



Baldwinsville
Central School District
Achieving our full potential together.

2021-2022
Charles W. Baker High School &
Theodore R. Durgee Junior High School
Course Catalog

The Course Catalog is also available on-line at www.bville.org

January 2021

Dear Parents and Students:

It is our belief that through the cooperative effort of parents, students and staff, we can meet our equally shared responsibility for the education of the individual student. As New York State mandates the passing of new requirements for graduation, it becomes increasingly important that we work together to ensure that students accomplish all that they are capable of.

Please review the graduation requirements on the following pages that pertain to your child's class. You may visit the New York State Education Department website at: www.nysed.gov, for the most up-to-date information concerning these requirements. We will be happy to answer questions about academic programs, as well as questions about what is necessary to achieve educational successes and career goals.

We know you share our belief and desire to work together for your child's achievement.

Theodore R. Durgee Jr. High School Administration and Counseling Staff
Charles W. Baker High School Administration and Counseling Staff

Baldwinsville Central School District History

Charles W. Baker High School:

In 1952, Baldwinsville Academy and Central School, now called Charles W. Baker High School, opened its north wing to elementary school students. The high school graduating class of 1953 attended school at the Academy on Elizabeth Street, but held their commencement ceremony in the new high school building. The first graduating class to attend school in the building now known as Baker High School was the class of 1954. The school was named for Charles W. Baker, who had been a teacher and an administrator with the district for many years.

Theodore Durgee Junior High School:

Durgee Junior High School, dedicated to Theodore Durgee, a district teacher and administrator, was constructed in 1959 and Ray Middle School, named for district superintendent Donald S. Ray, was built in 1974. Over the years all of the school buildings in the district have been renovated to meet the ever-changing needs of a growing student population.

Alma Mater

Where the golden sunset mellow Tints the western sky
Proudly stands our Alma Mater On her hilltop high
Join the chorus, speed it onward Loud her name we yell
Hail to thee, our Alma Mater Hail, all hail, B'ville

Loyal to thee Alma Mater Shall we always be
And we'll always keep forever Sweet thy memory
Join the chorus, speed it onward Loud her name we yell
Hail to thee, our Alma Mater Hail, all hail, B'ville

Academic Policies, Services, and Programs

School Counseling Services:

The counseling staff helps students develop an academic program; consider career options and assists in the areas of personal/social decision-making and problem solving.

It is imperative that the student, teacher, counselor and parent work closely to develop an educational plan appropriate for each individual student. During the winter months of each school year, the counselor will conduct an annual review. Educational planning, including an assessment of the year's progress, future academic programming and post-high school plans will be discussed during the review, as well as at other times during the year. Upon completion of the annual review, parents can view the course selections on School Tool. Parents are encouraged to contact the school counselor at any time for academic program, social and/or personal concerns, in addition to post-graduate goals.

Academic Intervention Services (AIS):

The New York State Education Department has mandated that schools provide academic intervention services to students believed to be in jeopardy of achieving success on the English Language Arts standards.

Math, English, Science and Social Studies These arrangements are scheduled on a case by-case basis and may be scheduled in a range of ways, from one quarter to a full year. Students enrolled in AIS will be provided with the necessary and appropriate academic support in order to assist them in meeting academic standards. Ongoing evaluation will determine the students' enrollment or completion of AIS services.

DROP/ADD COURSES & TEACHER CHANGES/TEACHER REQUESTS:

The following grading policies are included in our Student Code of Conduct (<http://www.bville.org>), and are communicated via our School Counselors during their individual meetings with students and also during group sessions. A student schedule is prepared with due consideration and input from teachers, parents, and counselors. All course offerings for the beginning of the school year must have been finalized with your counselor prior to **April break**. No course selection changes can be guaranteed after this date. Due to the complexities of scheduling at both Baker and Durgee, requests for teachers or for teacher changes cannot be honored.

In the case of extenuating circumstances, a semester course can be dropped or added up to two (2) weeks into the semester and a full-year course can be dropped or added prior to the completion of the fifth (5th) week of instruction. Students are expected to maintain a course load of six credits plus physical education (6.5 total credits). Any time after this deadline schedule changes would have to be discussed with the Building Principal prior to a request from the teacher or Guidance Counselor.

In order to drop a course, the student must request the proper forms from his or her counselor. For a drop to be referred to the principal for final review, it must be acknowledged by the teacher, parents/guardians, and counselor. The building principal will make the final determination as to whether the request to drop a course will be approved or denied based upon a comprehensive review of the student's entire educational programming. In many cases, a conference with parents and staff will be requested. It is the responsibility of the students to return all books and equipment for the class being dropped.

College Credit and Advanced Placement

We are continually working to offer opportunities for our students to achieve college credit. Our list of courses that have the possibility of college credit grows and changes each year depending on the affiliated colleges and/or College Board and Advanced Placement adjustments.

Concurrent Enrollment (College Credit) and Advanced Placement Courses:

We offer a variety of courses that allow the student to achieve college credit. Currently, we offer courses wherein students can receive credit through Onondaga Community College or SUNY Oswego. At this point, the advantages of completing college credits in high school are enormous. The rigor of the courses is greater, and the savings can compound through time. Our courses that are aligned with SUNY Oswego have a cost attributed that is far less than a typical 3-credit college course. They currently offer us a rate of \$175 for 3 credits. Onondaga Community College offers our students the opportunity to earn credits for free.

All of our college credit courses require the student to register with the college. Our teachers (acting as adjunct staff) will help guide each student through the registration process. For both schools, registration for the first course causes a student ID number to be generated. For our students who take a first course in the fall of their sophomore or junior year, subsequent registrations use that number. Credits begin to accumulate at the conclusion of the first course.

Advanced Placement Courses and Examination Fee:

Throughout the course catalog are courses listed as Advanced Placement. Students enrolled in these courses are required to take the exam in April or May as one part of course completion. College Board sets the fee each year, and we collect and send in one lump sum payment to them. The fee in 2019 was \$94 per exam or portfolio submission. College Board periodically increases their fee.

College Level Courses			College Board
Baldwinsville Dual Enrollment	Course Name	College Credit	Advanced Placement Courses
Math of Business Finance	OCC BUS 102	3	Calculus AB Calculus BC
Introduction to Computer Science	OCC CIS 100	3	Statistics
Freshman Composition I	OCC ENG 103	3	English Literature
Freshman Composition II	OCC ENG 104	3	Physics 1
Pre-Calculus	OCC MAT 143	4	Physics
Calculus / AP Calculus	OCC MAT 161	4	Chemistry
German IV and V 201/202	OSW GER	3	Biology Spanish Language
French IV and V	OSW FRE 201/202	3	French Language
Spanish IV and V	OSW SPA 201/202	3	Psychology Government & Politics
Physics	OCC PHY 103/104	8	U.S. History World History
ESF Global Environment	ESF	3	Studio Art 2D & 3D Studio Art & Drawing
Creative Writing	OSW CRW 206/208	3	Computer Science A
Program Design and Development	OCC CSC 110	4	Computer Science P
Topics in Traditional Media	OSW ART 102	3	

The granting of AP and college credit is determined by the individual policies of the post-secondary college the student plans on attending. Students are encouraged to call the College Admissions Office to determine course acceptance. BOCES Programs with Tech Prep options lead to college credit bearing coursework. Please contact BOCES for specific information at 431-8503.

Project Lead the Way Courses:

We currently offer two strands of Project Lead the Way Courses that are aligned with Rochester Institute of Technology. We offer Biomedical Engineering, Engineering, and Computer Science strands. These courses offer rigor and relevance for today's job market and college readiness. Additionally, there are options for college credit for Technology and Computer Science courses. RIT does charge a fee for the credits.

*****If a student signs up for a course and the course enrollment does not go over fourteen students, the district may/may not offer the course due to the low enrollment. The determining factor is if the teacher from the said course needs to teach a section of something else.**

Dual Enrollment College Credit Courses

This list outlines courses that are offered through our College Partnerships. These courses are also found on the department course offering pages.

Art Electives

Topics in Traditional Media and Methods in Ceramics (OSWEGO ART 102) ■ 5273 ■ 20 Weeks

■ 3 Oswego credits This is a topics-based studio course in traditional media and designed to teach the materials and methods in a visual arts discipline. Students explore artistic expression through the given materials and methods of specific traditional media in ceramics and design. Students may take the course for additional credit in a second topic, photography or drawing or painting.

Prerequisite: Ceramics II or instructor approval

Topics in Traditional Media and Methods in Film or Digital Photography (OSWEGO ART 102) ■ 5664 ■ 20 Weeks ■ 3 Oswego credits

This is a topics-based studio course in traditional media and designed to teach the materials and methods in a visual arts discipline. Students explore artistic expression through the given materials and methods of specific traditional media in Photography. Students may take the course for additional credit in a second topic, drawing & painting or ceramics.

Prerequisite: Photography I and II or Digital Photography I and II or instructor approval

Topics in Traditional Media and Methods in Drawing and Painting(OSWEGO ART 102) ■5272 ■ 20 Weeks ■ 3 Oswego credits

This is a topics-based studio course in traditional media and designed to teach the materials and methods in a visual arts discipline. Students explore artistic expression through the given materials and methods of specific traditional media in drawing and painting. Students may take the course for additional credit in a second topic, photography or ceramics.

Prerequisite: Drawing and Painting I & II

Business Electives

Financial Accounting ■ 6321 ■ 40 Weeks ■ 3 OCC Credits

An introduction to accounting as a means of recording business activities. This course includes a study of the classification and recording of original business transactions, the preparation and evaluation of financial statements, and the application of Generally Accepted Accounting Principles. The course will incorporate appropriate technology to include spreadsheet and presentation software in the instruction process.

Information and Computer Literacy (OCC CIS 100) ■ 6371 ■ 20 Weeks ■ 3 OCC Credits This course offers students an overview of the role of technology in society and provides an introduction to digital and information technologies, concepts, and terminologies. Discussions of the community, legal, and ethical issues related to digital devices and the Internet are integral to the nature of this course. This course provides students with opportunities to develop research and critical thinking skills, and will introduce students to continuously evolving and emerging digital technologies and their effects on society. Students will demonstrate the skills needed to be an informed digital citizen, achieve academic and workplace success, and participate in an increasingly globalized environment. Students will use web applications, word-processing, spreadsheet, database, presentation, and other software, as applicable, to learn, search and organize their research, and then present and communicate their findings.

Mathematics of Business & Finance (OCC BUS 102) ■ 6411 ■ 40 Weeks ■ 3 OCC Credits

A study of mathematical concepts and processes as applied to business and finance. Students will develop skills required to perform with accuracy and facility mathematical operations integral to the interpretation and solution of business problems. Arithmetic operations, signed numbers, linear equations, percentage and statistical procedures are applied to such topics as accounting, retailing, risk management, banking, and finance. This course is a core course for the Business Technology A.A.S. degree and may be used to fulfill a business or general elective requirement.

English Electives

Creative Writing (Non-Fiction) (OSWEGO CRW 208) ■ 0592 ■ 20 Weeks ■ 3 Oswego Credits

Creative Writing: Non-Fiction will be offered concurrently with SUNY Oswego's CRW 208: Creative Nonfiction Writing: Introductory. This course introduces students to various modes of nonfiction writing, helps them analyze and evaluate literature in the genre, and provides an environment in which they develop writing in nonfiction modes will introduce students to creative writing techniques for developing plot, setting, character, conflict and resolution. It will focus on the continued discovery and development of the student's voice. This course will introduce students to genre studies from the perspective of the writer and push them to utilize other writers' craft to develop their own.

Creative Writing (Fiction) (OSWEGO CRW 206) ■ 0591 ■ 20 Weeks ■ 3 Oswego Credits

Creative Writing: Fiction will be offered concurrently with SUNY Oswego and their CRW 206 course Fiction Writing: Introductory. This course will be focused on fiction writing with specific emphasis on character study, plot development, plotlines, dialogue, as well as other fiction writing techniques. The course will culminate with the development and publication of students' original fiction works. This course will focus on the development of narrative fiction and poetry, as well as magazine article writings, short stories and/or technical writing styles. Proofreading and editing skills will be emphasized in order to help students develop as writers. Students will also create a literary publication for distribution throughout the school and the greater community.

Freshman Composition and Literature, I (OCC ENG 103) ■ 0212 ■ 20 Weeks ■ 3 OCC Credits

Prerequisite: Onondaga Community College placement test or 500 or better on the Verbal portion of the SAT or unweighted GPA of 80% or higher.

Emphasizing the recursive nature of writing and the process of revision, this course teaches students the skills and processes necessary for writing and revising college-level academic prose. Various aspects of writing, including invention/pre-writing, composing, revision, and editing/proofreading will be taught. Critical readings of various nonfiction texts may be used to develop understanding of rhetorical conventions and genres. Composing in and for electronic environments, as well as their conventions, will also be taught. Prerequisite: Onondaga Community College placement test or 500 or better on the Verbal portion of the SAT. Student that are unsuccessful in the first semester will be dropped from the class. This could affect financial aid or acceptance in to college. If a student wishes to drop this class it must be within the first 5 days of class, otherwise it will be listed on the high school transcript as a withdraw.

Freshman Composition and Literature, II (OCC ENG 104) ■ ■ 20 Weeks ■ 3 OCC Credits

Prerequisite: ENG 103.

Teaches students to comprehend, respond to and use the ideas of others in their own writing. Skills such as analytic and critical reading and writing, summarizing, and paraphrasing are developed through the study of literature. Term paper form will also be taught. Prerequisite: ENG 103. If a student wishes to drop this class it must be within the first 5 days of class, otherwise it will be listed on the high school transcript as a withdraw. This could affect financial aid or acceptance in to college.

Subject options for OCC ENG 104 include:

OCC ENG 104: British Literature ■ **0433 ■ 20 Weeks ■ 1/2 Credit**

OCC ENG 104: Mythology ■ **0425 ■ 20 Weeks ■ 1/2 Credit**

OCC ENG 104: Stage and Screen ■ **0438 ■ 20 Weeks ■ 1/2 Credit**

OCC ENG 104: Contemporary Literature ■ **0429 ■ 20 Weeks ■ 1/2 Credit**

OCC ENG 104: Literary Analysis ■ **0413 ■ 20 Weeks ■ 1/2 Credit**

OCC ENG 104: AP English ■ **0419 ■ 20 Weeks ■ 1/2 Credit**

Languages Other Than English

French IV (OSWEGO FRE 201) ■ 4421 ■ 40 Weeks ■ 3 Oswego Credits

Prerequisite: French III

This full year one credit course helps the student begin to attain communication skills at a level of proficiency beyond the Comprehensive Final Exam. It is the first course necessary for those wishing to move toward the advanced Checkpoint C proficiency leading to advanced placement at college level. Students will participate in a variety of activities: reading, discussions, skits and one-to-one conversations and an introduction to French cooking. Both vocabulary and knowledge of the grammatical patterns of French are developed and refined. This course is conducted in French. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

French V (OSWEGO FRE 202) ■ 4521 ■ 40 Weeks ■ 3 Oswego Credits

Prerequisite: French IV

This full-year, one credit elective offers advanced students the opportunity to bring their communicative skills to the highest level of development at Checkpoint C. The student will be exposed to excellent examples of French literature which serve as a catalyst for discussion as well as a most expanded vocabulary. French culture and civilization are emphasized with special emphasis on French foods. This course is conducted in French. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

German IV (OSWEGO GER 201) ■ 4425 ■ 40 Weeks ■ 3 Oswego Credits

Prerequisite: German III

This full-year, one credit course helps the student begin to attain communication skills at a level of proficiency beyond the Regents. It is the first course necessary for those wishing to move toward the advanced Checkpoint C proficiency leading to advanced placement at college level. Students will study the language through a variety of cultural activities and will experience the language in some famous literature and music. Both vocabulary and knowledge of the grammatical patterns of German are developed. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

German V (OSWEGO GER 202) ■ 4525 ■ 40 Weeks ■ 3 Oswego Credits

Prerequisite: German IV

This course is a full year one credit elective that offers students who have successfully completed German IV the opportunity to develop their communication skills to the highest level at Checkpoint C. A variety of programs and fields of culture, such as the literature and music of German-speaking countries, serve as a catalyst to expand vocabulary for oral and written expression. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

Spanish IV (OSWEGO SPA 201) ■ 4423 ■ 40 Weeks ■ 3 Oswego Credits

Prerequisite: Spanish III

This full year, one credit course helps the student begin to attain communication skills at a level of proficiency beyond the Comprehensive Final Exam. It is the first course necessary for those wishing to move toward the advanced Checkpoint C proficiency leading to advanced placement at college level. Students will study the language through its literature, art, and history. Both vocabulary and knowledge of the grammatical patterns of Spanish are developed and refined. This course is conducted in Spanish. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

Spanish V (OSWEGO SPA 202) ■ 4523 ■ 40 Weeks ■ 3 Oswego Credits

Prerequisite: Spanish IV

This full year, one credit elective offers advanced students the opportunity to bring their communicative skills to the highest level of development at Checkpoint C. The student will be exposed to excellent examples of Spanish literature which serve as a catalyst for discussion as well as a most expanded vocabulary. Spanish and Latin American culture and civilization are emphasized. This course is conducted in Spanish. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

Math Electives

Pre-Calculus with Trigonometry (OCC MAT 143) ■ 2445 ■ 40 Weeks ■ 4 OCCredits

Prerequisite: We recommend that a student pass Algebra II and Algebra II Regents exam

This course is designed to provide the necessary foundation for a standard calculus course. Topics include absolute value and quadratic inequalities, functions and their equations, exponential and logarithmic functions and their applications, right triangle trigonometry, law of sines and law of cosines, trigonometric functions (circular) and their inverses, trigonometric identities and equations, addition and multiple angle formulas, and binomial theorem. Graphing calculator use is required.

