

Greenwich
Junior-Senior
High School



"Where Excellence is a Tradition"

Grades 9-12

2016-2017



Greenwich Junior-Senior High School
10 Gray Avenue, Greenwich, NY 12834

Dear Parent/Guardian,

The 2016-2017 Educational Planning Guide (EPG) is a tool designed to assist students and their parents in maximizing their educational opportunities at Greenwich Junior-Senior High School. The 9-12 EPG consists of course descriptions for those courses that will likely be offered during the 2016-2017 school year. It also provides important information about our academic policies and procedures and, perhaps most importantly, outlines the minimum requirements a student needs to earn an Advanced Regents Diploma in New York State. The Advanced Regents Diploma is the diploma type that the majority of the students in our school should be working toward as it indicates that a student has passed the classes and exams considered essential for college preparation.

When you meet with your child's counselor this spring to develop his/her 2016-2017 class schedule, your initial discussion should focus on making sure your child is on track to earn an Advanced Regents Diploma. If your son/daughter has already met the requirements for an Advanced Regents Diploma and is looking to challenge themselves academically, you should discuss the opportunities our school provides for students to take college courses, as well as Advanced Placement (AP) courses. It is also recommended that you discuss the outstanding opportunities available in our school to study in the areas of business, agriculture, art, music, and/or technology.

The economic climate that we live in today makes it more important than ever for our young people to maximize their educational experience while in high school. Your child needs to leave our school with the knowledge, skills, and habits necessary to be able to successfully compete with the millions of students graduating throughout our country and the world. You can help us prepare your child by taking an active role in the course selection process. Our counselors and teachers look forward to partnering with you in this important and rewarding endeavor.

As always, we welcome you to contact us if you have any questions or concerns about our educational program and your child's progress toward a diploma and beyond.

Respectfully,

A handwritten signature in black ink, appearing to be 'G. Niesz'.

George C. Niesz
JH/SH Principal

Table Of Contents

How to Use this Guide _____	3
Advanced Regents Diploma Requirements _____	4
CTE Endorsement _____	5
Policies and Procedures _____	6
Add/Drop Course Change Policy _____	9
Independent Study _____	10
Earning Special Units of Credit _____	11
Advance Placement (AP) Courses _____	12
College-Level Courses _____	13
<u>Course Offerings</u> _____	14-39
Academic Intervention Services (AIS) _____	14
Agriculture _____	14
Art/Music/Fine Arts _____	17
Business/Marketing _____	20
English/Language Arts _____	23
Foreign Languages _____	25
Health/Physical Education _____	27
Mathematics _____	28
Science _____	31
Social Studies _____	36
Technology Education _____	39
BOCES Occupational Education _____	40
CTE Application Process _____	40
Contact Information _____	41

How to Use this Guide

The Educational Planning Guide is intended to aid students, parents and school personnel in the planning of academic programs at Greenwich Jr./Sr. High School.

As students and their parents read through this Planning Guide, they should try to plan for not only the next school year, but for the years beyond. Every GCS student enters the ninth grade “on track” for an Advanced Regents diploma. The chart on the next page shows the required courses that a student needs to take throughout their high school career, as well as the nine required Regents exams that they must pass in order to earn an Advanced Regents diploma. Some students who struggle meeting some aspect of the Advanced Regents diploma will earn a Regents Diploma. (See School Counselor for Regents Diploma description.)

Once a student has met the requirements for an Advanced Regents diploma, they should look to challenge themselves academically. Greenwich offers a variety of opportunities for students to take college courses through SUNY Albany and SUNY Adirondack, as well as a large selection of Advanced Placement (AP) courses. Students may also take advantage of the outstanding opportunities available in our school to study in the areas of business, agriculture, art, music, and/or technology. Students in our CTE Business and Agriculture departments may also pursue a CTE endorsement on their diplomas.

NUMBER OF CREDITS AND SEQUENCES

All students are required to carry a minimum of 6 1/2 units of credit each year, including Physical Education and a minimum of 22 credits are required for graduation. The High School Principal may change this minimum load in unusual or extenuating circumstances. A **Unit** is a value given to any high school subject pursued 5 times a week for the entire school year. A $\frac{1}{2}$ **Unit** is earned for pursuing a half-year course or a course which meets on alternating days.

Students must either take three units of a Foreign Language or one unit of a Foreign Language plus a 5-unit sequence in Art, Music, Tech, Agriculture or Business.

Prerequisites represent requirements which must be met before a student may be enrolled in a given course. This may consist of meeting certain standards in previously completed courses, attaining minimum standard scores in a previous final or Regents, and/or the recommendation of a teacher and school counselor. **All prerequisites can be overridden by special exception of the Principal.**

Required Courses for an Advanced Regents Diploma	
English	4 UNITS
Social Studies	4 UNITS
Math	3 UNITS
Science	3 UNITS
Health	1/2 UNIT
Art and/or Music	1 UNIT
Foreign Language (LOTE)	3 UNITS (or 1 unit in LOTE and 5 units in Art/Music/Tech/Agriculture or Business)
Physical Education	2 UNITS
Electives	2 UNITS
Total Required Credits (minimum)	22 UNITS

REQUIRED REGENTS EXAMS FOR AN ADVANCED REGENTS DIPLOMA
8 Required Regents Exams
1. English Language Arts (Common Core) **
2. Global History & Geography**
3. US History and Government**
4. Integrated Algebra**
5. Geometry**
6. Algebra 2/Trigonometry**
7. Living Environment**
8. Earth Science OR Chemistry OR Physics (** one needed)
**Advanced Regents Diploma with Honors is earned by averaging 90% or higher on certain Regents Exams

CTE ENDORSEMENT

All students have the option to obtain a five credit sequence in Art, Music, Technology, Agriculture or Business. Students specializing in Agriculture or Business also have the option to receive a Career and Technical Endorsement on their Regents Diploma. This endorsement is recognized by New York State for students who attain mastery in a CTE subject area.

Required Courses for a CTE ENDORSEMENT	
CTE BUSINESS ENDORSEMENT	CTE AGRICULTURE ENDORSEMENT
Keyboarding	Ag Science
Business Ownership	Plant Science
Business Law	Animal Science
Work Experience	Ag Cooperative or Work Experience
1 Unit—Other Business Electives	1 Unit—Other Ag Elective
All students seeking endorsement must maintain a portfolio and pass an industry based exam.	

Policies and Procedures

Passing Standard

The passing standard at Greenwich Junior-Senior High School is 65%. Students that have a final average of above a 50%, but below a 65% AND earn a grade of 65% or better on a New York State Regents exam, local final exam or culminating activity will have their final average overridden to a 65% by the teacher of the course.

Regents Exam as Final Exam

Teachers that have students in grades 9-12 can choose to offer their students that have a final average of above a 65% AND earn a grade of 85% or better on a final exam, culminating activity or New York State Regents exam, the opportunity to replace their final average with the grade from their final exam, culminating activity, or Regents exam grade.

Incomplete Grades

Teachers should only place Incomplete on a student's report card in extraordinary circumstances. Extraordinary circumstances will usually be defined as times when a student has missed a significant amount of instructional time due to an illness or other excused absence from school. All incomplete grades MUST be changed to numeric grades within two weeks of the posting of the incomplete grade.

Early Graduation (graduating in less than 4 years)

A student will only be considered for early graduation if they have completed all requirements for a Regents diploma. If those requirements have been completed, there will be a meeting with the Principal, School Counselor, parents and student to determine the appropriateness of the request. If deemed appropriate, the student will be allowed to "double up" on English 11 and 12, as well as Social Studies 11 and 12. The final decision will rest with the Building Principal.

Scheduling Procedure

School counselors will meet with students during the spring semester. Teachers will make placement recommendations as applicable. A course selection sheet will be finalized by the school counselors for each student by May 1st (this selection sheet should be signed by the parent or guardian). After the Master Schedule is created, a student schedule will be developed. Where classes are cancelled or when conflict arises in a student schedule, the student and parents will be contacted and different courses will be selected. Before school opens in the fall, students will receive a copy of their daily schedule for the upcoming year. **Schedule changes will be strongly discouraged at this time unless there is a major error in the schedule. Students are obligated to make a sincere effort to succeed and complete the agreed upon program.**

High School/College Cross Enrollment

Students may wish to cross-enroll with area colleges in order to enroll in

college courses. They may cross-enroll in a college and still graduate with their class if they meet the following criteria:

- The student must maintain a full time student status (a three or four college credit course will be considered equal to one high school credit)
- The Principal is notified prior to enrolling and provided with courses descriptions in writing for his/her approval for high school credit.

