, 11, 12**

**20-40 Weeks**

Cooperative office work experience involves utilizing your study hall/free time to gain real-world work experience within the school community. This is a great opportunity to:

- Gain additional work-related experience
- Improve skills
- Earn future professional recommendations.

Students will be matched with school employees in need of a variety of tasks. Successful completion includes achieving the required time and successful evaluation by staff member.

(67 class periods = ½ credit, 125 class periods = 1 credit)

### Social Media

**½ Credit**

**Grades 10, 11, 12**

**20 Weeks**

Do you use Instagram? Twitter? How often? In what capacity? Social media has given individuals a voice to connect and engage with others. In business and industry, this platform gives consumers considerable power over marketers and brands. If you want to learn more about how to use social media effectively, this course can help.

**Students will:**
- Explore the history of social media
- Develop effective social media
- Understand the fundamentals of social media marketing

- Build, measure, and track effective social media marketing
- Explore the impact of digital footprints
ENGLISH

Minimum Graduation Requirements:
Students must earn four credits of English and pass the English Comprehensive Regents Exam.

English 8H/Humanities  ½ Credit
Grade 8                  40 Weeks
This course is designed for students identified as talented and gifted. Students will complete the entire 8RH English curriculum and experience an emphasis on genres within the Humanities. Instruction will include an exploration of the interrelationship among literature, languages, music, art, philosophy, logic, ethics and drama. Class size is small and managed as a seminar, allowing students the opportunity to express their ideas. This will be accomplished through projects in spoken, written, dramatic (theatrical and video), and concrete art forms. Upon completion, students will be awarded ½ credit toward graduation and many continue in the Humanities/TAG 9 course.

English 9 1 Credit
Grade 9                  40 Weeks
This course is designed to focus on writing skills, reading skills, listening/speaking, vocabulary building and spelling. Emphasis will be placed on the skills that should be developed in high school to prepare the student to take the Regents in English/Language Arts and to also prepare the student for beyond high school. Readings will include both classic and modern works at a variety of levels.
This course is NCAA approved.

English 9 Honors  1 Credit
Grade 9                  40 Weeks
Prerequisite: Teacher recommendation
This course has as its core a greater depth of study than that which may be pursued in English 9 Regents. Work will require synthesis, analysis and application as well as higher level/critical thinking skills. Emphasis will be placed on reading and writing skills as well as literary analysis of modern and classical literature. Students should have a 90% overall average in eighth grade English and must pass the final exam with a minimum score of 90%. The Reading Inventory (R.I) score should be 1260 or higher.
This course is NCAA approved.

Humanities  1 Credit
Grade 9                  40 Weeks
Humanities 9 is a two semester elective open to those students eligible for the Humanities/Enrichment/TAG program. Students earn one half Carnegie Unit of credit for each semester successfully completed. Students must maintain an overall average of 90 or above to participate in the spring semester offering. Four key strands of instruction will be explored in this class:
- Humanities and Contemporary Issues
- Logical thinking/problem solving skills
- Independent projects and creativity
- Personal interest projects

English 9H 1 Credit
Grade 9                  40 Weeks
Prerequisite: English 9H and/or teacher recommendation
This course is for the self-motivated and determined student. Discussion and class activities move beyond surface level understanding. It is a survey course designed to promote critical analysis and knowledge of literary theory. Through the study of multiple genres, students will be expected to perform at the advanced level. This fast paced and rigorous environment prepares students for success at the AP level and beyond. Class requirements will include, but are not limited to, independent research, higher-level thinking and advanced skill in writing.
This course is NCAA approved.
English 11 1 Credit Grade 11 40 Weeks
The curriculum involves a study of American literature, as well as significant selections from British literature. Short stories, poetry, drama, and novels are studied. Vocabulary is developed through a contextual approach and/or through use of vocabulary books. Composition is a major part of this curriculum, with emphasis on expository and literary essay types. The course encompasses intensive concentration on skills required to pass the Comprehensive English/Language Arts Regents Examination. This course is NCAA approved.

English 11 Honors 1 Credit Grade 11 40 Weeks
Prerequisite: English 10 or 10H and teacher recommendation
The full-length play and the novel are the genres stressed. Students will engage in the writings of weighty authors such as Melville, Hawthorne, Dickinson, Thoreau, Emerson, Whitman, and others. In addition, students are expected to independently research extra materials and read “outside” critical analyses on the writers and works used. Because this course is intended for the highly motivated student, extensive personal involvement via discussions and class presentations is expected, as is a healthy appreciation for challenging literature. This course is NCAA approved.

AP Language and Composition* 1 Credit Grades 11, 12 40 Weeks
Prerequisite: English 10/11 or 10H/11H, with at least an 85 average and teacher recommendation
This elective is for any junior or senior who truly appreciates the power of words and the art of language as it appears in our daily lives and in the writings of those who have been published in years past. While promoting writing in many contexts for a variety of purposes, the 11th grade AP English Language course is the place where nonfiction texts and contexts take center stage. Here students think deeply about language as a persuasive tool and about the dynamic relationship of writer, context, audience and argument. We read and write from a different perspective and talk about familiar techniques of diction, syntax, imagery and tone. We learn how persuasive writers combine these devises to the service of argument. This is a fantastic course for students who want a challenging environment in which to grow.
Students will:
- Read, discuss and discover the art within non-fiction, fiction and various mixed media
- Become skilled consumers of information
- Develop credible, ethical, interesting arguments that draw from current events, pop culture, history, their own lives and relevant literature
- Prepare for college level thinking and writing.
*There is a course fee for the required AP exam in May
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE. Exam Fee: $98.00
This course is NCAA approved.

AP Literature* 1 Credit Grades 11, 12 40 Weeks
Prerequisite: English 10/11 or 10H/11H, with at least an 85 average and teacher recommendation
In this literature and composition course, students are engaged in the careful reading of literary works. Through such study, they sharpen their awareness of language and their understanding of the writer’s craft. They develop critical standards for the independent appreciation of any literary work, and they increase their sensitivity to literature as a shared experience. Students will take an AP exam in May. A fee is required for the AP examination.
Students will:
- Read complex and sophisticated works of fiction, poetry and drama
- Write analyses of literature, using a variety of critical perspectives
- Discuss literature with their classmates and teacher
Exam Fee: $98.00
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.
This course is NCAA approved.

Humanities 12 1 Credit Grade 12 40 Weeks
The English 12 curriculum is designed to prepare students to be college and career ready. This course is not only designed to make students better readers, writers, speakers and thinkers, but also to make students better educated about themselves as they embark on the real world.
Students will:
- Compose argumentative essays
- Master the research process
- Read, analyze, and respond to novels, short stories, non-fiction, and drama
This course is NCAA approved.
English 12 1 Credit
Grade 12 40 Weeks

The College English curriculum is designed for students who plan on pursuing their academic education beyond high school at a two or four year college or university. The academic demands are rigorous and mimic that of a college freshman style course. The course also helps students complete the college exploration and application process, including, but not limited to, the common application essay.

Students will:
- Compose argumentative essays
- Master the research process
- Read, analyze, and respond to novels, short stories, non-fiction, and drama

This course is NCAA approved.

ESL Language Arts 1 Credit
Grades 9, 10, 11, 12 40 Weeks

This course is a full year English class for ESL students. The class is open to English Language Learners in grades 9-12 based on performance on the NYSESLAT exam and on teacher recommendation. ELLS in grade 8 may also be placed in the course by teacher recommendation. Curriculum is based on the New York State Learning Standards for ESL and ELA and on the Common Core Standards. Materials and methodologies are responsive to the lower English Language level of the learners, and instruction is differentiated to accommodate a range of developmental language levels. Students engage in listening, speaking, reading, and writing activities centered around literature, academic topics, grammatical structures, and intercultural awareness. Students who successfully complete the course earn one elective English credit.

SUPA Writing 1 Credit
Grade 12 40 Weeks

Do you feel ready for the writing colleges will require? Here’s your chance to take a Syracuse University course right here at CNS. This course will be conducted as a writing workshop, which views writing as a creative, visible, and ongoing process. Understand multiple genre and several different writing situations.

Our Community will:
- Develop a greater understanding of how one’s writing can have an effect on oneself and one’s environment
- Read a variety of informal and formal pieces
- Think and write analytically
- Create evidence based arguments

Everyone in this community will function as active teachers, learners, and writers. Accordingly, you will be asked to write, edit, and rethink your own work, to critique the papers of your peers, to engage in research, and to write critical responses to a variety of assigned texts. The goal of these activities is to help you acquire confidence in your own ability to read and write with precision and sophistication. The three units in this course consist of writing and thinking analytically, developing a research-based argumentative essay, and in culminating a reflective portfolio.

Students who successfully complete this course have the option of earning three credit hours through Syracuse University Project Advance (SUPA) Program. All students must register for SU Credit and pay current rate of tuition ($345/course).

**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September. This course is NCAA approved.

ENGLISH ELECTIVES

Team Building and Emotional Intelligence ½ Credit
Grade 10, 11, 12 20 Weeks

Emotional Intelligence was designed to give students in grades 10-12 an opportunity to learn and apply people skills that will not only help them navigate high school, but their professional and personal lives in the world after high school as well. Students will become better connected both to their own aspirations, as well as to each other as they participate in the class. Typical days consist of team building challenges, creative thinking activities and hands-on tasks centered around Daniel Goldman’s concept of Emotional Intelligences.

Students will:
- Analyze and appropriately manage social situations, both in their personal and professional lives
- Organize their ideas and present them in a group setting (both large and small)
- Understand and apply the eight basic concepts of Daniel Goldman’s Emotional Intelligences
- Think flexibly and problem solve in unique, creative ways
- Connect with classmates and build positive, health relationships
Children’s Literature ½ Credit
Grades 11, 12 20 Weeks
This course is designed to make students aware of the benefits and pleasures inherent in exposing children to good literature from a very early age. The types of literature appropriate to various age levels, are examined, discussed, critiqued and even created. Each student is responsible for approximately four-five creative, literature based projects throughout the semester.

Students will:
- Complete semester reading project
- Complete a research component
- Create original book(s)
- Actively participate in a Cicero Elementary Partnership

Cinema ½ Credit
Grades 11, 12 20 Weeks
Cinema studies film theory, film terminology and film genres. The course focuses on the basic elements that will help students become better film viewers and, potentially, better filmmakers. Some of the film titles we will study include: *Batman Begins; Monsters, Inc; The Godfather, 127 Hours; Hugo; Edward Scissorhands; Cool Hand Luke* and a host of other titles.

Students will:
- Discuss film using cinematic terminology
- Evaluate films critically
- Investigate the importance of editing
- Recognize the role of cinematography
- Write reviews and critiques
- Create storyboards
- Produce a flip book

Creative Writing ½ Credit
Grades 11, 12 20 Weeks
This course offers students a learning community where they will investigate and develop their own unique voice and style of writing. Many genres of writing will be studied allowing students to be self-directed learners as they discover genres they prefer. While this course is writing intensive, the writing workshop environment allows students to collaborate with one another and grow as writers.

Students will:
- Experiment with genres including: memoirs, poetry, digital storytelling, short stories, plays, journals and many others
- Participate in a writer’s workshop where they critique work
- Have the opportunity to publish pieces
- Create a diverse portfolio

This course is NCAA approved.

Journalism ½ Credit
Grades 11, 12 20 Weeks
This course is designed for the journalists of the 21st century. Students taking this course should possess curiosity and responsibility. Students learn techniques of reportage, from researching, to writing and editing. The emphasis is on writing for publication while fostering the habit of reading for information and enjoyment.

Students will:
- Write a variety of styles for publication, including editorials, features, news, sports, and entertainment.
- Research and discuss controversial/current topics important to society and generate informed responses.
- Develop and enhance effective communication skills.

This course is NCAA approved.

Speech ½ Credit
Grades 11, 12 20 Weeks
The fear of speaking ranks up there with the fear of heights and death for ALL people young and old. In this class, the teacher provides the experiences and the framework but the students drive this course—nearly all class time is devoted to student presentations ranging from informative speeches to persuasive and speaking exercises like picking subjects out of a hat and thinking on your feet. So, if you want to improve your communication skills, this is the environment for you. One of the bonuses to this class is the diverse bunch of students who take the course, giving you the rare opportunity in our big school to meet new people. The skills you learn here, you will take with you for the rest of your life. Sign up!

Students will:
- Learn ways to overcome fears of public speaking
- Experience a variety of speaking types
- Become confident in speaking both formally and informally

This course is NCAA approved.
SUPA Presentations * ½ Credit
Grade-12 20 Weeks
Nearly all secondary schools require a public speaking course and we offer Syracuse University’s Presentational Speaking course right here at CNS for any interested senior. The credits transfer to all colleges and universities and the communication skills stay with you for life. In this class, we explore multiple modes of presentation styles in order to deliver a message. Students are exposed to various organizational techniques and are given the opportunity to use their own interests and personalities to develop their speeches. Each student becomes a voice for awareness and change.

Students will:
- Follow the SU syllabus and experience the rigor of college level work
- Overcome anxieties associated with public speaking
- Develop confidence
- Learn the value of constructive feedback both as a speaker and as a listener

Note: Anyone can take this course. There is NOT a pre-requisite

**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of the students in the class must be registered for credit which needs to be done within the first two weeks of the course in February.

Students who successfully complete this course have the option of earning three credit hours through Syracuse University Project Advance (SUPA) Program. All students must register for SU Credit and pay current rate of tuition ($345/course).

**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September.

This course is NCAA approved.

Theatre ½ Credit
Grades 11, 12 20 Weeks
This performance-oriented course will introduce students to the many facets of theatre: theatre history, pantomime, improvisation, acting techniques, stagecraft, scriptwriting and playwriting with a focus on monologues, one-act plays and full length plays. This course will also study drama from a wide range of writers, time periods and perspectives, and will focus on improving reading, writing, communication and performance skills. After studying the various aspects of theatre, students will then be provided with ample opportunities to practice the craft firsthand.

Students will:
- Read and perform plays from major periods in theatre history
- Create original scripts for performance
- Engage in classroom performances from a variety of genres
- Complete a research based project and performance
- Memorize and deliver dramatic works
- Fully develop scenes and characters
- Analyze the qualities of effective performances and audiences
- Work collaboratively on projects and performances
The Family Consumer Sciences Department (FACS) offers courses that are designed to assist students in developing college and career readiness skills. Courses prepare students for entry-level job positions, post-secondary education options, and for independent or family living. Students may choose to work toward earning Cazenovia College & SUNY OCC, SUNY Cobleskill credit through several courses. Work based learning experience credits can include CEIP and CO-OP.

The following are all Family and Consumer Sciences courses offered at the levels indicated below:

<table>
<thead>
<tr>
<th>CLOTHING AND HOUSING</th>
<th>FOOD AND NUTRITION**</th>
<th>HUMAN SERVICE AND FAMILY STUDIES</th>
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<td><strong>9th Grade Level:</strong></td>
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<tr>
<td>- Fashion In Our Lives</td>
<td>- Food and Nutrition for Life</td>
<td>- Lifespan Studies</td>
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<td>- Housing and Interior Design</td>
<td>- Culture and Foods</td>
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<td>- Clothing Production 110 (1 credit course)**</td>
<td>- Nutrition Core</td>
<td>- Infant Development</td>
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<td>- Fashion Design and Merchandising</td>
<td>- Food Preparation</td>
<td>- Preschool Development</td>
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<td>- Interior Studio Design: Residential</td>
<td>- Food for Health and Wellness</td>
<td>- Preschool Education Experience</td>
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<tr>
<td>- Interior Studio Design: Commercial</td>
<td>- Food Science *</td>
<td>(1 credit course)</td>
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<tr>
<td>- Foundation for College and Career Success **</td>
<td>- Science of Baking *</td>
<td>- School Age Education Experience (1 credit course)</td>
</tr>
<tr>
<td><strong>College Credit Available</strong></td>
<td>- Hospitality &amp; Pastry Arts</td>
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<td>- Independent Living</td>
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<td>- Careers in Health and Human Services</td>
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</tbody>
</table>

**What is Career and Technical Education?**
Career and Technical Education is a kindergarten through adult area of study that includes rigorous academic content closely aligned with career and technical subjects. In grades nine through twelve, CTE includes the specific subject areas of agriculture education, business and marketing education, family and consumer sciences education, health occupations education, technology education, and trade, technical and industrial education.

**How can Family and Consumer Sciences coursework help students meet the high school graduation requirements?**
It can help students fulfill the graduation requirements in science, fine arts (Housing and Environment Core and Fashion In Our Lives=1 fine arts graduation credit), foreign language (a five-unit-sequence in family and consumer sciences including Career & Financial Management can take the place of the additional 2 unit foreign language requirement for a Regents Diploma with Advanced Designation).

**How can students be awarded a New York State CTE Endorsement on their Diploma?**
North Syracuse Central School District has been approved by the New York State Board of Education to grant students a CTE: Family and Consumer Sciences designation on their high school diploma by completing the necessary requirements outlined on the next page. Students may choose from one of four different specialty strands based on their interests, skills or future career plans.

**Can students earn college credits through coursework in Family and Consumer Sciences?**
Yes, C-NS High School offers college credit through completion of outlined requirements in many different courses. Colleges offering credit include SUNY OCC, and Cazenovia College. All four CTE strands include opportunities for college credit.
Career and Technical Education (CTE) Endorsement for
Family and Consumer Sciences
Requirements (5 Credits)

All CTE: Career and Financial Management is required for all approved CTE programs

Students may earn a CTE Endorsement on their diploma in one of the areas listed below. Five (5) credits are needed including the core requirements and Careers & Financial Management course offered through the business department. Students can select from the course offerings listed below to fulfill the credit requirements.

In addition, students must pay for and pass a national proficiency exam in selected areas.

<table>
<thead>
<tr>
<th>Family and Consumer Sciences All Aspects of Industry</th>
<th>Food and Nutrition</th>
<th>Human Development</th>
<th>Fashion/ Interior design</th>
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<tbody>
<tr>
<td>Needs to complete a minimum of one ½ credit in each of the following FACS content areas</td>
<td>• Food and Nutrition for Life (½ credit)</td>
<td>• Personal Relationship(½ credit)</td>
<td>• Fashion in our lives(½ credit)</td>
</tr>
<tr>
<td>• Food and Nutrition</td>
<td>• Nutrition Core (½ credit)</td>
<td>• Infant Development(½ credit)</td>
<td>• Housing and Environment Core (½ credit)</td>
</tr>
<tr>
<td>• Human development</td>
<td>• Food Preparation (½ credit)</td>
<td>• Preschool Development(½ credit)</td>
<td>• Interior Studio Design: Residential (½ credit)</td>
</tr>
<tr>
<td>• Fashion</td>
<td>• Food for Health and Wellness (½ credit)</td>
<td>• School-Age Development(½ credit)</td>
<td>• Interior Studio Design: Commercial (½ credit)</td>
</tr>
<tr>
<td>• Housing/Interior design</td>
<td>• Culture and Foods (½ credit)</td>
<td>• Adolescent Development(½ credit)</td>
<td>• Clothing Production 110 (1 credit)</td>
</tr>
<tr>
<td>• Foundation for College &amp; Career Success</td>
<td>• Food Science (1/2 credit)</td>
<td>• Adult Development (½ credit)</td>
<td>• Fashion Design and Merchandising (1/2 credit)</td>
</tr>
<tr>
<td></td>
<td>• Science of Baking (1/2 credit)</td>
<td>• Preschool Education Experience (1 credit)</td>
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</tr>
<tr>
<td>To complete the 5 credits required for the endorsement, students will select courses from all strands of FACS courses.</td>
<td>• Hospitality &amp; Pastry Arts (½ credit)</td>
<td>• School-Age Education Experience (1 credit)</td>
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<td></td>
<td></td>
<td>• Careers in Health and Human Services (1/2 credit)</td>
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</tr>
</tbody>
</table>

At least one of the following work-based opportunities must be completed in your 5-credit requirement for endorsement.