Calculus I (OCC MAT 161) ■ 2435 ■ 40 Weeks ■ 4 OCC Credits

Prerequisite: Passed Pre-Calculus MAT 143

This is a first course in calculus for students in mathematics, science, computer science and engineering. Topics include basic analytic geometry, functions, limits and continuity, derivatives of algebraic and trigonometric functions, chain rule, implicit differentiation, antiderivatives, definite integrals, Fundamental Theorem, applications of derivatives and integrals. Graphing calculator use is required. Prerequisite: Four years of college-preparatory mathematics (including trigonometry) or a C or better in Pre-Calculus with Trigonometry (MAT 143)

Science Electives

General Physics I (OCC 103) ■ 3446 ■ 20 Weeks ■ 4 OCC Credits

Prerequisites: Successful completion of Regents Chemistry and current enrollment in Algebra II.

The first semester of a two-semester, basic, non-calculus General Physics course emphasizing fundamental concepts and principles with a problem-solving approach. Topics covered include Kinematics and Dynamics, Newton's Laws, Work and Energy, Momentum, Rotational Motion, Heat and Thermodynamics. Student that are unsuccessful in the first semester will be dropped from the class. This could affect financial aid or acceptance in to college. If a student wishes to drop this class it must be within the first 5 days of class, otherwise it will be listed on the high school transcript as a withdraw.

General Physics II (OCC 104) ■ 3447 ■ 20 Weeks ■ 4 OCC Credits

The continuation of PHY 103. Topics covered include Vibrations and Wave motion, Physical and Geometrical Optics, Electricity and Magnetism, simple AC and DC Circuits and Modern Physics. Two class hours, two recitation hours, and two laboratory hours. Prerequisite: PHY 103. If a student wishes to drop this class it must be within the first 5 days of class, otherwise it will be listed on the high school transcript as a withdraw. This could affect financial aid or acceptance in to college.

Global Environment ■ 3323 ■ 40 Weeks ■ 3 ESF Credits

Global Environment is a three (3) credit introductory, college-level environmental science course that explores large-scale environmental issues and their relationship to human society. Students will gain knowledge and tools to make informed decisions regarding their environment and the earth's future. The focus is on relationships among organisms and their environment, human populations, and long term sustainability of natural resources. Topics include general ecology, biodiversity loss and conservation, human population growth, global climate change, aquatics, pollution issues, soil conservation, green technology, and the environmental movement. Reduced tuition fee for SUNY ESF college credit. Prerequisites: Successful completion of NYS Regents Earth Science, NYS Regents Biology, and successful completion of or concurrent enrollment in NYS Regents Chemistry.

Technology Electives

Program Design and Development (OCC CSC 110) ■ 6433 ■ 20 Weeks ■ 4 OCC credits

This is a language dependent introduction course on computer program design and development. Emphasis is on the identification and solution of business problems through systems of computer programs. Programs are described and designed through such tools as program flowcharts, structure charts, and pseudocode. Within this framework, programming languages are treated as tools which can be selected, as appropriate, to implement the design.

**THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT**

CORE CREDIT GRADUATION REQUIREMENTS

SUBJECT AREA	REGENTS DIPLOMA	ADVANCED REGENTS DIPLOMA
English	4	4
Social Studies	4	4
Mathematics	3	3
Science	3	3
Languages Other Than English (LOTE)	1	3
Fine Arts	1	1
Health	$\frac{1}{2}$	$\frac{1}{2}$
Physical Education	2	2
Electives	3 ½	1 ½
Total Units Required for Graduation	22	22

SPECIFIC DIPLOMA EXAMINATION REQUIREMENTS

Regents Diploma:

Students must score a minimum of 65% on 5 Regents exams: Algebra I, Global History and Geography, US History and Government, Comprehensive English, and one of the sciences (Earth Science, Biology, Chemistry, or Physics).

Regents Diploma with Advanced Designation:

Students must successfully pass additional Regents exams in Math (Geometry and Algebra 2), and an additional science (Earth Science, Living Environment, Chemistry, or Physics). Students also need to pass a LOTE (Language Other Than English) examination -or may substitute a 5 unit sequence in art, business, family and consumer science, music, technology or career education/tech prep.

■ **Arts - Visual** *All students must complete one credit of Art to be eligible for a Regents diploma.*

Studio in Creative Crafts I ■ 5175 ■ 20 Weeks ■ ½ Credit

This course is designed for students who like to work in many artistic areas, discovering new interests and abilities. Students learn the primary skills of many visual art processes, as well as design and creative strategies. Creative Crafts builds on a wide range of art projects through hands-on exploration of mediums like glass, fibers, textiles, books, paper, ceramics, and recycled materials. *This course will fulfill 1/2 credit of the art/music graduation requirement.* Building on the theory that form follows function, students will create works of art that reflect historical, as well as multicultural themes. **This course is taught only at Durgee Jr. High School.**

Studio Media in Video ■ 5176 ■ 20 Weeks ■ 1/2 Credit

This is a 20 week course utilizing both the technical and artistic aspects of the medium with a more intense study in the field of video production and media. Students develop skills through instruction and hands on experiences with video cameras, editing equipment and video communication. **This course is taught only at Durgee Jr. High School.**

Studio Media in Photography ■ 5177 ■ 20 Weeks ■ 1/2 Credit

This is a 20 week course utilizing both the technical and artistic aspects of the medium with a more intense study in the field of photography. Students develop skills through instruction and hands on experiences in photography. **This course is taught only at Durgee Jr. High School.**

Studio in Art I ■ 5171 ■ 20 Weeks ■ 1/2 Credit

This is a 1/2-year foundation course for students in grades 8-12. *This course acts as a prerequisite for most other art electives and will fulfill 1/2 credit of the art/music graduation requirement.*

Students will gain general art skills by participating in a variety of fine arts experiences including creating their own artworks, and by building knowledge, understanding and appreciation for the arts. Emphasis is placed on creative problem solving. Mediums include drawing, painting, print making, mixed-media, and sculpture.

Studio in Art II ■ 5172 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Studio in Art I

This is a 1/2-year foundation course for students in grades 9-12 and is a continuation of Studio in Art I. This course places an emphasis on the principles of design and applied arts. Students will work with a variety of art media in two and three-dimensional creative design.

Drawing & Painting I ■ 5271 ■ 40 Weeks ■ 1 Credit

Drawing & Painting is the foundation and pre-requisite for other Advanced Drawing & Painting courses. This course emphasizes drawing as the foundation for all other art forms and enables students to gain a broad and rich understanding of a variety of art techniques and processes. Students will become aware of various art movements and trends and create artwork based on a variety of themes.

Advanced Drawing and Painting II ■ 5476 ■ 40 Weeks ■ 1 Credit

Prerequisite: Drawing & Painting I

This is an advanced level course for any students wishing to explore various drawing and painting media, techniques and applications. Students will develop work that represents their individual artistic expression. There is an emphasis on learning to work through the creative process and discover personal voice through art making.

■ Arts - Visual

Advanced Drawing and Painting III ■ 5478 ■ 40 Weeks ■ 1 Credit

Prerequisite: Advanced Drawing and

Painting II This is an advanced level course that is a continuation of Advanced Drawing and Painting II. Students in this course will develop their unique artistic vision and style. Students will continue their exploration of advanced drawing and painting practices while preparing a portfolio for graduation and/or enrichment.

Topics in Traditional Media and Methods in Drawing and Painting (OSWEGO ART 102) ■ 5272 ■ 20 Weeks ■ 1/2 credit

Prerequisite: Drawing and Painting I & II

This is a topics-based studio course in traditional media and designed to teach the materials and methods in a visual arts discipline. Students explore artistic expression through the given materials and methods of specific traditional media in drawing and painting. Students may take the course for additional credit in a second topic, Photography or Ceramics. Successful completion of this course will result in 3 hours of college credit. A fee of \$175 is charged by SUNY Oswego.

Advanced Placement (AP) Studio Art ■ 5479 ■ 40 Weeks ■ 1 Credit

Prerequisite: Advanced Drawing and Painting II or with Instructors

approval This is an advanced level course that is a continuation of Advanced Drawing and Painting II and aligns with College Board's AP curriculum. Students in this course will develop their unique artistic vision and style and will prepare for the AP portfolio submission. Success on the portfolio may earn the student three hours of college credit. A fee will be charged for the portfolio submission, which is required for all students taking Advanced Placement courses.

Photography I ■ 5671 ■ 20 Weeks ■ 1/2 Credit

This course is an introduction to 35mm black and white **film** photography and will include the use of film photographic materials and equipment. Course content covers 35mm camera operation, black and white film developing, making enlargements and mounting prints. Emphasis is placed on 'seeing' creatively and organizing well designed photographic images.

Photography II ■ 5672 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Must be taken sequentially.

This course is an extension of Photography I emphasizing further exploration of **film** photography as an art form. Materials covered may include solarization, toning, hand coloring, digital, and other special effects done with the camera and in the darkroom.

Photography III ■ 5675 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Must be taken sequentially.

This course is designed for the advanced photography student to have the opportunity to have a deeper, more personal exploration into **film** photography as an art form, and in preparing a portfolio suitable for college entrance, scholarship application and the work place. Instruction is tailored to individual student needs.

Digital Photography I ■ 5665 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Photography I.

Digital Photography I will serve as an introduction to the world of digital photography and computer based editing and compositing of photographs. Students will use digital cameras to take pictures and use Adobe Photoshop, Lightroom and other computer software programs to learn how to touch up, alter and compose photographs into digital works of art.

■ Arts - Visual

Digital Photography II ■ 5666 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Must be taken sequentially.

This course is an extension of Digital Photography I. Students will learn more advanced approaches and techniques using their digital cameras (composition, lighting, color theory and design) and post-production editing software like Photoshop & Lightroom. Students will begin to channel their Digital Photography and Media Art skills into specific directions based on exploration during Digital I and II, in order to prepare for Digital III, which will function as an independent study where a body of work will be produced and compiled as a final portfolio for the course sequence.

Digital Photography III ■ 5667 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Must be taken sequentially.

This course is a continuation from Digital Photography I and II. Students will focus on continuing their exploration in Digital Photography and Media Art and begin to focus on generating a portfolio of work as a part of a final grade for the course sequence. This course serves as preparation for college and/or career readiness through the development of a body of work or portfolio as a final project.

Topics in Traditional Media and Methods in Film or Digital Photography (OSWEGO ART 102) ■ 5664 ■ 20 Weeks ■ 1/2 credit

Prerequisite: Photography I and II or Digital Photography I and II or instructor approval

This is a topics-based studio course in traditional media and designed to teach the materials and methods in a visual arts discipline. Students explore artistic expression through the given materials and methods of specific traditional media in Photography. Students may take the course for additional credit in a second topic, drawing; painting or ceramics course. Prerequisite: Photography I and II or Digital Photography I and II or instructor approval

Introduction to Ceramics and Sculpture I ■ 5276 ■ 20 Weeks ■ 1/2 Credit

Introduction to Ceramics and Sculpture I is the foundation and prerequisite for Intermediate and Advanced Ceramics and Sculpture courses. This course is a survey of the techniques and tools that are used in both ceramic sculpture and in other three-dimensional sculptural mediums. This course will provide the foundations a student will need in order for them to progress into the advanced Ceramics and Sculpture courses.

Intermediate Ceramics and Sculpture ■ 5274, 5374 ■ 40 Weeks ■ 1 Credit

Prerequisite: Must be taken sequentially.

This is an advanced level course for any students wishing to build upon the knowledge, techniques and skills presented in Introduction to Ceramics and Sculpture I. Students will explore the elements and principles of design and self-expression through ceramic and sculptural mediums. Students will examine works from ancient and contemporary cultures as well as the exploration of functional, nonfunctional, traditional and experimental materials and methods of construction.

Advanced Ceramics and Sculpture ■ 5275, 5375 ■ 40 Weeks ■ 1 Credit

Prerequisite: Must be taken sequentially.

This is an advanced level course for any student wishing to build upon the knowledge, techniques and skills presented in Intermediate Ceramics and Sculpture. Students in this course will develop their unique artistic vision and style. Students will examine works from ancient and contemporary cultures as well as the exploration of functional, non-functional, traditional and experimental methods of construction. Students will continue their exploration of advanced ceramics and sculpture practices while preparing a portfolio for graduation and/or enrichment.

■ Arts - Visual

Topics in Traditional Media & Methods in Ceramics (OSWEGO ART 103) ■ 5273 ■ 20 Weeks ■ ½ credit

Prerequisite: Ceramics II or instructor approval

This is a topics-based studio course in traditional media and designed to teach the materials and methods in a visual arts discipline. Students explore artistic expression through the given materials and methods of specific traditional media in ceramics and design. Students may take the course for additional credit in a second topic, Drawing and Painting or Photography.

Advanced Placement (AP) Studio Art 3D ■ 5480 ■ 40 Weeks ■ 1 Credit

Prerequisite: Must be taken sequentially.

In this course students will pursue the investigation of the three-dimensional form in both ceramics and sculpture. Students are responsible for compiling a portfolio of 18-24 works of 3D art from their high school career that complete the three sections of the College Board's AP curriculum: Quality, Concentration, and Breadth. Students will be encouraged and supported in their efforts to develop and express themselves in their own personal style. Students will be engaged in art making as an ongoing process. They will design, create, review, and explore variations in their artwork as they engage in visual problem solving. Throughout the year, research, journal assignments, and other work outside of the school day will be required. Students will partake in both group critiques and individual critiques with faculty. In addition, students will learn self-critique strategies and techniques. A student's art making process assessments (formative and summative) will include idea generation, research, and execution of ideas, product, and critiques.

Advanced Art Studio ■ 5173 ■ 20/40 Weeks ■ 1/2 or 1 Credit

Art Instructor Approval Only

This is an advanced level course designed for the student who is planning to study art at the university level. Students in this class will focus on creating a body of work for exhibition and college admission purposes. Students will create work in the specific discipline (Drawing and Painting, Ceramics, Sculpture or Photo) as they prepare for college level work.

Potter's Wheel Throwing I ■ 5277 ■ 20 Weeks ■ 1/2 Credit

This course will provide a foundation for using the potter's wheel as a tool for creative expression. This class will enable the student to create both functional and non-functional works of art, furthering their understanding of 3 dimensional forms.

Potter's Wheel Throwing II ■ 5278 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Wheel Throwing I

This course will build upon Potter's Wheel Throwing I. Students will explore the elements and principles of design and self-expression using the Potter's wheel throwing techniques and form.

■ Information & Business Management

Financial Accounting ■ 6321 ■ 40 Weeks ■ 1 Credit

Are you planning to attend college and major in Business Management, Business Administration, Accounting, Economics, Marketing, or Finance? OR, do you want a skill that can lead to an interesting entry-level position? Accounting may be just what you need. Learn the accounting system that is used by all well-managed businesses. In this Accounting course, you will learn to record, classify, summarize, and interpret financial data for a business. Automated accounting is included as well as spreadsheet applications.

Business Management ■ 6426 ■ 20 Weeks ■ 1/2 Credit

The purpose of this course is to provide an understanding of the characteristics, the organization, and the operation of business. The course is designed to provide students with a sound foundation as they prepare for business or other careers as well as providing an awareness of the many activities, problems and decisions involved in successfully operating a business. Topics include the dynamics of business, labor relations, management functions and responsibilities, the link between business and society, and the importance of working toward a goal as a team.

Business of the Music Industry ■ 6150 ■ 20 Weeks ■ 1/2 Credit

This half-year course is designed for both musicians and non-musicians with a desire to learn about the music industry. This course examines how record companies work and how musicians are increasingly able to make it on their own without getting signed. How the revenue stream flows as they pertain to sound recordings and song writing will also be examined along with how an artist can protect their works of art, (i.e. legal issues that affect songwriters and musicians). Students will also learn about current trends and the history of the music industry along with the many career paths that can be taken. Students will also make a music video and learn the basics of designing a web site.

Business Ownership & Marketing ■ 6431 ■ 40 Weeks ■ 1 Credit

This is a full-year course designed to provide students with a step-by-step approach to starting and operating a business as a sole proprietorship or partnership. The entire course is an extremely realistic practice set in which students will develop a business plan, create promotional materials using Adobe Photoshop and Premiere, and analyze business scenarios of current issues in human resource management.

Career and Financial Management ■ 6171 ■ 20 Weeks ■ 1/2 Credit

Do you know what you want to do with the rest of your life? Do you have a plan? This might be the course for you! Career & Financial Management is a great course for those interested in a business major, as well as those who would just like to know more about business and/or career exploration. Career & Financial Management provides students with valuable employability skills and knowledge of the workplace. Topics covered include: career planning, career development, time management, personal budgeting, purchasing a car, writing checks, balancing a check book, savings accounts, income tax, insurance, and credit. Course work includes projects and hands-on activities that simulate the real world.