All costs for transportation, tuition, and transcript filing become the student's responsibility. Grades taken at college will not count in regard to the student's GPA. The final decision to permit cross-enrollment lies with the Principal.

Tutored Students

Students that are tutored (not receiving instruction during the regular school day due to a medical issue or because they are suspended from school) are entitled to instruction that is commensurate to what is happening in the regular classroom. It should not be assumed that a student being tutored will always receive exactly the same assignments as the students regularly attending class. Teachers will assign work for students being tutored that will allow the student to meet the New York State learning standards. When a student requires tutoring for an extended period of time (longer than ½ of a school year), he or she will likely not be able to maintain a full schedule of classes. The school counselor will develop a new class schedule for students being tutored that allows the student to maintain enrollment in the minimum number of core courses (Math, English, Social Studies, and Science) plus any courses that the counselor and tutor believe can be successfully completed through tutoring.

Failing Grades

In order to decrease the likelihood of at-risk students giving up in a full-year course, a grade of 50 will be the lowest grade used in the first half of a full year course. For the second half of a course, actual numeric grades will be used.

Grading

In order to meet the local standard for passing a course, a student must earn a grade of 65% or higher. All students are expected to complete the assigned class work and homework as directed. Students are also expected to participate meaningfully in class discussions and activities in order to receive course credits.

Grading System

In the Junior/Senior High School, each course is passed or failed separately. The local passing standard is 65% on the course work and the final exam. The state-determined passing standard on Regents Exams is 65%. A student passes a course by earning a passing final average.

Computing Final Course Grade

* A Half year course grade will be computed as follows:
 40% (1st MP) + 40% (2nd MP) + 20% (Final Exam) = Final Average

1st semester			2nd semester		Final Exam	Final Average
1st MP	2nd MP	Midterm Exam *	3rd MP	4th MP		
18%	18%	8%	18%	18%		
44% +			36% +		20% =	100%

Acceleration in English/Language Arts

Students that would like to accelerate in the ELA department will need to meet the following requirements to be considered for acceleration by the High School Principal:

- 1) A score of 4 on the last NYS ELA exam taken, as well as an above grade level performance on the GRADE reading assessment. If student is in Grades 9 or 10, they must have achieved a final average of above a 95% in the last ELA course completed.
- 2) The student will have at least one ELA and/or Social Studies teacher submit a written recommendation to the Principal that supports the proposed acceleration proposal.
- 3) The student and his/her family will meet with their Counselor and the Principal to discuss the proposed acceleration proposal so that all parties are clear about the criteria that will be used to determine the appropriateness of the acceleration and the impact of the acceleration on the future academic plans of the student.
- 4) Transfer students - The criteria used to determine whether a student that is transferring into Greenwich from another school will be allowed to accelerate will be the same as outlined above.

Add/Drop/Course Change Policy

The procedure for a student-initiated Add/Drop/Course Change is:

- **During the first two weeks of school, only emergency schedule changes will be made.**
- Students meet with their school counselors to discuss proposed changes and deem if the change is appropriate. If the requested change is possible and appropriate the student will be given an Add/Drop/Change form to complete.
- All of the required signatures must be on the form for it to be considered complete. This includes both the adding and the dropping teacher and the parent/guardian. If a teacher, parent, counselor, or the Principal feels that the change is not appropriate, the change may not be granted.
- Once the form is complete, it should be returned to the counselor for his/her comments. The counselor will then bring the form to the Principal for a final decision.
- Student schedules will not be altered to accommodate the change of a teacher or the change of a student's lunch period.
- Course balances will be considered by the school counselors when Add/Drop decisions are made.

All changes to schedules must be processed by the end of the tenth week of school. **Requests for changes after the tenth week of school will be granted only in extraordinary circumstances.** Students that drop a class after the ten week Add/Drop period closes, will have a notation on their permanent transcript indicating the dropping of the course.

**FINAL DATE FOR ADD/DROP FULL YEAR or
FIRST SEMESTER COURSES: November 4, 2016**

**FINAL DATE FOR ADD/DROP SECOND
SEMESTER COURSES: April 7, 2017**

Grades for Dropped Courses

If a course is dropped prior to the end of the first quarter, the class will not become part of a student's permanent academic record. After a student receives a quarter grade in a course, the next quarter column of the report card will denote either a drop/pass or drop/fail. The teacher assigns a drop/pass or drop/fail based on the current grade in the course. This procedure will not apply when a student is moved to another course or if the course dropped was deemed inappropriate for the student.

Independent Study

1. PURPOSE

To provide students who are eligible with more flexibility in fulfilling their high school goals.

2. PROCEDURE FOR REQUESTING INDEPENDENT STUDY

The student must have the written consent of his/her parents and of a sponsor teacher before s/he may apply for independent study. After consulting with the sponsor teacher, the student must complete the independent study application. The application is available in the Counseling Office. Before the independent study can begin, it must be approved, in writing, by the sponsor teacher, counselor and parent. The final decision will be made by the Principal.

3. ADDITIONAL INFORMATION AND REQUIREMENTS

- a. Independent study courses are offered at the teacher's discretion because they require work beyond the regular teacher assignment.
- b. Independent studies will not be granted to students who can fit the desired class into their schedule.
- c. There is a minimum academic standard for independent study. It must be equal in difficulty and work load to a course offered in the subject area and at the grade level of which the applicant is a member.
- d. The student may use any material, equipment, facility, etc. that has been approved as noted on the application.
- e. The sponsor teacher and the student will arrange the schedule and meeting place. A record (log-including the time in minutes) will be kept of the meetings each day and filed with the Principal quarterly.
- f. The sponsor teacher will evaluate and grade the independent study at 5 week intervals and a pass/fail and/or letter grade will be placed on the report card. Independent study grades will not be used in GPA calculations.

Earning Special Units of Credit

Challenging a Regents course: With the approval of the Principal, a student may earn a maximum of 6 ½ units of credit for either a Regents or local diploma without completing a full course of study for such units of credit if:

1. The student meets with the counselor and/or Principal to discuss

- the possibility of **challenging the course prior** to the beginning of the class in question.
2. Based on the student's past academic performance the Principal determines that the student will benefit academically by exercising this alternative.
 3. The student has demonstrated above average proficiency in all subject areas including the subject he/she is planning to challenge (85% average or above).
 4. (When appropriate) The teacher of the course indicates that the student qualifies based on the above mentioned items and that the student has a better than average chance at receiving an 85% or better on the Regents examination.
 5. Permission to challenge is granted by the principal.
 6. Student constructs and submits a plan to prepare to pass the examination.
 7. Student registers for the Regents examination.
 8. The student achieves a score of at least 85%, or its equivalent as determined by the Commissioner, on a State-developed or State approved examination; (The following are State-developed examinations – Regents examinations in all subjects; second language proficiency tests; Occ. Ed. Proficiency tests.)
 9. The student passes an oral examination or successfully completes a **special project** to demonstrate proficiency, as determined by the principal, in the subject matter area.

Art and/or Music Requirement: A student may obtain the unit of credit in art and/or music required in the following manner:

- By participating, only in exceptional situations, in an advanced out-of-school art or music activity. Credit for such participation shall be upon recommendation by the student's art or music teacher, or by the school Principal, and shall be consistent with the goals and objectives of the school's art and/or music program.
- A student may receive a unit of credit for participation in such activities if such participation is equivalent to a unit of study, or a student may receive $\frac{1}{4}$ unit of credit for such activity equivalent to $\frac{1}{4}$ unit of study.

Advanced Placement Courses

Advanced Placement courses are offered through the College Board. Through AP courses, students develop and apply the skills, abilities and content knowledge they will need later in college. **AP courses culminate with the AP exam** which enables students to demonstrate their mastery of college-level course work. Strong performance on AP exams is rewarded by colleges and universities worldwide.

Quarter grades for AP courses will be weighted by 1.05. Midterm and final exam grades will not be weighted.

Students that want to take an AP course while at GCS will need to meet the prerequisites for the course before being scheduled in the class. (See course descriptions for more information.)

AP Summer Assignments

Many AP courses require that students complete coursework during the summer months (this is necessary because of the relatively late start of NYS school calendars and the administration date of May for AP exams). Students that fail to adequately complete the summer work they have been assigned will immediately be placed on probation and a parent/teacher meeting will take place to review whether the student should remain in the AP class.

