

# **Greenville High School**



**2012-2013  
Course Selection Guide**

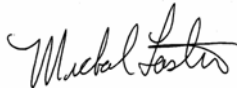
Dear Students,

In the upcoming weeks, you will be involved in the course selection and scheduling process here at Greenville High School. This is a critical activity as you consider your four-year academic plans as well as your post high school plans. Examine the course offerings closely to determine your interests and strengths as this will assist you in the planning stages of your schedule.

Take the time to discuss with our Guidance Department recommendations for your schedule and program. Our timeline and process have been designed to be flexible; however, finalized schedules will be mailed home in late August. There will only be a two week add/drop period in the beginning of each semester.

It is the philosophy of our Board of Education, faculty, staff and administration to engage students in learning that is of high interest and rigorous. Your future as a Greenville High School student begins now with this course selection process. Choose carefully and think positively about your future aspirations.

Respectfully,



High School Principal  
Greenville High School Principal

## Mission Statement

The mission of the Greenville Central School District, with vital community partners, is to present the world with a gift of well educated graduates who will forge ahead as confident thinkers, empowered learners and compassionate, responsible leaders by ensuring superior instruction with total support for excellence and vision.

## Belief Statements

We believe that every individual has equal value.

We believe that trust, respect, and caring are essential for a healthy community.

We believe that the meeting of clear and defined standards is the starting point for success.

We believe that every individual has the right to fully realize his/her potential.

We believe that the pursuit of excellence cannot be compromised.

We believe that every individual has responsibility to contribute to the common good.

We believe that individual responsibility and self-discipline are crucial to achieving one's goals.

**GREENVILLE CENTRAL SCHOOL**  
**Curriculum Course Guide**  
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# Program Planning Guide

The information presented in this guide is designed to assist you in planning programs for your high school career. We believe that parents and students should work closely with teachers and guidance counselors in considering the various courses and programs that are available. The scheduling process begins with individual meetings with your students and your guidance counselors. Parents are invited and encouraged to participate in the scheduling process at any time. Appointments can be made by contacting the Guidance Department directly. There will also be a two week period during the summer to discuss schedule changes. The responsibility for selection of courses is shared by the students, parents and our Guidance counselors.

**Course Requirements** Students must earn the following course credits in order to graduate with a Regents or Advanced Regents diploma.

<u>Regents Diploma</u>		<u>Advanced Regents Diploma</u>	
	<u>Units</u>		<u>Units</u>
English	4	English	4
Social Studies	4	Social Studies	4
Science	3	Science	3
Math	3	Math	3
Foreign Language	1 (a)	Foreign Language	1 (a)
Health	½	Health	½
Art and/or Music	1	Art and/or Music	1
Physical Education	2	Physical Education	2
Electives	3.5	Electives	3.5 (b)
<b>Total Credits</b>	<b>22</b>	<b>Total Credits</b>	<b>22</b>
(a) Students are required to have completed one unit of language by the end of their freshman year.		(b) A three unit sequence in a language other than English, or a five unit sequence in business, technology, or the arts.	

### Local Diploma

Credit requirements for the local diploma are the same as those for the Regents diploma. The exam requirements differ based on the year students enter grade 9.

### State Exam Requirements

State exams required for a local diploma are the same as Regents with a passing score of 55 or 65 depending on the year of entry into the high school.

For students who entered grade 9 in:

**2009:** all five scores on the required Regents exams must be 65 or above

**2010:** all five scores on the required Regents exams must be 65 or above

RCT exams may be available for special education students who score below 55 on a Regents exam.

### **Testing Required for Graduation**

Students must demonstrate competency in reading, writing, math, science, U. S. History, and global studies by passing the examinations listed below:

#### **Regents Diploma**

- Comprehensive English Regents exam
- Math A or Integrated Algebra Regents exam
- Global History & Geography Regents exam
- U.S. History & Government Regents exam
- One Science Regents exam
- Second Language Proficiency exam

#### **Advanced Regents Diploma**

- Geometry Regents and Algebra II/Trigonometry Regents exams
- Additional Science Regents exam
- Second Language Proficiency Exam (or five credits in Technology, Arts or Business)

A **sequence** may be taken in one of the following areas: social studies, science, math, language, music, art or occupational education.