Credit Bearing Work Experiences
Preschool Education Experience (1 credit)
School-age Education Experience (1 credit)
C-NS Career Center Job Shadow (non-credit)
Big Brother/Big Sister (non-credit)

College Credit Options
• Clothing Production 110 (3 credits) Cazenovia College
• Foundation for College and Career Success (3 credits) SUNY OCC or CCC TBD
I. CLOTHING AND HOUSING

Fashion in Our Lives  ½ Credit
(Clothing and Textile Core)
Grade 9  20 Weeks
If you are creative, fashion conscious, and enjoy constructing items by hand and machine, this is the course for you. Explore your own personal clothing style as you select and construct a garment and several accessories. Discover how the past influences the present trends in fashion.

Students will:
- Collaborate with others to study contemporary designers.
- Investigate the cultural, social, and economic influences on clothing uses and styles.
- Develop basic knowledge of sewing terminology, equipment, and basic clothing construction skills.
- Demonstrate the ability to read and follow directions while constructing four to five sewing projects.

No prior sewing experience required.
Completion of this course satisfies ½ credit needed of the art/music requirements.

Housing and Interior Design  ½ Credit
Grade 9  20 Weeks
Explore some of the dimensions of architecture and interior decorating in this introductory course. If you are a person who enjoys working with colors, rearranging furniture and choosing accessories for your own space, this is the course for you.

Students will:
- Develop knowledge of housing styles, roof designs, and window styles and treatments.
- Identify and create room color schemes.
- Design floor plans for individual living spaces.
- Create four to five accessory items for use in a home environment.
- Demonstrate skills learned by designing and furnishing a teen’s bedroom.

No prior sewing experience required.
Completion of this course satisfies ½ credit needed of the art/music requirements.

Clothing Production 110  1 Credit
Grades 10, 11, 12  40 Weeks
This course is for the students to build on the basic clothing construction learned in Middle School or the Junior High clothing and textile units. In the class, you will learn about more advance clothing construction techniques. You will then be able to relate these construction techniques to apparel design. This will provide you with experience in repairing and altering clothing for yourself or a client. This course also offers the opportunity to receive 3 Credits through Cazenovia College.

Students will:
- View patterns, fabric, construction techniques and equipment.
- Practice and develop construction skills and techniques.
- Create upcycled textile products.
- Develop textile construction skills various fabrics.
- Investigate textile crafts.
- Identify classic style
- Demonstrate basic skills of pattern selection, alteration and layout
- Construct garments with woven & knit stretch fabrics
- Use construction skills and techniques to produce six clothing items
- Participate in the Cazenovia Fashion Show
- Explore the career opportunities related to clothing construction
- Develop an electronic portfolio

No prior sewing experience required.

Fashion Design and Merchandising  1/2 Credit
Grades 10, 11, 12  20 Weeks
From artistic to scientific, from highly creative to technical, from sales to manufacturing, the field of fashion is diverse. The Fashion Design & Merchandising program introduces high school students to key career areas in fashion design and merchandising.

Students will:
- Explore the Fundamentals of Fashion
- Discover the Science of Fashion
- Create Fashion Design and Illustration
- Learn about the Fashion Marketing and Merchandising
- Design their own Apparel Construction Line
- Explore Global Perspective of Fashion
- Explore Careers in Textiles, Fashion, and Apparel
- Develop an Electronic Portfolio

Student’s successful completion of this course may earn them 3 college credits from Cazenovia College.

No prior sewing experience required.
II. FOOD AND NUTRITION

Food and Nutrition for Life ½ Credit
Grade 9 20 Weeks
This course provides students with basic food preparation skills and nutrition awareness. Explore culinary techniques and styles while preparing a variety of foods and meals. Investigate career opportunities in the food service industry.

Students will:
- Investigate the nutrients and how choice in diet can affect healthy living.
- Collaborate with peers to design, prepare and serve several food products and meals.
- Develop skills in basic food preparation techniques.
- Demonstrate proper table setting, types of meal service and table manners.
- Explore the fundamentals of general baking, pastry construction, bread making and

Culture and Foods ½ Credit
Grade 9 20 Weeks
This course offers you the opportunity to experience preparing and tasting foods from other cultures. Enjoy delicious celebration of ethnic backgrounds in the exciting course.

Students will:
- Investigate the historical, geographical, and cultural influences on foods from several countries.
- Prepare and taste foods from a variety of places around the world.
- Discover how other cultures have influenced regional foods found in America.
- Create several projects related to the cultures of the countries studied.

Food for Health and Wellness ½ Credit
Grades 10, 11, 12 20 Weeks
Students interested in feeling good and looking great for a lifetime, will find this course interesting. The content of this course will examine the role of nutrients in the body, wellness, diet related conditions, special diets, diet analysis, nutrition for athletes, exercise, the effect of food preparation techniques on diet, and careers in the field of nutrition.

Students will:
- Assess personal fitness and eating habits
- Explain the risks associated with special diets
- Explain the effect of gender on physical performance
- Design a personal plan for lifetime fitness
- Explore safe nutritional practices related to sports
- Explain the importance of complex carbohydrates
- Explore healthy/unhealthy facts in your daily diet
- Explain the importance of proteins & vitamins
- Prepare meals geared towards healthier choices
- Explore career opportunities related to wellness

No previous experience required.

**Nutrition Core**

Grades 10, 11, 12  
20 Weeks

The class covers chunks of Nutrition as well as food related diseases, food choices, food marketing, meat alternatives and all types of food alternatives for different diet restrictions. This class is based on lectures followed up with culinary labs to explore food and food groups that will be discussed. The class will cover the “6” basic nutrients.

**Students will:**
- Explore the influences on food choices
- Apply nutrition principles to food labs
- Practice Serve Safe food safety and sanitation
- Learn about the foundations of food production
- Prepare fruits and fruit products in labs
- Prepare vegetables and vegetable products labs
- Prepare milk and milk products labs
- Prepare meat and meat alternatives labs
- Explore meal management and preparation
- Explore food product marketing
- Learn food services and proper etiquette
- Explore career pathways in food and nutrition

**Food Preparation**

Grades 10, 11, 12  
20 Weeks

This class is a culinary class. We explore all aspects of food preparation starting with the history of food preparation, food techniques and skills, menu preparation for nutritional needs exploring vegetarian options, incorporating foods into a menu for people with food allergies and other dietary concerns. We also do facility design and management through a food truck lesson that covers several business and career aspects of the food truck industry like food costing, marketing and advertising and menu design. The class also covers current food issues like food waste and the production of food; understanding where our food supply comes from.

**Students will:**
- Explore the history of food preparation
- Learn food preparation for nutritional needs
- Explain current food issues

**Food Science**

1/2 Credit  
Grades 10, 11, 12 (1/2 Science Credit)  
20 Weeks

Science of Food is designed to reinforce and enhance the student’s knowledge of scientific principles and processes through the study of foods and nutrition. This class encourages students to use their knowledge of foods, science and creativity to develop food experiments to discover how science effects the foods we eat. An in-depth understanding of science as it applies to foods will assist students with interest in career and technical education, to understand the food industry as well as food preparation in their daily lives. Whenever possible, students should be involved in hands-on laboratory activities which verify the scientific concepts presented.

**Students will:**
- Learn Food Science and its relevance to global society
- Research practices in food science
- Explore concepts of physical sciences relevant to food science
- Explore the food biochemistry of water, carbohydrates, lipids, proteins, vitamins and minerals
- Learn about food preservation & food safety
- Learn about the future of our food through technology & science
- Prepare food science labs
- Practice Serve Safe food safety and sanitation procedures required in food service industry
- Explore food industry careers

**Science of Baking**

1/2 Credit  
Grades 10, 11, 12 (1/2 Science Credit)  
20 Weeks

*Any students who have already taken Food Science will not be able to sign up for this course.

This course is for students with an interest in enriching their math and science skills, while learning the science of baking. Students will learn how the molecular structure of ingredients affects the resulting product. Along with the fundamentals of the science behind baking including, dough, quick breads, pies, cakes, cookies, tarts and basic items made in a bakery. Topics include baking technology; tool and science based measuring equipment, formula conversions, functions of ingredients, and the use of proper flours. Students will also use percentages,
fractions, ratios and the metric system to create and bake recipes. Students upon passing this course will receive a ½ credit of Science.

**Students will:**
- Learn Food Science and its Relevance to Baking
- Learn the fundamental skills necessary to become a successful baker
- Learn by baking is a science
- Explore concepts of physical sciences relevant to science of baking
- Explore the food biochemistry of flour, sugar, eggs and leavening agents
- Learn how ingredients interact with each other
- Learn about food preservation & food safety
- Learn about the future of our food through technology & science
- Prepare science of baking labs
- Practice Serve Safe food safety and sanitation procedures required in food science industry
- Explore food industry baking careers

### Hospitality & Pastry Arts ½ Credit Grades 10, 11, 12 20 Weeks
This course is designed to introduce students to the various aspects of the hospitality industry including restaurants, travel, and leisure and lodging industries. Students will gain experience in planning and hosting an event, preparing food, customer service, menu development, serving food, front and back of the house, food safety and sanitation, purchasing, food presentation, as well as explore careers in the fastest growing food industry.

**Students will gain skills in the following areas:**
- Learn about Quantity food production
- Exploring the Pastry Arts area of Hospitality
- Learn about Inventory, cost controls, and product pricing
- Operating and working in a variety of types of food service organizations and institutions
- Explore Food production systems
- Operate a curriculum-based food service business
- Plan and prepare themed event
- Practice Serve Safe food safety and sanitation procedures required in food service industry.

### III. HUMAN SERVICE AND FAMILY STUDIES

#### Lifespan Studies ½ Credit Grade 9 20 Weeks
Lifespan Studies is a class designed to help students understand the dynamics of relationships in the home, school, community and workplace. In this course the student will develop a skill set which will allow them to create positive relationships in these areas. A positive relationship with others plays a major role in an individual’s happiness throughout life. By exploring the physical, social, emotional and intellectual development that occurs over a lifespan, you will have a better understanding of how to relate to people of any age.

**Students will:**
- Study the human life span from birth through old age.
- Explore the effects of heredity, environment and personal behavior on various stages of development.
- Examine the diverse forms of the family unit and its functions.
- Experience parenting an infant using a baby simulator.
- Research current adolescent issues.

### Careers in Health and Human Services ½ Credit Grades 10, 11, 12 20 Weeks
This course introduces students to careers in the helping professions. If you like working with and helping people, and get along well with others, then this course can introduce you to the variety of careers available in the medical and human service fields.

**Students will:**
- Prepare a resume and cover letter.
- Practice interviewing techniques.
- Participate in collaborative activities to industrialized health and human service agencies in the community.
- Become aware of a variety of Health and Human Service professions through guest speaker presentations, and research.
- Develop communication, listening and self-assessment skills through activities.
- Explore Health and Human Service Career paths.
- Understand the concept of empathy as it relates to future career and community needs.

### Adolescent Development ½ Credit Grades 10, 11, 12 20 Weeks
What makes a teen tick? What makes you, you? What is adolescence? Take this course to discover the answers to these and other questions teens often have.

**Students will:**
- Study the physical, social, emotional and intellectual development of the adolescent
- Improve communication skills by participating in “Discussion Days” and focus on issues important to teens.
- Complete a “Teens Through the Decades” project.
- Investigate their own personality and characteristics.
• Explore psychological theories related to adolescence.

Adult Development ½ Credit  
Grades 10, 11, 12  20 Weeks  
Why are more people living to be 100 years old? Do you know anyone 90 years of age? What will your life be like 10 years from now? Who is the “X generation”?
Take this course to understand your parents and grandparents or explore careers related to working with the elderly.
Students will:
• Participate in panel discussion with adults from each age group.
• Examine the developmental changes that occur as we all age.
• Create products that meet the needs of adults throughout the life span.
• Develop cognitive, social and communication skills in “game day” activities.
• Investigate careers and health issues of adults.

Infant Development ½ Credit  
Grades 10, 11, 12  20 Weeks  
This course explores the many factors related to the health and welfare of children from conception to one year. Recommended for males and females who are interested in a career in the fields of psychology, social work, health care, medicine, education, childcare or wish to develop parenting skills for the future.
Students will:
• Learn how infants grow and develop physically, socially, emotionally and intellectually.
• Discuss issues in parenting, teen pregnancy, preventing birth defects, prenatal care, newborn care, infant development, etc.
• Prepare a parenting project that may include a baby simulator.
• Participate in classroom observations of infants.
• Research and present information on a birth defect.

Preschool Development ½ Credit  
Grades 10, 11, 12  20 Weeks  
Study the child from 1 to 5 years of age. Skills in working with preschoolers are developed through discussions, films and experiences with children in the classroom. Recommended for males and females interested in a career in the fields of psychology, social work, health care, medicine, education, childcare or wish to develop parenting skills for the future.
Students will:
• Learn how preschoolers grow and develop physically, socially, emotionally and intellectually.
• Write and illustrate a children’s book.
• Design and plan preschool environment.
• Prepare and present healthy snacks for preschoolers.
• Participate in the planning and presenting a “play day” for toddlers and/or a “story day” for preschool age children.
• Complete several projects related to the development of preschoolers

This class is prerequisite to Preschool Education Experience.

Preschool Education Experience 1 Credit  
Grades 11, 12  20 Weeks  
Required Prerequisite: Preschool Psychology with a passing grade. Students may also be required to have a TB test which is required by law for all childcare workers.
Do you like working with children ages 3-5 years? Are you considering a career in childcare or early childhood education? Find out if you have the personality and energy level needed to supervise and teach young children through hands-on experience as you work under the direction of a classroom teacher.
Students will:
• Practice observation skills by observing preschool age children.
• Identify qualities and skills needed by early childhood professionals.
• Review growth and development of children ages 3-5.
• Intern as a “student assistant” in a child care center, nursery school, or Pre-K classroom.
• Plan, prepare and present a variety of developmentally appropriate activities under the direction of a classroom teacher.
• Prepare personal portfolio for future employment or college.

School-Age Development ½ Credit  
Grades 10, 11, 12  20 Weeks  
Explore the many factors related to the health, welfare, and development of children from ages 6-12. Recommended for males and females who are interested in a career in the fields of psychology, social work, health care, medicine, counseling, education, childcare or wish to develop parenting skills for the future.
Students will:
• Learn how school age children grow and develop physically, socially, emotionally and intellectually.
• Discuss psychological theories and current issues as they apply to the school-age child.
• Participate in a “Writing Partners” project with an elementary classroom.
• Create age appropriate activities and games for children.

This class is prerequisite to School-Age Education Experience.

School Age Education Experience 1 Credit
Grades 11, 12 20 Weeks

Required Prerequisite: School-Age Psychology, with a passing grade.

Interested in children ages 6 through 12? Is your career goal to become an elementary teacher or work in a human service career with children? Take this course to learn if you have the qualities necessary to work with children of school age.

Students will:
• Practice observation skills by observing children in an elementary classroom.
• Identify qualities and skills needed by teachers and other human service workers and compare to their own.
• Review growth and development of children ages 6-12.
• Intern as a “student assistant” in an elementary or middle school classroom.
• Plan, prepare and present a variety of activities and lessons that meet the NYS Learning Standards under the direction of a classroom teacher.
• Prepare personal portfolio for future employment or college.

Independent Living ½ Credit
Grades 10, 11, 12 20 Weeks

Independent Living is a course designed to prepare students for the day-to-day challenges of adult living. Regardless of what lifestyle students choose, whether they go to college or start a career right away.

This course will help students:
• Make the transition from living with their family to living on their own.
• Make career choices
• Finding an apartment
• Reading and signing a lease
• How to select a roommate
• Payroll deductions
• Handling personal finances
• Meal planning and meal budgeting
• Apartment decorating

Foundations for College and Career Success ½ Credit
Grades 11, 12 20 Weeks

This course will introduce students to methods of career planning and strategies for college/career success. Students are required to investigate an advanced level of understanding and practice used in their personal field of interest. At the center of this course, students will prepare for Next Generation Skills (21st Century), as well as College and Career Readiness. OCC or CCC Credit will be available (TBD).

Students will:
• Become more effective and efficient learners through practice of higher level thinking skills.
• Develop and practice skills for individual learning strategies, e.g. test taking, and note taking.
• Learn about college expectations, using many proven strategies for creating academic, professional and personal success.
• Achieve success in college and in life by following the eight principles: personal responsibility, self-motivation, self-management, interdependence, self-awareness, life-long learning, emotional intelligence and belief in self.
• Explore college and workplace expectations, using many proven strategies for creating academic, professional and personal success.
• Prepare a vision statement for your individual project exploration.
• Establish a community connection to a professional advisor/mentor.
• Prepare a set of self-directed goals and steps to follow towards a culminating learning activity.
• Development a portfolio and culminating presentation to an authentic audience.
HEALTH

Health ½ Credit
Grades 10, 11, 12 20 Weeks
This course is required for graduation. It is based on
the dimensions of wellness, which include the
components of social, intellectual, physical, spiritual
(connectedness) emotional and occupational health.
The importance of a positive self-concept, confidence in
one’s own judgment regarding risk-taking behaviors and
responsibility for the consequences concerning choices
are also stressed in this course.
This skills based curriculum will focus on the
following content areas:
• Goal setting
• Communication
• Decision making
• Sexual health (abstinence, contraceptives, pregnancy)
• HIV/STI prevention
• Drug prevention
• Nutrition
• Positive relationships
• Positive coping strategies to deal with everyday life

First Aid – Responding to Emergencies ½ Credit
Grades 10, 11, 12 20 Weeks
The purpose of the American Red Cross First Aid-
Responding to Emergencies course is to provide the
citizen (lay) responder with the knowledge and skills
necessary in an emergency to help sustain life and
minimize pain and the consequences of injury or sudden
illness until medical help arrives.
Students will:
• Explore the role a lay responder plays in a medical
emergency
• Learn on a manikin how to give CPR to an infant, child and adult
• Learn and perform on a manikin how to administer
the first aid technique for choking
• Learn and practice first aid skills such as:
  1. Controlling bleeding
  2. Caring for burns
  3. Immobilize musculoskeletal injuries
  4. Caring for sudden illness: fainting, diabetes, seizures, poisons, etc.
  5. Caring for heat and cold emergencies

The American Red Cross requires a $22.00 fee for
certification in CPR, AED and First Aid. To take this
course at one of the local American Red Cross chapters a
participant would have to pay $150 dollars. Please note
there is no fee if a student is only interested in receiving
school credit for this course.
The New York State Education Department graduation requirement for mathematics is such that all students complete a minimum of three mathematics credits and pass one of the Mathematics New York State Exams. The mathematics requirement for an advanced diploma is such that all students pass three Mathematics New York State Exams. The Mathematics Regents Exams are given in Algebra, Geometry and Algebra 2.

The goal of our course offerings is to ensure that all students meet or exceed the New York State requirements in Mathematics. In order to meet that goal, all students are expected to have a graphing calculator for home use. The Texas Instrument TI 84 or TI-Nspire is the recommended calculator for all classes.