Students enrolled in an AP course must maintain a minimum course average of 75% to ensure enrollment. Students that earn quarter averages of below 75% will be placed on probation and a parent/teacher meeting will take place to review whether the student should remain in the AP class. In order to receive credit for taking an AP class a student must take the attached AP exam in May.

Dropping an AP class in the first marking period

AP students that choose to drop an AP course during the first marking period will follow the normal Drop procedures that are used with any class. However, if the AP class being dropped is one of the following AP courses linked to a graduation requirement (AP U.S. History, AP World History, AP Language, AP Literature and AP Government) the first quarter grade from the AP course will be used as the first quarter grade in the required course (with the .05 AP multiplier). No record of the AP course will show on a student's report card or transcript.

Dropping an AP class after the first marking period

AP students that choose to drop an AP course after the conclusion of the first marking period will have a record of the dropped AP course noted on their transcript (Dropped-Passing will be used if the student was passing at the time of the dropped course; Dropped-Failing will be used if the student was failing at the time of the dropped course.) If the AP class being dropped is one of the following AP courses linked to a graduation requirement (AP U.S. History, AP World History, AP Language, AP Literature and AP Government) the quarter grades from the AP course will be used as the quarter grades in the required course (with the .05 AP multiplier).

College-Level Courses

Greenwich Central School has reached agreements with SUNY Adirondack and SUNY Albany to offer our students college-level courses on our campus.

Students can earn college credits while still in high school. These credits form the basis of a permanent academic record that can be transferred to many colleges and universities throughout the country. These courses provide students with the academic challenges of college-level curriculum during their final years of High School. This "bridging" experience helps students to begin to develop the skills

necessary for academic success in higher education and allows students to shorten the college sequence by entering college with previously earned credit.

Please be aware that students choosing to take one of these courses may be required to pay a fee in order to sign up for the course. See course descriptions for more information.

Course Offerings

The following pages describe the high school courses that are being offered this year.

Please note that some courses in this guide are not offered each year.

Please check with your counselor for details.

ACADEMIC INTERVENTION SERVICES (AIS)

AIS is mandated by NYS Education regulations and provides additional targeted instruction to students in English/Language Arts, Mathematics, Social Studies and Science based on performance on required New York State assessments. Services are provided in two forms: progress monitoring and scheduled AIS classes. AIS classes supplement the instruction provided in the general curriculum and assist students in meeting the State Learning Standards.

AGRICULTURE

*(An alternative to the 3-unit LOTE requirement
is completing a 5-unit sequence in Agriculture.)*

SPECIAL NOTE: *Living Environment may be used as one of the courses in the 5 unit agricultural sequence. At the same time it can be used to meet the second year of the three-year science requirement. It will count only once to meet the unit requirements for graduation.*

AGRICULTURE SCIENCE

05240

Credit: 1 Unit

One out of every five jobs in the United States are in the agricultural industry. What is agriculture? Find out in this hands-on science course. Topics of study include an introduction to plant science, animal science, food science, leadership development, and FFA. This course is a prerequisite for Animal Science and Plant Science.

ANIMAL SCIENCE

05250

Credit: 1 Unit

Prerequisite: Ag-Science

Students successfully completing this course may earn college credit through the Ag Tech Prep initiative. Students will study the current issues in animal rights versus welfare, animal breeds, health and disease, genetics and animal breeding, nutrition and marketing. Leadership development through the FFA will be incorporated throughout the course.

PLANT SCIENCE

05260

Credit: 1 Unit

Prerequisite: Ag-Science

Prune trees, make a floral arrangement, produce maple syrup, or clone a plant while studying the scientific principles of plant growth. Units of study include: Plant Structure and Function, Plant Reproduction, Floriculture, Arboriculture, and Nursery Management.

VETERINARY SCIENCE

05270

Credit: 1 Unit

Prerequisites: Ag-Science and Animal Science

Designed for upper level agricultural students, this course builds on what students learn in *Animal Science*. It will prepare them for post-secondary education and/or a career in the field of veterinary medicine. Content areas include safety and sanitation, veterinary terminology, anatomy and physiology, clinical exams, hospital procedures, parasitology, office management, posology, laboratory techniques and small animal nutrition. Leadership development through the FFA will be incorporated throughout the year.

AGRICULTURE ENGINEERING

Credit: 1-3 Units

Recommended for Sophomores or higher.

Agriculture Engineering courses teach skills that will be useful to students planning any career or advanced study in engineering, mechanics, or just looking to gain experience in basic home repairs. Courses are offered every other year, so students may enroll for two consecutive years. **Qualifying** students may **apply** to participate in a third year of study.

AG ENG - POWER SYSTEMS - 05200A

Major units of study include: electrical theory and electrical wiring, the principles of internal combustion, small engine diagnostics and maintenance, renewable energy, and construction techniques.

AG ENG - WELDING 05210A

This course focuses on welding and metallurgy processes, although students will also complete a unit in land surveying during fair weather months. Topics include oxy-acetylene cutting, welding and brazing. Students also weld using Arc, MIG and TIG welding equipment. Students will finish the year with units in plumbing, pipe-fitting, and copper soldering.

ADVANCED AGRICULTURE ENGINEERING - 05220A

Students who have successfully completed Power Systems and Welding with averages of 90 or above can apply for this course. Students' grades, attitude and performance are evaluated along with their application prior to acceptance into this course. Students develop their own program of study with the instructor and are responsible for securing their own projects to work on for the entire year.

COOPERATIVE WORK EXPERIENCE LEARNING 05290

Credit: 1 Unit

Junior or Senior agriculture students may earn one unit of school credit by meeting the requirements of the FFA Empire Degree. Requirements include:

- 350 hours of documented Ag work experience that has earned

the student a net worth of at least \$1,000

- Leadership in FFA, school and community activities
- Participation in an interview to verify records

AP ENVIRONMENTAL SCIENCE

04151

Credit: 1 Unit

Prerequisites:

1. **Passing Living Environment and Chemistry courses**
2. **An 85% or higher on the Living Environment Regents exam and 80% or higher on the Chemistry Regents exam**
3. **Or by special permission of the Principal**

**NOTE: Quarter grades for this course will be weighted at 1.05.
Mid-term and final exam averages will not be weighted.**

Environmental Science involves the use and understanding of many disciplines, including biology, chemistry, earth science, agricultural science, politics, government, economics and medicine. The natural environment is a tremendously complex and poorly understood system. As we progress through the year, the student will experience how each discipline listed above, as well as others, is used by environmental scientists to understand and predict the effects that changes, including those caused by the human population, have on the natural world. Computer analysis and simulations as well as laboratory analysis are among the tools Environmental Science students will use in this attempt. In addition, students will study how environmental issues have political, social and economic ramifications.

AGRIBUSINESS/SUNY ADK FUNDAMENTALS OF AGRIBUSINESS (BUS 195)

05236

Credit: 3 College Credits (Local 1 Unit)

Prerequisite: Intended as the upper level capstone for students completing CTE sequence in Business or Agriculture (in most cases will have already taken 3-4 credits in their appropriate sequence.)

This course is for the student who plans to pursue a career/college major in the field of agriculture or business management. Student(s) will be introduced to the fundamental management theories and functions including: planning, organizing, leading, controlling, responsibilities, production, goals, decision making, and managing risk in both the agriculture and the business fields of study. The students will then apply these essential elements of management through practical experience including career specific business plans, business operations and sales theories. Units of study will also include computers and communication, as they would need to be utilized in business and agriculture fields. Lastly, specific careers in the business and agriculture areas will be studied. This class will be counted toward a 5-unit sequence in Business & Marketing Education or Agriculture Education.

ART / MUSIC / FINE ARTS

(1 Unit of Art/Music is required for graduation.
An alternative to the 3-unit LOTE requirement is completing
a 5-unit sequence in Art Education)

STUDIO IN ART I & II

06520/06530

Credit: 1 Unit (1/2 per semester)

This course meets the state and local requirements for art. Students taking this course will explore color, line texture, balance, composition, two and three dimensional design, drawing, painting, mixed media and art history. Students are required to keep a sketchbook in class.

STUDIO DRAWING and STUDIO PAINTING 06540/06550

Credit: 1 Unit (1/2 per semester)

Prerequisite: Studio in Art I and Studio in Art II

The basic art elements from *Studio in Art* are extended to various forms of drawing and painting. Various mediums and methods of artistic expression in drawing and painting are explored. In addition to class projects, students are also required to complete weekly sketchbook assignments. Lessons in art history and its applications to projects are integrated throughout the course.