Intro to Computer Literacy (OCC CIS 100) ■ 6371 ■ 20 Weeks ■ 1/2 Credit

Are you going to college, or do you plan to go to work? Whatever your plan is, this course is for you! Students will demonstrate the skills needed to be an informed citizen, achieve academic success and workplace success, and participate in an increasingly globalized environment. Students will use web applications, word-processing, spreadsheets, database, presentation software and other software as applicable to learn, search, organize and communicate information to an audience. This course will give you the 21st century skills you need for success in college or work.

Sports & Entertainment Marketing ■ 6343 ■ 20 Weeks ■ 1/2 Credit

This half-year course is designed to introduce the student to the world of marketing and how it applies specifically to the sports and entertainment industry. Sports and entertainment are important parts of our modern economy. Fans and companies spend billions of dollars each year on sports. Entertainment is one of the largest exports from the United States to the rest of the world.

Mathematics of Business & Finance (OCC BUS 102) ■ 6411 ■ 40 Weeks ■ 1 Credit

Students will develop skills required to perform mathematical operations pertaining to the world of business and finance. This course is a must course for those entering a business course in college! It will also provide you with one high school business or math credit and 3 college credits from Onondaga Community College which may be transferred to other colleges.

Money Management ■ 6429 ■ 20 Weeks ■ 1 Credit

Do you have the necessary skills to live on your own? This course will arm you with the tools to gain control of your financial future. Money management covers topics such as personal banking (checking, savings and budgeting), buying a vehicle, renting to buying a property, credit (protecting you identity), income taxes, insurance and investing in your future. Course work includes real-world projects and hands-on activities.

Cooperative Work Experience ■ 6475 (CTE Senior Candidates Only) ■ 40 Weeks ■ 1/2 Credit

To receive credit, students must fulfill the following requirements: 1. be gainfully employed and continuously employed for at least 200 hours in an approved work station between September 1 to the following June 1 of the school year; 2. attend class for work related instruction; and 3. satisfactorily complete all assigned work.

Wall Street: Investing in Your Future ■ 6482 ■ 20 Weeks ■ 1/2 Credit

This fun one-semester course is designed for all students with a desire to pursue financial security by learning and understanding how the financial markets operate. The complete ins and outs of the stock market and investing will be explained. A simulation of stock market activities will give the students an opportunity to participate in and experience investing options.

Gaming Concepts and Computer Science ■ 6791 ■ 20 Weeks ■ 1/2 Credit

Using video games as a lens, students will cover computer science standards, including societal and ethical impacts of computing and gaming, computational thinking as it relates to game design, and digital literacy as we explore game theory, video game design, goal setting for gamer performance, health and wellness for gamers, and careers in the video game industry. Each unit will require students to use skills and content from a range of other subject areas to be successful. *Only Offered at Durgee.*

Career and Technical Education Endorsement

Business Finance Strand:

Required Courses:

- Career and Financial Management
- Accounting
- Mathematics of Business Finance
- Cooperative Work Experience or pre-approved work experience related to Business Finance

Business Marketing Strand:

Required Courses:

- Career and Financial Management
- Business Management and Advertising
- Sports & Entertainment Marketing
- Business Ownership and Marketing
- Cooperative Work Experience or preapproved work experience related to Business Marketing

Plus: Electives (Pick at least Two)

- Intro to Computer Literacy
- Wall Street
- Business Ownership and Marketing
- Sports & Entertainment Marketing

Plus: Electives (Pick at least Two)

- Intro to Computer Literacy
- Accounting
- Mathematics of Business Finance



■ Computer Science

PLTW- Computer Science Essentials / Introduction to Computer Science ■ 2955 ■ 40 Weeks ■ 1

Credit

This course is designed to be the first computer science course for students who have never programmed before. It is a fun, foundational course that helps prepare students for success in the PLTW Computer Science program. In PLTW Computer Science Essentials, students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. They will use a visual programming language and advance to text-based programming. Throughout the course, students will have opportunities to apply computational thinking practices and collaborate just as computing professionals do to create products that address topics and problems important to them. This is a hands-on course. Students will work in teams to create solutions and problem-solve. **This course is only offered at Durgee Junior High**

Advanced Placement (AP) [Computer Science Principles](#) (PLTW) ■ 6433 ■ 40 Weeks ■ 1

Credit

Prerequisite: Passing grade on the Algebra I Examination

Open doors in any career with computer science. Students create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people's lives. How will computing and connectivity transform your world: Unit 1: Algorithms, Graphics, and Graphical User Interfaces (48%) Unit 2: The Internet (18%) Unit 3: Raining Reigning Data (17%) Unit 4: Intelligent Behavior (17%) This course is highly recommended for students interested in careers in computer science, engineering, or business. This course will require strong reading and logic/reasoning skills. All students enrolled in this course must take the Advanced Placement exam given in May. A fee will be charged for the AP exam.

Advanced Placement (AP) [Computer Science A \(PLTW\)](#) ■ 6434 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Computer Science Principles or C++

This course is the second course in the PLTW Computer Science Pathway. We currently offer the first course. CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java™ and other industry-standard tools. This course prepares students for the College Board's Advanced Placement CS-A test and aligns with CSTA Level 3C Standards. All students enrolled in this course must take the Advanced Placement exam given in May. A fee will be charged for the AP exam.

PLTW Cybersecurity ■ 6435 ■ 40 Weeks ■ 1 Credit

Prerequisite: Previously taken at least one computer science class or C++

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

Webpage Design ■ 7582 ■ 20 weeks ■ 1/2 Credit

An exciting and interactive experience for anyone knowledgeable in the use of computers and the web. Html coding is used to develop interactive webpages. Activities will include tutorials, small assignments and putting a web page online with wix.

Program Design and Development (OCC CSC 110) ■ 6433 ■ 20 Weeks ■ 1/2 Credit

C++ is becoming the language of choice for introducing college students across the country to computer science and programming. This 1/2-unit course is an introductory course to computer programming using the C++ computer language. Topics to be covered include history of computers, computer architecture, variables and constants, math operations, decision making, if/else statements, loops, and functions. This course is highly recommended for students interested in careers in computer science, engineering, or business.

■ English

NINTH GRADE ENGLISH (DURGEE)

English 9R ■ 0121 ■ 40 Weeks ■ 1 Credit

Students in this course read a variety of literature organized primarily by genre, including autobiography, short story, poetry, drama (*Romeo and Juliet*), and the novel. The literature is used as a vehicle through which students can gain insight into themselves and perspective on their place in the world at large. Woven through the curriculum are various non-fiction selections which correspond with the fiction. All students are expected to produce personal, creative, and analytical pieces of writing. Formal presentations are required as is a research paper. Students are encouraged to develop and strengthen their ability to read, write, listen and speak for information and understanding, for literary response and expression, for critical analysis and evaluation, and for social interaction as outlined in New York State Standards for English Language Arts.

English 9H (Honors) ■ 0111 ■ 40 Weeks ■ 1 Credit

Students in this course will receive an enriched program in which a variety of literature is read, including autobiography, short story, novel, Shakespearean drama, and poetry. Woven through the curriculum are various non-fiction selections which correspond with the fiction. Active reading and annotation are emphasized as part of literature study to focus on comprehension and inference. The writing requirements for this course are rigorous. All students are expected to produce analytical and interpretive pieces of expository writing in preparation for the English 11 Regents examination. Formal presentations, as well as a research paper, are required as part of the course. Students are encouraged to develop higher level thinking skills and are required to demonstrate these skills in both individual and collaborative efforts.

TENTH - ELEVENTH GRADE ENGLISH (BAKER)

English 10R ■ 0221 ■ 40 Weeks ■ 1 Credit

The literature taught in English 10R is taken primarily from the Western European tradition. Students read a variety of authors and genres from antiquity through modern day. Students read a mixture of novels and plays. These include selections from Shakespeare, tragedies, poetry and works of non-fiction. A variety of projects as well as group and individual oral presentations are incorporated into the course. This course is designed to continue to prepare students for the requirements of a Regents diploma.

English 10H (Honors) ■ 0211 ■ 40 Weeks ■ 1 Credit

The English 10 Honors course provides a reading and writing program that focuses on higher level thinking skills. Experiences in literature will concentrate on the short story, the novel, drama, poetry, and non-fiction. Various types of writing will be explored such as literacy analysis, essays, and reading responses. Several collaborative and individual activities involving critical thinking skills will be assigned.

English 11R ■ 0321 ■ 40 Weeks ■ 1 Credit

While American Literature represents only one facet of the English 11R program, it is the basis for a number of writing and speaking exercises and is the nucleus of the curriculum. Through a survey of short, literary selections from the major historical eras, the student will be expected to trace the overall development of literary history, as well as to analyze individual authors. Because English 11R concludes in the taking of the New York State Comprehensive Examination, the skills that are necessary for success on that exam are emphasized and are integrated into the study of the content of the course.

English 11H (Honors) ■ 0311 ■ 40 Weeks ■ 1 Credit

Students in English 11H have a strong academic capabilities and work ethic as demonstrated through standardized test scores and teacher recommendations and grade point average. Students in this course will receive an enriched program focusing on works from American literature. A survey of works representative of the major historical eras will be studied intensively, ranging from the earliest Native American traditions to writers of the 21st century. The writing strand will consist of longer works including literary essays, persuasive pieces and special projects to develop critical analysis and communication skills. The number of readings, as well as depth of mastery expected, will be greater than in a traditional 11R program. Since the New York State Regents Examination will be administered at the conclusion of this course, the skills that are necessary for success on that exam will be integrated into the study of the content of the course.

TWELFTH GRADE

Advanced Placement English Literature ■ 0419 ■ 40 Weeks ■ 1 Credit

[English 11H with a minimum 90% average or above and a 90% or higher on the English Regents examination is suggested] Advanced Placement English Literature is a full year course for seniors who are interested in a college level English course experience. The course will provide opportunities to develop strategies for intensive literary analysis of a wide range of traditional and contemporary classics, techniques for inferential reading, and close analysis of texts and strategies for developing and refining the conventions of academic writing. Course reading experiences include a variety of literary genres, such as the novel, drama, poetry, personal, critical and expository essays. The Advanced Placement English Examination in May is mandatory. (A fee will be charged for this AP examination.)

12R/Critical Reading, Writing & Thinking ■ ■ 40 Weeks ■ 1 Credit

Eligibility: Seniors may take this course to fulfill their fourth year English requirement.

This senior elective presents a broad spectrum of reading, writing, and speaking activities with an eye to preparing high school seniors for the demands of college, the military, technical or business school, industry, and other rigorous postsecondary environments. Course literature consists of many pieces of fiction and nonfiction. The first month of the course is devoted to personal narrative, culminating in students writing their college admissions essays—essays easily adaptable to other post-graduation situations. Frequent writing is required.

Freshman Composition and Literature, I (OCC ENG 103) ■ 0212 ■ 20 Weeks ■ 3 OCC Credits

Prerequisite: Onondaga Community College placement test or 500 or better on the Verbal portion of the SAT or unweighted GPA of 80% or higher.

Emphasizing the recursive nature of writing and the process of revision, this course teaches students the skills and processes necessary for writing and revising college-level academic prose. Various aspects of writing, including invention/pre-writing, composing, revision, and editing/proofreading will be taught. Critical readings of various nonfiction texts may be used to develop understanding of rhetorical conventions and genres. Composing in and for electronic environments, as well as their conventions, will also be taught. Student that are unsuccessful in the first semester will be unable to register for OCC ENG 104. Failing this course could affect financial aid or acceptance in to college. If a student wishes to drop this class it must be within the first 5 days of class, otherwise it will be listed on the high school transcript as a withdraw and on the OCC transcript as a drop.

Freshman Composition and Literature, II (OCC ENG 104) ■ 20 Weeks ■ 3 OCC Credits

Prerequisite: ENG 103.

Teaches students to comprehend, respond to and use the ideas of others in their own writing. Skills such as analytic and critical reading and writing, summarizing, and paraphrasing are developed through the study of literature. Term paper form will also be taught. If a student wishes to drop this class it must be within the first 5 days of class, otherwise it will be listed on the high school transcript as a withdraw and on the OCC

transcript as a drop. This could affect financial aid or acceptance in to college.

OCC ENG 104: British Literature ■ 0433 ■ 20 Weeks ■ 1/2 Credit

The course in British Literature covers the seven major periods of recorded British history: the Middle Ages, the medieval period, the Renaissance, the 18th Century, the Romantic Age, the Victorian Age, and the Twentieth Century, and the distinct literature written by the prominent authors of each time period. The literature will be presented and discussed in terms of genre and the techniques and strategies used by authors in specific movements or schools of thought in order to trace the development of British literature through the past fifteen centuries. Students are expected to complete close readings of the texts, participate in small and large group discussions, contribute to formal presentations, and write critical analysis essays in which they draw informed conclusions about the texts, authors, and time periods.

OCC ENG 104: Mythology ■ 0425 ■ 20 Weeks ■ 1/2 Credit

In this course students will study mythologies and cultures from around the world. Student will reflect on how our knowledge of mythology help us understand our lives. We will begin the course by reading the Greek epics *the Iliad* and *the Odyssey*, while focusing on literary analysis. We will then transition into regions like Egypt, Mesopotamia, Northern Europe, India, China, Japan, Africa and the Americas, to include myths like *Gilgamesh*, *Sigurd the Volsung*, *King Arthur*, *the Ramayana*, and *Sunjata*. We will end the course with a research project on world mythology, followed by a research paper on comparative mythology, wherein we will attempt to determine if myths from around the world are more different than similar or more similar than different.

OCC ENG 104: Stage and Screen ■ 0438 ■ 20 Weeks ■ 1/2 Credit

This course offers students the chance to read wonderful plays, both classical and contemporary. Students will have the opportunity to attend student matinee performances at Syracuse Stage and will be offered opportunities to attend evening performances there and at other venues in CNY. Film versions of many dramatic offerings will also be explored and compared to stage counterparts when appropriate. A new feature of the course is classroom participation in the spring or fall drama club production. Students in Stage and Screen will learn about and be responsible for the production elements of the drama club offering. In Stage and Screen, students' understanding of and connection to the literature they read will be evaluated through the frequent use of reading logs. Other kinds of writing, including analytical essays and critical reviews, will be taught.

OCC ENG 104: Contemporary Literature ■ 0429 ■ 20 Weeks ■ 1/2 Credit

The course is for students who would enjoy studying contemporary literature as a vehicle to explore and discuss the world we live in. The literature selected for this course is written by, written about, or expected to appeal to young adults. Many of the selections are recent novels/memoirs taken from best sellers lists. Using a thematic approach we explore such topics as individuality, relationships, and search for self and family. In addition to the formal and informal analytical writing, there will be a focus on creative writing. Students will be given the opportunity to write original works of various genres, including memoir, poetry, and vignettes.

OCC ENG 104: Literary Analysis ■ 0413 ■ 20 Weeks ■ 1/2 Credit

PIG/ECO/LIT is a two-period, co-curricular, team-taught course designed to help students understand and nurture what it means to be a citizen in a Democracy through the use of literature, writing, discussion, and media. It combines current government issues and concepts of citizenship and economic principles with analytical reading of classical authors as well as argumentative writing. This course is specifically designed to get students involved in their own learning and in the process of government. Students become active members of the class while simultaneously becoming familiar with writing techniques and styles to improve individual skill level. PIG/ ECO/LIT studies literature spanning the classical work of Plato to today's most influential authors, such as Frank McCourt, Neal Postman, Tim O'Brien and George Will. This course will help students understand the connection between literature and the socioeconomic and socio-historic context in which they were written and assist them in developing opinions on the issues explored. Topics discussed include communication, governments, citizenship, finances, media, and current issues.

ELECTIVE ENGLISH

Creative Writing (Non-Fiction) ■ OSWEGO CRW 208 ■ 0592 ■ 20 Weeks ■ 1/2 Credit

Creative Writing: Non-Fiction will be offered concurrently with SUNY Oswego's CRW 208: Creative Nonfiction Writing: Introductory. This course introduces students to various modes of nonfiction writing, helps them analyze and evaluate literature in the genre, and provides an environment in which they develop writing in nonfiction modes will introduce students to creative writing techniques for developing plot, setting, character, conflict and resolution. It will focus on the continued discovery and development of the student's voice. This course will introduce students to genre studies from the perspective of the writer and push them to utilize other writers' craft to develop their own.

Creative Writing (Fiction) ■ OSWEGO CRW 206 ■ 0591 ■ 20 Weeks ■ 1/2 Credit

Creative Writing: Fiction will be offered concurrently with SUNY Oswego and their CRW 206 course Fiction Writing: Introductory. This course will be focused on fiction writing with specific emphasis on character study, plot development, plotlines, dialogue, as well as other fiction writing techniques. The course will culminate with the development and publication of students' original fiction works. This course will focus on the development of narrative fiction and poetry, as well as magazine article writings, short stories and/or technical writing styles. Proofreading and editing skills will be emphasized in order to help students develop as writers. Students will also create a literary publication for distribution throughout the school and the greater community.