Informal Algebra 1 Credit
Grade 9 40 Weeks
Prerequisite: Designed for students who previously have been in prioritized curriculum math and/or have not been successful for two or more years of mathematics between grades five and eight. Approval for class by Administration only.
This course is based on the essential elements of the New York State Core Curriculum for Algebra 1. This course focuses primarily on algebra concepts and will also include critical knowledge in geometry, measurement, statistics and probability. While some of the curriculum will be mastered, much of the curriculum will be at the exposure level and will be taught more in depth during the tenth grade algebra year. Students in Informal Algebra will take a school final and will be recommended into Algebra for the tenth grade. Students will be taking the New York State mathematics assessment beginning in January of tenth grade.

Algebra 1 Credit
Grades 9, 10 40 Weeks
Prerequisite for Grade 10: Designed for students who have not successfully earned a mathematics credit in algebra and have scored less than a 55 on the NYS Mathematics Regents Exam in Algebra.
This course is based on the NYS Core Curriculum for Algebra I. This course focuses primarily on Algebra concepts and will also include critical knowledge in geometry, measurement, statistics, and probability. Students in Grade 9 will be expected to take the NYS Common Core Algebra Regents in June. Students in Grade 10 will be expected to take the NYS Common Core Algebra Regents in January.
This course is NCAA approved.

Geometry 1 Credit
Grades 10, 11 40 Weeks
Prerequisite: Designed for students who successfully completed Algebra or are dual enrolled in APEX.
This course is based on the NYS Core Curriculum for Geometry. This course is meant to employ an integrated approach to the study of geometric relationships. Congruence and similarity of triangles will be established using appropriate theorems. Transformations including rotations, reflections, translations, and glide reflections and coordinate geometry will be used to establish and verify geometric relationships. Students will be expected to take the NYS Common Core Regents in Geometry in June.
This course is NCAA approved.

Regents Geometry Accelerated Honors 1 Credit
Grade 9 40 Weeks
Prerequisite: Designed for students who successfully completed Regents Algebra Accelerated.
This course is based on the NYS Core Curriculum for Geometry. This course is meant to employ an integrated approach to the study of geometric relationships. Congruence and similarity of triangles will be established using appropriate theorems. Transformations including rotations, reflections, translations, and glide reflections and coordinate geometry will be used to establish and verify geometric relationships. Students will be expected to take the NYS Mathematics Regents Exam in Geometry in June. Upon successful completion of this course, students are expected to enroll in Trigonometry or Trigonometry Honors.
This course is NCAA approved.
Intermediate Algebra  1 Credit
Grades 10, 11  40 Weeks
Prerequisite: Placement in this course will be by teacher recommendation with Administration/Math Department Chair approval.
This course is designed as a third or fourth credit of math for students who are planning to attend college and pursue a two or four year degree in a non-STEM major, enter the workforce or a military branch. This course is designed to strengthen basic algebraic skills and expand upon the concepts learned in Algebra 1 to promote a deeper understanding of more complex algebraic topics. Students in this course apply and adapt a variety of strategies and algorithms to solve problems.

Algebra 2  1 Credit
Grades 10, 11, 12  40 Weeks
Prerequisite: Designed for students who successfully completed Algebra or are dual enrolled in APEX.
This course is based on the Common Core curriculum for Algebra II. The content of this course includes, but is not restricted to, exponential and logarithmic functions, geometric and algebraic transformations of functions, trigonometry, probability and statistics, and their applications. Students will be expected to take the NYS Common Core Algebra 2 Exam in June. Upon successful completion of this course, students are expected to enroll in Pre-Calculus with Trig.
This course is NCAA approved.

Algebra 2A  1 Credit
Grades 10, 11  40 Weeks
Prerequisite: Designed for students who struggled in Algebra and teacher recommendation.
This course is based on the Common Core Curriculum for Algebra 2. Units will include, but are not restricted to, Polynomials, Quadratics, Exponentials, Logarithms, and Radicals. This is the first year of a two year program. Students will be sitting for the Algebra 2 Regents exam in June.
This course is NCAA approved.

Algebra 2B  1 Credit
Grades 11, 12  40 Weeks
Prerequisite: Designed for students who have successfully completed Algebra 2A.
This course extends the earlier study of Algebra 2A to that of Rationals, Statistics and Trigonometry. Algebraic skills from Algebra 2 are thoroughly reviewed during this semester. This is the second year of a two year program. Students will be sitting for the Algebra 2 Regents exam in June.
This course is NCAA approved.

Algebra 2 Honors  1 Credit
Grades 10, 11  40 Weeks
Prerequisite: Designed for students who successfully completed Algebra & Geometry with a minimum average of 85.
This course will cover the NYS Algebra 2 Common Core curriculum with increased emphasis on investigation and problem solving. Advanced algebra concepts will be explored in depth and the course will include critical thinking skills and a major emphasis will be placed on conjecture and hypothesis testing. Students will develop a strong understanding of Trigonometry and its applications in real life settings.
Upon successful completion of this course, students are expected to enroll in Pre-Calculus with Trig Honors in preparation for Advanced Placement classes.
This course is NCAA approved.

College Algebra  1 Credit
Grades 11, 12  40 Weeks
Prerequisite: Successfully earned two math credits.
This course is designed to provide the necessary foundation for introductory college mathematics. An emphasis will be based on enhancing algebraic skills, graphing techniques, statistical reasoning, complex numbers, quadratic, polynomial and exponential functions, as well as systematic approaches to problem solving.
This course is NCAA approved.

Pre-Calculus with Trig* (MAT-143)  1 Credit
Grades 11, 12  40 Weeks
Prerequisite: Designed for students who have successfully completed Algebra 2 and have passed the Algebra 2 Regents or OCC placement test.
This course is designed to provide the necessary foundation for a standard calculus course. Topics include absolute value, quadratic inequalities, exponential and logarithmic functions, trigonometric functions and their inverses, trigonometric identities and equations, and binomial theorem.
Students will:
- Use cooperative learning to gain understanding
- Explore topics using real world applications
- Complete hands-on activities to enhance their learning

*A fee may be associated with this class
This course is NCAA approved.
Pre-Calculus with Trig Honors* (MAT-143) 1 Credit  
Grades 11, 12  
40 Weeks  
Prerequisite: Designed for students who successfully completed Common Core Algebra, Geometry & Algebra 2 Honors with at least an 85 average in all three and have passed all three Regents exams. 
This course serves as preparation for AP Calculus. It is a rigorous pre-calculus course. Topics include, but are not limited to, absolute value, quadratic inequalities, exponential and logarithmic functions, trigonometric functions and their inverses, trigonometric identities and equations and binomial theorem. 
**Students will:**  
- Use various forms of technology to complete activities  
- Learn collaboratively with other students to gain understanding  
- Learn a variety of ways to solve equations and word problems using both prior knowledge and new methods that apply to calculus.  
Upon successful completion of this course, students are expected to enroll in AP Calculus.  
*A fee may be associated with this class.  
This course is NCAA approved.

AP Calculus*  
1 Credit  
Grade 12  
40 Weeks  
Prerequisite: Designed for students who have successfully met the requirements for an advanced diploma and have completed Pre-Calculus Honors with an 85 or Pre-Calculus with an 85 and a teacher recommendation.  
The course is created for students to understand the concepts of calculus with a focus on derivatives and integrals. This class will allow students to work with applications of derivatives and integrals related to real world examples.  
**Students will:**  
- Observe how speed (velocity) looks graphically on a position, velocity and acceleration graph  
- Create 3D models to show cross sections volume  
- Create equations to optimize profit and minimize materials  
Students are expected to take the Advanced Placement Examination upon completion of this course. College credit may be available if exam score meets college requirements.  
**Exam Fee $98.00**  
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.  
This course is NCAA approved.

AP Statistics*  
1 Credit  
Grade 11, 12  
40 Weeks  
Prerequisite: Designed for students who successfully completed Algebra 2 and Geometry and scored at least a 75 on the Algebra 2 Regents.  
Have you ever wondered how 9 out of 10 dentists can recommend a specific toothpaste when there are so many out there? AP Statistics deals with *why* you have the answer, not just how to get it. Statistics is the most widely applicable branch of mathematics used by more people than any other kind of math. You’ll never wonder when you’ll ever use this stuff because there will be daily applications to fields such as science, medicine, anthropology, business law and government. This is a college course, so you will be involved on a daily basis in calculations, reading, writing, analyzing and thinking.  
**Students will:**  
- Design experiments to draw conclusions  
- Collect and examine data and display patterns from real world data sets  
- Anticipate patterns and produce models for prediction  
- Investigate research questions, design a study and interpret the results  
Students are expected to take the Advanced Placement Examination upon completion of this course. College credit may be available if exam score meets college requirements.  
**Exam Fee $98.00**  
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.  
This course is NCAA approved.

Financial Algebra  
1 Credit  
Grades 11, 12  
40 weeks  
Placement of 11th graders in this course will be by teacher recommendation with Administration/Department Chair approval only.  
Designed to provide students with the tools to become financially responsible.  
The purpose of this course is to enhance and continue the study of financial applications, as well as provide additional tools to ready students for college success. This course encourages students to be actively involved in applying mathematical ideas to their everyday lives.  
**Students will study:**  
- Banking services  
- Consumer credit  
- Automobile ownership  
- Employment basics  
- Income taxes  
- Independent living  
- Preparing a budget  
**This course is NCAA approved.**
Technology Applications in Math 1 Credit
Grades 10, 11, 12 40 Weeks
Designed to introduce students to computer programming.
It is an elective that covers a variety of topics – it’s like a techy buffet. Units may include Android app development, Scratch, cryptography, Excel, graphics, music and formal programming with the Python language. Students will develop problem solving strategies to create fun and innovative projects. This is an elective course that counts as a math credit.

Students will:
- Learn what a computer program looks like
- Create games and animations with Scratch
- Create digital artwork with Processing
- Create mobile apps with App Inventor

Math Topics – Fall ½ Credit
Grades 11, 12 20 Weeks
Prerequisite – Two credits of Math and successful completion of a Math Regents exam. Placement in this course will be by teacher recommendation with Administration/Math Department Chair approval.
This course will extend and apply the mathematical topics learned in earlier courses to practical, “real-life” applications. Students will collaborate and communicate mathematically in a supportive learning environment where they feel accepted and free to take risks.

Students will study:
- Mathematics used in different careers
- Financial literacy as it relates to future goals

Math Topics – Spring ½ Credit
Grades 11, 12 20 Weeks
Prerequisite – Two credits of Math and successful completion of a Math Regents exam. Placement in this course will be by teacher recommendation with Administration/Math Department Chair approval.
This course will extend and apply the mathematical topics learned in earlier courses to practical, “real-life” applications. Students will collaborate and communicate mathematically in a supportive learning environment where they feel accepted and free to take risks.

Students will study:
- Types of personal income/budgeting
- Consumer purchasing and protection

MATHEMATICS ELECTIVES

AP Computer Science A* (2021-2022) 1 Credit
Grades 10, 11, 12 40 Weeks
Prerequisite: Designed for students who have successfully completed Algebra and Geometry.
AP Computer Science covers the basics of computer programming at a college level of understanding. It uses the Java language to explore the main concepts. Topics covered include variables, logic and modeling real world objects with computer code. Students should be comfortable with mathematical thinking – computer programs rely on math. The class will prepare students for programming courses in college.

Students will:
- Learn what a computer program looks like
- Create computer programs to solve problems
- Work on computer based projects and labs during class
- Apply their programming knowledge in fun ways (independent projects)

*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.
This course is NCAA approved.

Visual Basic and Object Oriented Design 1 Credit
Grades 10, 11, 12 40 Weeks
Prerequisite: Designed for students who have successfully completed Algebra and passed the Common Core Algebra Exam.
Visual Basic is a course built for students that have an interest in the operations of objects on a computer. It is really a beginners course for people who will eventually become computer analysts/computer programmers/web designers/video game designers/ or many other related careers. The majority of the work is done in class as it is a lab based course. The labs are given in such a manner as to slowly develop the basics of writing code. Eventually they will code objects to appear/disappear; to change colors; to give answers to questions; to perform economic tasks; to move/change direction; and do many more tasks. Many of the labs are centered on the production of games which use the coding principles.

Students will:
- Learn how to write code
- Learn using real life scenarios that occur in everyday usage of technology
• Acquire necessary skills to go on to higher level
  Computer Science classes at the high school/college
  level

Upon successfully completion of this course, students are
expected to enroll in AP Computer Science or SUPA
Computer Engineering.

AP Computer Science Principles (2020-2021) 1 Credit
Grades 10, 11, 12  40 Weeks
Prerequisite: Designed for students who have
successfully completed Algebra.
AP Computer Science Principles is designed to be
equivalent to a first-semester introductory college
computing course. Students should be comfortable with
mathematical thinking and problem solving.

Students will:
• Develop computational thinking skills
• Analyze, visualize and make predictions about
data
• Develop computational artifacts based on their
  interests and write about their work
• Learn how technology impacts their world both
  locally and globally

Students are expected to complete a student-directed
independent project and take the Advanced Placement
Examination upon completion of the course. College
credit may be available if exam score meets college
requirements.  Exam Fee $98.00

*STUDENTS ARE REQUIRED TO STAY IN AP
CLASSES THE FIRST FIVE WEEKS OF THE

This course is NCAA approved.

SUPA Cyber Security (2020-2021) 1 Credit
Grade 10, 11, 12  40 Weeks
Prerequisite: Designed for students who have
successfully completed Algebra and Geometry.
Cyber Security is a course that presents fundamental
concepts of security, network organization and operation.
It will introduce mechanisms and the history of software,
hardware, and OS security. Students will differentiate
between physical, organizational and personal security.
By the end of the course, students will be able to
understand how a network functions, monitor a network’s
functions and performance, control a network’s
configuration, determine what security is and how it
relates to a network, detect and respond to an attack on a
network, determine if a network is vulnerable to an attack,
identify the threats to a network, prevent harm to a
network, and analyze the impact of the protection.

Students who successfully complete this course have the
option of earning three to four credit hours through
Syracuse University Project Advance (SUPA) Program.

*Must register for SU Credit and pay current rate of
tuition ($345/$460/course).

**In order for any students to receive Syracuse
University Project Advance Credit (SUPA), more than
50% of students in the class must be registered for
credit which needs to be done within the first two
weeks of class in September.

MUSIC

Graduation requirements for all students include 1
credit in Music or Art.

Chorus 1 Credit
Grade 9  40 Weeks
This is a choral group for mixed voices (soprano, alto,
tenor and bass) which emphasize performance of works
from the pop and classical repertoire. Related co-
curricular activities include a Select Ensemble.
Attendance at all concerts is mandatory.

Music in Our Lives 1 Credit
Grade 9  40 Weeks
Music in Our Lives will provide practical knowledge in
four main functions of music. The student should be able
to listen intelligently to music in a variety of musical
idioms, perform at a recreational level on a “social”
accompaniment instruments, compose music in some
medium, and be proficient in using basic musical “tools.”
Students will work as a class, in small groups, and
independently. This course will satisfy the New York
State credit for art and/or music.

Concert Chorus 1 Credit
Grades 10, 11, 12  40 Weeks
Concert Chorus is open to ALL high school students who
are interested in singing. Students will study and perform
music in a variety of styles and languages. In addition to
music study, students will develop lifelong skills
applicable to any profession: responsibility, teamwork,
professionalism, time and stress management, self-
motivation and leadership, to name a few.

Students will:
- Attend weekly in school voice lessons – (lessons rotate throughout the school day)
- Develop and refine proper vocal technique
- Learn how music reflects cultural and historical experiences
- Prepare vocal solo literature for evaluation and performance
- Perform evening public concerts

**No prior music experience is required**

**All curricular music performing ensembles share a uniform dress code.**

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**Honors Chorus**

1 Credit

Grades 11, 12

40 Weeks

Prerequisite – Successful completion of audition, written test, and teacher recommendation.

The Honors Chorus option is designed for highly motivated student musicians who strive to achieve at the highest levels of music performance. In addition to all the requirements of “Advanced Chorus”

**Students will:**
- Participate in co-curricular vocal music activities
- Audition for honors ensembles
- Assume leadership roles within the larger ensemble
- Perform individual solos

**All curricular music performing ensembles share a uniform dress code.**

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**Advanced Chorus**

1 Credit

Grades 11, 12

40 Weeks

This select group challenges the experienced and motivated singer to perform advanced choral literature in an environment that encourages student leadership and creativity. This course will prepare young musicians to become lifelong independent music learners and participants.

**Students will:**
- Attend weekly in-school band lessons (lessons rotate throughout the school day)
- Continue to develop and refine proper playing techniques
- Learn how music reflects cultural and historical experiences
- Prepare solo literature for evaluation and performance
- Perform evening public concerts

**All curricular music performing ensembles share a uniform dress code.**

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**Concert Band**

1 Credit

Grades 9, 10, 11, 12

40 Weeks

Concert Band is open to students who play traditional wind band instruments: flute, double reeds, clarinets, saxophones, French horn, trumpet, trombone, euphonium, tuba and percussion (snare drum, timpani and mallets). Students will study and perform music in a variety of styles. In addition to music study, students will develop lifelong skills applicable to any profession: responsibility, teamwork, professionalism, time and stress management, self-motivation and leadership, to name a few.

**Students will:**
- Attend weekly in-school band lessons (lessons rotate throughout the school day)
- Develop and refine proper playing techniques
- Learn how music reflects cultural and historical experiences
- Prepare solo literature for evaluation and performance
- Perform evening public concerts

**All curricular music performing ensembles share a uniform dress code.**

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**Honors Symphonic Band**

1 Credit

Grades 11, 12

40 Weeks

Prerequisite – Successfully completion of audition, written test and teacher recommendation.

The Honors Symphonic Band option is designed for highly motivated Junior and Senior student musicians who strive to achieve at the highest levels of music performance. This option will prepare young musicians to become lifelong independent music learners and participants. Students selecting this option are enrolled in the regular Concert Band class. In addition to all the requirements of “Concert Band”

**Students will:**
- Participate in co-curricular music ensembles
- Audition for honors ensembles (All-County and All-State)
- Fully participate in the Concert Band and other ensembles available through school
- Demonstrate exemplary attitude and grades throughout the year

**All curricular music performing ensembles share a uniform dress code.**
Orchestra 1 Credit
Grades 9, 10, 11, 12 40 Weeks
Orchestra is open to students who play traditional string instruments: violin, viola, cello and string bass. Students will study and perform music in a variety of styles. In addition to music study, students will develop 21st Century skills, especially Critical Thinking, Creativity, Collaboration, Communication and Flexibility, along with other lifelong skills including responsibility, professionalism, time management, self-motivation and leadership.

Students will:
- Attend weekly in-school string lessons (lessons rotate throughout the school day)
- Develop and refine proper playing techniques
- Learn how music reflects cultural and historical experiences
- Prepare solo and orchestral literature for evaluation and performance
- Perform evening public concerts

All curricular music performing ensembles share a uniform dress code.

Honors Orchestra 1 Credit
Grades 11, 12 40 Weeks
Prerequisite – Successful completion of audition, written test, and teacher recommendation.
The Honors Orchestra option is designed for highly motivated student musicians who strive to achieve at the highest levels and encourages student leadership and creativity. This option will prepare young musicians to become lifelong independent music learners and participants. Students selecting this option are enrolled in the regular Orchestra class. In addition

Students will:
- Participate in co-curricular string music activities
- Learn to evaluate and improve performance by:
  - Leading class rehearsals
  - Creating lesson plans
  - Selecting musical literature
- Audition for and participate in, honors ensembles
- Assume leadership roles within the larger ensemble
  - perform individual solos

All curricular music performing ensembles share a uniform dress code.