ADVANCED STUDIO IN ART I & II

06580/06585

Credit: 1 Unit (1/2 per semester)

Prerequisites:

1. **Successful completion of *Studio In Art I & II* and *Studio in Drawing & Studio in Painting* with a grade of 80% or above.**
2. **Or successful completion of assigned summer portfolio demonstrating advanced skills as described in the assignment criteria.**
3. **A minimum grade of 80% or above is required for students in *Adv. Studio I* to continue to *Adv. Studio II*.**

Students are expected to understand and apply drawing and painting skills including shading, contour, gesture, value and composition. Interest in art, self-motivation and creative solutions to assignments are essential in meeting course goals. Students are expected to complete weekly sketchbook assignments, participate in class critiques, complete written assignments and maintain standards demonstrating and applying advanced skills.

STUDIO IN CERAMICS I & II

06560/06565

Credit: 1 Unit (1/2 per semester)

Prerequisites:

1. **Successful completion of Studio Art I and Studio Art II**
2. **Completion of Studio in Drawing and Studio in Painting is strongly recommended**

In addition to class assignments, both courses require students to keep a sketchbook with weekly assignments. Lessons in art history and its application to projects are integrated throughout each course.

STUDIO IN CERAMICS I - This course focuses on hand building

with clay. Basic techniques in pinch pots, slab, coil, relief and construction are taught. Students will learn how to use glazes, patinas and added material to complete their fired pieces.

STUDIO IN CERAMICS II - This course focuses on advanced techniques in hand building and glazing. Advanced projects in relief and "in the round" are taught.

ADVANCED STUDIO IN CERAMICS

06569

Credit: 1 Unit (1/2 per semester)

Prerequisites:

1. **Completion of Ceramics I and II with a minimum grade of 90 or above**
2. **Completion of Studio in Drawing and Studio in Painting**

Advanced Ceramics students are expected to understand and apply skills learned in Ceramics I & II. This course builds upon prior knowledge, while developing creativity, craftsmanship, and design skills. Students will explore a variety of ceramic techniques including refining hand building skills. Specific projects will be assigned with emphasis given to design and craftsmanship. Interest in art and self motivation are essential in meeting course goals. Students will be required to complete sketchbooks, participate in class critiques, and maintain standards demonstrating and applying advanced skills. Each student will develop an area of concentration and create a document to showcase their work in the spring.

DESIGN AND DRAWING FOR PRODUCTION

05353

Credit: 1 Unit

Design and Drawing for Production is a high school level course that is appropriate for students who are interested in design and engineering. An emphasis will be placed on the design process of a product and how a model of that project is produced, analyzed, and evaluated. Students will use 3-D modeling software that is currently used in industry and will create products that are capable of being produced.

BAND, Senior High

06612/06613

Credit: 1 Unit or 1/2 Unit

Students have an option of attending Band every day of the week to earn a full unit of credit or on alternating days to receive a 1/2 unit of credit. A wide variety of classical music, traditional concert band music, popular and seasonal music is performed. Eligibility requirements for Senior Band include 4 years playing experience on the instrument, past participation in Junior/Senior Band or with the director's permission. Enrolled students also take one class lesson per week on a 4 week rotating period basis.

Attendance at lessons and evening performances is mandatory. There are several opportunities throughout the year to perform in advanced ensembles, and to perform at in-state and out-of-state festivals. One full

credit of band will satisfy the New York State art/music requirement for graduation

Students who did not receive instruction in the school band program the previous year must pass an entrance audition. Enrolled students are required to participate in activities such as occasional evening rehearsals, the winter, pops, and spring concerts, Memorial Day parade and graduation. Individual practice at home is required.

CHORUS, Senior High

06632

Credit: 1/2 Unit

Students will explore a varied repertoire of choral literature and will study and develop healthy vocal techniques. One full credit of chorus will satisfy the New York State art/music requirement for graduation.

MUSIC THEORY

06660

Credit: 1 Unit

Prerequisites: Open to students in grades 11 or 12.

9th and 10th graders with permission of the instructor and Principal

Music Theory is designed for student who 1) require a music theory education for future college and career music study; 2) participate in the school band and chorus program and wish to improve their fundamental skills; 3) do not participate in the school band or chorus program, but love music and wish to expand their knowledge of music fundamentals.

BUSINESS & MARKETING EDUCATION

*(An alternative to the 3-unit LOTE requirement
is completing a 5-unit sequence in Business Education.)*

KEYBOARDING

05090

Credit: 1 Unit

This course is devoted to mastery of a computer keyboard, basic computer and word processing functions along with additional business communications, such as proper letter format, résumés and reports.

This is the foundation course of the Business sequence - meaning it is a pre-requisite to all other Business courses and mandatory for a Business Sequence and CTE Business Endorsement. Typing speed of 40 wpm for 1 minute with 5% error at the end of the first semester and 50 wpm with 5% error at the end of the second semester are required.

ACCOUNTING

05010

Credit: 1 Unit**Available for Juniors and Seniors only**

An introduction of Accounting concepts, theories, principals and practices as they relate to a service business. The Accounting cycle, journalizing, posting, closing and financial statement preparation are studied. Emphasis will be placed on a business owned by one person and by partners. Automated Accounting will also be applied during this course. This course satisfies the third year requirement for Math.

BUSINESS LAW**05020****Credit: 1 Unit**

This is the first in a series of law courses. Students will gain a respect for and understanding of the segment of law that affects them in personal and business applications. It deals specifically with contracts and the principles of law applicable to everyday life. The curriculum deals with a broad basis of law and culminates with students participating in a mock trial. At the end of this course, students may opt to take the CLEP Business Law Exam. Passing this exam can yield a student three college credits. (See instructor for more details.)

BUSINESS OWNERSHIP**05000****Credit: 1 Unit**

Students will analyze the multi-faceted role of a business owner in today's international business world. There is an emphasis on hands-on simulation activities along with student presentations. Students will operate the school store, prepare a business plan, and participate in a classroom version of *The Apprentice*. Credit for this course may be used to meet the sequence requirements of Business/Marketing Education.

ESSENTIAL SKILLS FOR COLLEGE & LIFE**05060****Credit: 1/2 unit****Open to any Junior or Senior**

This course is for the upper classman who is interested in fine tuning his/her computer communication skills (Keyboarding Skill/Word Applications) while working towards documents that will help them in the college exploration, planning, and application processes. Each student will develop a portfolio to use for college and internship interviews. This course will also address key life skills that are essential for effective transitioning to college life.

CAREER EXPLORATION INTERNSHIP PROGRAM **05095****Credit: See below****Open to Seniors Only**

This class is designed for Seniors to explore a career at an actual worksite. Students will spend up to 20 weeks per semester observing and involving themselves with their chosen career at a school-approved job site. Students are placed only by the Internship Coordinator. Job sites cannot be family or family businesses. NOTE: Students must ap-

ply and be accepted into this program. Applications are available online, from the Internship Coordinator, or from the Counseling Office.

Credit will be based on the number of hours at the job site, completion of weekly time logs, weekly meetings with the Internship Coordinator, and quarterly projects.

BUSINESS/PERSONAL FINANCIAL MATH 05070

Credit: 1/2 unit

Open to any Junior or Senior

This course is for the student who is looking to understand the complex financial world they will encounter during their lives. Topics covered will include: managing personal finances, banking, investing, checking/savings, debt, identity fraud, insurance, record-keeping, income taxes, credit, budgeting, and taxes, as well as business mathematics topics such as personnel, production, purchasing, financial management and planning. Students will routinely use the internet, Excel spreadsheets, and several computer applications with real world connections.

PRINCIPLES OF MARKETING (ACC BUS 103) 05036

Credit: 3 College Credits (Local 1 credit)

Prerequisite: Students wishing to obtain college credit must have an overall GPA greater than 85% or special permission from the Principal.

This course covers the history of marketing and development of current marketing practices. Emphasis is on the marketing concept and the decision-making process. Includes practical applications designed to develop student interest in the field of marketing.

PERSONAL FINANCE (ACC ECO 101) 05037

Credit: 3 College Credits (Local 1 credit)

Prerequisite: Students wishing to obtain college credit must have a GPA in Business or an overall GPA greater than 85%. Those taking the course for local credit only must have completed at least three other Business courses.