Interpretation to Film: 0594: 40 weeks: 1 credit

The interpretation of film course will provide students with the skills and vocabulary necessary to make meaning of film through formal analysis. We will cover films from the silent era to contemporary pieces, paying attention to the small detail of what we see and hear, and how these details determine meaning. This course will introduce students to the different organizational structures of film, including narrative films, documentary and experimental, which will further enhance their understanding of genre specific films. Students will be expected to produce multiple pieces of writing and produce short films in order to articulate their understanding.

■ English as a Second Language

Entering, Emerging Stand Alone ENL ■ 0106 ■ 40 weeks ■ 1 Credit

Students are identified for English as a New Language services through the use of student interviews, Home Language Surveys, and the New York State Identification Test for English Language Learners (NYSITELL). Those who are new arrivals from another country and speak no English and those who speak another language at home and score below the proficiency level on the NYSITELL test into the program. Basic survival skills and vocabulary are taught through exercises in listening/comprehension, speaking, reading, writing and critical thinking. Varied reading, graphic organization, and cooperative learning strategies are taught. Students are required to develop projects related to the current unit and give oral presentations quarterly. Reading comprehension is taught through the use of studying current events in newspapers. Public speaking is practiced weekly with discussion cards. Grammar, writing and critical thinking skills are taught using a multi-cultural curriculum that teaches meaningful language that pertains to academic content areas. Math, social studies, science and literature are woven throughout the curriculum to teach and support concepts and vocabulary in content area classes. Unit exams test the progress of students. The New York State English as a Second Language Achievement Test (NYSESLAT) is administered in May every year to check the progress of students. Students at this level receive minimally one Stand Alone ENL class and one Integrated ENL class.

Transitioning, Expanding Integrated ENL ■ 0107 ■ 40 weeks ■ 1 Credit

Students who score at the Transitioning or Expanding Level just receive one Integrated ENL class. The ENL teacher in a content area class such as English, Math, Science or Social Studies integrates literacy and content to teach language. One content area credit is awarded upon passing each corresponding ENL unit of study. Approved accommodations are offered on Regents, such as extra time, bilingual glossaries, some test translations and writing in their native language. Students who score at the proficient level, Commanding, in the listening, speaking, reading and writing areas of the NYSESLAT exit out of the ENL program.

■ Family and Consumer Sciences

Food & Nutrition Core (SUNY Cobleskill Credit) ■ 7173 ■ 20 Weeks ■ 1/2 Credit

This course is an introduction to basic food preparation. Food & Nutrition Core offers basic cooking, baking, food preparation and sanitation skills, which are needed for professional and personal purposes throughout life. Students will learn basic cooking & baking techniques, recipe reading & planning as well as kitchen math, measurements and equivalents. This course is a prerequisite for other cooking courses.

Food Science ■ 7273 ■ 40 Weeks ■ 1 Credit

Prerequisite: Food & Nutrition Core

Do you like to play with your food? Do you like to experiment and create new foods? Do you need a third science credit? Food Science may be the classes for you! This class encourages students to use their knowledge of food, science and creativity to develop food experiments to discover how science affects the foods we eat. Student do not need to take Food & Nutrition Core prior to Food Science.

Cooking Coast to Coast ■ 7373 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Food & Nutrition Core

(Enrollment Preference will be given to Juniors and Seniors)

This course provides a study of American food traditions & culture and focuses on the influences of foreign cultures in our country's food: with specific region by region units of study across the map. Students prepare foods brought to the USA by immigrants. The course is a mixture of individual work and cooperative group work.

Child Psychology ■ 7271 ■ 20 Weeks ■ 1/2 Credit

This is a 20-week program to survey the challenges of understanding and guiding young children effectively through the first ten years of growth. Prenatal development, discipline, and learning are only a few of the areas discussed. This course is recommended for those interested in pursuing a career in any of the human service areas, such as child care, teaching, social work, probation/police science, etc.

Food for Health, Fitness & Wellness ■ 7474 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Food & Nutrition Core

Students interested in life-long health, fitness and wellness will find this course exciting! Students will explore sports, health care, recreation, dietetics, nutrition and fitness. Students will explore ways to cook and bake in healthier ways by modifying recipes and using new alternative ingredients. Students will also complete a personalized analysis of health and participate in weekly fitness activities.

Global and Gourmet Foods ■ 7476 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Food & Nutrition Core

The Global and Gourmet Foods course introduces students to the ways in which the culture and traditions of regions and countries influence food choices. Students will identify and prepare foods from various regions and countries to compare cuisines, ingredients used, and preferred cooking methods. Students will also examine the issues and conditions which affect the availability and quality of food in the global market. Current issues related to global nutrition from production through consumption will be explored. Through this investigation students, will understand and appreciate diverse cultures. Students will have the opportunity to examine the wide variety of career paths in the global and gourmet foods fields and identify the knowledge and skills necessary for success within these fields.

Advanced Cookery ■ 7275 ■ 20 Weeks ■ 1/2 Credit

Prerequisite: Food & Nutrition Core

This course is designed to challenge students in all areas of cooking and is especially designed for those with specific interest or career paths geared toward the food industry. Various cooking, baking and specialty work will be studied in depth. Students will explore moist and dry heat cooking methods, fine pastry arts, chocolate work, cake decorating, restaurant design, purchasing and costing and menu planning.

■ Family and Consumer Sciences

CTE Endorsement Checklist- Culinary Arts <i>(Minimum of 3 credits & passing the NOCTI exam required for CTE endorsement)</i>	
Required Courses	Course Passed ✓
Career and Financial Management (1/2 credit)	
Food and Nutrition Core (1/2 credit)	
Cooperative Work Based Learning (1/2 credit)	
Elective Options (choose 1 ½ credits or more)	
Advanced Cookery (1/2 credit)	
Cooking Coast to Coast (1/2 credit)	
Global and Gourmet Foods (1/2 credit)	
Food for Health Wellness and Fitness (1/2 credit)	
Food Science (1/2 credit)	
Required Assessments	
NOCTI Exam – Culinary Arts, Prep Cook I	
Total	

■ Languages Other Than English

FRENCH

French I ■ 4121 ■ 40 Weeks ■ 1 Credit

This full-year course introduces the student to the French language and the French people. In French I, students learn how to communicate with French people about everyday life. Although spoken communication is the major emphasis, students also learn how to read and to write in simple French. Through slides, students are able to learn to appreciate the culture of French speaking countries. This course is offered only at Durgee.

French II ■ 4221 ■ 40 Weeks ■ 1 Credit

Prerequisite: French I

This full year, one credit course continues the work begun in French I. The major emphasis is on the development of communication skills which will be useful in daily life. There is added practice in reading and writing French which focuses on the daily life and language of the typical French teenager. This course is offered only at Durgee.

French III ■ 4321 ■ 40 Weeks ■ 1 Credit

Prerequisite: French II

This full-year, one credit course brings the communication skills to the Comprehensive Final Exam level of proficiency. The development of conversational and communicative skills is the central focus. Much small group work is done to allow students to practice speaking French on topics of interest to them. Emphasis is on vocabulary development and the refinement of previously learned structures. Authentic French materials are used to help students experience selected areas of the culture of French speaking peoples.

French IV (OSWEGO FRE 201) ■ 4421 ■ 40 Weeks ■ 1 Credit

Prerequisite: French III

This full year one credit course helps the student begin to attain communication skills at a level of proficiency beyond the Comprehensive Final Exam. It is the first course necessary for those wishing to move toward the advanced Checkpoint C proficiency leading to advanced placement at college level. Students will participate in a variety of activities: reading, discussions, skits and one-to-one conversations and an introduction to French cooking. Both vocabulary and knowledge of the grammatical patterns of French are developed and refined. This course is conducted in French. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

French V (OSWEGO FRE 202) ■ 4521 ■ 40 Weeks ■ 1 Credit

Prerequisite: French IV

This full-year, one credit elective offers advanced students the opportunity to bring their communicative skills to the highest level of development at Checkpoint C. The student will be exposed to excellent examples of French literature which serve as a catalyst for discussion as well as a most expanded vocabulary. French culture and civilization are emphasized with special emphasis on French foods. This course is conducted in French. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

Advanced Placement French ■ 4511 ■ 40 Weeks ■ 1 Credit

Prerequisite: French IV

Advanced Placement French is a senior elective for the able French student who is committed to the intensive training that will lead to success in the Advanced Placement examination in the French language. The course stresses competency in listening, speaking, reading and writing comparable to an advanced college course in composition and conversation. Successful completion of the Advanced Placement French examination in May could earn the student up to six hours of college credit. This course is conducted in French. A fee will be charged for the AP exam. This examination is required for all students taking Advanced Placement courses.

■ Languages Other Than English

GERMAN

German I ■ 4125 ■ 40 weeks ■ 1 credit

This full-year, one credit course covers the essential grammatical and conversational components of the German language within the context of cultural concepts and the development of technological skills and responsibilities via Google Classroom. A combination of skits, listening activities, and guided notes are used in class to coincide with and complement the establishment of a long-term friendship with our partner school in Germany via pen pal letters and/or live video conferences. Circumstances permitting, an opportunity to host as well as visit said students will also be communicated. **This course is offered only at Durgee**

German II ■ 4225 ■ 40 Weeks ■ 1 Credit

Prerequisite: German I

This full-year, one credit course continues work begun in German I. Cultural topics are explored further, grammatical topics are expanded upon, and German history and/or fairy tales “Märchen” are also covered. As communication skills develop, more advanced conversations are held with our pen pals via letters, live video conferencing, and/or face-to-face discussions during hosting/visiting, circumstances permitting. **This course is only offered at Durgee.**

German III ■ 4325 ■ 40 Weeks ■ 1 Credit

Prerequisite: German II

This full-year, one credit course brings the modalities of listening, speaking, reading, and writing to the Regents-level of communication. Authentic German materials are used and projects/skits that emphasize speaking skills are prioritized. The conversational past is the central grammatical-focus and journaling is also part of the coursework. Select areas of German culture, including travel-related topics, are studied in great detail. Current events in Germany, Austria, and Switzerland are also discussed.

German IV (OSWEGO GER 201) ■ 4425 ■ 40 Weeks ■ 1 Credit

Prerequisite: German III

This full-year, one credit course carries students beyond the Regents-level proficiency and toward the college-level, Checkpoint-C degree of proficiency. Students will study the language through a variety of cultural, literary, and historical activities and will experience the language in some famous literature and music. Scholarship opportunities and other opportunities for distinction in German-language learning may be communicated at this point. Successful completion of this course will enable each student to additionally earn three college credit hours via SUNY Oswego. A fee is required to obtain college credit.

German V (OSWEGO GER 202) ■ 4525 ■ 40 Weeks ■ 1 Credit

Prerequisite: German IV

This full-year, one credit course provides students the opportunity to develop their communication skills to the highest level of proficiency at Checkpoint C. Students will intermittently have the opportunity to select certain areas of interest to study from the German perspective via authentic texts and media within the context of grammatical/thematic units in the class. Advanced grammatical topics, paragraph-level speaking, and fluency are stressed. Successful completion of this course will enable each student to additionally earn three college credit hours via SUNY Oswego. A fee is required to obtain college credit.

■ Languages Other Than English

LATIN

Latin I ■ 4127 ■ 40 Weeks ■ 1 Credit

This full-year, one credit course is open to all students. Simple stories read in Latin combine the necessary grammar and vocabulary with knowledge of mythology and the history and background of our Western culture. Emphasis is also put on the development of English vocabulary through the study of derivatives and Latin words and phrases used in English today. This course is offered only at Durgee.

Latin II ■ 4227 ■ 40 Weeks ■ 1 Credit

Prerequisite: Latin

This full year, one credit course continues the work begun in Latin I. The development of comprehension background and vocabulary building are emphasized. A large variety of selections from Latin authors are read and discussed. By the end of this course, students will have been introduced to the basic structures of Latin. This course is offered only at Durgee.

Latin III ■ 4327 ■ 40 Weeks ■ 1 Credit

Prerequisite: Successful completion of Latin II

This full-year, one credit course leads the student to the comprehension of Latin literature on an increasingly sophisticated level. Review of syntax from levels I and II, in addition to the study of new structures and vocabulary taken from reading selections, prepare the student for the Comprehensive Final Exam in Latin. Early Roman history and mythology are emphasized. Latin III is an excellent course through which to explore the Roman foundations which became our modern heritage while also preparing for the New York State Regents Examination.

Latin IV ■ 4427 ■ 40 Weeks ■ 1 Credit

Prerequisite: Latin III

Latin IV students study selections from ancient authors such as Catullus, Virgil, Lucy and Ovid. For the college-bound liberal arts student, Latin IV offers superior preparation through the study of old ideas which are still alive and well today. Successful completion of this course meets the core requirement for a Regents diploma.

Latin V ■ 4527 ■ 40 Weeks ■ 1 Credit

Prerequisite: Latin IV

Latin V prepared students to read, understand, translate and analyze Latin literature. Students develop their language skills through various activities with an emphasis on reading comprehension and literary analysis that demonstrates critical thinking in clear and coherent arguments supported by textual examples.

■ Languages Other Than English

SPANISH

Spanish I ■ 4123 ■ 40 Weeks ■ 1 Credit

This full year, one credit course introduces the student to the Spanish language and the Hispanic people. In Spanish I, students learn how to communicate with Hispanic people about everyday life. Although spoken communication is the major emphasis, students also learn how to read and to write in simple Spanish. Through Spanish, students are able to learn to appreciate the culture of Spanish speaking countries. Students will take the N.Y.S. Proficiency Examination at the end of the course. This course is offered only at Durgee.

Spanish II ■ 4223 ■ 40 Weeks ■ 1 Credit

Prerequisite: Spanish I

This full year, one credit course continues the work begun in Spanish I. The major emphasis is on the development of the communication skills which will be useful in daily life. There is added practice in reading and writing Spanish which focuses on what it is like to travel through various Hispanic countries. This course is offered only at Durgee.

Spanish III ■ 4323 ■ 40 Weeks ■ 1 Credit

Prerequisite: Spanish II

This full year, one credit course brings the communication skills to the Comprehensive Final Exam level of proficiency. In this class students explore Spanish through storytelling, novels, songs, movies, current and cultural events and more. Students will be expected to read, listen and respond in Spanish throughout the course. Communication, critical thinking and literacy at an intermediate level are prioritized.

Spanish IV (OSWEGO SPA 201) ■ 4423 ■ 40 Weeks ■ 1 Credit

Prerequisite: Spanish III

This full year, one credit course helps the student begin to attain communication skills at a level of proficiency beyond the Comprehensive Final Exam. It is the first course necessary for those wishing to move toward the advanced Checkpoint C proficiency leading to advanced placement at college level. Students will study the language through its literature, art, and history. Communication skills in Spanish are further developed and refined. This course is conducted in Spanish. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

Spanish V (OSWEGO SPA 202) ■ 4523 ■ 40 Weeks ■ 1 Credit

Prerequisite: Spanish IV

This full year, one credit elective offers advanced students the opportunity to bring their communicative skills to a higher level of development at Checkpoint C. The student will be exposed to diverse examples of Hispanic literature and film which serve as a catalyst for discussion as well as a more expanded vocabulary. Spanish and Latin American culture and civilization are emphasized. This course is conducted in Spanish. Successful completion of this course will enable each student to additionally earn three college credit hours at SUNY Oswego. A fee is required to obtain college credit.

Advanced Placement Spanish ■ 4513 ■ 40 Weeks ■ 1 Credit

Prerequisite: Spanish IV

Advanced Placement Spanish is a senior elective for the Spanish student who is committed to the intensive training that is conducted entirely in Spanish. The course stresses competency in listening, speaking, reading and writing comparable to an advanced college course in composition and conversation. Successful completion of the Advanced Placement Spanish examination may earn the student up to six college credits. A fee will be charged for the AP examination which is required for students taking the course.

■ Mathematics

All students must earn a minimum of three units of mathematics credit and pass the New York State Common Core Algebra Examination to obtain a Regents Diploma. Advanced Regents diplomas can be earned if students earn a minimum of three units of mathematics credit and pass the New York State Common Core Algebra I, Geometry Regents, and the Algebra II Regents Examinations.

Algebra I ■ 2126 ■ 40 Weeks ■ 1 Credit

This course is the first course in a three-year sequence aligned with the Common Core State Standards. Algebra provides tools and ways of thinking that are necessary for solving problems in a wide variety of disciplines, such as science, business, social sciences, fine arts, and technology. This course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in a variety of settings. Topics include linear, quadratic, and exponential functions, solving equations and inequalities, and statistics, as outlined in the NYS Common Core Standards. The course concludes with the Algebra I Regents examination in June.

Intermediate Algebra ■ 2331 ■ 40 weeks ■ 1 Credit

Prerequisite: Passed Algebra I Regents

This course can serve as the second course for students who need to continue the study of mathematics and obtain a 2nd or 3rd mathematics credit. The course includes work with linear and quadratic equations, absolute value equations and inequalities, polynomials, sequences, linear systems, radicals, and pattern recognition and description. Emphasis will be placed on topics that will help each student prepare for college placement testing and/or a 3rd math course.