Basic Musicianship 1 Credit
Grades 10, 11, 12 40 Weeks
This music course is open to all students interested in learning how to read and write music. Students will be introduced to elements of music notation, construction, terminology, and ear training. Successful completion of this course will advance the student to Music Theory 1.

Students will:
- Learn to read musical notation of rhythms and pitches
- Compose musical pieces to be performed in class
- Learn how to construct major and minor scales
- Learn basic chord progressions

There are no prerequisites for this class

Students CANNOT enroll in both Basic Musicianship and Music Theory I simultaneously

Music Theory 1 1 Credit
Grades 10, 11, 12 40 Weeks
Prerequisite – Successful completion of Basic Musicianship or teacher recommendation.
This course is designed to provide knowledge and experiences for students who are majoring in music or intend to pursue it as an avocation. It provides an understanding of the rules and principles of music

This course is highly recommended for all college-bound music students.

Students will:
- Analyze music aurally and visually
- Develop music composing and arranging skills
- Compose musical pieces to be performed in class
- Harmonize music
- Sing various melodies at sight

Music Theory 2 1 Credit
Grades 11, 12 40 Weeks
Prerequisite-Successful completion of Music Theory 1
A continuation of the Music Theory 1 course wherein an understanding of the rules and principles of music is pursued. The second year is devoted to increasing the skills associated with composition, arrangement, harmonization and sight singing.

Students will:
- Develop contemporary classical techniques of music composition
- Analyze music aurally and visually
- Compose musical pieces to be performed in class
- Harmonize music
- Sing various melodies at sight
PHYSICAL EDUCATION

Physical Education (1/4 blocks) ½ Credit
Grades 9, 10, 11, 12 40 Weeks

The Physical Education program is a compilation of lifetime sport and movement activities designed to instill a belief in the value of physical activity in all of our students. Our intent is to expose students to a large variety of activities and have them develop basic knowledge and skills, thereby promoting participation in them during their lives after high school.

Over 20 instructional activity units are offered throughout the course of the school year of which students will participate in eight of the unit’s total. The Physical Education staff feels that a student who completes their high school Physical Education requirement to graduate will have experienced a very well rounded program and thus, have a solid base from which to pursue a healthy, active lifestyle.

Students will:

- Understand what is necessary to maintain a physically active lifestyle.
- Participate in 8 activity units that focus on lifetime physical activities.
- Cooperate in class so all students learn and participate in a healthy and safe environment.
- Understand and be able to manage their personal and community resources.

SCIENCE

The following are the minimum science requirements for receiving a Regents diploma:

- Three credits of science.
- At least one course of life science
- At least one course is a physical science
- The third may be either life sciences, physical sciences, or approved electives.

An approved alternative, pursuant to section 100.2(f), of NYS education law, may be substituted for one of the physical science course.

- One NYS Science Regents exam must be taken and passed.

In order to qualify to take a Regents exam in any of the sciences a student must complete 1200 minutes of actual hands-on (not simulated) laboratory experience with satisfactory documented laboratory reports.

Earth Science 1 Credit
Grades 9, 10 40 Weeks

Prerequisite – Students taking this course in Grade 10 should have a final course average of 75 in or better in Living Environment and a 75 or better on the respective Regents exam.

This course is designed to cover the fundamental principles of how our plant operates. Have you ever wondered why Syracuse gets so much snow? How is an earthquake produced and why does it cause so much damage? Is global warming inevitable, and what should we be doing about it? How do scientists theorize the earth and universe were formed? What is a fossil and where do they come from? How and why do hurricanes develop? Sharpen your critical thinking skills and learn all about the theories associated with these phenomena and more.

The final exam for this course will be the New York State Regents Exam in Earth Science. In order to gain entrance into this exam, students must complete 1200 minutes of passing laboratory work.

This course is NCAA approved.
Earth Science Honors
Grade 8, 9
Prerequisite – Final average of 90 or better in 7th or 8th grade science, enrolled in Algebra or Geometry and teacher recommendation required.
This course is designed for those 9th grade students who exhibit high achievement in science or are considering science as a major field of emphasis in their academic careers. Based on the NYS Earth Science Core Guide, it offers freshman an option for a more enriched and challenging curricula. Through various assessments, honor students will be expected to demonstrate a deeper understanding of content and activities as compared to the Regents Earth Science course. These will include advanced lab data analysis and content-based projects. The final examination for this course will be the NYS Regents in Earth Science Examination. Graphing calculators are not permitted for use on the Earth Science Regents examination.
This course is NCAA approved.

Physics Honors
Grade 9
This is an academically oriented course designed specifically for those students participating in the Accelerated/Honors program of high school Regents science course sequencing. The student develops understandings of the basic unifying concepts of conservation in three core areas: energy, momentum and change. Four separate content areas (mechanics, waves, electricity and nuclear physics) provide the framework for laboratory activities and class discussions. The exam for this course will be the NYS Regents in Physics.
This course is NCAA approved.

Essentials of Biology
Grade 9
Prerequisite – Designed for students who have received minimal science instruction or have had a challenging experience in science between grades 5-8. Approval for class by Administration only.
This course will provide basic instruction in biology. Much of the curriculum will be at the exposure level and will be taught at the process and application level in Living Environment in tenth grade. Topics include ecology, genetics and the interdependence of living things. This course will not have a separate laboratory class. Students in Essentials of Biology will take a school final and will be recommended for Living Environment in tenth grade.

Living Environment
Grades 9, 10
Prerequisite: Students selected for this course, in grade 9, should be recommended by their grade 8 science teacher or guidance counselor.
The course will provide essential requirements to meet the New York State core syllabus in Living Environment. The Living Environment Regents examinations will be administered as the final assessment. A minimum of 1200 minutes of satisfactory laboratory reports is required for admittance to the examination. This course includes process and application skills to provide experiences in the field of biology. Topics include ecology, genetics, patterns of evaluation, continuity of life, and the interdependence of all living things.
Students will:
- Acquire an in-depth understanding and mastery of key biological concepts and ideas as outlined in the New York State Regents Living Environment core curriculum
- Master important science process and safety skills through a minimum of 1200 minutes of hands-on laboratory investigations
- Develop post high school preparatory skills
- Develop a proficiency in critical thinking and problem solving as it relates to the living environment
- Use their knowledge of the living environment to become environmental stewards and participatory citizens

This course is NCAA approved.

Living Environment Honors
Grade 10
Prerequisite – 85 or better in either H Earth Science or H Physics. 95 or better in Regents Earth Science. 85 or better on either the Earth Science or Physics Regents Exam and teacher recommendation. The honors Living Environment course is academically oriented and rigorous in nature. It follows the same scheme as The Living Environment curriculum. It will, however, offer a more in-depth examination of the main themes as well as the most recent biological findings, which do not appear in current texts. The laboratory investigations are of a more complex nature than those used in The Living Environment program. The final exam will be the NYS Regents exam in Living Environment. A minimum of 1200 minutes of satisfactory laboratory reports is required for admittance to the examination.
Students will:
- Acquire an in-depth understanding and mastery of key biological concepts and ideas as outlined in the New York State Regents Living Environment core curriculum
• Master important science process and safety skills through a minimum of 1200 minutes of hands-on laboratory investigations
• Develop college preparatory skills
• Develop in-depth, critical and creative problem solving skills as it relates to the living environment
• Use their knowledge of the living environment to become environmental stewards and participatory citizens

This course is NCAA approved.

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Science of Matter (Fall 2020) ½ Credit
Grades 10, 11
Prerequisite – This course is designed for those students entering tenth grade from the ninth grade Living Environment course who have not met the tenth grade Earth Science course requirements and for those students in tenth grade Living Environment not meeting the Regents Chemistry requirements. Any students who have completed a Chemistry course are NOT permitted to take this course.
This course is recommended for students with a curiosity for learning and applying the science of matter to real world experiences. In this semester course, we explore how polymers and plastics influence our lives, the effects of chemicals in our brain as well as the science behind food and nutrition. As time permits, we will explore other relevant issues of science in today’s society.

Students will:
• Develop an understanding of the science of matter
• Cultivate problem-solving and critical-thinking skills related to matter
• Apply the knowledge of matter to decision making about scientific issues
• Recognize the importance of matter in daily life

This course is NCAA approved.

Science in Society (Spring 2021) ½ Credit
Grades 10, 11
20 Weeks
Prerequisite – This course is designed for those students entering tenth grade from the ninth grade Living Environment course who have not met the tenth grade Earth Science course requirements and for those students in tenth grade Living Environment not meeting the Regents Chemistry requirements. Any students who have completed a Chemistry course are NOT permitted to take this course.
This course is recommended for students with a curiosity for learning and applying science to real world experiences. Over the course of the semester, we explore how polymers and plastics influence our lives, the effects of chemicals in our brain as well as the science behind food and nutrition. As time permits, we will explore other relevant issues of science in today’s society.

Students will:
• Develop an understanding of science and its impact on ourselves and our society
• Cultivate problem-solving and critical-thinking skills related to science and our society
• Apply scientific knowledge to decision making about scientific issues
• Recognize the importance of science in daily life

Applied Chemistry 1 Credit
Grades 11, 12
40 Weeks
Prerequisite- Successful completion (65 or higher on at least 3 regents Exams) Living Environment, Algebra 1, and one other science or math exam.
Any students who have completed a Chemistry course are NOT permitted to take this course.
This course is recommended for any students that are college bound, but are not entering the science field. Early in this course, the elements of scientific activity are displayed, including the role of uncertainty. The atomic theory, the nature of matter, and the mole concept are developed. Additional principles discussed in the program are energy, rate and equilibrium characteristics of chemical reactions, chemical periodicity and chemical bonding.

Students will:
• Develop “Higher Order Thinking” Skills as they solve multistep problems.
• Apply apply algebraic math skills to math based topics.
• Develop an understanding of the periodic table and identify trends.
• Develop an understanding of subatomic particles and atomic structure.
• Identify the differences between chemical and physical changes.
• Compare and contrast the relationships between matter and energy.

This course is NCAA approved.

Chemistry
Grade 11, 12
1 Credit
40 Weeks

Prerequisite – Successful completion (65 or higher on Regents Exams) of Earth Science, Living Environment, and two Math Regents Exams.

Early in this course, the elements of scientific activity are displayed, including the role of uncertainty. The atomic theory, the nature of matter and the mole concept are developed. Additional principles discussed in the program are energy, rate and equilibrium characteristics of chemical reactions, chemical periodicity and chemical bonding.

This course differs from traditional chemistry in its reduced emphasis on descriptive chemistry, and a greater emphasis on the quantitative aspect of chemistry and in linking the laboratory to the classroom.

The final exam for Regents Chemistry will be the NYS Regents exam in Chemistry. Students will not be permitted to use a graphing calculator when taking this Regents Exam.

Students will:
• Develop “Higher Order Thinking” skills as they solve multistep quantitative problems
• Apply algebraic math skills to math based topics
• Develop an understanding of the periodic table and identify trends
• Develop an understanding of subatomic particles and atomic structure
• Identify the differences between chemical and physical changes
• Compare and contrast the relationships between matter and energy
• Students must complete a minimum of 1200 laboratory minutes and laboratory reports to be eligible to take the Regents exam

This course is NCAA approved.

Chemistry Honors
Grades 11, 12
1 Credit
40 Weeks

Prerequisite – Successful completion (85 or higher on Regents Exams) in Earth Science, Living Environment, and two Math Regents exams.

This course is designed for academically oriented students who have consistently exhibited high achievement in previous courses in their science sequence. Students are challenged to develop abstract mental models representing the unique but changing structures of the various chemical systems involved in chemical reactions.

Some additional topics covered are energetic of reactions, the mole concept, reaction kinetics, chemical equilibrium and chemical periodicity. Several models of the atom are developed and each is evaluated according to its ability to explain what is and to predict what will be.

Successful participation in Regents Honors Chemistry will prepare students for the challenges of freshman college chemistry.

The final exam for this course will be the NYS Regents exam in Chemistry. Students will not be permitted to use a graphing calculator when taking this Regents Exam.

Students will:
• Master “Higher Order Thinking” skills as they solve multistep quantitative problems
• Recognize the variables to develop the mathematical relationships to solve multilevel quantitative problems
• Develop an in depth cognitive understanding of the Periodic Table and identify the trends
• Develop an understanding of subatomic particles, atomic structure and the interactions of those particles
• Identify the differences between chemical and physical changes and the energy involved in those changes
• Compare and contrast and manipulate the relationships between matter and energy
• Students must complete a minimum of 1200 laboratory minutes and electronic submitted laboratory reports to be eligible to take the Regents Exam.

This course is NCAA approved.
Science in Motion (Fall 2020)  ½ Credit
Grades 11, 12  20 Weeks
Prerequisite – Students must have earned at least 2 credits of science credit (1 in Life Science and 1 in the Physical Setting) and have passed 1 NYS Science Regents Exam. Any students who have already completed a Physics course are NOT permitted to take this course.
An introductory course in science that focuses on the fundamental concepts of motion & forces. It is a very conceptual approach to these topics and how they relate to everyday life.
Students will:
• Use scientific skills and strategies to investigate the course content
• Investigate the course concepts through hands on learning activities
• Apply acquired science principles to real life situations
This course is NCAA approved.

Science of Energy (Spring 2021)  ½ Credit
Grades 11, 12  20 Weeks
Prerequisite – Students must have earned at least 2 credits of science credit (1 in Life Science and 1 in the Physical Setting) and have passed 1 NYS Science Regents Exam. Any students who have already completed a Physics course are NOT permitted to take this course.
An introductory course in science that focuses on the fundamental concepts of energy and waves. It is a very conceptual approach to these topics and how they relate to everyday life.
Students will:
• Use scientific skills and strategies to investigate the course content
• Investigate the course concepts through hands on learning activities
• Apply acquired science principles to real life situations
This course is NCAA approved.

Physics
Grades 11, 12  40 Weeks
Prerequisite – Successful completion (65 or higher on Regents Exams and courses) of Earth Science, Living Environment, Algebra and Geometry.*
Regents Physics is a mathematically-oriented course, which is integral to the understanding of the concepts. Various physical concepts are treated to be meaningful in everyday life situations with laboratory applications. The core areas of mechanics, waves, electricity and modern physics provide the framework for laboratory activities and class discussion.
The final exam will be the NYS Regents Physics exam.
This course is NCAA approved.

Physics Honors
Grades 11, 12  40 Weeks
Prerequisite – Mastery level attainment (85 or higher on Regents Exams and courses) in Earth Science, Living Environment, Algebra and Geometry.*
Honors Physics is a course for students who have demonstrated a high aptitude for and interest in science and math. The course is similar in content to Regents Physics in the core areas, but treats each with extended coverage in greater depth and at a more rapid pace.
Laboratory investigations are an integral part of the course. The final exam will be the NYS Regents Physics exam.
This course is NCAA approved.

Science Explorations
Grades 11, 12  40 Weeks
Prerequisite – Successful completion of 2 years of science courses, and a willingness to work independently and cooperatively with peers to solve real-world science problems.
Science explorations is a project-based course where students are challenged to apply scientific knowledge to real-world scenarios to solve problems. Students will have the opportunity to work as individuals and in small groups. The instructor will assist students in goal-setting and the process model of project completion. Students will have the opportunity to demonstrate their knowledge at the end of the course.
Course Objectives:
• Students will conduct their own experiment including research, experimental design, data collection and analysis, and interpretation of data
• Students will have the chance to solve real-world problems
• Students may craft solutions to current problems in the local community or across the globe
• Students will present their findings
This course is NCAA approved.
Science Electives

Astronomy  ½ Credit  
Grades 11, 12  20 Weeks  
Prerequisite – Successfully completed 2 Science credits (one of which must be Earth Science).

This is a one semester, introductory course in astronomy. What makes a star shine? For how long will the sun keep shining? What are black holes and how can they form? From the phases of the moon to the explosions of supernovas, this class is a general introduction to the concepts of contemporary astronomy.

A survey of the basic topics in astronomy will be done in a seminar format. Topics may include: Astronomy through the ages, the Solar System, our Galaxy, with a laboratory portion covering the solar system, properties of stars, spectral classification, stellar evolution, and variable stars. Design and use of the portable planetarium may be included.

Students will:
- Understand the origin and history of the universe and the formation of the earth and the solar system.
- Students will compare the earth’s properties with those of the other planets and explore how the heavens have influenced human thought and action.
- Deepen their understanding with a student chosen topic exploration

This course is NCAA approved.

Meteorology  ½ Credit  
Grades 11, 12  20 Weeks  
Prerequisite – Successfully completed 2 Science credits (one of which must be Earth Science).

This is a one semester, introductory course in meteorology. This course will also provide the student with basic understanding of weather and climate and an understanding of basic weather forecasting.

This course is also designed to explain local weather phenomena. It will introduce students to important phenomena and physical processes that occur in earth’s atmosphere, as well as to the basic concepts and tools that are used to study atmospheric problems with special emphasis on developing information technology skills.

This course includes atmospheric dynamics, wind systems, and severe storms. Other topics include climate, climate change, boundary layer meteorology, air pollution, forecasting and weather modification.

Students will:
- Develop an understanding of the structure and function of the atmosphere including the dynamics between its matter and energy and their effect on weather and climate
- Deepen their understanding with a student chosen topic exploration

This course is NCAA approved.

Anatomy/Physiology  ½ Credit  
Grades 11, 12  20 Weeks  
Prerequisite – Successful completion of Living Environment (grade of 80 or better) or current enrollment/successful completion of AP Biology.

This semester length class is an introductory college level course that covers most of the human body systems. This course is ideal for students who wish to pursue one of the many careers in the medical field or as a supplemental course for students who are concurrently taking or planning on taking AP Biology.

Students will:
- Learn medical and anatomical terminology
- Memorize anatomical terms and medical conditions for unit quizzes
- Be able to identify various tissues, bones and muscles
- Learn about various body systems such as the nervous system, digestive system, endocrine system, cardiovascular system, respiratory and excretory systems
- Dissect chicken wings, sheep or cow eyes, brains and hearts
- Dissect a cat, examining its musculature and all internal organs.

This course is NCAA approved.

Environmental Science (Global Issues and Sustainable Solutions)  ½ Credit  
Grades 11, 12  20 Weeks  
Prerequisite – Students must have earned at least 2 credits of science credit and have passed 1 NYS Science Regents Exam.

This course aims to educate students about local, national, and global environmental issues including climate change, human population growth, natural resources depletion, food and water scarcity, energy, pollution, poverty, conflict, governance and sustainability. In short, this course focuses on Critical Thinking, Global Perspectives, Informed Actions, and Sustainable Solutions.

Students will:
- Explore environmental issues from scientific, social, political and economic points of view
- Be engaged in thinking critically about real and sustainable solutions to environmental problems

This course is NCAA approved.
Introduction to Forensics ½ Credit
Grades 11, 12 20 Weeks
Prerequisite – Completion of 2 Regents Credits in Science.
Do you ever wonder what it takes to be a Forensic Scientist? To solve crimes like Stabler and Benson? What really goes on behind that yellow crime scene tape? If you like watching Dexter, Bones, Criminal Minds or CSI, this class is for you. Learn the science behind solving crimes in this exciting hands on, laboratory based elective.