This course introduces students to the subject areas needed to manage their economic future. Topics include the U.S. economic and financial systems, financial planning, banking, consumer credit, retirement planning and investing, health insurance, and risk management.

Please be aware that students choosing to take either of these college courses could be required to pay a fee in order to sign up.

**AGRIBUSINESS/SUNY ADIRONDACK 05236
FUNDAMENTALS OF AGRIBUSINESS (BUS 195)**

Credit: 1 Unit

Prerequisite: Intended as the upper level capstone for students completing CTE sequence in Business or Agriculture (in most cases will have already taken 3-4 credits in their appropriate sequence.)

This course is for the student who plans to pursue a career/college major in the field of agriculture or business management. Students will

be introduced to the fundamental management theories and functions including: planning, organizing, leading, controlling, responsibilities, production, goals, decision making, and managing risk in both the agriculture and the business fields of study. The students will then apply these essential elements of management through practical experience including career specific business plans, business operations and sales theories. Units of study will also include computers and communication, as they would need to be utilized in business and agriculture fields. Lastly, specific careers in the business and agriculture areas will be studied. This class will be counted toward a 5-unit sequence in Business & Marketing Education or Agriculture Education.

Please be aware that students choosing to take on of these college courses may be required to pay a fee in order to sign up.

ENGLISH/LANGUAGE ARTS

(4 Units of English and 1 Regents exam are required for graduation)

ENGLISH 9

01090

Credit: 1 Unit

Students will study various literary genres including short story, drama, novel, poetry and non-fiction. Students learn to take a more critical look at how authors develop their craft. Students will broaden their understanding of literature and strengthen their skills as readers. Students will also study different writing styles. Students will write for different audiences and with different purposes.

ENGLISH 10

01100

Credit: 1 Unit

This course focuses on genres such as fiction, non-fiction, drama, and poetry. Classic and contemporary literature readings are the basis for literary and creative writing. This course also emphasizes prose revision for clarity and style. In addition, English 10 includes guidelines and practice for the Comprehensive English Regents.

ENGLISH 11

01110

Credit: 1 Unit

Students can expect a heavy focus on preparation for the New York State Regents Examination in English Language Arts (Common Core), especially during the first semester. Emphasis is on reading and writing

for critical analysis and evaluation. Literature studied includes short stories, essays, poems, novels and full-length plays. Responses to the literature are evaluated through written language primarily, and oral class discussion.

ENGLISH 12

01120

Credit: 1 Unit

Students will read and respond to historically or culturally significant works of literature. Focus is on contrasting major periods, themes, styles and cultures, as well as philosophical, political and social influences of each period. Major essays will include narrative, compare/contrast, literary analysis, literary response, reflective composition, historical investigation, and research.

JOURNALISM

01131

Credit: 1 Unit

Journalism in contemporary society as an application in non-fiction writing. The course will develop an understanding of journalism from a historical perspective as well as modern application. An exploration of the ethical and legal issues facing journalists and how that is balanced with the responsibility of the trade will be considered. The course will explore the fundamentals of writing for this purpose and put that into practice. The student in the course will be responsible for news gathering, reporting, regular media consumption, employing formulaic writing for a mass audience, and performing critical examinations of media.

AP ENGLISH LITERATURE & COMPOSITION

01140

Credit: 1 Unit

Prerequisites:

1. **Successful completion of English 11 (the full course)**
2. **85% or above on the NYS Comprehensive English Regents**
3. **Overall average grade of 90% or better in English 11 or a score of 3 or better on the AP English Language exam.**
4. **Completion of summer reading and writing**
5. **Or by special permission of the Principal**

NOTE: Quarter grades for this course will be weighted at 1.05.

Mid-term and final exam averages will not be weighted.

Students will be required to intensively study several representative works from various genres and periods. Through such study, students will sharpen their awareness of language and understanding of the writer's craft. The Advanced Placement course aims to provide course content and learning experiences that will ensure the following in those who complete the program: knowledge of and ability to respond critically and aesthetically to a broad range of literature; ability to engage in literary scholarship and to apply literary theory and criticism to the study of specific historical periods and specific texts; experience in reading and responding to different kinds of discourse produced by voices diverse in gender and culture; mature skills in critical and creative writing and the successful completion of the three-hour AP Exam in English Literature and Composition.

AP ENGLISH LANGUAGE AND COMPOSITION

01145

Credit: 1 Unit

Prerequisites:

1. Successful completion of English 10 (the full course)
2. Overall average grade of 90% or better in English 10 or a score of 3 or better on the AP World History exam
3. Completion of summer reading and writing
4. Or by special permission of the Principal

NOTE: Quarter grades for this course will be weighted at 1.05.

Mid-term and final exam averages will not be weighted.

The goal of the course is to further student understanding and appreciation of the English language, particularly language used to argue and persuade. The class will study the logic of English usage, increase vocabulary, and read writing that exemplifies precision and rhetorical force. Content and assignments in the course will center on understanding and clarifying personal values, and weighing these against accepted societal values. A focus will be on exploring specific means of persuasion employed in American society. Articulate, deliberate, precise language will be encouraged and reinforced in writing assignments, oral reports, and class discussions.

LANGUAGES OTHER THAN ENGLISH: FRENCH, SPANISH

(1 Unit of LOTE is required for graduation)

SPANISH 1

06119

Credit: 1 Unit

This beginning level is for students who have not taken Spanish before or for those who did not successfully pass Spanish 7 & 8 or the final exam. This course develops the student's ability to comprehend simple statements and questions. The student will also be able to initiate and respond to simple statements and manage conversation within the vocabulary and structure appropriate to his/her level. Reading skills are developed so that a student comprehends the essentials of short statements. In writing, the student will express personal needs and compose messages providing information on a variety of topics.

FRENCH/SPANISH - LEVEL II

06020/06120

Credit: 1 Unit

Prerequisite: Recommended final average of 80% or above in French 1B or Spanish 1B or Spanish 1

Students will be able to better comprehend conversations in every day settings involving familiar topics. Students will initiate conversations with others, employing the proper verb order and correct word choice. Despite errors, the learner will be encouraged to speak in various communicative situations. Student's reading skills of authentic materials and texts will improve. He/she will be able to respond to questions concerning the passages. Level II stresses writing simple notes, letters and paragraphs that use more diverse vocabulary and structures. Students will use the present, past and future tense. Student writing is compre-

hensible to native speakers who often deal with beginning language learners. The student will show an understanding of history, current events and contemporary issues of the target culture.

FRENCH/SPANISH - LEVEL III

06030/06130

Credit: 1 Unit

Prerequisite: Recommended final average of 80% or above in French/ Spanish II.

Students will fine tune their listening, speaking, reading, writing and cultural understanding through extensive preparation for the local version of the state's Comprehensive Exam. Students will be able to socialize in typical situations using more complex sentence structures as well as a wider range of vocabulary by incorporating various verb tenses, necessary content vocabulary and expressions, all of which can be understood by native speakers familiar with foreigners. The student will attain knowledge of many aspects of the French and/or Hispanic culture(s).

SPANISH LEVEL IV

06140

Credit: 1 Unit

Prerequisites: Grade of 85% or better class average in Spanish III.

This year of Spanish expands upon and improves all five skills necessary for communication with natives. Communication in the target language is stressed through diversified classroom activities. Students will be able to function in various situations with native speakers who are familiar with foreigners. Students will continue to develop more fluency with the language. Auditory comprehension improves with constant use of Spanish. Reading, writing and cultural proficiencies become more complex. A series of increasingly more demanding multimedia involving videos, computer technology, literature and research projects will require students to broaden their use of vocabulary and proper grammatical structure.