Geometry ■ 2432 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Algebra I

This course is intended to be the second course in mathematics for high school students. Within this course, students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusion follows logically from their hypothesis. This course is meant to employ an integrated approach to the study of geometric relationships. Integrating synthetic, transformational, and coordinate approaches to geometry, students will justify geometric relationships and properties of geometric figures. 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. A major emphasis of this course is to allow students to investigate geometric situations. Properties of triangles, quadrilaterals, and circles should receive particular attention. It is intended that students will use the traditional tools of compass and straightedge as well as dynamic geometry software that models these tools more efficiently and accurately, to assist in these investigations. Geometry is meant to lead students to an understanding that reasoning and proof are fundamental aspects of mathematics and something that sets it apart from the other sciences. Additionally, this course culminates in a NYS Regents Examination.

Algebra II ■ 2332 ■ 40 Weeks ■ 1 Credit

This course is the capstone course of the three units of credit required for an Advanced Regents diploma. It is a continuation and extension of Algebra 1 with some references to Geometry. This course focuses on four critical areas of the Common Core model pathway for Algebra II: functions, polynomials, periodic phenomena, and collecting and analyzing data. The course begins with a review of linear and quadratic functions, to solidify a foundation for learning new functions. Students will make connections between verbal, numeric, algebraic, and graphical representations of functions and apply this knowledge as they create equations that can be used to model and solve mathematical and real-world problems. As students refine and expand their algebraic skills, they will draw analogies between the operations and field properties of real numbers and those of complex numbers and algebraic expressions. The Common Core practice standards are embedded throughout the course, as students solve novel problems, reason abstractly, and think critically. The course concludes with the NYS Algebra II Common Core Regents exam. Each student is required to have a graphing calculator for this course.

■ Mathematics

Advanced Algebra and Trigonometry ■ 2431 ■ 40 Weeks ■ 1 Credit *Prerequisite: Passed Algebra II*

This course is designed for students who desire additional math credits for college preparation. The course will allow students to develop and apply trigonometric formulas in the solution of triangular problems. It will also review basic algebra and develop skills in the area of functions: linear, quadratic, and exponential. Much of the course will center on algebraic skills used in the solution of algebraic and trigonometric equations. This course will strengthen a student's skills with high school algebra and trigonometry and prepare a student for continued work at the college level. Graphing calculators are required for the course. **This course is not designed to prepare students for the Algebra II Regents Examination.**

Pre-Calculus (OCC MAT 143) ■ 2445 ■ 40 Weeks ■ 1 Credit

Prerequisite: We recommend that a student pass Algebra II and Algebra II Regents exam

Pre-Calculus is designed to prepare students for their first course in calculus and other college courses in mathematics. The majority of content is centered on topics dealing with functions, both polynomial and rational. Special functions such as irrational, exponential, logarithmic, trigonometric, and inverse trigonometric functions are developed using the graphing calculator. Advanced mathematical areas, such as polar equations and limits of functions, as well as sequences and series are studied. Each student is required to have a graphing calculator for the course. Course is offered for optional college credit through OCC.

Calculus (OCC MAT 161) ■ 2435 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Pre-Calculus

This course is designed for students wishing to continue their study of mathematics after Pre-Calculus but not wanting to take AP Calculus. This course contains, but is not limited in, the following topics: differential and integral calculus, applications of calculus to curve sketching and problems of Physics, conic sections and advanced methods of integration. Each student is required to have a graphing calculator. Course is offered for optional college credit through OCC.

Intro to Statistics ■ 2516 ■ 40 Weeks ■ 1 Credit

This course is an alternative third course in mathematics for high school students. It is designed to focus on an introduction to probability and statistics as applicable to real-world situations and professions. Topics to include graphic representation of data, randomness and probability, normal distributions, measures of central tendency, experimental design and analysis of current real-world data.

■ Mathematics

Advanced Placement Statistics ■ 2517 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Algebra II Regents Exam, passed Pre-Calculus or passed Intro to Statistics

The Advanced Placement Statistics course is an excellent option for a student who has successfully completed a 3 year Regents sequence in mathematics and is pursuing additional course work in science, engineering, business or mathematics. The topics for Advanced Placement Statistics explore four major themes: 1) Exploratory Analysis of Data - study of patterns and departure of patterns using graphical and numerical techniques 2) Planning a Study - deciding what and how to measure data 3) Anticipatory Patterns - producing models using probability and simulation 4) Statistic Inference - conforming models using statistical inference guides. Students may be enrolled concurrently in any Calculus course or Pre-Calculus. All students enrolled in this course must take the Advanced Placement exam given in May. Also, each student must have a graphing calculator. A fee will be charged for the AP exam.

Advanced Placement (OCC MAT 161) Calculus AB ■ 2518 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Pre-Calculus with Mastery or above

This course is designed for students expecting to enter engineering, Math or Science related fields: i.e., Medical, Statistician, etc. and who wish to take a college level course. This course introduces and develops Calculus and Analytical Geometry. One purpose of the course is to prepare for the Advanced Placement exam offered in the spring. A fee will be charged for the AP exam. All students must take this exam and upon successful completion, obtain advanced placement in most colleges and universities. This course contains, but is not limited in, the following topics: differential and integral calculus, application of calculus to curve sketching and problems of Physics, conic sections and advanced methods of integration. Each student is required to have a graphing calculator. Course is offered through optional College Credit through OCC.

Advanced Placement (OCC MAT 161) Calculus BC ■ 2437 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Pre-Calculus with Mastery or above and with teacher recommendation

This course is designed for students planning to enter engineering, Mathematics or Science related fields: i.e. Medical, Statistician, etc. who wish to take an Advanced Placement college level class. This course is equivalent to a two semester college course. The Calculus BC course is intended for students whose prior studies and success in Pre-Calculus eliminate the need for the review of basic functions included in Calculus AB. This course introduces and develops Calculus and Analytical Geometry. This course covers both AB Calculus and BC Calculus in one year. It prepares students to take the BC Calculus exam in May. Students who take the Calculus BC exam will be scored on both the AB and BC exams. A fee will be charged for the AP exam and all students must take the exam. This course contains but is not limited to: differential and integral calculus, application of calculus to curve sketching and problems in physics, conic sections, Taylor Series, polynomial approximations and series, parametric, polar and vector functions, logistic growth, Euler's Method, integration by parts and other BC topics.

Math/Science/Technology ■ 3500 ■ 40 Weeks ■ 1 Credit

Prerequisite: Earned 2 Math credits and 2 science credits prior to enrollment and passed 1 math and 1 science Regents examination

This course is designed to meet the need of a third math or third science credit. The purpose of this course is to ensure the use of problem-solving techniques in order to increase students' understanding that Math, Science and Technology are inherently interactive and are an integral part of society. This course is designed to have a thematic approach to real world problems. Possible themes include transportation, mechanical systems, energy, toys, medicine, health and wellness, communication, electronics, home, and engineering and design. The course will conclude with a culminating project.

■ Mathematics

Math Topics (Seniors Only) ■ 2325 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed two math classes (This course is used as third or fourth credit for seniors).

This course is designed for seniors who choose not to study at the depth and pace required for Algebra II (Common Core). Throughout the course emphasis is placed on mathematical skills as they relate to personal finance such as filing taxes, budgeting, bills, and understanding the use of credit. This course benefits college-bound students regardless of their mathematical intentions for the future.

Computer Science Essentials / Introduction to Computer Science (PLTW) ■ 2955 ■ 40 Weeks ■ 1 Credit

This course is designed to be the first computer science course for students who have never programmed before. It is a fun, foundational course that helps prepare students for success in the PLTW Computer Science program. In PLTW Computer Science Essentials, students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. They will use a visual programming language and advance to text-based programming. Throughout the course, students will have opportunities to apply computational thinking practices and collaborate just as computing professionals do to create products that address topics and problems important to them. This is a hands-on course. Students will work in teams to create solutions and problem-solve. **This course is only offered at Durgee Junior High**

Advanced Placement Computer Science Principles (PLTW) ■ 6433 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passing the Algebra I Examination

Open doors in any career with computer science. Students create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people's lives. How will computing and connectivity transform your world? Unit 1: Algorithms, Graphics, and Graphical User Interfaces (48%) Unit 2: The Internet (18%) Unit 3: Raining Reigning Data (17%) Unit 4: Intelligent Behavior (17%) This course is highly recommended for students interested in careers in computer science, engineering, or business. This course will require strong reading and logic/reasoning skills. All students enrolled in this course must take the Advanced Placement exam given in May. A fee will be charged for the AP exam.

Advanced Placement Computer Science A (PLTW) ■ 6434 ■ 40 Weeks ■ 1 Credit

Prerequisite: Passed Computer Science Principles or C++

This course is the second course in the PLTW Computer Science Pathway. We currently offer the first course. CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java™ and other industry-standard tools. This course prepares students for the College Board's Advanced Placement CS-A test and aligns with CSTA Level 3C Standards. All students enrolled in this course must take the Advanced Placement exam given in May. A fee will be charged for the AP exam.

Webpage Design ■ 7582 ■ 20 weeks ■ 1/2 Credit

An exciting and interactive experience for anyone knowledgeable in the use of computers and the web. Html coding is used to develop interactive webpages. Activities will include tutorials, small assignments and putting a web page online with wix.

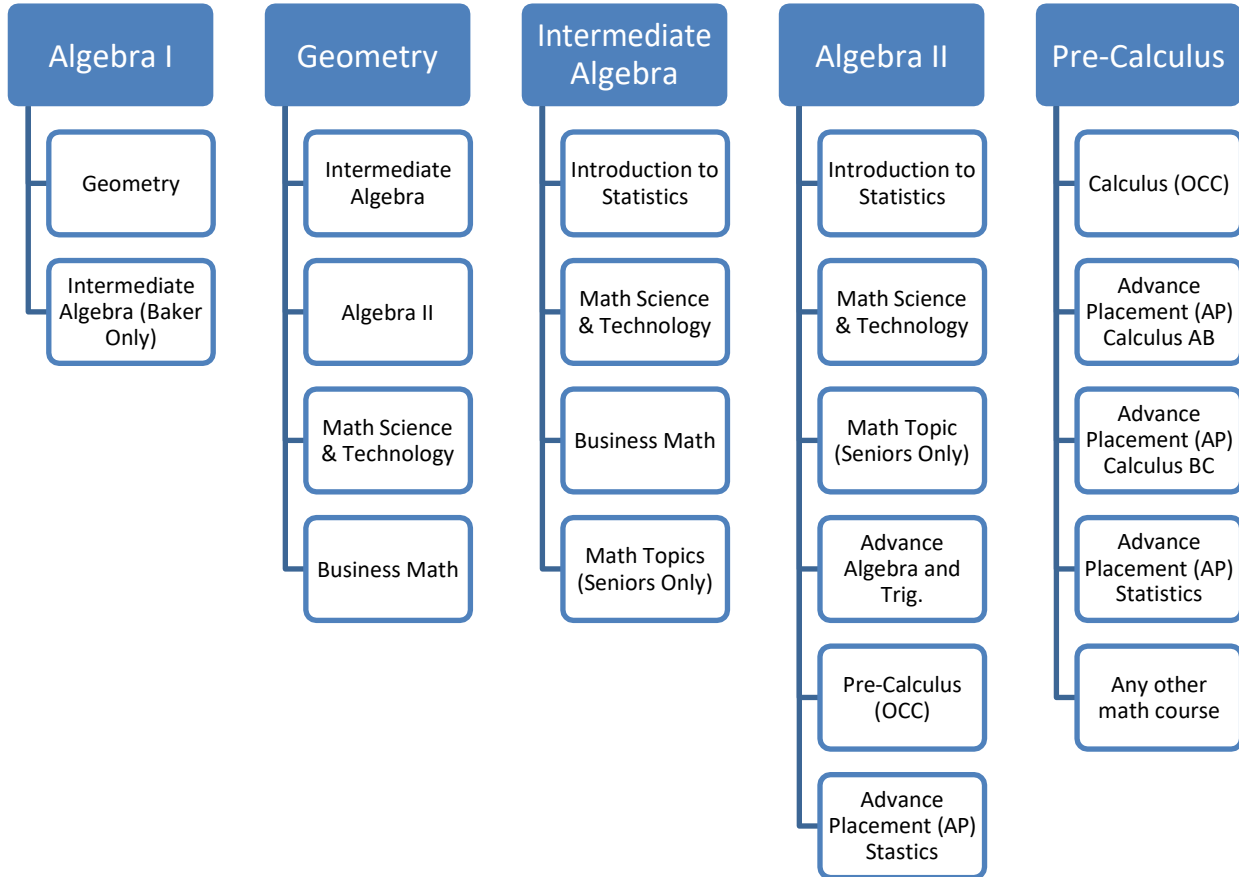
Program Design and Development (OCC CSC 110) ■ 6433 ■ 20 Weeks ■ 1/2 Credit

C++ is becoming the language of choice for introducing college students across the country to computer science and programming. This 1/2-unit course is an introductory course to computer programming using the C++ computer language. Topics to be covered include history of computers, computer architecture, variables and constants, math operations, decision making, if/else statements, loops, and functions. This course is highly recommended for students interested in careers in computer science, engineering, or business.

■ Mathematics

Math Flow Chart

If you have taken the course in blue then you can take any of the courses below it.



■ Music and Performing Arts

Music Performance (9-12)

All major performance classes (Band, Chorus, and Orchestra) require attendance at scheduled lessons and rehearsals, as well as programs and performances.

Orchestra ■ 5678 ■ 40 Weeks ■ 1 Credit

Membership is open to any regularly enrolled student subject to instructor's approval. Orchestra work includes: weekly lessons, 5 rehearsals per week, and required performances. String Quartet and String Ensemble are available.

Concert Band ■ 5679 ■ 40 Weeks ■ 1 Credit

Band work includes: instrumental group lesson, concert band, and required performance and non-performance evaluations. The concert band performs NYSSMA grade 3-5 literature. Opportunities are available for involvement in select ensemble groups such as Jazz Ensemble and chamber music ensembles. Five rehearsal sessions plus one instructional session per week. Additional involvement to include small ensemble and solo studies and related performing experiences.

Wind Ensemble ■ 5682 ■ 40 Weeks ■ 1 Credit

Band work includes: instrumental group lesson, concerts, and required performance and non-performance evaluations. The wind ensemble performs NYSSMA grade 4-6 literature. Opportunities are available for involvement in select ensemble groups such as Jazz Ensemble and chamber music ensembles. Five rehearsal sessions plus one instructional session per week. Additional involvement to include small ensemble and solo studies, and related performing experiences.

Concert Choir ■ 5677 ■ 40 Weeks ■ 1 Credit

As incoming sophomores, you can look forward to a Concert Choir of 100 mixed voices in September. The group performs at least four times during the year. Music selections throughout the year consist of all styles from the classics to pop. One year of this course will fulfill the New York State Regents Music/Art Requirement for graduation. No audition is necessary for this choir made up of students in grade 10-12.

Chamber Choir ■ 5674 ■ 40 Weeks ■ 1 Credit

This upper level choral ensemble of 11th and 12th graders is selected by the audition process each year. The group performs at least four times during the year. Music selections throughout the year consist of all styles from the classics to pop. One year of this course will fulfill the New York State Regents Music/Art Requirement for graduation.

Comprehensive Musicianship I (Music Theory I) ■ 5221 ■ 40 Weeks ■ 1 Credit

Guitar players, drummers and music majors learn to read and write music. This course will introduce you to the basic skills needed to read and write music. A brief survey of music history and sight-reading is included. This course fulfills the New York State Regents requirement for art and music.

Comprehensive Musicianship II (Music Theory II) ■ 5321 ■ 40 Weeks ■ 1 Credit

A continuation of CM-IR with greater emphasis on writing music. This course is a must if you intend to pursue a career in music at the college level. You must complete CM-IR in order to take this course. Keyboard skills are also included in this course. You will learn how to play chords, scales, melodies, etc.

■ Music and Performing Arts

Comprehensive Musicianship III (Music Theory III) ■ 5421 ■ 40 Weeks ■ 1 Credit

If you enjoy writing music this is the course to take after completing CM-IIR. You will study major compositions and forms of music and then write your own music in the styles you studied. All work is completed on the computer. Students also practice conducting, score analysis, arranging and basic guitar and keyboarding.

Practical Musicianship ■ 5550 ■ 20 Weeks ■ 1/2 Credit

Practical Musicianship will offer students the opportunity to explore and enhance their music abilities through learning the basics of keyboarding and/or guitar. Students may choose to play guitar, keyboard, or both throughout the semester. Students choose their own project songs to work on (anything pop, rock, country, hip hop etc.). This 20-week course is designed for students who are interested in participated in music, but not the traditional ensembles currently offered. Reading music will be optional, as students will also learn to play off of lead sheets and by ear. **This course is offered only at Durgee Junior High.**

HONORS 40 Weeks 1 Credit

Band (5680)

Chorus (5676)

Orchestra (5681)

Wind Ensemble (5689)

The purpose of this course is to encourage students to achieve a higher level of performance and musical understanding. This will be an extension of the regular ensemble classes, rather than a separate class. There will be additional responsibilities/requirements in order to earn Honors credit.