Students will:
• Learn how to problem solve and think abstractly while improving their observational skills
• Learn how to work collaboratively with a team to solve crimes
• Learn the steps taken to process a crime scene
• Learn how to analyze fingerprints, create footprint casts, interpret blood spatter patterns, test for blood types and analyze hair and fibers found at a scene
• Learn how human remains are used to discover information about a person
• Develop an understanding of how the Criminal Justice field uses firearm analysis and document analysis when solving a crime
• Use skills obtained throughout the course to solve a murder mystery as part of the final assessment

This course is NCAA approved.

Science in the Cinema ½ Credit
Grades 11, 12 20 Weeks
Prerequisite – Successful completion of 2 years of science (one living and one physical science preferred).
A firm grasp of scientific conceptual understanding in multiple areas is needed to be able to evaluate and dissect films to separate fact from fiction.
Delve into the mysteries of science as portrayed in popular Hollywood movies and learn to separate real science from science fiction. By providing the real science behind some of the ‘science’ concepts presented in movies, we will shift student roles from being passive viewers of movies to becoming active questioners of information and seekers of truth. Individual movies will be the anchors for units of study, and learning will include scientific research and publications, individual research using online resources, and group discussions and debates.

Students will:
• Gain a deeper understanding of scientific phenomena
• Examine the portrayal of scientific concepts in mainstream media
• Create contextual understanding of scientific phenomena
• Dissect popular movies to separate truth from fiction

** Films studied and resources used will vary, taking into account the results of a student interest survey administered in the beginning of the year, as well as the background knowledge of the instructor.

Science Lab Assistant ½ Credit
Prerequisite – Teacher selection and appointment only.
This pass/fail course is for students interested in some aspect of the Science field. The student will work with a teacher and will:
• Work in and maintain the Science Lab Prep Room
• Set up labs to be used in Science class
• Take down labs after the completion of the lab
• Maintain lab equipment in the Science classroom
• Any other duties as directed

The Advanced Sciences
Advanced Science courses are designed for high school juniors and seniors with an above average interest in science and an academic background in these sciences. A distinguishing characteristic of the Advanced Science program is that the student accepts a significantly large measure of responsibility for the achievement of his or her own academic goals in these courses.

Students being placed in the Accelerated Science Program after grade 7 will be expected to take the following courses and examinations:
Grade 8: Honors Earth Science (Earth Science Regents)
Grade 9: Honors Physics (Physics Regents)
Grade 10: Honors Chemistry (Chemistry Regents)
Grade 11: Advance Placement Biology (Living Environment Regents and AP Biology Exam)
Grade 12: SUPA Chemistry (Syracuse University Curriculum/Exams) or Advanced Placement Physics (AP Exam)

Students who do not meet the prerequisite requirements from Honors Physics into Honors Chemistry will be placed into Honors Living Environment.

Prerequisites below:
Acc. ES (Gr. 8) – Acc. Physics (Gr. 9) – H Chem (Gr. 10) – AP Biology (Gr. 11) – SUPA Chemistry or AP Physics (Gr. 12)

Criteria to continue in above sequence from H Physics into H Chemistry:
• 90 or above in Earth Science and Physics Courses, and
• 85 or above on previous Regents Exams in both
  Earth Science and Physics

Students not meeting above criteria would follow course sequence below:
  H Liv. Envir. (10) – H Chem. (11) – AP Science Course
  (Bio or Physics) or SUPA Chemistry (Gr. 12)

AP Biology* 1 Credit
Grades 11, 12 40 Weeks
Prerequisite – 85 or better in Living Environment and
Chemistry and 85 or better on the Regents Exams.
Recommended for students to have taken or be taking
Anatomy and Physiology.
The AP Biology course is one which is designed to be the
equivalent of a two semester college introductory biology
course which is usually taken by biology majors during
their first year of college. Students are exposed to higher
level biological principles, concepts, and skills and are
given the opportunity to apply their knowledge to real life
applications. The concepts of the course are organized
around biological principles called big ideas that are
studied throughout the entire course and focus on the
following topics: evolution, biological systems using
energy to maintain homeostasis for survival, passing
heritable information to provide continuity of life, and the
interaction of biological systems with biotic and abiotic
factors. The course aims to provide students with the
conceptual framework, factual knowledge and analytical
skills necessary to deal with the rapidly changing science
of biology.

Students will take the Advanced Placement exam in May.
College credit may be available if exam score meets
college requirements. A fee is required for this
examination.

Students will:
• Develop advanced inquiry and reasoning skills
• Design a plan for collecting data and analyzing it
• Apply mathematical routines to biological concepts
• Connect concepts in and across domains of the AP
  Biology course

Exam Fee: $98.00

*STUDENTS ARE REQUIRED TO STAY IN AP
CLASSES THE FIRST FIVE WEEKS OF THE
COURSE.
This course is NCAA approved.

SUPA Chemistry* 1 Credit
Grade 12 40 Weeks
Syracuse University Project Advance (SUPA)
Prerequisite – Mastery level attainment (85 or higher
on Regents Exams and courses) in Living
Environment, Chemistry, Algebra 2 and Geometry.
This is a Syracuse University Project Advance course
that combines CHEM 106/107/116/117 and earns 8
credit hours of college chemistry. Students who enroll
in the course are required to register for college credit
and must pay current rate of tuition*. Because of its rigor, abstract nature and emphasis on the
quantitative aspects of chemistry, it is recommended that
students have a strong mathematical background. They
must have successfully completed a high school
Chemistry course. The following general chemical
topics will be explored at the collegiate level:
stoichiometry, redox, atomic theory and structure,
bonding, states of matter, solutions, acids and bases,
kinetics, equilibrium, thermodynamics, electro-
chemistry and organic chemistry. Students will take the
SUPA Chemistry final exam in June and will receive 8
College Chemistry credits from Syracuse University for
the successful completion of this course.

Students will:
• Solve multistep chemistry related mathematical
  problems
• Recall past knowledge from various aspects of
  the course and apply it to new and unique
  chemistry related topics
• Develop and write formalized lab write-ups
• Conceptualize, interpret and explain the
  properties and reactions observed in terms of the
  structure and properties of atoms and molecules,
  including concepts of atomic structure,
  periodicity and bonding
• Explain how the chemical and physical properties
  of materials can be explained by the structure
and arrangement of atoms, ions and molecules and the forces between them
- Relate chemical reactions to molecular collisions, kinetics and equilibrium
- Understand the laws of thermodynamics and how the role of energy is related to the changes seen in matter

*Must register for SU Credit and pay current rate of tuition ($920/course).
**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of students in the class must be registered for credit which needs to be done within the first two weeks of class in September.

This course is NCAA approved.

SOCIAL STUDIES

Requirements for Graduation:
A student must complete four (4) credits of social studies to successfully meet requirements for graduation for a local or Regents diploma. These four (4) credits include Global 9, Global 10, US History 11 (American History since 1865 and Government), Participation in Government (1/2 credit) and Economics (1/2 credit).


Students must also pass BOTH the 10th and 11th grade Social Studies Regents exams to fulfill state requirements for graduation.

Elective courses are offered for students who wish to take five (5) credits in social studies. Also, a student may wish to experience a course as a prelude to a particular college course or career.

9 Global History & Geography 1 Credit
Grade 9 40 Weeks
Global History and Geography 9 is the first part of a two-year 9-10 course. Each student will be required to pass a New York State Regents Exam on 9-10 Social Studies at the end of the 10th grade. Through a study of geography, history, and political and economic systems, students will be taken chronologically across time from the period of Early Humans to the Age of Revolution. After a review unit, a school Final Exam in the format of a Regents Exam will be administered at the end of 9th grade.

Concepts related to geography, history, sociology, political science and economics will be taught through skill development focused on critical thinking; essay writing, using library resources, reading, map and chart interpretation, oral presentation and cooperative learning. Topics include Ancient and Classical Civilizations, Beliefs Systems, the Middle Ages, the Renaissance, Exploration, Reformation, and Absolutism.

This course is NCAA approved.

9 Global History and Geography Honors 1 Credit
Grade 9 40 Weeks
Prerequisite – 8th grade teacher recommendation and 90 or above average in Social Studies 8 required.
The concepts of change, choice, citizenship, culture, diversity, human rights, interdependence, justice and scarcity are some of those which will be studied in depth to teach the areas of Ancient and Classical Civilizations, Beliefs Systems, the Middle Ages, the Renaissance, Exploration, Reformation, and Absolutism. To take this course the student must be reading above grade level, writing good essays, and have exceptional social studies skills, such as library research, critical thinking, map, chart and graph interpretation, and independent learning. Each student will have to pass the Global Studies Regents on 9-10 grade content at the end of the 10th grade social studies. Since this includes writing essays, writing skills are critical and will be emphasized. Students should have a 90% overall average in eighth grade Social Studies and must pass the final exam with a minimum score of 90%.

This course is NCAA approved.

World History 1 Credit
Grade 9 40 Weeks
Prerequisite – Social Studies 8H, maintaining 90 average with recommendation, English 8H or English 8H/Humanities.
This class is a college/high school co-credit course for the serious academic student. 9th grade AP is the first of a two year World History course that will cover Beginnings of Man to c.1450 CE. An AP Exam will occur at the end of 10th grade, which can earn college credit.

Students will:
- Analyze primary and secondary source documents and formulate point of view and purpose references.
- Learn to critically analyze information through nine historical thinking skills and apply that information in multiple formats: Document Based Questions (DBQ’s), Long Essay Questions (LEQ’s), Short Answer Questions and Multiple Choice
- Be expected to keep up with a rigorous schedule of reading and assignments
- Take the AP Exam and Global History Regents Exam at the end of 10th grade.

This course is NCAA approved.
10 Global History & Geography 1 Credit
Grade 10 40 Weeks
Using political, social, economic, and geographic concepts, students will study history from the period of the Age of Revolutions (1750s) to present day. Students will study the areas of Europe, the Middle East, and the Third World.
Students should be reading on grade level or above. Students are expected to apply a conceptual approach to factual material and further develop skills such as evaluating primary sources, writing DBQ and thematic essays, and interpreting maps, graphs, and charts.
This course is NCAA approved.

10 Global History & Geography Honors 1 Credit
Grade 10 40 Weeks
Prerequisite – Global History 9RH and/or teacher recommendation. Students enrolling in this course are expected to be highly motivated. This is an intensive academic course that entails extensive reading, writing, and discussion. This course will be used to identify candidates for 11th and 12th grade AP courses and prepare them for college level expectations.
Among the major concepts followed through the year in the study of world history from the Age of Revolutions through Today are: choice, scarcity, citizenship, human rights, interdependence, culture, and technology. The Regents Honor student should demonstrate exceptional social studies skills and interests and be reading above grade level. Skills such as reading comprehension, developing a hypothesis from evidence, critical thinking, interpreting primary sources, historiography, essay writing (of multiple essays per quarter), note taking and term paper organization and research, and oral presentation skills will be stressed. Students will be subjected to rigorous reading and writing assignments that require them to analyze and synthesize complex material. Students take a Regents exam in June which tests 9th and 10th grade Social Studies skills, information, and concepts.
This course is NCAA approved.

AP World History * 1 Credit
Grade 10 40 Weeks
Prerequisite – World Grade 9 with at least an 85 average and teacher recommendation.
This is a college/high school co-credit course for the serious academic student. This course is a continuation of Pre-AP World Grade 9 and will continue to introduce students to college level material in World History that covers the time period from the 17th century through the present.
Students will:
• Highlight the nature of changes in the world history and their causes and consequences, as well as comparison among major societies.
• Learn to critically analyze information through AP History disciplinary practices and reasoning skills and apply that information in multiple formats: Document Based Questions (DBQs), Long Essay Questions (LEQs), Short Answer Questions (SAQs) and multiple choice.
• Students will explore several time periods and discuss change and continuity throughout the course.
• Students will develop skills necessary to arrive at conclusions based on informed judgement and to effectively communicate their findings through writing.
• Students must be strong readers, and capable of working independently; the demands on the students are equivalent to those made by college courses.
• Students are mandated to take the AP World History Exam in May that has a cost of $98.
• Students are also required to take the NYS Regents Exam in Global History and Geography in June as the final exam for the course.
Exam Fee: $98.00
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.
This course is NCAA approved.

11 U.S. History and Government 1 Credit
Grade 11 40 Weeks
In government this academic course emphasizes the Constitution and the three branches of American government. This history component focuses on United States History since 1865. Historic, economic, political, social and cultural aspects of this period to the present will be examined. This course will build upon previously learned skills such as reading comprehension, writing, and geography. Some independent study will also be expected and essay writing will be a major focus. The final exam is the 11th grade US History and Government Regents exam that is required for graduation.
*THIS COURSE WILL NOT TAKE THE PLACE OF PARTICIPATION IN GOVERNMENT AND ECONOMICS
This course is NCAA approved.
AP US History* 1 Credit
Grades 11, 12 40 Weeks
Teacher recommendation and minimum 85% on the Global Regents.
The AP US History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in US History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses.

Students will:
- Learn to assess historical materials and their relevance
- Interpret problems and to weigh historical evidence
- Present reasons and evidence clearly and persuasively in written and oral format
- Study political institutions, public policy, social change, cultural and intellectual developments, diplomacy and international relations and economic developments
- Utilize and develop historical thinking skills (chronological reasoning, comparison and contextualization, historical interpretation and synthesis and crafting historical arguments)

Students will take the Advance Placement exam in May for college credit. The amount of credit will be determined by the scores on this exam. Juniors will also take the Social Studies 11 Regents exam, which is required for graduation. A fee is required for the AP exam.

Exam Fee: $98.00
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.
This course is NCAA approved.

AP Economics* 1 Credit
Grades 12 40 Weeks
Prerequisite – Successfully passes US History Regents and course with an 85 average or an 80 average for AP and honors classes.

The focus of this course is on the institutions of government, political behavior and politics. Topics addressed include: Congress, Presidency, Courts, Political Parties, Interest Groups, Civil Rights, Civil Liberties, US Constitution, Federalism, Bureaucracy, Elections, Presidential Nomination Process, Voting Behavior, Political Participation, the Media and an in depth analysis of Conservatism and Liberalism. Studying current events enriches instruction and student understanding of the curriculum. AP United States Government and Politics is an alternative to the half year Participation in Government (PIG) and Economics courses. This college level class will prepare students studying Political Science, fulfilling a college distribution requirement in the social sciences, or preparing themselves for knowledgeably participating in our political system.

Students will:
- Understand the Constitutional basis of our government
- Achieve a high level of understanding of how the US political system operates, including its strengths and shortcomings.
- Further develop college-level reading, writing and analytical skills.
- Successfully complete the AP Exam in May as another means to earn college credit.

Students may concurrently take this course for OCC credit.
Exam Fee: $98.00
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.
This course is NCAA approved.

AP U.S. Government and Politics* 1 Credit
Grade 12 40 Weeks
Prerequisite – Successfully passes U.S. History Regents and course with an 85 average or an 80 average for AP and honors classes.

The focus of this course is on the institutions of government, political behavior and politics. Topics addressed include: Congress, Presidency, Courts, Political Parties, Interest Groups, Civil Rights, Civil Liberties, US Constitution, Federalism, Bureaucracy, Elections, Presidential Nomination Process, Voting Behavior, Political Participation, the Media and an in depth analysis of Conservatism and Liberalism. Studying current events enriches instruction and student understanding of the curriculum. AP United States Government and Politics is an alternative to the half year Participation in Government (PIG) and Economics courses. This college level class will prepare students understanding of the curriculum. AP United States Government and Politics is an alternative to the half year Participation in Government (PIG) and Economics courses. This college level class will prepare students
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.*

This course is NCAA approved.

**Participation in Government**  
**½ Credit**  
**Grade 12**  
**20 Weeks**

This exciting course will broaden students’ understanding of local, county, state and national governments as well as the issues confronting them as new voters. This will prepare them to be informed, involved, and responsible citizens. Students are required to actively participate in a minimum of five Academic Advisement events and one half-day event.  
**This course is NCAA approved.**

**Economics**  
**½ Credit**  
**Grade 12**  
**20 Weeks**

This required course of study is patterned after the new state mandate for 12th grade social studies. Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resources, how major decision-making units function in the U.S. and other national economies, and how an economy solves the scarcity problem through market and nonmarket mechanisms. Units covered in this subject area will include economics and economic systems, marketplace economics, components of economic systems, international trade, the stock market and the major variations of world trade. Academic “macro” economics is the primary curriculum core for this subject.  
**This course is NCAA approved.**

**Geography**  
**½ Credit**  
**Grades 10, 11, 12**  
**20 Weeks**

The main focus of this half-year course will be the five themes of Geography: location, place, human environmental interaction, regions and movement. As members of the Global Community in the 21st century, a better understanding and appreciation of other cultures will be a vital asset.  
**Students will:**

- Explore the earth, its natural phenomena and its weather patterns, by doing Web based projects
- Analyze the culture in which they live and compare this to other cultures around the world
- Have guest speakers from other cultures
- Examine different facets of world culture by use of National Geographic materials
- Gain significant understanding of the global community of which they are a part of
- Develop a greater appreciation for the world they live in

**This course is NCAA approved.**

**SOCIAL STUDIES ELECTIVES**

**Current Events**  
**½ Credit**  
**Grades 10, 11, 12**  
**20 Weeks**

In this course we will be looking at a variety of current issues. Having students become informed citizens in our global society is the main goal of this course. The current events of the time will determine the main focus of this class. Specific reoccurring issues, such as, crime, discrimination, globalization, and problems of mass society will be studied as the framework of this class. This course will give students the opportunity to analyze the forces that are affecting our lives now and in the future.  
**Students will:**

- Cover a wide range of subjects and connect to all areas of the curriculum.
- Build language, vocabulary, reading comprehension, critical thinking, problem solving, oral expression, and listening skills.
- Develop informed citizens and lifelong newsreaders. Studying current events helps students understand the importance of people, events, and issues in the news; it stimulates students to explore and learn more about the news, and to pay attention to the news they see and hear outside of school.
- Help teachers teach media literacy skills, as important today as any of the three R’s.
- Offer ideal opportunities for cooperative-group instruction, classroom discussions and debates, purposeful follow-up writing, and much more.

**This course is NCAA approved.**

**Multiculturalism and Diversity**  
**½ Credit**  
**Grades 10, 11, 12**  
**20 Weeks**

The primary focus of this course is to learn how people are affected by the perceptions of others. What difference does it make to be seen as “different” by society at large. Current events and historical examples are examined. In this respect, issues related to race, ethnicity, gender and gender identity, ability, sexual preference, age, income and religion are studies. Fundamentally, as students learn more about life in the United States, they learn more about themselves and the society they live in. it is always the instructor’s hope that student enrollment in this course represents all the diversity that CNS has to offer.  
**Students will:**
• Understand the significance of racism, sexism, homophobia, ageism, ableism and classism
• Improve observation skills to identify the five faces of oppression: exploitation, marginalization, powerlessness, cultural imperialism and violence
• Recognize the difference between prejudice and discrimination
• Enhance their multicultural understanding of American History
• Prepare themselves for life in a rich and diverse world

This course is NCAA approved.

American History Through Film ½ Credit
Grades 10, 11, 12 20 Weeks
This course will provide students with an opportunity to explore important topics in American history through the lens of film and television by viewing and analyzing historically accurate and critically acclaimed films about and from American history. In some instances grossly inaccurate films or excerpts might be used to demonstrate the often misleading portrayal of people, groups and events in American history.