#### **Sequence Options:**

A sequence of 3 credits in 2 subject areas.

A sequence of 5 credits in one area.

*Occupational Education equals technology, business, agriculture, early childhood education and Questar III Career and Technical programs.*

# Program Planning Guide

## Planning Your Courses

These are some helpful tips and guidelines that will help you plan a successful high school program.

- Identify personal goals. Your plans may change over time; however, you should have some general educational, occupational and personal goals.
- Evaluate your strengths, interests and weaknesses.
- Learn the requirements for entrance to the higher educational institution or the occupational career that you are interested in.
- During your junior year, visit the colleges or vocational opportunities that are available to you.
- Converse with your parents, teachers and guidance counselors in order to help you clarify what your future goals and plans are.
- Select courses and programs that will benefit you the most in achieving your personal goals.

Remember to adhere to the two week add/drop period if you are interested in changing your schedule. Bring all the appropriate documents, signed by your parents, to your assigned counselor.

## Program options

### Advanced Placement and college level courses

AP Courses, IB Courses, Questar III New Visions programs, and local college courses (Syracuse University and Columbia Greene) are available at the high school. Successful completion of the courses and appropriate exams, in addition to the payment of tuition fees by the student, may entitle the student to credit for the course at the collegiate level. A one semester college course is equal to a 1/2 credit in high school. Preparation for AP exams in English, social studies, mathematics, and art are offered if student interest warrants offering these courses. Advanced Placement tests are given in May. Students enrolled in each course are required to sit for the exam. Students interested in electing any one of these college level courses should consult with their teachers and counselor. Parents and students should contact colleges directly for specific information about their specific AP credit policies.

### Honors

Honors courses are designed to challenge students by providing enrichment through in-depth study. Honors courses are offered in English, social studies, and science.

Honors course participation in any area is based on a students' ability to engage in a program that is both accelerated and enriched. Students enrolled in these courses are required to sit for the Regents examinations whenever they are offered for each subject. An application and fact sheet are available in the Guidance Office.

### Regents

Courses offered at this level meet the New York State Regents standards. Students successfully completing these courses are well prepared to pursue higher education or an occupational career of interest.

### General Educational Development program (GED)

Students who do not wish to work towards a New York State diploma may consider entrance into an approved GED program. In order to qualify, students must have completed the school year in which they have reached 16 years of age, have at least a 9<sup>th</sup> grade reading level, and be recommended for the program by our admissions team which consists of administration and our Guidance Department. Interested students should speak with their guidance counselor if this option is being considered.

### Criteria for admission to Honors courses

The purpose of the following guidelines is to clearly define the criteria used in recommending student placement. Honors programs are designed for students who demonstrate a high level of interest, aptitude, and success in the subject matter. The criteria for recommendation to this program are as follows:

- Students must have a 90% overall GPA in the specific content area.
- Students must maintain an 88% in the course during the academic year.
- The first time a student falls below an 88% within a 5 week period, a warning letter from departments will be generated and mailed home. Students will have the next 5 weeks to get their average back to an 88%.
- The second time a student falls below the 88% within the next 5 week period; the student will be removed from the Honors program and placed back into our Regents program.
- Students applying for any 9<sup>th</sup> grade Honors program will be evaluated using assessment data from the Middle School 8<sup>th</sup> grade exams. Those 8<sup>th</sup> grade students who achieved a Level 4 on these exams will receive primary consideration.
- Students applying for 10-12<sup>th</sup> grade Honors program must achieve a 90% or better on their local end of year exam from the previous year.
- Students must be recommended by their previous content teacher in that area.
- Students should be aware that there may be summer supplemental reading assignments that need to be completed by the beginning of the school year.

Any student interested in any Honors course must submit a letter of intent and application for admission to these programs. These applications and letter of intent expectations are available in the MS/HS Guidance offices and are due to your counselor no later than May 1<sup>st</sup>.