Students who are taking a five-unit sequence in music must take Music Theory I and II to fulfill the requirements.

■ Physical Education and Health

Physical Education ■ 9671 ■ 40 Weeks ■ 1/2 Credit

The Baldwinsville Central School District Commencement Standard in Physical Education for students is to develop an advanced level of wellness skills to create and pursue a lifetime fitness plan. PE classes are designed to make learning fun. They are geared toward positive self-esteem and co-operative learning experiences. Some of the activities include step aerobics, kickboxing, Pilates, yoga, weight training, tennis, archery, scuba, physical fitness, various team and individual sports and lifelong fitness activities. Sophomores have a series of required units of study including successful completion of the Baldwinsville swim/water safety unit.

Health ■ 9871 ■ 20 Weeks ■ 1/2 Credit

This course is designed to provide students with comprehensive knowledge and skills necessary to achieve a health enhancing lifestyle. The course consists of planned learning experiences that will allow the students to authentically apply the learned skills which are aligned with the New York State Health Education Learning Standards. The goal of Health Education is to give the students the necessary confidence and skills to practice health enhancing behaviors. This course is a graduation requirement.

Athletic Training I ■ 9679 ■ 40 Weeks ■ 1 Credit

This course offers an introductory look at the broad field of Sports Medicine in today's society. It is an essential course for students interested in the field of Athletic Training and would be beneficial for anyone considering a career in physical therapy, nursing, or medicine. It covers basic human anatomy, human physiology, athletic injuries, prevention of athletic injuries, evaluation techniques, as well as the care and rehabilitation of athletic injuries. After school observation hours are required to provide students with authentic experiences in which they can demonstrate the knowledge gained in the classroom as well as expand their knowledge in the health care field.

Athletic Training II ■ 9677 ■ 40 Weeks ■ 1 Credit

Prerequisite: Successfully completed Athletic Training I

■ This course offers an introductory look at the broad field of Sports Medicine in today's society. It is an essential course for students interested in the field of Athletic Training and would be beneficial for anyone considering a career in physical therapy, nursing, or medicine. It covers basic human anatomy, human physiology, athletic injuries, prevention of athletic injuries, evaluation techniques, as well as the care and rehabilitation of athletic injuries. After school observation hours are required to provide students with authentic experiences in which they can demonstrate the knowledge gained in the classroom as well as expand their knowledge in the health care field.

■ Fire Safety Firefighter/EMS Training ■ 9111 ■ 20 Weeks ■ 1/2 Credit

(Enrollment Preference will be given to Juniors and Seniors)

This course will expose students to basic firefighting skills and basic emergency medical training, and prepare a student to join a volunteer fire department as an exterior firefighter. Students will be provided with basic training in Scene Support, CPR/AED and First Aid. During the Scene Support Operations Unit, students will be provided with the training that provides them with skills to support fire activities that arise before, during and after fire attacks. Additionally, students will learn CPR / AED which will certify them to provide effective basic life support in the event of an emergency. This course will also address Basic First Aid and the signs and symptoms of sudden injury and/or illness.

The Science Department offers students in grades 9-12 a wide variety of course selections. In addition to the local and Regents curricula, students may also select PLTW, Advanced Placement Physics, Advanced Placement Chemistry, and/or Advanced Placement Biology for which they may acquire college credit. Most science courses have a laboratory experience as a requirement for the successful completion of the curriculum. State regulations require all students pursuing either a local or regents diploma to earn a minimum of three science credits for graduation.

Earth Science (Regents) ■ 3121 ■ 40 Weeks ■ 1 Credit Regents

Earth Science is an intensive, student-activity oriented course. Emphasis is given to laboratory and field experiences. The course focuses on students investigating topics such as: observation and measurement of the environment, earth motions, energy in earth processes, insolation, astronomy, atmospheric energy exchanges, energy budget, erosional and depositional processes, rock formation, plate tectonics, and geological history. The course consists of two periods of lecture and one period of laboratory in a two-day cycle. Students must have satisfactorily completed the course laboratory requirements to be eligible for admission to take the regents examination.

Living Environment (Regents) ■ 3126 ■ 40 Weeks ■ 1 Credit

This course is a graduation requirement and is based on the NYS Living Environment Core Curriculum Guide and the New York State P-12 Science Learning Standards. This includes biology as a science, methods of science, ecology, cells as unifying living features, exploring diversity, human physiology, genetics, reproduction, and evolution. The course consists of two periods of lecture and one period of laboratory in a two day cycle. The course culminates with the Living Environment Regents Exam. Students must have satisfactorily completed the NYS course laboratory requirements to be eligible for admission to take the Regents examination.

Chemistry (Regents) ■ 3321 ■ 40 Weeks ■ 1 Credit

Regents Chemistry is a course of study which presents a modern view of chemistry suitable for pupils with a wide range of skills and abilities. Students are made aware of the technological impact of chemistry as well as the total effect of the application of chemical principles on our lives. Areas of emphasis include atomic structure and chemical bonding, ionization, oxidation-reduction, chemical kinetics, stoichiometry, and organic chemistry. The course consists of two periods of lecture and one period of laboratory in a two day cycle. Students must satisfactorily complete the laboratory requirements for the course in order to be eligible for admission to take the Regents examination.

Chemistry (Local) ■ 3341 ■ 40 Weeks ■ 1 Credit

This is a complete chemistry course designed for students not requiring the more technical Regents course. Students will obtain sufficient chemical knowledge and skills to explore and assess chemistry-related personal and societal issues and concerns. Students will also gain an appreciation for the important role that chemistry plays in everyday life through problem-solving activities and required inquiry-based laboratory experiments. The course will include such topics as matter and energy, atomic structure, bonding, the Periodic Table, solution chemistry, acids and bases, and organic chemistry.

Forensic Science ■ 3445 ■ 40 Weeks ■ 1 Credit

This course will provide students with an opportunity to study an exciting application of science and the world of forensic science. Case studies, laboratory exercises, text work and lecture will be used to introduce the basics throughout the course. The student of forensic investigation learns to analyze a with many different sciences disciplines in mind. This course incorporates math, English and all science disciplines to improve student literacy and problem solving skills. Preference will be given to seniors needing their third unit of science.

Global Environment ■ 40 weeks ■ 3 ESF Credits, 1 HS Credit

Global Environment is a three (3) credit introductory, college-level environmental science course that explores large-scale environmental issues and their relationship to human society. Students will gain knowledge and tools to make informed decisions regarding their environment and the earth's future. The focus is on relationships among organisms and their environment, human populations, and long term sustainability of natural resources. Topics include general ecology, biodiversity loss and conservation, human population growth, global climate change, aquatics, pollution issues, soil conservation, green technology, and the environmental movement. Reduced tuition fee for SUNY ESF college credit. Prerequisites: Successful completion of NYS Regents Earth Science, NYS Regents Biology, and successful completion of or concurrent enrollment in NYS Regents Chemistry.

Field Biology ■ 3423 ■ 40 Weeks ■ 1 Credit

Field Biology is a hands-on, experiential course covering areas of ecology, conservation biology, environmental science, and natural history. The course focuses on outdoor field study and is taught cooperatively with Onondaga County's Beaver Lake Nature Center. Additional classroom instruction and class work preparing for or following up on fieldwork also is included. Topics of study include plant and animal identification, aquatic ecology, succession, ecosystem dynamics, soils, and environmental issues. Due to the physical expanse of a "nature classroom," students are held to the highest standards of our Code of Conduct. The course consists of three periods in a two day cycle. This course is available to students who need a third unit in science to meet graduation requirements and is designed for students who want to continue their science education with particular interest in environmental studies.

Math/Science/Technology ■ 3500 ■ 40 Weeks ■ 1 Credit

Prerequisite: Earned two Math credits and two science credits prior to enrollment and passed 1 math and 1 science Regents examination.

This course is designed to meet the need of a third math or third science credit. The purpose of this course is to ensure the use of problem-solving techniques in order to increase students' understanding that Math, Science and Technology are inherently interactive and are an integral part of society. This course is designed to have a thematic approach to real world problems. Possible themes include transportation, mechanical systems, energy, toys, medicine, health & wellness, communication, electronics, home, and engineering and design.

Advanced Placement Biology ■ 3425 ■ 40 Weeks ■ 1 Credit

The Advanced Placement Biology course is designed to be the equivalent of a college introductory biology course, usually taken by biology majors during their freshman college year. This course differs significantly from the Regents Living Environment course, with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students. The course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Units of study will include biological chemistry, cells, energy transformation, molecular genetics, heredity, evolution, plants, animals, and ecology. The kinds of laboratory work done by the students in this course are equivalent to those done by college students. The course consists of two periods of lecture and one period of laboratory in a two-day cycle. Students must take the Advanced Placement examination, which is offered nationally in May. A fee will be charged for the AP exam.

Advanced Placement Chemistry ■ 3318 ■ 40 Weeks ■ 1 Credit

Prerequisite: Regents Chemistry & a passing grade in Physics (Physics may be taken concurrently)

Advanced Placement Chemistry is a two semester course which is offered to a selected group of juniors and seniors. The course is designed to be the equivalent of the general chemistry course usually taken during the first college year. It contributes to the development of students' abilities to think clearly and to express their ideas orally and in writing with clarity and logic. This course differs qualitatively from Regents chemistry course with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations, the mathematical formulation of principles, and the kind of laboratory work done by students. Quantitative differences appear in the number of topics treated, the time spent on the course by students, and the nature and variety of experiments done in the laboratory. The course consists of two periods of lecture and one period of laboratory, in a two-day cycle. All students must take the Advanced Placement Examination in Chemistry which is written in May. A fee will be charged for the AP exam.

Physics (Local) ■ 3441 ■ 40 Weeks ■ 1 Credit

This course is designed for non-science majors with mathematics limited to algebra. Topics studies include: mechanics, energy, heat, sound, light, electricity, atomics and nuclear physics. Additional topics, depending on student interests include: airfoils, relativity, optical illusions, physics of toys, physics of sports and engineering design.

Physics (Regents) ■ 3442 ■ 40 Weeks ■ 1 Credit

Regents Physics is a laboratory based, algebra based, introductory Physics course designed for students pursuing non-science, math, or engineering majors. The objective of the course is to use the basic laws of physics to explain how things work. Using basic algebra and trigonometry, the student will learn how physics can explain the qualitative and quantitative nature of the interworking of common everyday objects. Trigonometry applications will be limited to the basic identities. Physics topics covered include; Motion, Projectiles, Energy, Wave Motion, Sound, Electricity and Magnetism, Color, Light, and Modern Physics. All students will be expected to take the NYS Physics Regents Examination at the completion of this course.

Physics I & II (OCC 103 and OCC 104) ■ 3446 & 3447 ■ 40 Weeks ■ 1 Credit

Prerequisites: Successful completion of prior science course and current enrollment in Algebra II and passing the Chemistry Regents Exam is recommended.

College Physics is a non-calculus General Physics course emphasizing fundamental concepts and principles with a problem-solving approach. It is designed as a college-level Physics course. The course includes the study of Kinematics and Dynamics, Newton's Laws, Work and Energy, Momentum, Rotational Motion, Waves, and Electricity and Magnetism. The application of algebra, trigonometry, geometry and graphical analysis is stressed. The course consists of two periods of lecture and one period of laboratory in a two day cycle. The Physics Regents examination in June is optional. The satisfactory completion of labs is required for admission to the Regents examination. All students must take the Advanced Placement Examination in Physics 1 in May. A component of the course will also involve preparation for the AP Physics 1 Examination. That part of the course will cover Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electrical circuits. Depending on the examination score achieved, some colleges may allow students to register in courses where general physics is a requirement. A fee will be charged for the AP exam.

Advanced Placement Physics C ■ 3419 ■ 40 Weeks ■ 1 Credit

Co-requisite: Calculus / AP Calculus AB or BC

Prerequisite: Passing grade in Physics I & II is recommended.

This course is designed for students who plan to study science, technology, engineering or math in a post-secondary sequence. The AP Physics C course is intended to extend the student's understanding of physics concepts which are developed with the use of calculus. The two parts of this course are the counterparts to the mechanics and the electricity and magnetism portions of introductory calculus-based college physics course sequences. Since this course is a prerequisite for more advanced study, it is important that students demonstrate their level of achievement in each content area. For this reason, there are two separate AP examinations in May, one for mechanics and one for electricity and magnetism. All students must take two Advanced Placement Examinations in May. A fee will be charged for both AP exams.

PLTW - Principles of Biomedical Sciences ■ 3600 ■ 40 Weeks ■ 1 Credit

Prerequisite: Concurrent Enrollment in College Preparatory Science and Mathematics Courses

This is the 1st of a 4 course sequence in Biomedical Sciences. This course will provide students the opportunity to work on the study of human medicine, research processes and an introduction to bioinformatics. Students will investigate the human body systems and various health conditions including: heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. This course is taught only at Durgee Jr. High School.

PLTW - Human Body Systems ■ 3601 ■ 40 Weeks ■ 1 Credit

Prerequisite: Concurrent Enrollment in College Preparatory Science and Math Courses

This is the 2nd of a 4 course sequence in Biomedical Sciences. Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data software to monitor body functions like muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

PLTW - Medical Interventions ■ 3602 ■ 40 Weeks ■ 1 Credit

Prerequisite: PLTW Human Body Systems and Concurrent Enrollment in College Preparatory Science and Mathematics Courses

This is the 3rd of a 4 course sequence in Biomedical Sciences. Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and utilize the code in human DNA to prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to the prevention, diagnosis and treatment of disease.

PLTW - Biomedical Innovation ■ 3603 ■ 40 Weeks ■ 1 Credit

Prerequisite: PLTW Medical Interventions and Concurrent Enrollment in College Preparatory Science and Mathematics Courses

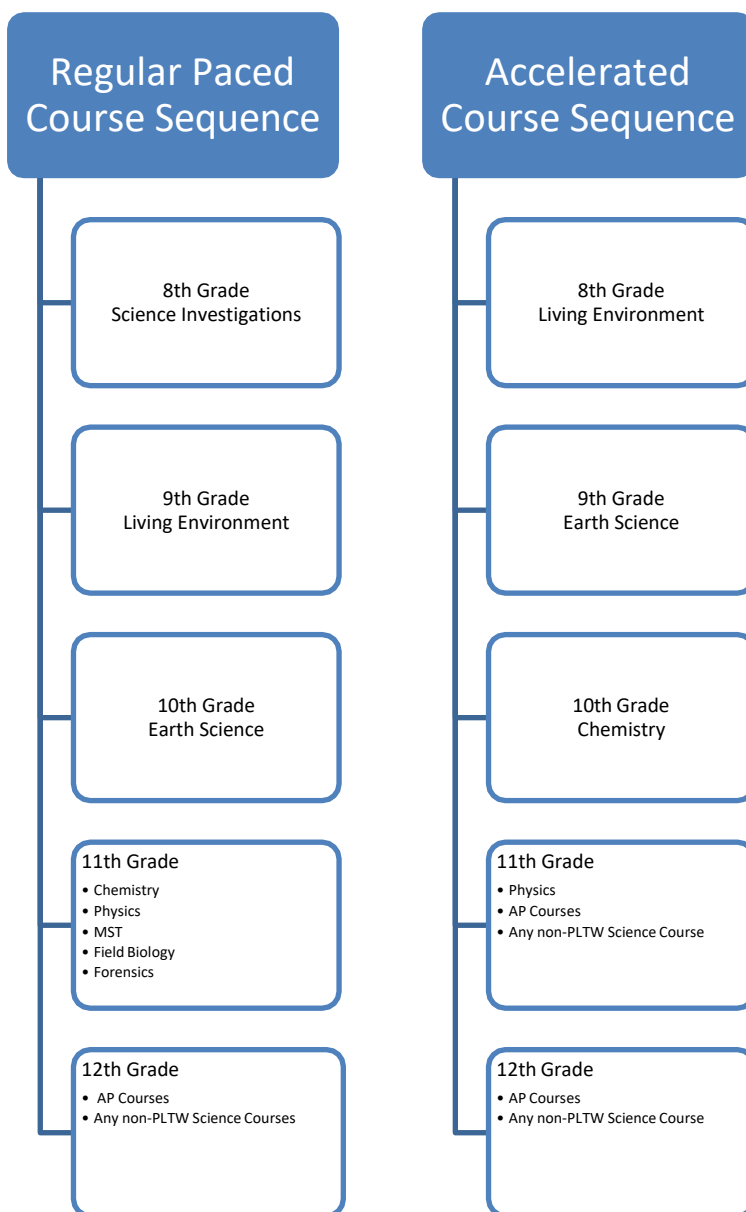
This is the 4th of a 4 course sequence in Biomedical Sciences. Students design innovative solutions for the health challenges of the 21st century. They work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project with a mentor or advisor from a university, hospital, research institution, or the biomedical industry. At the culmination of the course students are expected to present their work to an audience of STEM professionals. This course is designed for 12th grade students.

Science Sequence

Students are not limited to the options below when choosing a science pathway. Many classes can be taken in a different order and multiple science courses can be taken during the same year.