Students will:
• Increase their content knowledge
• Better understand the “inter-thematic” relationship between patterns and trends in American history
• Understand the causes and effects of bias and perspective in popular media representations of historical content
• Evaluate the accuracy of various depictions of historical events
• Analyze the relationship between historiographic changes and popular media of various individuals and groups
• Evaluate whether changing television content is a result of or the cause of changing societal attitudes

This course is NCAA approved.

Modern European History (1900-present) ½ Credit
Grades 11, 12 20 Weeks
Modern European History is designed to show the history of Europe over the past 100 years through the use of key historical writing and foreign film. Students will also gain more insight into lesser studied but significant European events such as the Conflict in Northern Ireland and the Bosnian genocide.

Students will:
• Learn about Europe’s recent history from the European perspective
• Gain insight into European culture
• Take a unique look at familiar topics by studying them from a different point of view, i.e. WWII through the eyes of a German submarine crew or the Cold War from England’s perspective
• Develop critical thinking skills
• Expand their analytical and writing skills

This course is NCAA approved.

Psychology ½ Credit
Grade 10, 11, 12 20 Weeks
Travel into the human mind! Gain a greater understanding of human thought, emotion and behavior. Classes will select the areas they want to study: the brain, personality, conditioning, motivation, emotion, states of consciousness and psychological disorders.

Students will:
• View and analyze films
• Participate in discussion and debates
• Execute real life applications and projects
• Challenge their perspectives on psychological disorders and other aspects of human behavior

This course is NCAA approved.
AP Psychology*  
1 Credit  
Grades 11, 12  
40 Weeks  
The prerequisite for this course is an 80% or higher on either the Global History or US History and the Living Environment Regents exam. Need teacher recommendation.  
AP Psychology is a challenging, but rewarding course, which is the equivalent of college psychology 101. The course follows the curriculum laid out by the College Board, covering psychological perspectives, research methods, biological bases of behavior, sensation and perception, states of consciousness, thought, learning and memory, human development and personality, psychological and intelligence testing, motivation and emotion, social psychology, stress, as well as psychological disorders and treatment.  
Students will:  
• Participate in class discussions and debates  
• Design and conduct their own psychological experiment  
• Analyze films  
• Participate in class demonstrations of key concepts  
• Read and analyze original research studies  
• Participate in group and individual activities  
This is a college freshman level course. Students will work at an advanced AP Level and will take an Advanced Placement exam in May. College credit may be available if exam score meets college requirements. A fee is required for the AP examination.  
Exam Fee: $98.00  
*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.  
This course is NCAA approved.  

SUPA Sociology  
½ Credit  
Grade 12  
20 Weeks  
Sociology is the study of social life, social change, and the social causes and consequences of human behavior. This course will investigate the structure of groups, organizations, and societies, and how people interact within these situations.  
Students who successfully complete this course have the option of earning three or four credit hours through Syracuse University Project Advance (SUPA) Program.  
Students will:  
• Participate in class discussions and debates  
• Design and conduct their own sociology experiment  
• Analyze films  
• Participate in class demonstrations of key concepts  
• Read and analyze articles and write article summaries  
• Participate in group and individual activities  
*Must register for SU credit and pay current rate of tuition ($345/$460/course).  
**In order for any students to receive Syracuse University Project Advance Credit (SUPA), more than 50% of the students in the class must be registered for credit which needs to be done within the first two weeks of class in September.  
This course is NCAA approved.  

Sociology  
½ Credit  
Grades 10, 11, 12  
20 Weeks  
Sociology is the study of human social behavior. This course is an opportunity to explore the causes and consequences of human behavior. Sociology will help you see the world around you from a completely new perspective and prepare you for life after CNS.  
Students will study:  
• Culture, social norms and socialization  
• Gender roles and sexism  
• Deviance  
• Inequalities of race and ethnicity  
• Institutions and media literacy  
• Conformity and authority  
• Important social issues and current events  
This course is NCAA approved.  

Modern Civics  
1 Credit  
Grades, 10, 11, 12  
40 Weeks  
This course will introduce and challenge students to the benefits of being a proactive citizen through the use of 3D printing technology. The objective of the course is to provide assistance to children who are missing fingers or hands due to war, disease, or birth defects by printing 3D prosthetic hands from crowd-sourced designs. During their time in the course students will make contact with potential recipients, communicate with volunteers around the world to share and use design files/ideas, scale and then fit 3D prosthetics, to fit specific individual needs of recipients, assemble and test hands, ship the completed hand to the recipient, and then follow up with potential modifications.  
Students will:  
• Provide an opportunity for a global community of like-minded students who will collaborate with each other and share e-NABLE inspired ideas, experiences, curriculum, and best practices through online discussions and an open-source file repository  
• To motivate youth to become involved in the e3STEAM and e-NABLE communities, thus providing them with an inspirational 21st century model of the power of collaboration, creativity, critical thinking, service, and technology
• Empower young people to become agents of positive change in their own lives and in local and global communities by virtue of their involvement in the building and receiving 3D printed hands
• Assist informal and formal education organizations in the creation of 3D printed hands and devices and to get them to those who need them
• Continue our school’s membership in the e-NABLE Community Chapter in order to allow families and potential recipients to find classrooms and students to help make their own 3D prosthetic device
• Build alliances with aid workers in war-torn regions, disaster zones, and impoverished communities where inexpensive and easily attainable prosthetics are needed

STAGE PRODUCTION

Fundamentals of Design for Theatre  
1 Credit
Grades 9, 10, 11, 12  
40 Weeks
Prerequisite: None
A good live performance seems effortless and natural, drawing you in to its setting and mood. This happens when everything goes right and every detail is in the proper place from the trained actors to the intricate set design to the hard-working crew. Have you ever wondered how all the magic happens? This course covers a brief history of theatre architecture and stage technology, the stage and its equipment, scenic design, an introduction to lighting and sound design, construction techniques, and costuming. Specific emphasis will be on the use of color and artistic choices to communicate effectively on stage.

Students will:
• Familiarize oneself with the elements of design in theatre
• Create a new set design for a classic play with your own twist
• Incorporate the current fall and spring play for analysis and design
• Develop your visual communication skills and personal artistic style
• Build self-confidence in your creative abilities and perceptions

Live Event Production 1  
1 Credit
Grades 10, 11, 12  
40 Weeks
Prerequisites: Accepted into the 4D Productions program
Students will explore the basics of live events that take place in our secondary school auditoriums, including our Talent Shows and Musical events. Learning the fundamentals of communication, solid work ethic, and teamwork, students will attain relevant technological skills in staging, lighting, sound and video. Participants will thoroughly train on a specific crew’s equipment, and successfully work several events during the year.

Students will:
• Receive group instruction for foundational content
• Work on real productions for large audiences
• Be responsible for project-based learning
• Run the CNS and JHS Auditorium
• Work on short and long-term plans for the spaces, including new equipment proposals, implementing new technology, maintaining and upgrading the facility
• Use state of the art equipment to improve all functions of the space
• Need to think outside the box to solve complex problems
• Practice employability skills: commitment, independence, timely work, positive attitude, adapting to change, taking constructive criticism, and being safe at all times
• Work on specific industry skills for possible employment in the field
• Build an impressive resume of work experiences for college

An additional ½ credit can be awarded to students completing 150 hours of Work Based Learning OR an additional 1 credit can be awarded to students completing 300 hours of Work Based Learning.
Live Event Production II 1 Credit
Grades 11, 12 40 Weeks
Prerequisites: Accepted into the 4D Productions program, Live Production 1, Fundamentals of Design for Theatre
Students will explore the mastery of live events that take place in our secondary school auditoriums, including our Talent Shows and Musical events. Using their knowledge of the crew procedures and relevant equipment, students will dive deep into how to incorporate the latest technological advances to improve all district events.

Students will:
- Work on real productions for large audiences
- Train how to lead a crew and build community
- Be expected to take leadership roles such as a crew manager or assistant manager
- Build budget proposals, manage finances, run marketing campaigns
- Explore new avenues of revenue, book new talent at our venues
- Communicate effectively using email, staff events using invites on Google Calendar
- Work on short and long-term plans for the spaces, including new equipment proposals, implementing new technology, maintaining and upgrading the facility
- Use state of the art equipment to improve all functions in the space
- Travel back to RRMS or GRMS to assist with building their programs, organize their crews, and volunteering for their productions
- Practice employability skills: commitment, independence, timely work, positive attitude, adapting to change, taking constructive criticism, and being safe at all times
- Understand the psychology of management, hierarchy and the pitfalls of power
- Work on the industry skills for possible employment in the field

An additional ½ credit can be awarded to students completing 150 hours of Work Based Learning OR an additional 1 credit can be awarded to students completing 300 hours of Work Based Learning.

Sound Design: Show Mixing & Recording ½ Credit
Grades 10, 11, 12 20 Weeks
Prerequisites: Accepted into the 4D Productions program, Fundamentals of Design for Theatre
For Live performances: If you don’t have good sound, you don’t have a performance. Imagine going to a concert that featured eye-popping lighting effects, complex staging with moving truss, video screens bigger than CNS... but there was no sound. I think you’d want a refund. Bottom line: Sound is the foundation in which a show can build upon. A good sound designer knows his audience, the equipment he works with and understands the scope and vision of the performance. In this class, students will learn basics of sound design as they learn the ins and outs in this industry. It’s not all fancy equipment that makes a great show. It’s a plan made by a team of sound workers who can exquisitely control every aspect of what is heard.

Students will:
- Mix live sound on professional theatrical equipment used around the world
- Have opportunities to run all the auditorium events for NSJHS and CNS
- Comprehend universal audio properties while realizing the artistic nature of design
- Learn how to run a professional sound check
- Setup and run large and small sound systems for real events in and outside of school
- Understand Sound Waves, Frequency Response, Microphones, Speakers, and Dynamic Range
- Experiment with Gain Structure, Calibration and Mixing at Unity
- Understand Distortion, Impedance, Preamps, Amplifiers, Delay, Reverb and other Signal Processing for both analog and digital systems
- Practice proper cabling techniques, soldering and repair of various cables
- Understanding Signal Processors, Inputs and Outputs, Summation and Perception
- Learn computer software for networking and recording such as Studio One and Dante
- Edit audio products for networking and recording for NSJHS, CNS and the community
- Use State of the art sound systems, microphones, and line array systems
- Learn workplace safety in regards to decibel levels, proper cabling and load balance
- Design sound plots, place microphones and speakers, mix and run shows

An additional ½ credit can be awarded to students completing 150 hours of Work Based Learning.
Lighting Design and Stage Lighting ½ Credit
Grades 10, 11, 12  20 Weeks
Prerequisites: Accepted into the 4D Productions program, currently enrolled or completed
Fundamentals of Design for Theatre
Lights, Camera, Action! There’s a reason that lights are called first. Without professional lighting, plays would be in the dark, concerts would be boring and this course wouldn’t exist.
In this class, students will learn the basics of lighting design as it relates to the stage and live performances. Lighting is more complex than you think. A good lighting designer uses all her tools to take the production to the next level.
Students will:
• Create lighting designs on professional theatrical equipment used around the world
• Realize the artistic nature of design and implementation
• Appreciate the composition elements: Line, Scale, Movement, Light, Color, Texture
• Experiment with the principles of Composition: Harmony, Contrast, Variation, Emphasis and Gradation with both classic instruments and LED lighting
• Understand the language of color: Hue, Value, Chroma, Additive/Subtractive Mixing
• Work with the CNS Drama Club and JHS Drama Club to produce their shows
• Learn computer-aided drafting using industry software such as Vectorworks and CAD
• Learn how to light actors, the acting area and background using different angles and direction of light
• Use state of the art instruments such as moving head lights and other automated LED lighting
• Learn workplace safety in regards to electricity, lasers, and other special effects
• Design light plots, hang lights, run wire for power DMX, focus lights and run shows
An additional ½ credit can be awarded to students completing 150 hours of Work Based Learning.

Film & Screen Design (2021-2022) 1 Credit
Grades 10, 11, 12  40 Weeks
Prerequisites: Accepted into the 4D Productions program, or recommended by Video Production 1 staff or Intermediate Photography staff with an 85% minimum average.
Looking through the camera eye is quite different from our natural perspective. The complex world of video design, production, and editing is constantly changing. New challenges abound with changing technology, higher resolutions, larger files and sophisticated networking and storage.
Students will:
• Build upon a foundational knowledge of video equipment and media
• Focus on skit writing for comedic and dramatic purposes
• Work live productions as videographers, technical directors, media loaders, color graders, and live mixing
• Learn how to call cues live to a team of videographers
• Create individualized projects such as stop-motion, short films, all supporting NSCSD
• Assist with advertising upcoming events for various school functions, clubs and staff members
• Work with athletic department to showcase the district’s athletic programs
• Develop video packets for news broadcasts in school and professional media outlets
• Be involved with several large district projects, including “We are NSCSD” an annual video project for the staff’s “Opening Day” celebration, and the Teacher of the Year video project
• Edit efficiently for a fast turn around using Premiere, Final Cut, After Effects, and Photoshop
• Meet guest speakers from the local industry and Boston’s famous WBGW Television Station
• Work real community events such as Syracuse’s Jazz Fest and the NYS Fair
• Internships available for top students with local media outlets and the Greater Syracuse Soundstage Development Corp
An additional ½ credit can be awarded to students completing 150 hours of Work Based Learning OR an additional 1 credit can be awarded to students completing 300 hours of Work Based Learning.
Technology requires basic skills such as problem solving, face-to-face communication, public relations, teamwork, listening to others, creative thinking, self-esteem, goal setting, motivation, negotiation, leadership, and computer literacy. These courses provide a window for students to view how technology is developed, used and monitored; how it meets needs and wants; and how it originates from knowledge. Technology attempts to bring together the workplace and the academic world. Students are given the opportunity to discover and experiment with their abilities. Most importantly, Technology Education attempts to provide students with a realistic self-appraisal of their goals and aspirations. Our goal is to help students learn how to learn. Students who do not choose to major in technology are still encouraged to select individual courses.

**TECHNOLOGY COURSE OFFERINGS**

**Transportation**
- Transportation (cars, boats & planes) ½ Year
- Aviation and Aerospace ½ Year
- Consumer Auto (car maintenance & repair) ½ Year

**Metal Working**
- Build-it with Metals (basic metalworking) ½ Year
- Welding ½ Year

**Wood Working**
- Build-it with Wood (basic woodworking) 1 Year
- Advanced Woodworking ½ Year
- Residential Technology (house construction & repair) ½ Year
- Production Systems ½ Year

**Computer Technology**
- Computer Aided Technologies 1 ½ Year
- Computer Aided Technologies 2 ½ Year
- Communication Systems ½ Year

**Drafting**
- Architectural Drawing (pencil drafting) ½ Year
- CADD 3Dimensional (solid modeling) ½ Year
- CADD 2Dimensional (computer drafting) ½ Year

**Electronics/Electricity**
- Electricity ½ Year
- Digital Electronics 1 Year
- College Credit – 3 Hrs. / Third year of HS Math Credit

**PROJECT LEAD THE WAY COURSES**

**PRE-ENGINEERING**
- Digital Electronics 1 Year
- College Credit – 3 Hrs. / HS Math Credit
- Principles of Engineering 1 Year
- Science/Math Credit College Credit – 3 Hrs
- Computer Integrated Manufacturing 1 Year
- College Credit – 3 Hrs.
- Engineering Design and Development 1 Year
- Civil Engineering & Architecture 1 Year
- College Credit – 3 Hrs.
- Design and Drawing for Production B 1 Year
- College Credit – 3 Hrs.

**Communication Systems** ½ Credit
- Grade 9 20 Weeks
- Students will be introduced to visual, audio, and multimedia communications technology. In visual, students build their own cameras, use a darkroom, experience portrait and commercial photography, work with digital cameras and image scanners. In audio, students will create their own “sound mixes” for cassette and CD recordings. Students will use video cameras to create multi-media productions. Computer use will be a vital part of the course.

**Students will:**
- Use digital photography and software (Photoshop).
- Produce digital, audio and video recordings
- Programs used: Photoshop, Adobe Premiere, iMovie and Movie Maker.
Computer Aided Technologies 1 ½ Credit
Grade 9 20 Weeks
Students will work together, with the aid of computers, multimedia, and hands-on activities exploring technology, their related careers and developing skills in the following areas: research and design, renewable energy, construction, basic electricity, industrial control, pneumatics and mechanisms, robotics and automation.

Students will:
- Experience a course designed to meet STEM standards.
- Work independently in a self-directed environment as well as collaborate with other students.

Transportation Systems ½ Credit
Grade 9 20 Weeks
This course explores the basic systems of marine, land and aerospace transportation technology and related careers. Activities have included: rocket design and construction, maintenance and repair of small engines and other yard equipment, racing of a magnetically levitated vehicle and other projects related to the transportation industry.

Students will:
- Learn the principals and theories of flight through model construction.
- Explore the operations of an internal combustion engine.
- Design and create magnetic levitation vehicles
- Design and create marine modes of transportation.

Design and Drawing for Production A 1 Credit
Grade 9 40 Weeks
Students will develop freehand sketching and technical drafting techniques to analyze and describe constructible objects and shapes. This course fulfills Art requirement.

Students will:
- Learn the principals of architectural drawing.
- Utilize the basics of mechanical drawing
- Create computer drawing using AutoCad.

TECHNOLOGY ELECTIVES

Production Systems ½ Credit
Grade 9 20 Weeks
This class is divided into two major units. The first unit deals with residential (home) construction. Students will explore the many stages and aspects of building a residential structure in sequential order. The second unit is devoted to a simulated manufacturing or production system. Students will select and design a product that they wish to mass-produce.

Students will:
- Explore many trades involved with residential construction.
- Residential fields will include: foundations, framing, roofing, plumbing, electrical work and HVAC.
- Use problem solving skills to create a mass produced product.

Architectural Drawing ½ Credit
Grades 10, 11, 12 20 Weeks
Architectural Drawing is an introductory course in residential architectural drafting and design using traditional drafting tools. Students will draw on drawing tables to complete the task of home design.

Students will:
- Demonstrate how to use basic drafting tools.
- Design and draw a home of your dreams.
- Learn how to plot land and design your property landscaping.
- Leave with a portfolio of drawings.

Build-it with Metals ½ Credit
Grades 10, 11, 12 20 Weeks
Build-it with Metals is a project oriented course offered to students who are interested in the metalworking and or mechanical technology fields, such as machinist, industrial fabricator, and metal worker. Students planning to attend college for engineering or engineering technology will also benefit from the hands-on-experience.

Students will:
- Learn how to work with sheet metal, band iron, steel and aluminum to complete several metal projects.
- Make several projects including: tool tote, candle holder and own personal projects.
- Learn how to braze weld, MIG weld, spot weld.
- Incorporate design elements into their projects.
Build-it with Wood  
Grades 10, 11, 12  
40 Weeks

This is a wood working course where through a series of hands on projects students will learn how to use a variety of tools and machines. At the end of the course, students will come up with their own project that they want to build.

**Students will:**
- Build various wood projects. Some of the projects students can choose from include a chess board, tool box, camping stool, wooden games, canoe paddle, wooden bowl and wooden pens to name a few.
- Learn how to use a pocket hole jig to build furniture like cabinets, table and chairs.
- Learn how to use and maintain wood working machines and tools including the table saw, band saw, lathe, scroll saw, belt sander, planer and jointer.
- Learn how to draw isometric and orthographic drawings.
- Learn how to build a project by looking at a set of technical drawing.