### Criteria for admission to Advanced Placement courses

The purpose of the following guidelines is to clearly define the criteria used in recommending student placement. Advanced Placement courses are designed for students who demonstrate a high level of interest, aptitude, and success in the subject matter. The criteria for recommendation to this program are as follows:

- Students must have a 90% overall GPA in the specific content area, and/or
- Students applying for Advanced Placement courses must be recommended by that particular department based upon department-determined criteria.

Students applying for AP courses should be aware that there might be summer supplemental reading assignments that need to be completed by the beginning of the school year.

### Additional Opportunities Challenge Program

Students in Greenville High School are encouraged to participate in our Challenge Program. The program reflects the theory which maintains that *ALL* children have gifts and need to have opportunities to develop and display those gifts in areas outside the regular classroom environment. The role of the Challenge Teacher is multifaceted. Primarily, they are a resource for students with certain abilities or interests in a particular area and acts as a catalyst for establishing options for students to choose, particularly with respect to extra-credit projects and community service. The Challenge Program allows for coordination with classroom teachers for in-class enrichment projects. Students can obtain "G" credits for their participation in Challenge opportunities. Students of all ability levels are encouraged to participate during their high school years.

### Guided Independent Study (GIS)

This option is available to students for courses that are not offered at Greenville High School. Students interested in obtaining credit in this program need to consider what they are interested in exploring on their own. Contact with a secondary instructor who will assist them in designing the course of study should take place first. The necessary paperwork in order for this to occur is available in our Guidance office. The completed paperwork needs to be approved by the High School Principal and filed in the guidance office. Course credit and grades will be added at the conclusion of the academic year. There are no quarterly grades for a GIS study, only the final grade. Students should contact their guidance counselor if interested in this option.

### Peer Mentoring

Students who are willing to assist other students with their academic, study or organizational skills should contact their guidance counselor for more information. This opportunity is for upper class students who are academically eligible and have flexibility in their schedule.

### Virtual Learning

As we prepare students to be college and career ready, we are able to deliver unique programs and/or courses to Greenville students. We continue to offer students access to virtual learning in the form of online coursework. Our high school courses are offered in cooperation with Questar III and other higher educational institutions. Information regarding these virtual course opportunities for students is available through our High School Guidance office. Online learning is designed for students who are independent learners, motivated and who would like to take a course that we do not offer in our high school. Certain circumstances do arise when a student may consider taking an online course instead of enrolling in our courses on campus. Students have a minimum of 8 weeks and a maximum of 24 weeks to complete the coursework and will be provided with a suggested timeline by the online instructor who will monitor the student's progress, provide additional instruction, focus the students learning and help to enable success for the student. Our district is responsible to provide a district advisor for the student. This will be the point of contact for the online instructor should there need to be a local person for follow-up with the student or additional communication with the district. The online instructor will grade all assignments and report a final score with comments back to the district. The local district determines the final grade and awards credit for the student. Any student interested in this program should speak with their counselor to obtain an application. A decision to enter the Online Program should be made carefully. Online course enrollment requires parental consent and the permission of administration, guidance and our district online advisor.

### Academic Intervention Services (AIS)

Academic Intervention Services will be provided to students who may not meet academic standards established by the NYS Education Department. We provide AIS services in Social Studies, English, Math and Science. Students who require AIS will be scheduled accordingly. AIS is not an option for students; it is state mandated and has been shown to increase student success. Disruption of the learning process in these smaller learning environments will meet with disciplinary action according to the School's Code of Conduct.

Entrance criteria for AIS:

- Unsatisfactory grades on 8<sup>th</sup> grade assessments
- Below average academically
- Has failed a Regents exam
- Teacher recommendation
- Recommendation by Instructional Support Team

Exit Criteria for AIS:

- 75% in content subject
- Agreement between AIS teacher and content teacher
- Recommendation by IST

Review every 5 weeks by departments

Grading for AIS:

- S – Unsatisfactory
- U – Unsatisfactory
- N – Needs improvement
- JE – Just entered
- A grade of a "U" or an "N" requires a comment

# English Language Arts

## English 9 (R)

### 1 Unit

English 9 is designed as a survey course to further develop each student's skills in the areas of reading, writing, grammar, vocabulary, and literary analysis. Students will read poetry, drama, fiction, and nonfiction, including newspaper articles, historical fiction, memoir, science fiction, and at least one work by Shakespeare. Students will also begin to develop the skills necessary for success on the English Regents, taken in 11<sup>th</sup> grade.