FRENCH IV (ACC FRN 201)

06152/06050

Credit: 1 Unit (Local) and 3 College Credits

Prerequisites: Three years of secondary school French

This course is intended as a comprehensive review of the principles of grammar (much emphasis on use of the past tenses), vocabulary, and the history that has shaped the identity and culture of the Francophone world. Introduction to literary classics, modern writers, and modern films. Emphasis is in nurturing communicative expression through class discussions, student-based presentations, and group work. **All students in this course are registered in the local French IV class all year long. Students that choose to pay tuition to ACC have the opportunity to earn 3 college credits for successfully completing FRN 201 during the second half of the year.**

FRENCH V (ACC FRN 202)

06153/06050

Credit: 1 Unit (Local) and 3 College Credits

Prerequisites: Successful completion of French IV and FRN 201

As a continuation of FRN 201, this course allows the student to work on refining their communicative skills and cultural knowledge. Emphasis is on mastery of conceptual uses in grammar, such as the indicative versus subjunctive mood and a wider vocabulary to speak about current events in media & workplace. Much emphasis is in developing writing. **All students in this course are registered in the local French V class all year long. Students that choose to pay tuition to ACC have the opportunity to earn 3 college credits for successfully completing FRN 202 during the first half of the year.**

**UNIVERSITY IN HIGH SCHOOL -
LEVEL V - SPANISH**

06150

Credit: 4 College Credits (Local 1 Unit)

Prerequisites:

1. **Three years of secondary school Spanish**
2. **At least an 85% or better average in Spanish**
3. **Or special permission from the Principal**

Students can earn up to four SUNY Albany credits while still in high school. These credits form the basis of a permanent academic record that can be transferred to many colleges and universities throughout the country. The Spanish UHS course provides students with the academic challenges of a college-level curriculum during their final year in High School. This “bridging” experience helps students begin to develop the skills necessary for academic success in higher education. It also allows students the opportunity to shorten the four-year college sequence by entering college with previously earned credit.

Please be aware that students choosing to take any of these college courses could be required to pay a fee in order to sign up for the course.

HEALTH AND PHYSICAL EDUCATION

($\frac{1}{2}$ Unit of Health and two units of Physical Education are required for graduation.)

HEALTH EDUCATION

06320

Credit: $\frac{1}{2}$ Unit

This course is required for all High School students and is usually scheduled in 11th or 12th grade. The total person is stressed by recognizing physical, emotional, mental and social aspects of one's personality. Critical and current health issues are covered including drugs, tobacco and alcohol, problems of obesity, proper nutrition, physical fitness, disease prevention and a sensible approach to human sexuality. Also included are first aid instruction, safety, decision

making and consequences, and basic overall life skills.

INTRODUCTION TO FITNESS AND CONDITIONING 07001A

Credit: 1/2 Unit

Students will be active in many different components of physical fitness including cardiovascular, strength, general flexibility and agility.

Students will learn skills and strategies to build their personal “fitness toolbox”. The goal of the class is to expose students to a variety of life-long activities while teaching them basic fitness concepts and skills related to improving their health and wellness.

PHYSICAL EDUCATION - PERSONAL FITNESS 07003/07004

Credit: 1 Unit or 1/2 Unit

Prerequisite:

- 1. At least a 90% or better in prior year’s Physical Education class**
- 2. Must have an 85% or better each marking period to remain in class**

Students have an option of attending Physical Education every day of the week to earn a full unit of credit or on alternating days to receive a 1/2 unit of credit. Students will create and participate in a personal fitness program designed specifically for them. Components will involve cardiovascular fitness, strength training, speed training and agility training. The purpose of the class is to expose students to lifelong activities that will help them stay in good physical condition.

INDEPENDENT PHYSICAL EDUC. (VARS. ATHLETE) 07100

Credit: 1/2 Unit

If the Athletic Director determines that a student will participate in two or more Varsity sports, then the student can request to not take a scheduled Physical Education class. The Athletic Director will verify at the end of each season that the student has participated in a Varsity sport. If it is determined that the student has not fulfilled this requirement, then the student will be scheduled into a regular Physical Education class.

MATHEMATICS

(3 Units of Mathematics and one Regents examination are required for graduation. Four years of Mathematics are strongly recommended for all college-bound students)

INTEGRATED ALGEBRA with Lab 03190

Credit: 1 Unit

Integrated Algebra is the first Regents mathematics course. 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. Topics include functions, coordinate geometry, systems of equations, measurement, data analysis, trigonometry, and probability theory. (This class includes an additional 41-minute math lab every other day.)

INTEGRATED ALGEBRA A**03195****Credit: 1 Unit**

Integrated Algebra/A is an introductory course designed for students who would benefit from an additional year of instruction in order to complete Integrated Algebra. Students will take Integrated Algebra after completing this course.

INTEGRATED ALGEBRA B**03196****Credit: 1 Unit****Prerequisite: Integrated Algebra/ A**

Integrated Algebra/B is the second part of a two year sequence to complete Integrated Algebra. Students will take the Integrated Algebra Regents exam at the end of this course. (Year two of a two-year sequence.)

GEOMETRY**03210****Credit: 1 Unit****Prerequisite: Integrated Algebra**

Within this course, students will have the opportunity to make conjectures about geometric situations in a variety of ways. Topics include congruence, similarity, transformations, circles, compass and straight edge as well as dynamic software, reasoning and proof.

GEOMETRY A**03215****Credit: 1 Unit****Prerequisite: Integrated Algebra**

Geometry A is an introductory course designed for students who would benefit from an additional year of instruction in order to complete Geometry. Students will take Geometry after completing this course.

FINANCIAL APPLICATIONS**03197****Credit: 1 Unit****Prerequisite: Integrated Algebra**

This course will use mathematics to give a student the tools to become a financially responsible young adult. The course employs algebra, probability and statistics, and geometry to solve financial problems that occur in everyday life. Real-world problems in investing, credit, banking, auto insurance, mortgages, employment, income taxes, budgeting and planning for retirement are solved by applying the relevant mathematics. This course can be used as the New York State Regents' required third math credit.

ALGEBRA 2/TRIGONOMETRY with Lab**03220****Credit: 1 Unit****Prerequisite: Geometry**

Algebra/Trigonometry 2 is the third Regents math course. While developing the algebraic techniques that will be required of those students that continue their study of mathematics, this course is also intended to

continue developing alternative solution strategies & algorithms. Topics include imaginary and complex numbers, direct and indirect variation, data analysis, sequences, series, binomial experiments, circular functions, and trigonometric equations and identities. (This class includes an additional 41-minute math lab every other day.)

ALGEBRA 2/TRIGONOMETRY A **03225**

Credit: 1 Unit

Prerequisites: Geometry

Algebra 2/Trigonometry/A is a course designed for students who would benefit from an additional year of instruction in order to complete Algebra 2/Trigonometry. Students will take Algebra 2/Trigonometry B after completing this course. (Year one of a two-year sequence.)

ALGEBRA 2/TRIGONOMETRY B **03226**

Credit: 1 Unit

Prerequisite: Algebra 2/Trigonometry/A

Algebra 2/Trigonometry B is the second part of a two year sequence to complete Algebra 2/Trigonometry. Students will take the Algebra 2/Trigonometry Regents at the end of this course. (Year two of a two-year sequence.)

PRE-CALCULUS (UHS MAT 100) **03138**

Credit: 3 College Credits (Local 1 Unit)

Prerequisite: Successful completion of the Algebra 2/ Trigonometry course and Regents exam

A preparation for Calculus through an extensive study of the theory of functions. Function families include exponential, logarithmic, trigonometric, polynomial and rational functions. The purchase of a graphing calculator is highly recommended. See instructor for details.

AP CALCULUS **03150**

Credit: 1 Unit

Prerequisites:

1. Final average of 80% or higher in UHS MAT 100 Pre-Calculus
2. By special permission of the Principal

**NOTE: Quarter grades for this course will be weighted at 1.05.
Mid-term and final exam averages will not be weighted.**

This course includes the study of functions, graphs, limits, derivatives and integrals. The purchase of a graphing calculator is highly recommended. See instructor for details.

AP STATISTICS **03161**

Credit: 1 Unit

Prerequisites:

1. Passing final average of 80% or higher in Algebra 2/Trigonometry
2. A score of 85% or higher on the English Regents exam

3. By special permission of the Principal

NOTE: Quarter grades for this course will be weighted at 1.05.

Mid-term and final exam averages will not be weighted.

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students who successfully complete the course may receive credit and/or advanced placement for a one-semester introductory college statistics course.

SCIENCE

*(3 Units (2 with Lab components) of Science and
1 Regents Exam are required for graduation.)*

Special Note: A Technology/Agriculture course may be approved for substitution for one unit in Math/Science, after a Regents exam is passed. It may be used in Science or Math, but not both.

EARTH SCIENCE with Lab

04090

Credit: 1 Unit

Topics include changing environment, measurements of Earth, motions of Earth, energy in Earth processes, isolation and the seasons, energy exchanges in the atmosphere, climate, weather, erosion, formation of rocks, the dynamic crust, the Earth's interior, interpreting geologic history, landscape development and environmental change. In order for students to be eligible for the Earth Science Regents, they must complete 1200 minutes of laboratory experience with satisfactory written reports for each investigation.