Advanced Woodworking  
Grade 11, 12  
½ Credit  
20 Weeks

Pre-requisite: Build-it with Wood

Note: There may be a fee associated with materials specific to individuals’ project choices.

This course will build on the skills learned in the Build-It with Wood course. The course will emphasize individualized projects using the lathe, cabinetry and furniture making techniques, and learning about how to estimate jobs and learn what is involved in running a personal woodworking business.

**Students will:**
- Make a project on the lathe (Examples: Baseball bat, Bowl or a Pen)
- Use advanced skills to build furniture/cabinetry projects
- Use a CNC Router to make an inlay on a project

Residential Technology  
Grades 10, 11, 12  
½ Credit  
20 Weeks

This is a hands on course that students learn how to do basic home repairs. Students will learn how to install and repair home plumbing, electrical, sheet rock, framing, baseboard and crown molding.

**Students will:**
- Learn how to frame a house using 2x4’s.
- Using torches, you will learn how to solder copper pipes.
- Learn how to wire outlet, switches and lights.
- Learn how to hang and mud sheet rock.
- Learn how to repair holes in sheet rock.
- Build a scale model of a shed.
- Cut molding for various applications.

Computer Aided Design and Drawing 2D  
Grades 10, 11, 12  
½ Credit  
20 Weeks

Computer Aided Design and Drawing 2D is 2 dimensional drawing using the computer as the tool for communicating ideas and designs, utilizing state of the art computer software (AutoCAD 2016). Whether you are thinking of Architecture or the Engineering fields, 2D CAD experience will be incredibly valuable and could also be used to gain a job from the experience gained in the class.

**Students will:**
- Learn the basics of CAD 2D software.
- Learn to read drawings and blueprints.
- Gain job ready skills in technical drawing and detailing.

Computer Aided Design and Drawing 3D  
Grades 10, 11, 12  
½ Credit  
20 Weeks

Computer Aided Design and Drawing 3D is an introductory course in using solid modeling software. Inventor and Revit Architectural are two of the premier 3D modeling software used by engineers, designers and architects. Students interested in engineering, architecture or drawing and design will find this course valuable and useful in their pursuits.

**Students will:**
- Learn Inventor 3D Modeling and Revit Architectural software.
- Design items for manufacturing.
- Design a dream bedroom
- 3D print a custom designed project.

Students enrolled in the Project Lead The Way curriculum must have taken Design & Drawing for Production and Technology in grade 9. This course will give the basic skills needed for Project Lead the Way Courses.
Consumer Auto  
Grades 10, 11, 12  
20 Weeks
Do you like working on cars? Do you like working with your hands? This is a basic course that every young student, male or female, should take if they ever plan on driving. This course will provide you with a thorough understanding of the design, construction, and operation of automotive systems.

**Students will:**
- Learn how to do oil changes, brake maintenance, tire rotations and engine diagnostics.
- Develop and enhance tool identification specific to the automobile
- Develop skills in the electrical and suspension system.
- Demonstrate how to disassemble a “whole engine”.
- Learn different alternate fuels and how cars run on bio-diesel, hydrogen, hybrid and straight vegetable oil.

Electricity  
Grades 10, 11, 12  
20 Weeks
This is a very hands on course learning the basics of electricity and how electricity work. Students will build circuits on circuit boards learning about LED’s, resistor and capacitors, all electrical components which make up a credit.

**Students will:**
- Learn how to build an alarm with basic electrical components.
- Create a car that travels across a magnetic electric track.
- Build a boat with a circuit to travel across the school pond.
- Design, construct and race a vehicle that you build from wood implementing circuits to create movement.

Transportation B  
Grades 10, 11, 12  
20 Weeks
This is a very hands on course that explores all facets of transportation; Land, Air, Sea and Space with many projects. This course will explore math, science and technology all implemented through projects.

**Students will:**
- Understand the physics of space by making “rockets” through design and launching.
- Create projects on boat building and sailing.
- Develop and build cars that crash on a track understanding “crumple zone”
- Identify fuel value through the creating of a “water bottle rocket”
- Learn how to use flight simulator on the computer to understand the basic principle of flight.

Aviation and Aerospace  
Grades 10, 11, 12  
20 Weeks
Note: There is a fee associated with the exam
This course will introduce students to basic aircraft and unmanned aerial systems, structures and their major components, principals of flight, and the fundamental physical laws affecting flight. This course will introduce the main systems found on larger and smaller airplanes and unmanned aerial systems. Successful completion of this course will prepare students to take the FAA Part One 107 exam to receive their commercial drone license.

**Students will:**
- Learn the principles of flight through hands on airplane construction and testing (build airplanes and fly them)
- Conduct experiments to understand the forces of aerodynamic flight (put airfoils and airplanes in a wind tunnel and measure the forces of lift and drag)
- Prepare for the FAA Part One 107 exam to become a licensed drone pilot
- Build and fly small drones for competition
- Understand basic flight planning within the FAA regulations
- Understand weather that allow unmanned aviation systems to fly
- Know the career pathways available to Remotely Piloted Aircraft Systems (RPAS) Technology
Welding Technology ½ Credit
Grades 10, 11, 12 20 Weeks
Students are introduced to the basic welding processes including gas, arc and MIG welding. They begin by learning the safety and setup procedures connected with welding. They develop their ability with each type of welding, as well as the various positions that welders work in. Other machines and tools that welders commonly use will also be demonstrated.

Students will:
- Be able to read a drawing
- Measure accurately
- Learn basic welding skills and terminology
- Prepare them for additional technology courses like “Build-it with Metals”.
- BOCES
- Entry level welding job
- Technical schools

Automation and Robotics ½ Credit
Grades 10, 11, 12 20 Weeks
This is a beginning course in robotics. We will be utilizing various Robot platforms and software. The objective of this course is to introduce the student to basic programming as well as problem solving strategies. This course will involve students in the development, building and programming of robots. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, timing, program loops, decision-making, timing sequences, and propulsion systems. Student designed robots will be programmed to compete in various obstacle courses and competitions seen in local and state robotics competitions.

Students will:
- Work hand-on in teams to design, build, program and document their progress.
- Learn basic robot programming language and software.
- Design and build robots to perform basic tasks.
- Work in groups to solve problems using robots.
- Compete with classmates on robotic solutions.

Project Lead the Way (PLTW) Electives

Pre-Engineering
Design and Drawing for Production B 1 Credit
Grade 9 40 Weeks
Prerequisite: Students should have an 80 or better in Honors Algebra or an 85 or better grade 8 Math.
This course meets the requirements for 1 credit of Art for all students and can be used in either a 5 unit Art or Technology sequences.
Students will develop engineering problem solving skills. The main purpose of this course is to experience through theory and hands-on activities what engineering is all about and to answer the question, “Is a career in engineering for me?”

Students will:
- Utilize the basics of mechanical drawing and 3D sketching
- Use Auto Desk Inventor to design and create 3D drawings
- Use 3D printing technology to prototype student drawings
- Fulfills Art requirement and can earn college credit

RIT College credit is available for this course.

Computer Integrated Manufacturing 1 Credit
Grades 10, 11, 12 40 Weeks
Concurrent enrollment in Geometry
CIM is a course that applies principles of rapid prototyping, robotics, automation and the high tech world of manufacturing. This course builds upon the computer solid modeling skills and the engineering design process developed in Introduction to Engineering Design.

Students will:
- Use computer controlled rapid prototyping machine
- Operate a CNC milling machine
- Construct models of their three-dimensional designs
- Learn the fundamentals of robotics and how this equipment is used in an automated manufacturing environment.
- Evaluate their design solutions using various techniques of analysis, and make appropriate modifications before producing their prototype.
- Design and print a 3D model.

RIT College credit is available for this course.
Civil Engineering and Architecture 1 Credit
Grades 10, 11, 12 40 Weeks
PLTW Course – College Credit (R.I.T.)
This course provides an overview of the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. Half the course will focus on Civil Engineering and the other half will focus on Architectural Engineering.

Students will:
- Design and test 3D models using the latest architectural software.
- Solve real world problems through hands-on projects and activities.
- Plan and develop a commercial property.
- Test soil for its compositional make-up.
- Use surveyors equipment.
- Design your future home in 3D Architectural software.

RIT College credit is available for this course.

Digital Electronics 1 Credit
Grades 10, 11, 12 40 Weeks
This is a Project Lead the Way course that students can receive college credit from RIT and use the course as a high school math credit. In this course, students complete a series of labs learning how to build circuits on both the simulation software and then wiring them on a bread board. Students will get both the theory and hands on experience in this course learning about logic gates, latches, flip flops, digital counters and state machine circuits.

Students will:
- Design and build circuits using the software program “multicim”.
- Wiring circuits on bread boards using various IC chips and components then testing them.
- Learn how to trouble shoot circuits and fix them.
- Learn how different electronic components work.
- Learn how to count and convert numbers to different number systems including binary, octal and hexadecimal.
- Use a multi meter to measure voltage, current and resistance.

Engineering Design and Development 1 Credit
Grade, 12 40 Weeks
Prerequisite: Design and Drawing for Production and Technology B, Digital Electronics, Principles of Engineering, Computer Integrated Manufacturing
In this course, students will work in teams of two to four to first identify a problem and then design and construct the solution to that problem, applying the principles developed in the four preceding courses. The problem may be selected from a database of engineering problems, or be a recognized national challenge or be an original engineering problem identified by the team and approved by the teacher. The problems will involve a wide-range of engineering applications. Students will maintain a journal as part of a portfolio of their work. Each team will be responsible for delivering progress reports and making final presentations of their project to an outside review panel.

Students will:
- Work on a team of 2 or 3
- Research real world problems
- Design and solve a problem of their choosing using 3D modeling software.
- 3D print a possible solution to their problem.
- Construct an actual working model of their solution
- Develop skills they will be using in college
- Independent self-directed work environment.

Principles of Engineering 1 Credit
Grades 11, 12 40 Weeks
This is a Project Lead the Way course that students can receive college credit from RIT and use the course as a high school math or science credit. It is a general engineering course that covers a wide range of engineering fields including civil, mechanical and electrical to name a few. Students will do a wide range of hands on activities while learning about various engineering fields.

Students will:
- Design and build bridges.
- Design and build catapults
- Learn basic computer programming
- Designing, programming and building a machine that can automatically separate different colored marbles using the computer and Fischer Tech.
- Research possible colleges that you can attend for a degree in engineering.
WORLD LANGUAGES

Graduation Requirements:
Students graduating in 2021 must earn one high school credit for a Regents Diploma.

Regents Diploma Requirements: One high school credit is earned by passing the Checkpoint A Exam at the end of eighth grade. If a student does not take the Checkpoint A Exam, he/she must pass one year of a high school World Language in order to meet minimum graduation requirements.

Regents Diploma with Advanced Designation Requirements: Candidates must successfully complete a sequence of 3 units of credit AND pass a Checkpoint B Exam in a World Language, which is given at the end of Level 3 of each language.

Seal of Biliteracy
Students enrolled in Spanish and French 5 have the opportunity to earn the Seal of Biliteracy, provided certain criteria have been met during their junior year concerning their performance in English and their chosen World Language. The Seal of Biliteracy is a formal recognition of a student’s high level of proficiency in reading, writing, listening and speaking (in English and in an additional World Language). This distinction on your high school transcript and diploma specifically:

- Shows your commitment to World Languages and cultural awareness
- Provides universities with a method to recognize and give you credit for attainment of high level skills in multiple language
- Demonstrates to colleges and future employers that you are proficient in English and an additional World Language
- Prepares you with 21st Century skills that will set you apart in the labor market and the global society
- Recognizes the value of language diversity and honors the multiple cultures, heritages and languages in our communities

Level 1B, Grade 8
(French and Spanish) 1 Credit 40 Weeks
Prerequisite – Level 1A
In this course of study, students will continue to develop the basic communication skills of listening, speaking, reading and writing in French or Spanish. Students learn to say and write more about themselves, their family and their friends. Skills that students will continue to develop include:

- Listening to information and announcements
- Speaking informally with peers and adults
- Reading information on forms, signs, labels, programs, timetables, maps and menus
- Writing informal notes for communications in everyday life situations.

As per district policy, students must pass the course and the Final Exam in order to receive one unit of credit. Students are required by the State of New York to earn 1 credit in a second language to graduate.

This course is NCAA approved.

Level 2, Grade 9
(French and Spanish) 1 Credit 40 Weeks
Prerequisite – Level 1
In this course, students continue to develop the basic communication skills of listening, speaking, and writing in French and Spanish. Topics that students discussed in Level 1B are expanded upon. At the end of this course a local exam is administered to all students.

Note: In grades 10, 11, 12, only Spanish I and Spanish II is offered. There is no French I or II at CNS High School.

This course is NCAA approved.

Cultural Spanish
Grades 9, 10, 11, 12 1 Credit 40 Weeks
Students will begin to develop the basic communication skills of listening, speaking, reading and writing in Spanish. Emphasis will be placed on the vocabulary and culture of the Spanish-speaking world. This course meets the minimum graduation requirement in World Languages.
Spanish 1  1 Credit  
Grades 9, 10  40 Weeks  
In this course, students will begin to develop the basic communication skills of listening, speaking, reading and writing in Spanish. This is the first course in a three year sequence, ending with the NSCSD Comprehensive Exam at the end of Spanish 3.  
This course is NCAA approved.

Spanish 2  1 Credit  
Grades 10, 11  40 Weeks  
Prerequisite – Spanish 1  
In this course, students continue to develop the basic communication skills of listening, speaking, reading and writing in Spanish. Topics that students discussed in Level 1B are expanded upon. At the end of this course a local exam is administered to all students.  
This course is NCAA approved.

Spanish 3  1 Credit  
Grades 10, 11, 12  40 Weeks  
Prerequisite – Spanish 2  
In this course, students improve their listening, speaking, reading and writing proficiencies in Spanish. They learn to discuss the topics covered in Level 2 in more depth. The situations in which you will learn to function include listening to short presentations given in person, on radio or on television, speaking in group conversations and discussions with peers and adults, and reading and reacting to short stories from various texts.  
STUDENTS IN SPANISH WILL TAKE THE NSCSD COMPREHENSIVE EXAM IN JUNE.  
This course is NCAA approved.

Spanish 4  1 Credit  
Grades 11, 12  40 Weeks  
Prerequisite – Spanish 3 or teacher recommendation  
In this course, students will refine their listening, speaking, reading and writing proficiencies as well as expand their cultural awareness in the French or Spanish languages. Students will:  
- Be eligible to earn up to 6 college credits from SUNY Oswego and/or Adelphi University  
- Explore various countries through food, geography and the arts  
- Listen to current international podcasts and music  
- Watch international movies with reflective discussion  
- Experience cultural differences through YouTube and other media  
- Make informal oral presentations  
- Read an abridged version of a classic literary piece for cultural appreciation  
- Compose short samples of expository or creative writing  
Eligible for college credit, see page 74. This course is NCAA approved.

Spanish 4 Honors  1 Credit  
Grade 11  40 Weeks  
Prerequisite – Successful completion of Spanish 3H and/or teacher recommendation.  
In this course, students will develop more sophisticated communication skills in all four areas – listening, speaking, reading and writing – with the emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students will:  
- Be eligible to earn up to 6 college credits from SUNY Oswego and/or Adelphi University  
- Explore various countries through food, geography and the arts  
- Listen to current international podcasts and music  
- Watch international movies with reflective discussion  
- Experience cultural differences through YouTube and other media  
- Make informal oral presentations  
- Read an abridged version of a classic literary piece for cultural appreciation  
- Compose short interpersonal writings  
- Practice simulated conversations  
- Describe, summarize and discuss selected upper level themes and topics  
Eligible for college credit, see page 74. This course is NCAA approved.
Spanish 5 1 Credit
Grade 12 40 Weeks
Prerequisite – Spanish 4 or teacher recommendation
This course is an extension of Level 4 wherein students will continue to refine their listening, speaking, reading and writing proficiencies as well as expand their cultural awareness in the French or Spanish languages.
Students will:
- Be eligible to earn up to 6 college credits from SUNY Oswego and/or Adelphi University
- Participate in hands-on activities in food, crafts and other artistic expressions based on different time periods and cultures
- Read and enjoy activities revolving around genres that exist in all cultures (ie. Fables, proverbs) and create originals
- Learn how to use resources available online and in print for linguistic and grammatical accuracy
- Gain a competitive edge with exposure to art, music, cinema and literature over other language students one will meet in the coming years

Eligible for college credit, see page 74.

French 3 1 Credit
Grades 10, 11, 12 40 Weeks
Prerequisite – French 2
In this course, students improve their listening, speaking, reading and writing proficiencies in French. They learn to discuss topics covered in Level 2 in more depth, in addition to new units, cultural aspects, and grammatical concepts. Practice will consist of listening to and giving short presentations, speaking in groups, discussing various topics with peers and adults, reading and reacting to short stories from various texts, and creating various assignments and projects to display their knowledge and proficiency.

STUDENTS WILL TAKE THE NSCSD COMPREHENSIVE EXAMINATION IN JUNE.

This course is NCAA approved.

French 3 Honors 1 Credit
Grades, 10 40 Weeks
Prerequisite – French 2 Final Average of at least 94 and/or teacher recommendation.
In this course, there will be substantial enrichment of the Level 3 Regents curriculum. Highly motivated students will have the opportunity to display listening, speaking, reading and writing skills in greater depth and a variety of settings. Students will be challenged with more difficult grammatical structures and nuances of the language, in addition to a more intense study of French and Francophone cultures.

STUDENTS WILL TAKE THE NSCSD COMPREHENSIVE EXAMINATION IN JUNE.

This course is NCAA approved.

French 4 1 Credit
Grade 11, 12 40 Weeks
Prerequisite – French 3, French 3H or teacher recommendation.
In this course, students will refine their listening, speaking, reading and writing proficiencies in the French language.
Students will:
- Be eligible to earn up to 6 college credits from SUNY Oswego and/or Adelphi University
- Explore various francophone countries through geography, history and the arts
- Watch international movies with reflective discussion and critical thinking essays
- Make informal oral presentations
- Compose short samples of expository or creative writing
- Use interpersonal, interpretive and presentational modes of communication
- Make cultural connections using authentic resources

Eligible for college credit, see page 74.

French 5 1 Credit
Grade 12 40 Weeks
Prerequisite – French 4 or teacher recommendation
This course is an extension of Level 4 wherein students will continue to refine their listening, speaking, reading and writing proficiencies as well as expand their cultural awareness in the French language.
Students will:
- Be eligible to earn up to 6 college credits from SUNY Oswego and/or Adelphi University
- Participate in hands-on activities in various artistic expressions based on different time periods and francophone cultures
- Play an active role in various activities revolving around genres that exist in all cultures as well as to create originals
- Gain a competitive edge with exposure to art, music, cinema and literature
- Use interpersonal, interpretive and presentational modes of communication
- Make cultural connections using authentic resources
- Be eligible to earn the Seal of Biliteracy

Eligible for college credit, see page 74.
AP Spanish  
Grade 12*  
1 Credit  
40 Weeks

**Prerequisite - Spanish 4H or teacher recommendation**

The purpose of this course is to prepare students to take the Advanced Placement Language exam given in May, for which placement and/or credit may be awarded at the college level if a qualifying score is obtained. Students study the use of language for active communication. Specifically, they understand the spoken target language in both formal and conversational situations. They express ideas accurately and resourcefully both orally and in writing, with reasonable fluency, and they develop a vocabulary sufficiently ample for reading newspaper and magazine articles, contemporary literature and other nontechnical writings. They receive extensive training in the organization and writing of compositions, review syntax and study selected works by contemporary authors. All students are required to take the Advanced Placement Spanish Language and Culture Exam.