## Honors English 9 (H)

### 1 Unit

The English Honors 9 curriculum will align with the Common Core Standards and is designed to offer more critical thinking opportunities for high ability students. Students will be expected to do close, careful work, both inside and outside the class, to participate regularly for credit, to learn the fundamentals of grammar, and to develop thesis statements, topic sentences, and arguments using evidence from the texts. Students will also complete research and literary papers. Classic literature is also coordinated with the 9<sup>th</sup> grade social studies curriculum.

## English 10 (R)

### 1 Unit

English 10 is designed to meet the Common Core Standards in English Education. These are addressed through the study of the novel, short story, works of nonfiction, drama and poetry. Speaking and problem-solving skills are further developed. Students will also write essays such as those required on the English Regents exam. The study of grammar, usage and editing skills will be enhanced through class exercises and the development of individual editing. The 10<sup>th</sup> grade research paper will focus on humanitarian effort in relation to modern global concerns and use the MLA style of documentation.

## Honors English 10/AP Language and Composition 1 Unit

This course satisfies one year of the English requirement. This class is also open to juniors and seniors.

This is a full-year course designed to prepare students for the difficult AP Language and Composition exam given at the beginning of May each year. The exam emphasizes stylistic and rhetorical (i.e. persuasive) strategies used by writers and speakers. At the highest levels, good writing is equally about thinking and style, logic and expression. As a result, we will begin studying –in microscopic detail- the prose style of major writers. Students will learn about a variety of specific stylistic techniques – from *antithesis* to *zeugma* – as well as the ways in which different writers seek to manipulate their readers through the use of logic (*logos*), emotion (*pathos*), and credibility (*ethos*). In addition to studying specific nonfiction prose passages, students will carefully read, analyze, and write about five novels by some of the world's greatest writers. This is designed to be a difficult, college-level course, so only students who have a firm grasp of grammar concepts and who wish to work hard should consider it.

## English 11 (R)

### 1 Unit

This course continues the development of communication skills with work in vocabulary, grammar, composition and listening. English 11 is designed as a literature and composition course specializing in American literature. All genres in this area will be explored. The primary emphasis of this course is on refining analytical skills and developing focus and clarity of written work. Preparation for the English Regents exam, offered in January, is built in to the curriculum. Students will practice both essays and research based writing.

## English 12-Humanities

### 1 Unit

This course is designed to develop higher-level communication and critical thinking skills. Emphasis is placed on the study of world literature, grammar, and academic writing necessary for college and the work place. Other activities include exploring continuing education and career options, writing college essays and resumes, and developing interview skills and test-taking strategies. The use of Blackboard and Globster (or other similar programs) will also be taught.

## AP English Literature & Composition 1 Unit

*(This course satisfies one year of the English requirement and is co-seated with IB English HL/Year One. This course is open to junior and seniors.)*

Students should have both the desire and ability to study literature at a more intensive level than is customary in a standard Regents-level course. AP Lit is a college-level course with college-level expectations, designed to prepare students for both the AP Literature and Composition exam and college-level reading and writing. We will study a wide variety of literary genres, including fiction, non-fiction, drama, and poetry. Current readings include contemporary memoir and fiction, science fiction, world literature, drama and poetry. Students will also continue to refine and develop their writing and public speaking skills through literary response essays, literary commentary, literary discussions, pastiche writing and literary presentations.

**Journalism****½ Unit**

*Students may take this course as an elective, or in conjunction with College Composition in place of English 12. Students meeting Columbia-Greene Community College admissions standards may also take this course for three college credits.*

This college-level course is designed to provide a basis for writing various types of news stories for print media. Students learn to be both observers and writers. Appropriate writing techniques are stressed with the emphasis on clarity and organization. Individual students should find their skills improving through experience.