LIVING ENVIRONMENT with Lab

04100

Credit: 1 Unit

This course explores the science of the living world. Topics include: Scientific Inquiry, Ecology, Cell, Systems, Immunology, Genetics and Evolution. The course also has a required laboratory component that is critical to understanding the Living Environment. In order for students to be eligible for the Living Environment Regents, they must complete 1200 minutes of successful (65% or better) laboratory experience.

CHEMISTRY with Lab

04110

Credit: 1 Unit

Prerequisite:

1. **At least an 80% on the Integrated Algebra and Living Environment Regents exams**
2. **Or by special permission of the principal**

The fundamentals of Chemistry are presented from the viewpoint of the periodic classifications of the elements. Topics include: matter, energy, atomic theory, quantum theory, periodic table, chemical bonding, mathematics of chemistry—moles/stoichiometry (requiring heavy use of algebra), physical behavior of matter, kinetics and equilibrium, acids and bases, oxidation/reduction, organic chemistry, and nuclear chemistry. In order for students to be eligible for the Chemistry Regents, they must complete 1200 minutes of laboratory experience with satisfactory written reports for each investigation.

PHYSICS with Lab

04120

Credit: 1 Unit

Prerequisites:

1. **An 80% on the Living Environment Regents exam, and an 80% on either the Earth Science or the Chemistry Regents exam**
2. **An 80% on Integrated Algebra and Geometry Regents exams**
3. **Completion or current enrollment in Algebra 2/Trigonometry**
4. **Or by special permission of the principal**

An elective that integrates basic physical concepts and their applications to current problems. Course work will not be calculus-based, but relies heavily on algebra and trigonometry. Topics include: mechanics-linear motion, two-dimensional motion, forces, circular motion, momentum, energy, light and sound waves, electricity and magnetism, and modern physics (subatomic particles). Assignments are frequently math-based, and result from both class and lab work. In order for students to be eligible for the Physics Regents, they must complete 1200 minutes of laboratory experience with satisfactory written reports for each investigation.

AP ENVIRONMENTAL SCIENCE with Lab

04151

Credit: 1 Unit

Prerequisites:

1. **Passing Living Environment and Chemistry courses**
2. **An 85% or higher on the Living Environment Regents exam and 80% or higher on the Chemistry Regents exam**
3. **Or by special permission of the Principal**

**NOTE: Quarter grades for this course will be weighted at 1.05.
Mid-term and final exam averages will not be weighted.**

Environmental Science involves the use and understanding of many disciplines, including biology, chemistry, earth science, agricultural science, politics, government, economics and medicine. The natural environment is a tremendously complex and poorly understood system. As we progress through the year, the student will experience how each discipline listed above, as well as others, is used by environmental scientists to understand and predict the effects that changes, including those caused by the human population, have on the natural world. Computer analysis and simulations as well as laboratory analysis are among the tools Environmental Science students will use in this at-

tempt. In addition, students will study how environmental issues have political, social and economic ramifications.

AP BIOLOGY with Lab

04102

Credit: 1 Unit

Prerequisites:

1. **Successful completion of Living Environment AND Chemistry with an 85% on the Regents exam**
2. **Or by special permission of the Principal**

NOTE: Quarter grades for this course will be weighted at 1.05.

Mid-term and final exam averages will not be weighted.

This course is designed to be the equivalent of a college introductory Biology course usually taken by Biology majors during their Freshman year of college. Interested students should realize that this course is demanding and requires a discipline to do work beyond what is expected in the Regents Biology course.

AP PHYSICS with Lab

04125

Credit: 1 Unit

Prerequisites:

1. **Student must have successfully completed Algebra II/Trig with a score of 80% or better on the Regents exam.**
2. **Students must have successfully completed Regents Chemistry.**
3. **Students will benefit from having taken Regents Physics, but this is not a requirement. If the student has completed Regents Physics, they must have scored an 80% or better on the Regents exam.**
4. **Or by special permission of the Principal**

NOTE: This course is weighted 1.05 in class average.

This course provides a systematic development of the main principles of physics, emphasizing problem solving and helping students develop a deep understanding of physics concepts. This is an extremely fast-paced course and students must be prepared for significant rigor.

Course topics include Newtonian Mechanics, Fluid Mechanics and Thermal Physics, Electricity and Magnetism, Waves and Optics, Atomic and Nuclear Physics.

FORENSIC SCIENCE

OT6333

Credit: 1/2 Unit

Prerequisites:

1. **Successful completion of Living Environment**
2. **Or by special permission of the Principal**

This half-year elective course provides an introduction to the topics of criminology within the field of forensic science. Study includes the applications of concepts from the areas of biology, chemistry, physics and geology to analyze and investigate evidence that may be discovered in a criminal investigation. Classroom activities include experiments, projects, case studies and the incorporation of technology.

INTRO TO SCIENCE RESEARCH

04141A

Credit: 1 Units

Offered from September-June for Sophomores

Pre-requisites: Successful completion of Living Environment with a grade of 85% or better (or teacher discretion) and attendance at June Science symposium.

This class is devoted to learning and practicing scientific method. This will involve an extensive review of scientific research and mentor search to begin the summer before the sophomore year. Students will research a science area of their interest to develop an original, never before researched topic. The student will complete a university caliber research plan which will be reviewed by a Scientific Research Committee in the spring. The plan will be executed the summer following their sophomore year, in ACAS 109. Students in this course are required to complete ACAS 109, 110, 209 and 210 (which hold up to 12 college credits through SUNY Albany).

INTERMEDIATE SCIENCE RESEARCH (A CAS 109)

04141B

Credit: 1/2 Unit

Offered from July-August for incoming Juniors

Pre-requisites: Completion of one year of an approved course in science research at the high-school level and permission of instructor

Students learn research methodology in the natural and social sciences by accessing scientific databases, by using on-line bibliographic search techniques, consulting doctoral-level research scholars, developing hypotheses and performing experiments to test them, and by writing research papers and making presentations at scientific symposia. It is expected that the students will have done many of these activities in the prerequisite high school course, and in this course emphasis is placed upon the formulation of hypotheses and initiation of experiments in consultation with mentors. (Offered summer session only.)

INTERMEDIATE METHODS RESEARCH (A CAS 110)

04141C

Credit: 1 Unit

Offered from September to June for Juniors

Pre-requisites: Completion of one year of an approved course in science research at the high-school level and permission of instructor

Students learn research methodology in the natural and social sciences by accessing scientific databases by using on-line bibliographic search

techniques, consulting doctoral-level research scholars, developing hypotheses and performing experiments to test them, and writing research papers and making presentations at scientific symposia. It is expected that the students will have done many of these activities in the prerequisite high school course, and in this course emphasis is placed upon performing experiments in consultation with mentors. Students are expected to spend at least three hours per week outside of class. (Available for year-long course of study only.)

ADVANCED SCIENCE RESEARCH (A CAS 209) 04141D

Credit: 1/2 Unit

Offered from July-August for incoming Seniors

Pre-requisites: Satisfactory completion of A CAS 109 or completion of two years of an approved science research course at the high school level and permission of instructor

Continuation of work undertaken in A CAS 109 or equivalent with emphasis placed upon the completion of experiments in consultation with mentors. Students will consult with their teachers as necessary, but will not meet in a formal classroom period. (Offered summer session only.)

ADVANCED METHODS OF RESEARCH (A CAS 210) 04141E

Credit: 1 Unit

Offered from September - June for Seniors

Pre-requisites: Satisfactory completion of A CAS 110 or completion of two years of an approved science research course at the high school level and permission of instructor

Continuation of work undertaken in A CAS 110 or equivalent with emphasis placed upon the communication of results. Students are expected to spend at least three hours per week outside of class. (Students must be enrolled throughout an entire academic year to obtain credit.)

SOCIAL STUDIES

*(4 Units of Social Studies and 2 Regents Exams
are required for graduation.)*

GLOBAL HISTORY & GEOGRAPHY I 02090

Credit: 1 Unit

Global History & Geography is a two-year course culminating with a Regents exam at the end of the second year. The first year of study includes these units: Ancient Civilizations and Religion, Expanding

Zones of Exchange and Encounters, and Global Interactions.

GLOBAL HISTORY & GEOGRAPHY II **02100**
Credit: 1 Unit

The second year of study includes these units: An Age of Revolutions, A Half-Century of Crisis and Achievement, The 20th Century Since 1945, and Global Connections and Interactions. The Global History Regents exam is taken at the end of the year and covers material from Global History and Geography I and II.