The recommended science sequence is:

- Living Environment
- Earth Science
- Chemistry
- Physics



■ Social Studies

Global HISTORY I and II

Global History is an eighty-week, two-year course that deals with world history from the time of pre-historic peoples to the present day. It is based on the premise that a person ought to have an awareness of history beyond the borders of the United States. The United States is a multi-cultural society and people have come here from every corner of the globe. This course attempts to tell the story of those other areas of the globe. As one of the requirements for graduation, students will have to take and pass the New York State Regents in Global History.

Global History and Geography I (9R) ■ 1121 ■ 40 Weeks ■ 1 Credit

This course introduces the students to the dimensions of Global History - history, geography, economics, and political science and government. It deals with the first four Eras of Global History, including pre-historic peoples, the Ancient Worlds of Rome, the Middle East and China, World Religions, and the histories of China, Japan, South Asia, the Middle East, Latin America, Africa, and Europe from 1000 C.E. until the mid-1700's. There are fifteen Themes and Concepts that act as organizers for the course. This first course in Global History will conclude with a final exam modeled on the NYS Regents.

Global History and Geography II (10R) ■ 1221 ■ 40 Weeks ■ 1 Credit

Students will continue with the histories of China, Japan, South Asia, the Middle East, Latin America, Africa, and Europe, beginning in the mid-1700. The course will conclude with an analysis of economic interdependence, globalization, modernization, and issues concerning human rights and the environment. Students are required to take and pass the NYS Regents in Global History at the end of this course.

Pre-Advanced Placement History (Global History 9H) ■ 1920 ■ 40 Weeks ■ 1 Credit

Students in this course will receive an enriched program as they are introduced to the dimensions of history, geography, economics, political science and government. Students who take this course will be expected to complete more in-depth analytical writing assignments and read independently from a variety of higher level sources. This course prepares students for 10th grade Advanced Placement level coursework. Taught at Durgee Jr. High School ONLY.

Advance Placement (AP) World History ■ 1211 ■ 40 Weeks ■ 1 Credit

This is a full year course for 10th grade AP World History. Students must have completed Pre-Advanced Placement History. This course will increase student understanding of World History historical themes and contributions. The purpose of AP World History is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. The course offers balanced global coverage, with Africa, the Americas, Asia, Europe, and Oceania all represented. Higher level reading, comprehension, and writing skills are expected, as well as the ability to move at an accelerated pace. All students are expected to take the Advanced Placement World History examination in May. A fee will be charged for the exam. Students must also take the Global History Regents Exam in June in order to meet the requirement for a NYS Regents diploma.

■ Social Studies

United States History & Government 11R ■ 1321 ■ 40 Weeks ■ 1 Credit

This program begins with an in-depth analysis of the United States Constitution - its origins, its characteristics, and its implementation as a system of government. Domestic and international events and trends will be analyzed. The focus is on historical thinking skills. US History and Government will end with the Regents exam.

Advanced Placement (AP) American History ■ 1311 ■ 40 Weeks ■ 1 Credit

This course is open to juniors. Juniors may take it in lieu of Social Studies 11R. Students must take the Advanced Placement American History examination in May. A fee will be charged for the exam. A student can earn 1 unit of high school credit and up to three hours of college credit.

This course is designed to be the equivalent of a college freshman survey American History course. It includes chronological and thematic developments in American History. Historical interpretation and evaluation skills are stressed. Juniors will take the NYS Regents exam.

Participation in Government / Economics ■ 1414 ■ 40 Weeks ■ 1 Credit

This is an integrated course of analysis of political and economic ideas related to public issues, economic decision-making, and the process for studying political issues. This course includes the basic economic concepts and understandings which all persons need to function effectively and intelligently as citizens and participants in the economy of the United States and the world. Additionally, the course provides students with skills to critically investigate problems facing our government such as funding for education, lack of funding for Social Security, the perception of the US in international arenas, the boundaries of free speech, and many other topics. This course provides the framework for making informed political and economic decisions.

12R/PIG/ECO/LIT (OCC ENG 103)

Participation in Government / Economics 1412 ■ 40 Weeks ■ 1 Credit

Literary Issues and Argument 0413 ■ 40 Weeks ■ 1 Credit

Pig/Eco/Lit is a two-period, co-curricular, team-taught course designed to help students understand and nurture what it means to be a citizen in a Democracy through the use of literature, writing, discussion, and media. It combines current government issues and concepts of citizenship with analytical reading of classical authors as well as argumentative writing. This course is specifically designed to get you involved in your own learning and in the processes of government. You become an active member of the class while simultaneously becoming familiar with writing techniques and styles to improve your own level of ability. PIG/ECO/LIT studies literature spanning the classical work of Plato to today's most influential authors, such as Tim O'Brien, William Golding and Ernest Hemingway. This course will help students understand the connection between literature and the socioeconomic and sociohistorical context in which they were written and assist them in developing opinions on the issues explored. Topics discussed include communication, government, citizenship, media, and current issues. This option provides college credit in English only.

Advanced Placement (AP) U.S. Government & Politics / Economics (Local) ■ 1441 ■ 40 Weeks ■ 1 Credit

AP U.S. Government and Politics studies the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students will gain the analytic perspective necessary to critically evaluate political data, hypotheses, concepts opinions and processes. Along the way, they'll learn how to gather data about political behavior and develop their own theoretical analysis of American politics. They'll also build the skills they need to examine general propositions about government and politics and to analyze the specific relationships between political, social and economic institutions. The equivalent of an introductory college-level course, AP U. S. Government and Politics prepares students for the AP Exam and for further study in political science, law, education, business and history. All students are expected to take the Advanced Placement U.S. Government & Politics examination in May. A fee will be charged for the exam.

■ Social Studies

SOCIAL STUDIES ELECTIVES

The courses listed here are 20 weeks (except when noted) courses. These courses are open to all students, subject to enrollment, and may not be offered every year or semester.

Introduction to Psychology ■ 1435 ■ 20 Weeks ■ 1/2 Credit

Psychology is the study of human behavior and mental processes. This course explores a wide range of topics related to human behavior from physiology to abnormal psychology. "Introduction to Psychology" offers a hands-on approach to studying introductory psychological principles. Students who take this course will be expected to complete a number of writing assignments and participate in class activities. This course is highly recommended for college bound students who will be required to take Psychology courses after graduation from high school.

Advanced Placement (AP) Psychology ■ 1440 ■ 40 Weeks ■ 1 Credit

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. All students are expected to take the Advanced Placement Psychology examination in May. A fee will be charged for the exam.

Introduction to Sociology ■ 1439 ■ 20 Weeks ■ 1/2 Credit

Sociology is the study of how people, groups, and societies differ from and interact with one another. Like the natural sciences, the goal of sociology is to find order out of seeming chaos - to look for patterns in behaviors of social groups that on the surface may look like random variations. It is the intent of this course to deal with both how to study human behavior in social settings and the study of selected patterns of behavior.

Criminal Law ■ 1436 ■ 20 Weeks ■ 1/2 Credit

The course is designed to give students a practical understanding of law and the legal system which will be of use in their everyday lives. Students will improve their understanding of the fundamental principles and values underlying our constitution, laws, and the legal system in general. The course promotes an awareness of current issues and controversies relating to criminal law and provides an opportunity to consider and clarify attitudes toward the role that law, lawyers, law enforcement officers, and the legal system play in our society. Hopefully, this kind of course will bring about a greater sense of justice, tolerance, and fairness in students, and also encourage effective citizen participation in the legal system. Topics include an introduction to law and legal systems, criminal justice, including its application to juveniles, and individual rights and liberties.

History of Sports ■ 1438 ■ 20 Weeks ■ 1/2 Credit

This course is a chronological history of modern sports beginning with the Industrial Revolution and continuing through yesterday's headlines. The course will investigate the origins of today's sports in England and the United States as well as its heroes. It will analyze the political, social, and economic impact of modern sports through the lens of the modern Olympics, women's rights, civil rights, business, professional and amateur athletics, and much more.

■ Special Education Services

Special Education Programing (Grades 10-12)

Computer and Study Skills:

This course is designed to teach students how to use the computer both in the school environment and workplace. Students will be taught the basics of Microsoft Office, accessing the Internet for information, as well as using Jurzweil, Dragon Dictate and Inspiration as compensatory strategies. The students will also be given strategies to improve their organization and study skills.

English 10, 11 & 12 (15:1:1 Program) ■ 9951 ■40 Weeks ■ 1 Credit

English challenges students to discover their full potential as readers and writers. This class is a credit bearing class where students have access to regular education English curriculum materials, ideas and concepts. Each student will be required to take the NYS Regents in English Language Arts.

Math 10, 11 & 12 (15:1:1 Program) ■ 9958 ■40 Weeks ■ 1 Credit

Math Topics is designed to help students improve simple math skills and learn how to apply mathematical skills to solve real world problems. Students will improve basic computational thinking and problem solving skills so that they can understand personal finance. Math 10 prepares students to deepen their understanding of Algebra and to prepare for the Algebra regents. Topics include polynomials, equations, writing and graphing functions and basic statistics.

Resource 9980 ■ 40 Weeks

This course is designed to provide content support and independent study opportunities to students within the 15:1:1 program.

Study Skills (15:1:1) 9971 ■ 40 Weeks

This course is designed to support students in the 15:1 program with content and independent study opportunities to students. The students will also be given strategies to improve their organization, study skills, and self-advocacy skills.

12:1:1 PROGRAM (Grades 10-12)

Life Skills Math: This course is designed to provide students with the tools they will need to function more independently as an adult. Life Skills Math will focus on earning money, banking and budgeting. Students will budget for community outings and practice paying for their purchases independently. In addition, students will access the Equals Math curriculum at their individualized level. When appropriate, students will be given access to Math 180 curriculum and software to enhance their math skills. The goal of this course is for students to be able to use math effectively within their everyday lives. The students enrolled in this course will be given access to the community under the direct supervision of their teacher to practice the skills they are taught.

Life Skills English: This course uses the Unique Learning System as the classroom curriculum. The curriculum program has been designed specifically for students with special learning needs. While the foundation of Unique is the academic content standards (reading, writing, math, science and social studies), the lessons are modified to make sure that all students have a way to participate and learn. There is a strong emphasis on life skills that are embedded in each lesson. Unique Learning System provides monthly units that teachers are able to access from the Unique website. Each month there is a new topic built around a science or social studies theme. Lessons include stories, chapter books, comprehension activities and writing activities. Lessons are taught in 3 differentiated groups based on student's needs. The primary goal of Unique Learning System is to give each child a way to participate, learn and succeed in the classroom.

■ Special Education Services

Citizenship & Community Reference: This course focuses on giving students exposure to current events. We also prepare for our community outings during this time. This class is offered every other day opposite Partners in Science each day during 9th period.

Independent Living/Health: This course is designed to teach students functional skills necessary for independent living. Selected topics include: nutrition, comparison shopping, meal planning and preparation, budgeting, emergency situations, personal health and fitness. This class also uses Environmental Print, which directly teaches survival signs students will see in community settings. The students enrolled in this course will be given access to the community under the direct supervision of their teacher to practice the skills they are taught. **Social Skills:** This course is team taught with 12:1:1 staff and a speech therapist. The primary focus of the class is to directly teach students how to communicate. Topics taught include: social awareness, self-regulation, having a two way conversation, phone skills, asking for help, listening and communicating your needs and wants. This course uses the Everyday Speech Curriculum

System 44/Read 180: This course is offered as part of the 12:1:1 modified curriculum. System 44 helps students understand that the English language is a finite system of 44 sounds and 26 letters that can be mastered. The program invites students to unlock the system and join the community of readers. Read 180 focuses on reading comprehension using software and literature. Students are provided with technology based instruction; teacher led instruction and guided practice.

Partners in Science (Penhollow & Kenna): This course focuses on giving students exposure to current events. We also prepare for our community outings during this time. This class is offered every other day opposite Partners in Science each day during 9th period.

Citizenship & Community Reference:

This course is designed to prepare the student for the rights and responsibilities of community living. Selected topics include the levels and branches of government, existing laws, legal aid, the court system, contracts and agreements, consumer laws and advocacy. Students will gain insight and knowledge of their rights and responsibilities as a contributing member of their community. This course also introduces the student to various aspects of the community including municipal and support agencies, production facilities and consumer services. Students will be taught self-advocacy skills through transitional planning. The students will be given access to the community through field trips as well as guest speakers from various agencies. The students will also be given the opportunity to register for services available to them.

■ Special Education Services

BESST – Work Study

This program gives students opportunities to learn and apply work skills at actual work sites. Students will develop skills in the following areas: job acquisition, work habits, employer expectations, production demands and keeping jobs. Emphasis is placed on individual student performance at the actual work site.

BESTT - Work Study 9988 ■ 40 Weeks

This course gives students opportunities to learn and apply work skills at actual work sites. Students will develop skills in the following areas: job acquisition, work habits, employer expectations, production demands and keeping jobs. Emphasis is placed on individual student performance at the actual work site.

Community Outings:

Community experiences make up a great deal of the 12:1:1 curriculum. All skills taught in the classroom will be transferred and generalized to community settings. Each week, students will be given the opportunity to go on planned community outings such as restaurants, stores, agencies and banks. Whenever possible, our students will use public transportation to access various community settings. Permission slips for community outings will be sent home on a quarterly basis.

■ Technology

DESIGN AND DRAFTING

Design, Drawing and Production ■ 7604 ■ 20 weeks ■ 1/2 Credit This course is designed to challenge students using the creativity of design, the exactness of Technical drawing and the fun of model building. Students will be presented problems to solve in Architecture, Magnetic Levitation, Automobile design, Furniture design, and Bridge building as well as develop skills in 3D Computer Aided Design (CAD). This course may be used by any student to satisfy the high school fine arts elective for high school graduation.

Architectural Drawing ■ 7612 ■ 20 weeks ■ 1/2 Credit

This course challenges students in architectural design. It emphasizes architectural styles, kitchen and bath design, floor planning and drafting technique. Each student will have to design a house to meet specific criteria utilizing the principles of good design and then build a scale model of it. This course is good for students with a wide range of interests from construction, interior design, architectural drafting and design, to home ownership and home remodeling. Chief Architect is used for project design.

Pre-Engineering ■ 7622 ■ 20 weeks ■ 1/2 Credit

A lab course designed for students who want to pursue an engineering, math/science or technology related career. Activities will include: engineering drawing, problem solving, machine tool theory, materials selection and technical data assessment. Students will participate in the identification, analysis and solving of engineering problems.

Computer Aided Drafting ■ 7632 ■ 20 weeks ■ 1/2 Credit

This course gives students an understanding of the application and techniques of Computer Aided Drafting. Students use CAD to create technical drawing solutions for machine, architectural, and engineering drawing problems. This course is highly recommended for students entering engineering and technically related fields.

Creativity and Innovation ■ 7705 ■ 20 weeks ■ 1/2 Credit

This course encourages the solving of technical problems through the use of student inspired design. It is a STEM based design and drawing class that will explore topics such as automobile design, magnetic levitation, architecture, packaging and geometry. Given a defined supply of materials, students will use laboratory facilities to optimize solutions to stated technical problems. **Offered at Durgee Junior High only.**

Robotics ■ 7706 ■ 20 weeks ■ 1/2 Credit

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use VEX robotics platform to design, build, and program real world objects, such as traffic lights, toll booths and robotic arms. **Offered at Durgee Junior High only.**

Robotics Engineering ■ 7633 ■ 20 weeks ■ 1/2 Credit

This class challenges students to work through the key steps of Engineering Design as a means for problem-solving using equipment from Vex Robotics. Students will be asked to design, assemble, program and operate a robot for specific task completion and competition. The class will work in teams and continually work to modify and improve their robots for the best possible performance. Students will also be asked to complete some research on applied robotics which are currently being developed or used in industry. **Offered at Baker only.**

Energy and Power ■ 7707 ■ 20 weeks ■ 1/2 Credit

Explore the range of technologies including types of energy: wind, hydro, solar, kinetic and basic electricity in this hands-on 20 week elective course. In this course students will build working models to gain firsthand knowledge and information as how each systems works independently as well as on the 'grid' by applying general knowledge of technology, physics and math skills. **Offered at Durgee Junior High only.**

■ Technology

MATERIALS AND PRODUCTION

Materials Processing ■ 7702 ■ 20 weeks ■ 1/2 Credit

Students will develop practical skills while producing several useful take-home projects. A variety of materials and processes (both modern and traditional) will be utilized. Project areas will include: wood, sheet metal, wrought iron and acrylics.

Production (Construction and Manufacturing) ■ 7722 ■ 20 weeks ■ 1/2 Credit

A skills development course for students interested in construction and/or manufacturing. Activities will include a school/community construction project, a mass production product and/or an involved individual project. A hands on course for students interested in construction and/or manufacturing. The course will cover construction techniques and careers. The class project will include building either a model home or full size shed. Students then design a product, set up an assembly line and then produce the design.

MULTIMEDIA COMMUNICATIONS

Communications Systems ■ 7502 ■ 20 weeks ■ 1/2 Credit

This is a course for anyone interested in the areas of audio, visual and print communications. Projects and activities include shirt design, screen printing a shirt, making business cards, animation and designing a graphic novel.