**College Composition****½ Unit**

*Students may take this course as an elective, or in conjunction with Journalism in place of English 12. Students meeting Columbia-Greene Community College admissions standards may also take this course for three college credits*

This one-semester course provides college-bound students with the opportunity to further develop their writing skills. Students will follow a traditional college composition syllabus and will learn to analyze, organize and write compare/contrast, persuasive, process analysis, narrative, definition, and research essays. Students will also focus on grammar, usage and revision. This course is designed to prepare students for college-level reading and writing assignments.

**IB English HL****2 Units**

*This course satisfies two years of the English requirement. Students enrolling in the second year of this course must have successfully completed the first year and must also be enrolled as IB Diploma or Certificate students.*

IB English A1-HL is a two year, four semester course that will culminate in the IB Language A1 exams taken in May of the senior year. The focus of the course is on each student's development of critical thinking and communication skills in oral and written forms. The students will view literature as both an art form and a universal language.

Course readings include the classics of world literature and a broad range of modern writing, in a variety of literary genres, styles and contexts. IB English HL is divided into four distinct semesters: Part One – World Literature; Part Two – Detailed Study; Part Three – Genre Study and Part Four – School's Free Choice. Students will complete both internally-assessed essays and projects and externally-assessed (by the IB) essays and projects.

Suggested prerequisites: Students enrolled in AP/IB English HL will be participating in a college-level course with college-level expectations. It is recommended, although not required, that students successfully complete Honors English 7, 8, and 9, as well as Honors 10/A.P. English Language and Composition, before the junior year.

**Note:** The English Dept. has a doubling-up procedure; please refer to the Student Handbook or the doubling up procedure on page 24.

**Social Studies****AP Art History****1 Unit**

This is a survey of western civilization and its greatest artistic accomplishments. The class will take a visual time-travel through 30,000 years of civilization and their changing aesthetics. Through analytical writing, research, class discussion, and museum visits, students will develop an understanding of art and its role in cultural development. This course can be taken for either Art or Social Studies credit.

**Global History & Geography 9 (R)****1 Unit**

This course focuses on the five social studies standards, common themes that recur across time and place, and four historical eras. These eras are: Ancient World: Civilizations and Religion (4000 BC- 500 AD), Expanding Zones of Exchange and Encounter (500-1200), Global Interactions (1200-1650) and the First Global Age (1450-1770). The *two-year* Global History and Geography Course will culminate in a NYS Regents exam at the conclusion of the sophomore year. A facility for reading will be a major factor with respect to student success in this course because of the need to comprehend the textual assignments. Research and writing skills in conjunction with the ability to organize information will be major components of the program. A variety of other social studies skills will be addressed. An emphasis will be placed upon the completion of homework assignments and which will necessitate an average of at least one-half hour of study per evening.

**Honors Global History & Geography 9 (H) 1 Unit**

This course focuses on the five social studies standards, common themes that recur across time and place, and four historical eras. These eras are: Ancient World: Civilizations and Religion (4000 BC- 500 AD), Expanding Zones of Exchange and Encounter (500-1200), Global Interactions (1200-1650) and the First Global Age (1450-1770). The Global History Honors program is to provide an opportunity for high ability students interested in Global History to be challenged academically. Students in the program will have the opportunity to exercise critical thinking skills through a variety of activities such as debates, independent research projects of interest, and enrichment activities. Instructors will have high standards for the students that participate in this course. Please refer to the Honors criteria listed in the program planning guide section for further information.

**Global History & Geography 10 (R) 1 Unit**

Students continue a course of study, which includes the study of global trends and developments from 1770 through the present. Students develop critical thinking and communication skills through extensive readings and the analysis of visual materials. Fluency in reading and the ability to extract, analyze, synthesize and evaluate information are critical to a student's success. A Global Regents exam will be taken in June of their sophomore year.

**Honors Global History & Geography 10 (H) 1 Unit**

Students continue a course of study patterned on the requirements of the State Education Department, which includes the study of global trends and developments from 1770 through the present. The Global History Honors program is to provide an opportunity for high ability students interested in Global History to be challenged academically. Students in the program will have the opportunity to exercise critical thinking skills through a variety of activities such as debates, independent research projects of interest, and enrichment activities. Instructors will have high standards for the students that participate in this course. A Global Regents exam will be taken in June of their sophomore year. Please refer to the Honors criteria listed in the program planning guide section for further information.