INTRODUCTION TO AP WORLD HISTORY **02149**

Credit: 1 Unit

Prerequisites:

1. **A 90% or higher class average and a 90% or higher score on the 8th grade Social Studies final exam. Students must consistently achieve 90% or higher on 8th grade in class exams prior to making test corrections.**
2. **A high 3 or 4 on the New York State ELA 8 exam**
3. **Strong reading and writing skills**
4. **Or by special permission from the Principal**

NOTE: Quarter grades for this course will be weighted at 1.05. Mid-term and final exam averages will not be weighted.

The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. The workload is significantly heavier than that of traditional High School classes and requires a willingness to devote considerable time to homework and study that are necessary to succeed. The course is designed to be the equivalent of a college course. Students are required to complete a summer assignment. In May of their second year students take the AP World History exam. NYS also requires students to take the Global History Regents exam in June of the second year.

U.S. HISTORY AND GOVERNMENT **02110**
Credit: 1 Unit

This course chronologically studies American history and government from the late colonial period to the present. Emphasis is placed on the post Civil War period and on the development of the U.S. Constitution and governmental system. A variety of skills including analysis, evaluation, research and an understanding of different historical resources are emphasized. The final exam is the United States History and Government Regents.

AMERICAN ECONOMICS/GOVERNMENT **02185**

Credit: 1 Unit

This course will cover the basic concepts and practices of our economic and governmental systems from the individual and local level to the national and international level. In each area the students will analyze the various methods of making policy and its implementation. The course is designed to be student friendly in allowing for interactive participation by means of class discussions and written material. The emphasis will be on drawing inferences from analyzed factual data and projection of theoretical policy on learned issues.

AP WORLD HISTORY**02155****Credit: 1 Unit****Prerequisites:**

1. **Completion of Introduction to AP World History with an 85% or higher class average and an 85% or higher score on the Introduction to AP World History final examination**
2. **Strong reading, writing and analytical skills**
3. **Or by special permission of the Principal**

NOTE: Quarter grades for this course will be weighted at 1.05. Mid-term and final exam averages will not be weighted.

AP World History is the second part of a two-year course devoted to developing the ability to analyze, apply and compare and contrast themes across place and time. It also requires that students critically analyze historical themes as they change over time from one era in history to the next. Students will determine cause-effect relationships between historical events and themes. A considerable amount of time will be devoted to primary source document analysis and interpretation. It is understood that the student will assume responsibility for acquiring important factual information. A willingness to devote considerable time to homework and study are necessary to succeed.

AP U.S. HISTORY**02160****Credit: 1 Unit****Prerequisites:**

1. **An average grade of 85% or better on the Global Studies Regents exam**
2. **An 85% or higher on the US History and Government Regents exam**
3. **Or by special permission of the Principal.**

NOTE: Quarter grades for this course will be weighted at 1.05. Mid-term and final exam averages will not be weighted.

AP U.S. History places attention upon understandings equivalent to those gained in a college-level course. The emphasis will be on the political, social and economic history of the U.S. from the colonial period through the present. The AP course will place a heavy emphasis

on the student's ability to analyze logically and evaluate critically. It is understood that the student will assume responsibility for acquiring important factual knowledge. Such understanding will be necessary to benefit from the class discussion and organized activities dealing with historical interpretation and theory.

AP GOVERNMENT AND POLITICS 02170

Credit: 1 Unit

Prerequisites:

1. **An average grade of 85% or better on the Global Studies Regents exam**
2. **An 85% or higher on the US History and Government Regents exam**
3. **Or by special permission of the Principal**

**NOTE: Quarter grades for this course will be weighted at 1.05.
Mid-term and final exam averages will not be weighted.**

AP Government and Politics is a college-level course designed to prepare students to take the AP U.S. Government and Politics exam. The course is designed to give students an analytical perspective on government and politics and acquaints students with the variety of theoretical perspectives and explanations for various behaviors and outcomes. The topics covered throughout the year will be the following: Constitutional Underpinnings of American Government; Political Beliefs and Behaviors; Political Parties and Interest Groups; Institutions and Policy Processes; Public Policy and Civil Rights.

TECHNOLOGY EDUCATION

*(An alternative to the 3-unit LOTE requirement
is completing a 5-unit sequence in Technology Education.)*

RESIDENTIAL STRUCTURES 05354

Credit: 1 Unit

This is an introductory course designed to inform students about the basic fundamentals and principles of construction technology. The course includes orientation to the trade such as; design & planning, site work, materials and supplies, and building systems (foundations, framing, roofing, and utilities). The course will include some hands-on learning activities when applicable.

DESIGN AND DRAWING FOR PRODUCTION 05353

Credit: 1 Unit

Design and Drawing for Production (DDP) is a high school level course that is appropriate for students who are interested in design and engineering. An emphasis will be placed on the design process of a product and how a model of that project is produced, analyzed, and evaluated. Students will use 3-D modeling software that is currently used in industry and will create products that are capable of being produced.

COMPUTER SCIENCE

05360

Credit: 1 Unit

This course aims to teach everyone the basics of programming computers using Python. The course covers the basics of how one constructs a program from a series of simple instructions. The course has no prerequisites and avoids all but the simplest mathematics. Anyone with moderate computer experience should be able to master the materials in this course.

INTRO TO ROBOTICS

05365

Credit: 1 Unit

Prerequisites: Design and Drawing for Production course

This is a Robotics program that includes the development of 21st century skills: teamwork, problem solving, ideation, project management, and communications. Robots will be built using VEX Robotics kits using Carnegie Mellon's Robotics Academy curriculum. Students will gain understanding of specialized concepts like programming parametric solid modeling, electronics, and advanced machining. (This course is intended for students in grades 10-12).

BOCES Occupational Education

SOUTHERN ADIRONDACK EDUCATIONAL CENTER

Career & Technical Training courses are conducted at the
BOCES Center in Hudson Falls.

They are recommended for Juniors and Seniors only.
(4 units per year of participation)

Students interested in taking CTE courses at BOCES, must complete a CTE Application. Interested students should discuss opportunities with their Guidance Counselor.

OFF-CAMPUS CTE APPLICATION PROCESS

SOPHOMORES

1. Student applicant will write an essay describing which off-campus CTE program they would like to attend and why. Student will need

- to be specific on how the program fits into their career plans.
2. Student and at least one parent/guardian must attend Greenwich CTE Open House night.
 3. Student applicant must have had at least a 90% attendance rate during their freshmen and sophomore years.
 4. Student applicant must be considered “on track” to graduate on time with, at minimum, a Regents diploma. On track will be considered at least the following:
 - One credit of Physical Education
 - Three credits of ELA and Social Studies
 - One credit of Mathematics
 - One credit of Lab Science
 - At least ten credits by the end of their sophomore year
 5. Student applicant will not have accumulated more than three referrals resulting in Out of School Suspension and/or an average of 40 discipline points over the course of their freshman and sophomore years.

JUNIORS

Students that have been participants in an off-campus CTE placement during their junior year will be re-evaluated at the conclusion of their junior year and will need to have met the following requirements to be allowed to continue in their off-campus CTE placement:

1. Student applicant must be considered “on track” to graduate on time with, at minimum, a Regents diploma. On track will be considered at least the following:
 - One and a half credits of Physical Education
 - Five credits of ELA and Social Studies
 - Two credits of Mathematics
 - Two credits of Lab Science
 - At least sixteen credits by the end of their junior year
2. Student applicant will not have accumulated more than one additional referral in their junior year resulting in Out of School Suspension and/or an additional 30 discipline points over the course of their junior year.
3. Student applicant must have had at least a 90% attendance rate at both GCS and BOCES during their junior year.

Contact Information

Phone: (518) 692-9542

Junior-Senior High School

George Niesz, Principal
ext. 6301, e-mail: gniesz@greenwichcsd.org

Benjamin Cronin, Assistant Principal
ext. 6302, e-mail: bcronin@greenwichcsd.org

Rebecca Catlin, Counselor
ext. 6601, e-mail: rcatlin@greenwichcsd.org

Richard Zwirn, Counselor
ext. 6602, e-mail: rzwirn@greenwichcsd.org

Dana Finney, Counselor
ext. 6603, e-mail: dfinney@greenwichcsd.org

District

Mark Fish, Superintendent of Schools
ext. 6800, e-mail: mfish@greenwichcsd.org

Susan Bishop, CSE Chairperson
ext. 6500, e-mail: sbishop@greenwichcsd.org