**Students will:**
- Be eligible to earn up to 6 college credits from SUNY Oswego and/or Adelphi University
- Have debates
- Speak in the target language in small group settings
- Work in groups for a play-doh communication activity
- Practice simulated conversations
- Compare/Contrast our culture with Hispanic cultures
- Make informal oral presentations
- Demonstrate the 5 C’s: Communication, Cultures, Connections, Comparisons and Communities
- Compose short interpersonal writings
- Produce persuasive essays
- Self-edit written work
- Watch a cultural movie
- Examine, compare and reflect on products, practices and perspectives of the target culture
- Participation a 24 hour challenge prior to the AP Exam
- Describe, summarize and discuss selected upper level themes and topics
- Become familiar and use the 6 course themes given by the AP College Board (global challenges, science & technology, contemporary life, personal and public identities, families and communities and beauty & aesthetics)

*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.*

Exam Fee: $98.00

See page 74 for more information.

This course is NCAA approved.

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Language Learning Through Film  
½ Credit  
11, 12 Grades  
20 Weeks

**Prerequisite – Spanish 3 or teacher recommendation**

In this course, students will further their language study by viewing and discussing films in the target language. Students will watch films in the target language and engage in discussions regarding significant themes and topics in both formal and conversational situations. They will learn to express ideas accurately and resourcefully both orally and in writing, with reasonable fluency. They will receive extensive training in the organization and writing of compositions, development of communication skills during discussions, and a thorough understanding of the selected films significant to Spanish/French-speaking cultures.

**Students will:**
- Speak in the target language in small group settings
- Practice simulated conversations
- Compare/contrast our culture with Hispanic cultures
- Make informal oral presentations
- Demonstrate the 5 C’s: Communication, Cultures, Connections, Comparisons, and Communities
- Compose short interpersonal writings
- Produce persuasive essays
- Self-edit written work
- Watch a cultural movie
- Describe, summarize and discuss selected upper level themes and topics

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*STUDENTS ARE REQUIRED TO STAY IN AP CLASSES THE FIRST FIVE WEEKS OF THE COURSE.*

STUDENTS IN FRENCH AND SPANISH AT LEVELS 4, 5 AND AP HAVE TWO AVAILABLE COLLEGE CREDIT OPTIONS IN ORDER TO ACHIEVE 3-9 COLLEGE CREDITS. THESE INCLUDE ADELPHI AND/OR SUNY OSWEGO.
NEW VISION

New Vision 5 Credits* Grade 12 40 Weeks

The New Vision program was devised for seniors in good academic standing who have an interest in a particular vocational area. Transportation will be provided if enrollment is sufficient. Students spend the majority of their school day in one of the following situations:

* New Vision Courses can fulfill 3 career studies credits as well as 1 English 12 credit, ½ credit in Participation in Government, and ½ credit in Economics.

Criminal Justice Program – Onondaga County Sheriff’s Office

New Vision Criminal Justice is a one-year program offered to high school seniors. Located at the Onondaga County Sheriff’s Department, students study the components of law enforcement, the judiciary and correction systems, causes and prevention of crime and current topics of interest including community relations, gun control, drug enforcement, cybercrime and capital punishment. Class visitations by community and career professionals will occur in addition to internship and job shadowing opportunities. Community service projects and real-world exposure to the criminal justice system is an integral component of this career building program. An annual Washington, D.C., trip includes visits to the Police Memorial, the Smithsonian Institute, Congress and Capitol Hill, and the Bureau of Engraving & Printing.

Eligibility requirements: Interested students must be in their senior year of high school, in good academic standing and on target with all graduation requirements. Eligible candidates should exhibit self-motivation, enthusiasm and maturity, and must be willing to work both independently and as a team member in diverse settings.

Students eligible to earn 3 college credits at OCC in Introduction to Criminal Justice.

Engineering Program
Lockheed Martin

The New Vision Engineering Professions is a one-year program designed for highly motivated high school seniors. As an engineering immersion program, students will explore numerous career pathways as they engage in real-world learning within an industry setting. Located at Lockheed Martin in Syracuse, students will study the fundamentals of engineering and extend their learning as they work side-by-side with engineers on contracted projects in aerospace, defense, security, and advanced technologies. Upon completion, students will possess a deep understanding of the engineering profession and the design process, and be able to apply engineering tools, technologies and techniques that are necessary to solve problems and demonstrate innovation.

After completing the program they will become eligible to participate in the Clarkson and RIT Engineering “two plus two” program through Onondaga Community College.

Medical Professions at Upstate University

New Vision Medical Professions is a one-year program offered to highly motivated high school seniors. As a healthcare field immersion program, students will explore related career pathways as they participate in scheduled rotations at Crouse Hospital, the Syracuse VA Medical Center and SUNY Upstate Medical University. Students will experience the medical profession first-hand by working with physicians, nurses and other health professionals. Through a combination of research and hands-on projects, students will learn about medical ethics, patient rights, human anatomy and physiology, governmental regulations, and health careers. Students will also earn CPR and First Aid certification and fulfill their English 12, Participation in Government, and Economics requirements toward graduation.

Eligibility requirements: Interested students must be in their senior year of high school, in good academic standing and on target with all graduation requirements. Eligible candidates should exhibit self-motivation, enthusiasm and maturity, and must be willing to work both independently and as a team member in diverse settings.

Students eligible to earn 4 college credits at OCC in Anatomy and Physiology.
OCM BOCES

Students considering specializing in Career and Technical Education during their junior and senior years of high school should carefully assess many factors:

- Do I have a strong desire to specialize in this occupational field?
- Do I have the prerequisite courses?
- Am I willing to leave my home school for a half-day and mix with students from many different schools?
- Am I mature enough to discipline myself in specialized shops, handling expensive equipment machinery?
- Am I ready to begin specializing now, or should I wait until after graduation from high school?
- Have I talked this through very thoroughly with my parents and school counselor?

As part of a BOCES Occupational Career and Technical Education Programs, students will be required to complete an occupationally related math or science course. **Students will receive one credit for this math or science course, in addition to the 3 credits for the BOCES Career and Technical Education course.**

**NOTE:** Juniors attend 1st year class in PM session; Seniors attend 2nd year class in AM session.

**Criteria to Enroll in BOCES:**
Participation in BOCES is evaluated on an individual student basis and in accordance with New York State and District graduation standards.

**Automotive Collision Technology 3 Credits/Year**  
**Grades 11, 12**  
**Thompson Rd. Campus**

Automotive Collision Technology is a two-year program in which students learn the essential skills needed to begin a career in the auto body and collision industry. As specialists in the automotive industry, Automotive Collision Tech students gain real-world and hands-on experience working in an industry-standard collision lab setting. Students will learn the fundamentals of vehicle refinishing, metal work, unitized body and frame alignment, painting and finishing, welding, plastics repair, body repair/replacement, cost estimation and customer service skills.

Students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

**Computer Technology 3 Credits/Year**  
**Grades 11, 12**  
**Thompson Rd Campus**

The Computer Technology program is designed to prepare students for the ever-changing world of computer and information technology. Through a combination of theory and hands-on lab work, this two-year, Cisco-certified program provides students with the essentials of computer repair and support in the first year, before transitioning to the fundamentals of networking in year two. As the first step in the computer technology career path, students are afforded the opportunity to earn the industry recognized Cisco Career Certification, which also serves as a gateway to the industry-recognized CCNA Certification. Moreover, the CompTIA A+ Certification is yet another key offering that helps fulfill a comprehensive program for students who are preparing for entry level work or have post-secondary aspirations.

**Heavy Equipment Repair, Operation & Diesel Tech.**  
**Grades 11, 12**  
**3 Credits/Year**

**Tracey Road Equipment**

Located at Tracey Road Equipment in Syracuse, the two-year Heavy Equipment Operations and Diesel Repair Technology program is designed to offer students essential skills in the operation and repair of heavy equipment and heavy-duty diesel trucks using the latest techniques and computerized diagnostic equipment. Students will gain daily practical experience working with a variety of engines and equipment that will prepare them for employment opportunities for furthering their education at college and technical schools. Students may be eligible to earn industry certifications in safety training and equipment operation.

**Automotive Technology 3 Credits/Year**  
**Grades 11, 12**  
**Thompson Rd. Campus**

Or at Driver’s Village (application required)

Automotive Technology is a two-year program designed to provide students with basic mechanical knowledge and skills. As an Automotive Service Excellence (ASE) program certified by the National Automotive Technicians Education Foundation (NATEF), students gain knowledge and skills through a combination of theoretical study and hands-on lab work, including the repair of customer vehicles in brake systems, engine performance diagnosis, suspension and steering, electronic control systems, and on-board computerized engine control systems diagnosis on automobiles and light trucks.

This program, which is state and nationally certified, is the first step in preparing an individual for a career in the technical repair field. Over the course of the program, students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing the industry-standard ASE NATEF technical assessment. Program has an embedded classroom at Driver’s Village Used Car Warehouse in Cicero.

**Course can become credit bearing at SUNY Canton, Morrisville College, and Onondaga Community College.**

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Prior to completion, students are also provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma, which they can achieve by successfully passing the industry-standard technical assessments.

**Construction Technology 3 Credits/Year**
**Grades 11, 12  Thompson Rd Campus**
The two-year Construction Technology program teaches students the essential skills needed to begin a career in the building and construction trades. Through the construction of a new house, students will gain real-world knowledge and hands-on experience in the fundamental components of carpentry, drywall, painting, framing, roofing, floor installation, door and window installation, blueprint reading, siding, electrical wiring, plumbing, proper tool use, and OSHA safety training. Students will develop and demonstrate integrated academics and employability skills through class activities, projects, live clinic, community service and professional development. Students are also provided with the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

**Graduates may earn credit toward SUNY colleges or special consideration for apprentice programs.**

**Cosmetology 3 Credits/Year**
**Grades 11, 12  Thompson Rd Campus**
Cosmetology is a two-year program that instructs students in the theory and practical skills necessary to prepare them for a career in the cosmetology field and/or post-secondary education. Students are provided with hands-on training and experience to pursue employment opportunities in such roles as cosmetologists, nail technicians, estheticians, hair stylists, salon managers and small business owners.

As part of the required 1,000 hours of instruction over a two-year period, students are provided with clinical experiences in addition to the opportunity to apply for their New York State Cosmetology License and earn a Career and Technical Endorsement on their diploma by successfully passing a technical assessment.

**Early Childhood Education 3 Credits/Year**
**Grades 11, 12  Thompson Rd. Campus**
The Early Childhood Education program is offered to students who want to pursue a career working with young children. Students learn about the characteristics, needs and behaviors of three- and four-year olds and study best practices on how to guide and teach them in a nursery school setting. Each high school student in the program is provided the opportunity to participate in all phases of operating the preschool. Students are responsible for the planning, preparation and presentation of activities for young children functioning as student teachers under the supervision of a certified teacher. Students are provided with embedded internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

**Graduates may find employment in day care centers, nursery schools and parks and recreation departments. Graduates continue their education in nursery and elementary education at 2 and 4-year colleges.**

**The Electric Apple.** Every day they gain experience in preparing gourmet soups, sauces, salads, meat, poultry and seafood entrees, and desserts. The art of buffet preparation, garnishing and plate composition are important aspects of the program.

Culinary and Pastry Arts is a hands-on food preparation program that provides students with broad exposure to the science of cooking and the art of pastry design. Through an academic partnership with the National Restaurant Association, students will develop their culinary and pastry skills learning the ProStart curriculum in food production, dining etiquette, customer service, food safety and sanitation.

As part of the required 1,000 hours of instruction over a two-year period, students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing the industry-standard ProStart exams and NOCTI performance assessment.

This course prepares students for entry-level positions in the local job market as well as for many post secondary situations. Several graduates have attended SUNY Cobleskill, Johnson & Wales University, Paul Smith’s College and the Culinary Institute of America.
Media Marketing Communications 3 Credits/Year
Grades 11, 12  (1 English credit 1st yr)
WCNY Building  (1 Science credit 2nd yr)
The two-year Media Marketing Communications program offers a rigorous high school and college level of study that pairs hands-on learning in a real-world business setting at WCNY, Central New York’s public media organization. WCNY's Broadcast and Education Center serves as a 21st century classroom for the students under the instructional guidance of OCM BOCES, Onondaga Community College and WCNY professionals. In this course, students work alongside WCNY staff on projects across TV, radio, social media, web and print platforms, learning firsthand the fundamentals of the world of broadcast media, marketing and communications. Another integral component of the program is the dual credit courses offered through Onondaga Community College, where students begin building their transcript by taking college credit courses on-site with college instructors. Students will also be eligible to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-based technical assessment.

*15-18 OCC credits are available that may transfer to other SUNY colleges.

Physical Therapy 3 Credits/Year
Grades 11, 12  (1 English credit 1st yr)
Upstate University  (1 Science credit 2nd yr)
Physical Therapy Professions is a two-year program designed for highly motivated students who are interested in gaining a post-secondary edge in pursuing a career in the rehabilitative field. Located at SUNY Upstate Medical University, students will study the fundamentals of therapy, including the elements of movement, anatomy and physiology. As a post-secondary partner, Onondaga Community College provides onsite dual credit courses allowing students to begin building their college transcript. Another important component of the program is providing students with opportunities to shadow health-care professionals in the field. Students are also able to earn a Career and Technical Endorsement on their diploma by successfully passing an industry standard technical assessment.

In the Junior Year of the Program, students will earn 3 credits in English 103 and English 104. In the Senior Year of the Program, students will earn 3 credits in General Psychology (PSY 103) and 4 credits Anatomy and Physiology I (BIO 171).

Two year CTE Program located at Strength in Motion

Health Occupations Technology 3 Credits/Year
Grades 11, 12  Thompson Rd. Campus

Health Occupations Technology 3 Credits Per Year
Grades 11, 12  Thompson Rd. Campus
Health Occupations is a two-year program offering theory and practical experience for students interested in the medical and health care professions. Students are introduced to multiple facets of long-term care, basic nursing procedures, patient rights, ethical practices, medical terminology, and body systems. Students will have the opportunity to earn a NYS license as a Certified Nursing Assistant and CPR & First Aid certification. This training includes a minimum of 108 hours in a long-term care clinical setting. Students are provided with embedded internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

* Onondaga Community College credit is available or you may transfer credits to other SUNY colleges.

Laboratory Technology 3 Credits/Year
Grades 11, 12  Thompson Rd. Campus
The Laboratory Technician program is designed for students who enjoy practical hands on Science. In this program, you will learn how to collect data and help conduct research studies. Students will work on complex instrumentation and laboratory equipment conducting experiments that may monitor product quality, test for immune response for patients, or solve a criminal case. Internships are part of the program and business partners are from a wide variety of local firms and hospitals.

Welding 3 Credits
Thompson Rd. Campus
Skilled welding technicians have multiple employment options and are a vital link in the manufacturing, construction and facilities maintenance industry. As a two-year program, Welding Technology provides students the skills of arc welding, resistance welding, brazing and soldering, as well as cutting, heat-treating and metallurgy. Students gain knowledge of electrical systems, power sources and different welding technologies, welding systems, print interpretation and measurement, as well as the use and interpretation of visual symbols related to welding. This course will give the student knowledge and technical skills that will prepare them for positions as an entry-level welder or advanced placement in post-secondary education.

Work-based learning sites are developed in the second year to allow the opportunity to intern at many local businesses. Students are provided with internship experiences, the opportunity to earn industry-recognized AWS certifications and a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.
<table>
<thead>
<tr>
<th>ART</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Studio Art</td>
<td>SUNY/O.C.C.</td>
<td>$98 Test Fee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUSINESS</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Business</td>
<td>SUNY/O.C.C.</td>
<td>No fee required</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>SUPA Entrepreneurship</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>SUPA Sport Management</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>SUPA Money and Banking</td>
<td>Syracuse University</td>
<td>$460/4 credits</td>
</tr>
<tr>
<td>SUPA Financial Accounting</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Language and Composition</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>AP Literature</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>SUPA Presentations (CRS 325)</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>SUPA Writing</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
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<table>
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<tr>
<th>FAMILY AND CONSUMER SCIENCE (FACS)</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations for College and Career Success</td>
<td>SUNY or CCC (TBD)</td>
<td>No fee required</td>
</tr>
<tr>
<td>Clothing Production 110</td>
<td>Cazenovia College</td>
<td>$250/3 credits</td>
</tr>
</tbody>
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<thead>
<tr>
<th>MATH</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Calculus</td>
<td>SUNY/O.C.C.</td>
<td>$98 Test Fee</td>
</tr>
<tr>
<td>AP Computer Science Principles</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>AP Statistics</td>
<td>SUNY/O.C.C.</td>
<td>$98 Test Fee</td>
</tr>
<tr>
<td>AP Computer Science</td>
<td>Syracuse University</td>
<td>$345/3 credits</td>
</tr>
<tr>
<td>SUPA Cyber Security</td>
<td>SUNY/O.C.C.</td>
<td>$98 Test Fee</td>
</tr>
<tr>
<td>Pre-Calculus with Trig</td>
<td>SUNY/O.C.C.</td>
<td>A fee may be required</td>
</tr>
<tr>
<td>Pre-Calculus with Trig Honors</td>
<td>SUNY/O.C.C.</td>
<td>A fee may be required</td>
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<thead>
<tr>
<th>SCIENCE</th>
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<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Biology</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>AP Physics</td>
<td>SUNY/O.C.C.</td>
<td>$920/8 credits</td>
</tr>
<tr>
<td>SUPA Chemistry</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL STUDIES</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP European History</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>AP US History</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>AP US Government and Politics</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>AP Economics</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>SUPA Sociology</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
<tr>
<td>AP World History</td>
<td>Syracuse University</td>
<td>$345/3 credits; $460/4 credits</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>TECHNOLOGY</th>
<th>COLLEGE</th>
<th>COST 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIM</td>
<td>R.I.T.</td>
<td>$250 per course/3 credits</td>
</tr>
<tr>
<td>Civil Engineering and Architecture</td>
<td>R.I.T.</td>
<td>$250 per course/3 credits</td>
</tr>
<tr>
<td>Design &amp; Drawing for Production B</td>
<td>R.I.T.</td>
<td>$250 per course/3 credits</td>
</tr>
<tr>
<td>Digital Electronics</td>
<td>R.I.T.</td>
<td>$250 per course/3 credits</td>
</tr>
<tr>
<td>Principles of Engineering</td>
<td>R.I.T.</td>
<td>$250 per course/3 credits</td>
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</table>

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<thead>
<tr>
<th>WORLD LANGUAGES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>French 4-5</td>
<td>Adelphi University or SUNY Oswego</td>
<td>$390/3 credits; $175/3 credits</td>
</tr>
<tr>
<td>Spanish 4-5</td>
<td>Adelphi University or SUNY Oswego</td>
<td>$390/3 credits; $175/3 credits</td>
</tr>
<tr>
<td>AP Spanish</td>
<td>SUNY Oswego</td>
<td>With SUNY Oswego a total of 6 credits may be taken over a 2 year period in level 4, 4H and level 5, AP.</td>
</tr>
</tbody>
</table>

With Adelphi, a total of 6 credits may be taken in either level 4, 4H or level 5, AP Oswego $85 if student qualifies for free/reduced lunch.