**U.S. History and Government 11 1 Unit**

One of the major themes of this course is to recognize and study basic constitutional issues and the application of those principles to both historic and contemporary life. The course will cover the United States history from its beginnings to the present day, with emphasis on political, constitutional, economic, social and cultural institutions. This course culminates with the United States History and Government Regents Exam.

**Advanced Placement US History 1 Unit**

This course will satisfy the requirement for US History and Government. Students will be expected to take the United States History and Government Regents at the end of the school year to earn regents credit. Topics will include those noted in the US History and Government course above. These topics and others will be studied in greater depth than in the regular US History and Government class. The AP Exam will be offered to all students enrolled but will not be averaged into the student's final grade. All students must pre-pay for the AP exam.

**Economics ½ Unit**

Students will acquire the necessary skills to understand the impact of economic concepts on the United States. Also, differences in economic systems and global economic concepts will be covered.

**Participation in Government ½ Unit**

National, state and local government studies are included. How these relate to us and our role in government will be the focus. Practical experience, guest lecturers and field trips are planned for this course.

**Introduction to Sociology ½ Unit**

Examination of small groups, families, formal organizations, social classes, ethnic groups and gender roles and relationships is the focus of this course. It will examine the social process and social change.

**General Psychology** **½ Unit**

The course is an overview of the field of psychology including some of the basic concepts of the discipline. Topics covered will be the major aspects of human behavior such as emotion, learned conditioning, motivation, personality and development.

**AP Economics** **1 Unit**

This course in macroeconomic theory enables the student to utilize aggregate supply and demand analysis techniques to monitor the national economy. This course yields college credits in economics and meets the New York State requirement for Social Studies 12. The AP Exam will be offered for all students enrolled but will not be averaged into the student's final grade. Students must pre-pay for the AP exam.

Note: The Social Studies Dept. has a doubling-up procedure; please refer to the Student handbook or the doubling up procedure on page 24.

**Science****Earth Science (R)** **1 Unit**

Earth Science is a full year course meeting 5 periods/ week for class and 2-3 periods/week for laboratory work. Math skills, such as interpreting graphs and solving algebraic equations, are needed. The areas studied are meteorology, astronomy and geology. Science laboratory skills such as measuring, weighting and timing will be developed and later evaluated by performance and a final laboratory practical exam. No prerequisite courses are necessary. Laboratory exercises are scheduled during the period before or after the class. There is a required minimum of 1200 satisfactorily completed hands-on lab minutes and write ups (equivalent to 30 satisfactorily completed credits). It is expected that all students will meet or exceed this lab requirement as well as take the Regents exam, which will serve as the final exam for the course.

**Honors Earth Science (H)** **1 Unit**

This course is challenging, so students must have excellent study skills and a willingness to work diligently. The department recommends that any student interested in enrolling in this course have a strong Science and Math background. Please refer to the Honors criteria listed in the program planning guide section for further information.

**Living Environment (R)** **1 Unit**

The basis of this course is the study of living things, the physical and chemical basis for life. Topics covered in this course are: the basic activities of living things, how plants and animals maintain themselves by solving basic life requirements, reproduction and development of single cells to multicellular organisms, heredity, evolution and diversity of living forms of plants, animals and their environment, and ecological relationships. Laboratory exercises are scheduled during the period before or after the class. There is a required minimum of 1200 satisfactorily completed hands-on lab minutes and write ups (equivalent to 30 satisfactorily completed credits) four of which are state mandated. It is expected that all students will meet or exceed this lab requirement as well as take the Regents exam, which will serve as the final exam for the course.

**Honors Living Environment (H)** **1 Unit**

The study of living things, the physical and chemical basis for life include topics of the basic activities of living things, how plants and animals maintain themselves by solving basic life requirements, reproduction and development of single cells to multi-cellular organisms, heredity, evolution and diversity of living forms of plants, animals and their environment, and ecological relationships. Students will study conceptual understandings and will be provided with a greater depth of understanding. Students will be responsible for completing individual and group research and the presentation of findings. Laboratory exercises are scheduled during the period before or after the class. There is a required minimum of 1200 satisfactorily completed hands-on lab minutes and write ups (equivalent to 30 satisfactorily completed credits). It is expected that all students will meet or exceed this lab requirement as well as take the Regents exam, which will serve as the final exam for the course. Please refer to the Honors criteria listed in the program planning guide section for further information.