Graphic Communications ■ 7512 ■ (Graphic Arts) ■ 20 weeks ■ 1/2 Credit

This course is designed for anyone interested in print communications, commercial art or photography. Advanced printing activities include layout and design, computer graphics with Adobe Photoshop, shirt designs, ads, surreal and house composition. It is recommended that the student first take Communication Systems 7502 or have a good working knowledge of computers.

Media Production Technology ■ 7522 ■ (Multi Media Production) ■ 20 weeks ■ 1/2 Credit

This course will give students an understanding of the major communications media and also how to use these various types of media. The forms of media which students will be utilizing will include: audio, video, integrated electronic media and computer-controlled media with a strong emphasis on digital video. Using Adobe software, projects include music video, history of movie trailers, destination video and claymation.

Radio Broadcasting & Communications ■ 9771 ■ 20 weeks ■ 1/2 Credit

This course is designed for any student interested in exploring radio broadcasting and audio communication. Students will gain knowledge of how a radio station functions, proper broadcasting procedures, and design personal broadcasting projects to be carried out on the air! Students will participate in radio station operation for WBXL. This course is a great opportunity for those interested in a career related to radio or TV broadcasting and communications!

TRANSPORTATION

Basic Automotive Technology ■ 7753 ■ (Automotive Technology) ■ 20 weeks ■ 1/2 Credit

A course for anyone interested in automobiles or any motorized vehicles. Included are activities that will help a consumer avoid fraud and get the most for their money when dealing with automobiles. Activities include: car maintenance, car care, tune ups, brake repair, lubrication, cooling systems, tire and body care and small engines.

■ Technology

Math/Science/Technology ■ 3500 ■ 40 Weeks ■ 1 Credit

Prerequisite: Earned two Math credits and two science credits prior to enrollment and passed 1 math and 1 science Regents examination

This course is designed to meet the need of a third math or third science credit. The purpose of this course is to ensure the use of problem-solving techniques in order to increase students' understanding that Math, Science and Technology are inherently interactive and are an integral part of society. This course is designed to have a thematic approach to real world problems. Possible themes include transportation, mechanical systems, energy, toys, medicine, health & wellness, communication, electronics, home, and engineering and design.

PROJECT LEAD THE WAY - ENGINEERING

PLTW-Introduction to Engineering Design ■ 7652 ■ 40 weeks ■ 1 Credit

Introduction to Engineering Design is an introductory course, which develops student problem solving skills, with emphasis placed upon the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes and tools provided by modern, state-of-the-art, computer hardware and software. **Offered at Durgee Junior High only.**

PTLW-Digital Electronics ■ 7662 ■ 40 weeks ■ 1 Credit

Digital Electronics is a course of study in applied digital logic. The course is patterned after the first semester course in Digital Electronics taught in two and four year colleges. Students will study the application of electronic logic circuits and devices and apply Boolean logic to the solution of problems. Such circuits are found in watches, calculators, video games, computers and thousands of other devices. The use of smart circuits is present in virtually all aspects of our lives and its use is increasing rapidly, making digital electronics an important course of study for a student exploring a career in engineering/engineering technology. Using Electronics Workbench (EWB), the industry standard, students will test and analyze simple and complex digital circuitry. Students will design circuits using EWB, export their designs to a printed circuit auto routing program that generates printed circuit boards, and construct the design using chips and other components.

PTLW-Aerospace Engineering ■ 7670 ■ 40 weeks ■ 1 Credit

Aerospace engineering is a course of study in aerodynamics. The course expands student's horizons with projects developed by astronauts, space-life sciences, systems engineering, and NASA-aerodynamics. Students will have the opportunity to use flight simulators, as well as a wind tunnel to test engineering designs.

PLTW - Principles of Engineering ■ 7672 ■ 40 weeks ■ 1 Credit

This is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. The main purpose of this course is to experience through theory and hands-on problem-solving activities what engineering is and "Is a career in engineering or engineering technology for me?"

PLTW - Computer Integrated Manufacturing (CIM) ■ 7682 ■ 40 weeks ■ 1 Credit

This course is an introduction to Robotics and CNC Machining. Builds upon the computer solid modeling design skills developed in PLTW - Design Drawing for Production (DDP). Students will be presented with design problems that require the use of AutoCAD Inventor to develop solutions to problems. They will use rapid prototyping equipment to produce three-dimensional models of the solutions, as well as learn how to program a CNC machine and Robots to create their design.

■ Technology

PLTW - Engineering Design and Development (EDD) ■ 7654 ■ 40 weeks ■ 1 Credit

In this course, students will work in teams of two to four to design and construct the solution to an engineering problem, applying the principles developed in the four preceding courses. The problem may be selected from a database of engineering problems, 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 (e.g. a school robo-mascot, automated solar water heater, remote control hover craft). 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.

COMPUTER SCIENCE

Webpage Design ■ 7582 ■ 20 weeks ■ 1/2 Credit

An exciting and interactive experience for anyone knowledgeable in the use of computers and the web. Html coding is used to develop interactive webpages. Activities will include tutorials, small assignments and putting a web page online with wix.

Program Design and Development (OCC CSC 110) ■ 6433 ■ 20 Weeks ■ 1/2 Credit

C++ is becoming the language of choice for introducing college students across the country to computer science and programming. This 1/2-unit course is an introductory course to computer programming using the C++ computer language. Topics to be covered include history of computers, computer architecture, variables and constants, math operations, decision making, if/else statements, loops, and functions. This course is highly recommended for students interested in careers in computer science, engineering, or business.

PLTW- Computer Science Essentials / Introduction to Computer Science : 2955 : 40 Weeks : 1 Credit

This course is designed to be the first computer science course for students who have never programmed before. It is a fun, foundational course that helps prepare students for success in the PLTW Computer Science program. In PLTW Computer Science Essentials, students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. They will use a visual programming language and advance to text-based programming. Throughout the course, students will have opportunities to apply computational thinking practices and collaborate just as computing professionals do to create products that address topics and problems important to them. This is a hands-on course. Students will work in teams to create solutions and problem-solve. **This course is only offered at Durgee Junior High**

Advanced Placement (AP) [Computer Science Principles](#) (PLTW) : 6433 : 40 Weeks : 1 Credit

Prerequisite: Algebra I Examination with an 80% average is suggested

Open doors in any career with computer science. Students create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people's lives. How will computing and connectivity transform your world: Unit 1: Algorithms, Graphics, and Graphical User Interfaces (48%) Unit 2: The Internet (18%) Unit 3: Raining Reigning Data (17%) Unit 4: Intelligent Behavior (17%) This course is highly recommended for students interested in careers in computer science, engineering, or business. This course will require strong reading and logic/reasoning skills. All students enrolled in this course must take the Advanced Placement exam given in May. A fee will be charged for the AP exam.

■ Technology

Advanced Placement (AP) [Computer Science A \(PLTW\)](#): 6434 : 40 Weeks : 1 Credit

Prerequisite: Passed Computer Science Principles or C++

This course is the second course in the PLTW Computer Science Pathway. We currently offer the first course. CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java™ and other industry-standard tools. This course prepares students for the College Board's Advanced Placement CS-A test and aligns with CSTA Level 3C Standards. All students enrolled in this course must take the Advanced Placement exam given in May. A fee will be charged for the AP exam.

PLTW Cybersecurity: 6435: 40 Weeks : 1 Credit

Prerequisite: Previously taken at least one computer science class or C++

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

COMMUNICATION SEQUENCE

<i>Required courses for a sequence</i>	<i>Credits</i>
Career and Financial Management	½
Communications Systems	½
Graphic Communications	½
Radio Broadcasting & Communication	½
Design & Drawing for Production	½

<i>Options</i>	<i>Credits</i>
Architectural Drawing	½
Computer Aided Drafting	½
Web Page Design	½
Media Production Technology	½

<i>For a 3-credit sequence</i>	<i>Credits</i>
2 ½ Credits required	2 ½
½ Credit from options list	½
Total credits =	3

<i>For a 5-credit sequence</i>	<i>Credits</i>
2 ½ Credits required	2 ½
2 ½ Credits from options list	2 ½
Total credits =	5

EXPLORATORY SEQUENCE

<i>Required courses for a sequence</i>	<i>Credits</i>
Career and Financial Management	½
Communication Systems	½
Materials Processing	½
Design & Drawing for Production	½

<i>Options</i>	<i>Credits</i>
Architectural Drawing	½
Computer Aided Drafting	½
Web Page Design	½
Graphic Communications	½
Media Production Technology	½
Basic Automotive Technology	½
Production	½

<i>For a 3-credit sequence</i>	<i>Credits</i>
2 Credits required	2
½ Credit from options list	1
Total credits =	3

<i>For a 5-credit sequence</i>	<i>Credits</i>
2 ½ Credits required	2
2 ½ Credits from options list	3
Total credits =	5

PRODUCTION SEQUENCE

<i>Required courses for a sequence</i>	<i>Credits</i>
Career and Financial Management	½
Materials Processing	½
Production	½
Design & Drawing for Production	½

<i>Options</i>	<i>Credits</i>
Architectural Drawing	½
Computer Aided Drafting	½
Graphic communications	½
Media Production Technology	½
Basic Automotive Technology	½

<i>For a 3-credit sequence</i>	<i>Credits</i>
2 ½ Credits required	2
½ Credit from options list	1
Total credits =	3

<i>For a 5-credit sequence</i>	<i>Credits</i>
2 ½ Credits required	2
2 ½ Credits from options list	3
Total credits =	5

ENGINEERING SEQUENCE

<i>3-credit sequence</i>	<i>Credits</i>
Introduction to Engineering	1
Principles of Engineering	1
Digital Electronics OR Computer Integrated Manufacturing OR Aerospace Engineering	1

<i>5-credit sequence</i>	<i>Credits</i>
Introduction to Engineering	1
Digital Electronics	1
Principles of Engineering	1
Computer Integrated Manufacturing OR Aerospace Engineering	1
Engineering Design and Development	1

Recommended PLTW Course Sequence

9th grade	Introduction to Engineering
10th grade	Principles of Engineering
11th grade	Digital Electronics (OR) Computer Integrated Manufacturing (OR) Aerospace Engineering
12th grade	Engineering Design & Development

Courses may be taken out of sequence with Principal approval

■ BOCES Career & Technical Education

**Students who attend the BOCES Programs are assigned either Scientific Inquiring or Data Analysis and Statistics in each year they attend. This fulfills their third year of math and science requirements.*

IE HENRY CAMPUS ■ 6820 Thompson Road ■ Syracuse, NY 13221 ■ 315-433-2635

I. TECHNICAL SERVICES

Auto Collision Technology
Auto Technology
Computer Technology
Welding Technology
Construction Technology (Carpentry)
Heavy Equipment Repair, Operation,
and Diesel Technology

III. HEALTH OCCUPATIONS

Health Occupations
Physical Therapy Professions
Laboratory Technology

II. ARTS AND SERVICES

Cosmetology
Culinary/ Pastry
Early Childhood Education
Media Marketing

IV. CAREER EXPLORATION

Level I (PM Only) - Wood Technology, Foods I,
Service Industry - Pre Vocational
Level II (AM Only) - Basic Carpentry, Foods II,
Service Industry - Pre Vocational

TECHNICAL SERVICES

AUTOMOTIVE COLLISION TECHNOLOGY

3 Credits

This is a two year course that prepares students for occupations in the modern auto body collision repair industry. In the first year students learn the basic skills and techniques using equipment and products that are up to date and currently used in the repair field today. Second year students' advance into more collision work, frame straightening, custom colors in painting and estimating. As students' progress they are allowed to work on cars brought into class.

AUTOMOTIVE TECHNOLOGY (AM and PM)

3 Credits

The auto technology program is designed to provide students with basic mechanical knowledge and skills. Students gain the knowledge and skills by doing repair work on customer's cars which are brought into the shop. The shop operates as a service garage in a large dealership. All repair work is done by the students. The jobs range from a simple oil change to complex on board computer systems. This two-year program is the first step in preparing an individual for a job in the automotive field. It prepares the student for entry-level employment as service maintenance persons, technician assistants, full technicians, service station attendants and New York State inspectors.

COMPUTER TECHNOLOGY (AM and PM)

3 Credits

The computer technology program is designed to involve students in the construction, operation, and repair of PC Systems and devices. Also, students learn how PC networks are organized and how to install and maintain them, Industry certification (CISCO Networking) is attainable. Over the two-year program, Computer Technology students will learn through a balance of theory and hands-on learning activities specifically designed to prepare graduates of the program for employment and/or college.

■ BOCES Career & Technical Education

Heavy Equipment Repair, Operation, and Diesel Technology **3 Credits**

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 or furthering their education at college and technical schools. Students may be eligible to earn industry certifications in safety training and equipment operation. A Career and Technical Endorsement on their high school diploma will signify that students have met the rigorous industry standard upon successfully passing a technical assessment.

LABORATORY TECHNICIAN (AM and PM) **3 Credits**

The Laboratory Technician program is designed for students who enjoy practical hands-on science. In this program, students 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. Over the two-year program, Laboratory Technician students will learn through a balance of theory and hands-on learning activities specifically designed to prepare graduates of the program for employment and/or college.

ARTS AND SERVICES

COSMETOLOGY (AM and PM) **3 Credits**

This course exposes students to theory and practical skill training to prepare them for careers in cosmetology. Satisfactory completion for the course and its 1,200 hours of instruction are required to make a student eligible to take the State licensing exams. The cosmetology program offers students the unique opportunity to develop and practice their skills during a regular weekly clinic when the public is invited to make appointments for beauty services.

CULINARY & PASTRY ARTS (AM and PM) **3 Credits**

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.

TECHNICAL SERVICES

CONSTRUCTION TECHNOLOGY (Carpentry) (AM and PM) **3 Credits**

The construction technology program trains students in the fundamentals needed to enter the carpentry trade. Students are engaged in the construction of houses and additions to houses on and off campus. They are also involved in many other classroom activities that develop proficient carpentry skills.

WELDING TECHNOLOGY (AM and PM) **3 Credits**

This course will give the student knowledge and technical skills that will prepare them for positions as an entry level welder or for advanced placement in post-secondary education. Work-based learning sites are developed in the second year to allow the opportunity to intern at local businesses.

■ BOCES Career & Technical Education

ARTS AND SERVICES

EARLY CHILDHOOD EDUCATION (AM and PM)

3 Credits

This program is offered to students who want to work with young children. Students learn about the characteristics, needs and behavior of three and four year olds and learn how to care for them in a nursery school setting. After learning basic skills, students operate a nursery school for 20 children three days per week. Each high school student in the course is expected to participate in all phases of running the nursery school. On Fridays, students plan activities for the following week and study child development through lectures, discussions, observations, films, speakers and occasional field trips. Graduates may find employment in day care centers, nursery schools and parks & recreation departments. Graduates may continue their education in nursery and elementary education at two and four year colleges.

Media Marketing (AM and PM)

3 Credits

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 will 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 credits courses on-site with college instructors.

HEALTH OCCUPATIONS

HEALTH OCCUPATIONS TECHNOLOGY (AM and PM)

3 Credits

This program offers multiple entry and exit points for students interested in learning and applying sciences in the health care field. PM students will complete requirements for the NYS Introduction to Health Occupations Proficiency exam. The AM session will complete the "Health Prep" portion of the course which will include Anatomy and Physiology, Microbiology and Medical Ethics. Students will complete the requirements necessary to sit for the Nurse Aide certification exam. During the second semester, students will explore additional specialty areas in the allied health field.

PHYSICAL THERAPY (AM and PM)

3 Credits

This course will give the students' knowledge and technical skills that will prepare them for an entry-level Physical Therapy field, as well as offer a path to entering higher education in a Physical Therapist Assistant college program. Work-based learning sites are developed in the second year to allow the opportunity to intern and shadow at local Physical Therapy Practices.

■ BOCES Career & Technical Education

NEW VISIONS

AN INTERDISCIPLINARY IMMERSION PROGRAM (AM and PM)

3 Credits

Each of the New Vision Programs is taught on-site where students learn through an integrated immersion model in the actual work environment. Subsequent materials are integrated in the work place and the student receives 3 Career and Technical Education credits. Participation in Government, Economics and senior English credits are earned while involved in the actual work for a total of 5 graduation credits.

Please note: Available to Seniors only. New Visions does not meet NCAA criteria for athletic scholarships. Any student considering a Division 1 or 2 College must also take an NCAA approved English 12 course at Baker High School.

Criminal Justice is the study of the criminal justice system ranging from the causes of crime to the law enforcement system, such as police who protect, the court system that deals with interpreting and enforcing the law of the locality, state or nation and the many agencies who interact with this system such as probation, child protection, correction, stop DWI, battered women, etc. This program is taught at the Onondaga County Sheriff's Department Building in Syracuse.

Engineering Professions is an engineering immersion program designed for highly motivated high school seniors. Students will study the fundamentals of engineering and extend their learning as they work side by side with engineers on projects in aerospace, defense, security and advanced technologies. This program is taught at Lockheed Martin

Medical Professions is the in-depth study of the health care system examining all the technical support staff needed to provide comprehensive quality care. Students are exposed to occupational, physical and respiratory therapy, nuclear medicine, research, dental, histology, pharmacology, nursing, recreational therapy, surgical practices and many other areas. This program is taught at SUNY Upstate in Syracuse.