## Chemistry (R)

### 1 Unit

Chemistry is the study of the elements and how they combine to form the materials of our universe. The course is presented in a logical sequence, beginning with the structure of the atoms. Understanding of the atomic nature of the major elements leads students to explore the ways in which the elements unite with each other to form molecules of compounds. The mathematics of Chemistry, for which elementary algebra is a necessity, enables science. Specific topics covered after the basics are kinetics and equilibrium of reactions, acid-base theory, electrochemistry, organic chemistry, technology and nuclear chemistry. Every second day is a double period class for laboratory investigations. Students learn to set up experiments and clean up after performing the exercises. There is a required minimum of 1200 satisfactorily completed hands-on lab minutes and write ups (equivalent to 30 satisfactorily completed credits). It is expected that all students will meet or exceed this lab requirement as well as take the Regents exam, which will serve as the final exam for the course.

It is strongly recommended that students have successfully completed Algebra and Geometry before enrolling for this class.

## Honors Chemistry (H)

### 1 Unit

Honors Chemistry is a quantitative, in-depth course for advanced students designed to prepare the student for success in college science courses. Chemistry topics covered are the same as Regents Chemistry, but with greater depth of theory and the mathematical expectations. More independence will be expected of students in homework and laboratory skills. Several labs are at the AP level. Please refer to the Honors criteria listed in the program planning guide section for further information.

## Physics

### 1 Unit

Physics is the study of the rules of nature. Real world situations will be stressed and discussed in terms of the fundamental rules of physics. The application of understanding of these rules to creative problem solving will be a major topic throughout the course. The mathematical concepts of algebra, trigonometry, and graphing will be regularly used to model these real world situations. Although these mathematical concepts will be reviewed throughout the course, it is expected students entering the course will have a solid background in these areas. Topics we will investigate include but are not limited to: motion, forces, energy, wave phenomenon, electricity, magnetism, and modern physics. Every other day is a double period. There is a required minimum of 1200 satisfactorily completed hands-on lab minutes and write ups (equivalent to 30 satisfactorily completed credits). It is expected that all students will meet or exceed this lab requirement as well as take the Regents exam, which will serve as the final exam for the course.

## Forensic Science

### 1 Unit

This is a course designed to provide an introduction to the science behind crime detection. It focuses on the application of scientific methods and analytical techniques to crime and law. Emphasis is placed upon evaluating physical evidence such as blood and hair analysis, organic and inorganic analysis, drug chemistry and toxicology, fingerprints and arson investigations. Laboratory exercises will include techniques commonly employed in forensic investigations. Prerequisite: Regents or Honors Biology. It is also strongly recommended that students complete Regents Chemistry before enrolling in this course. Course credit: 4 credits from Syracuse University as part of Project Advance. Fee must be paid for this course to Syracuse.

## Unified Science

### 1 Unit

This course is a third year science course intended to offer an overview of scientific principles as well as the nature of science. The course will address current and relevant topics in a wide range of scientific disciplines. The main focus of this course will be on crafting creative solutions to both abstract and real world scientific problems. This problem solving will take the form of class discussion, researching relevant scientific topics, experimentation, and collaborative projects. Possible topics of the course include, but are not limited to: the nature of science, sports science, weather, diseases, pollution, environmental science, nutrition, and engineering design.

# Mathematics

## Algebra I 1 Unit

This is the first of three courses offered to students wishing to fulfill the graduation requirements leading to an Advanced Regents Diploma, as well as being a required class for students graduating with a Regents Diploma. This particular course will integrate algebraic skills and concept development with applications, connections, problem solving, critical thinking and technology. The June Integrated Algebra Regents Exam is the final exam for this class, and is also a requirement for graduation from High School. A TI-84 Graphing Calculator is recommended for this course.

## Geometry 1 Unit

This is the second of the three courses offered to students wishing to fulfill the graduation requirements leading to an Advanced Regents Diploma. This particular course will integrate geometric relationships, constructions, locus, transformational geometry, and coordinate geometry with an emphasis on formal and informal proofs. The June Geometry Regents Exam is the final exam for this class. A TI-84 Graphing Calculator is recommended for this course.

## Applications in Geometry 1 Unit

All students enrolled in this course must have successfully completed Algebra 1. This course will present geometry through useful, real world applications. This course will provide opportunities to incorporate algebra concepts as we study geometry. A local final exam will be given at the conclusion of this course.

## Statistics through Project Based Learning 1 Unit

This is a project-based learning course where students will learn and apply mathematics to real-world applications. This course is designed to prepare students for college mathematics placement tests and improve proficiency in numerical skills, algebra and coordinate geometry. The course consists of 10 consecutive projects; each project will be approximately three to six weeks long. The projects, where appropriate, will successfully integrate real-world applications with many of the major and sub content areas based on the two domains of the Compass Mathematics Test.

## Algebra 2/Trigonometry 1 Unit

This is the third of three units of credit required for a Regents diploma. All students enrolled in Algebra 2 and Trigonometry must have successfully completed Algebra 1 and Geometry. This particular course will incorporate the use of technology to investigate the following topics: the complex number system, functions, direct and indirect variation, data analysis, analysis of regression, arithmetic and geometric sequences and series, binomial experiments, normal probability distributions, circular functions, and systems of equations. The required Regents exam will be given to all Algebra 2 and Trigonometry students at the conclusion of the course. The June Algebra2/Trigonometry Regents Exam is the final exam for this class. A TI-84 Graphing Calculator is recommended for this course.

## Pre Calculus 1 Unit

This course is offered to students who have successfully completed the Algebra 1, Geometry, Algebra 2/Trigonometry classes, as well as their associated Regents exams. Some of the topics included in this course are graphs and functions, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions, analytic geometry, trigonometric applications, limits and derivatives. This class will prepare students for AP Calculus and any higher-level mathematics classes that they may take in college. A TI-84 Graphing Calculator is recommended for this course.

## Advanced Placement Calculus 1 Unit

*Prerequisites:* Successful completion of Mathematics– SL Year 1 or Pre-Calculus

This college level course is offered to students who have successfully completed Pre-Calculus or IB SL Mathematics (Year 1). Everything in the Calculus AB topic outline as it appears in the *AP Calculus Course Description* is covered during the year, including studies in functions, limits, derivatives with applications, integration with applications, derivatives and integrals of transcendental functions and special methods of integration, as well as an IB SL statistics topics with calculus ramifications. Objectives of this course include developing the students' understanding of the concepts of calculus, communicating mathematically the ideas of calculus, providing experience with the methods and applications, scoring well on the AP Exam and/or IB SL Mathematics Papers, and preparing students' for subsequent college course. The AP Exam and/or IB SL Mathematics Papers will be offered for all students enrolled but will not be averaged into the student's final grade. Students must pre-pay for the AP exam and/or IB SL Mathematics Papers. A TI-84 Graphing Calculator is recommended for this course.

## **Advanced Placement Statistics**      **1 Unit**

*(Department Recommends: At least three years of high school math)*

The topics for statistics are divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference. Students will only be considered for placement in AP Courses if they have maintained an average of 85 or higher in the subject area or by a recommendation of the department. The AP Exam will be offered for all students enrolled in AP Statistics but will not be averaged into the student's final grade. Students must pre-pay for the AP Exam. A TI-84 Graphing calculator is recommended for this course.

# **Languages Other Than English**

## **Spanish**

### **Spanish IB**

**1 Unit**

This is a two year advanced language course which will introduce the student to a variety of situations likely to be encountered in everyday social situations, to be able to function efficiently in an alien environment and to be able to communicate effectively. The focus of the course is to be centered on language acquisition thus elementary contemporary grammar and vocabulary will be the central keystone.

The course includes all four of the skills required i.e. listening, speaking, reading and writing. A further aim is to be able to communicate clearly and in situations encountered in both Spanish and Hispanic countries. Integral to this aspect will be to introduce the student to the multicultural nature of the language, including the increasing use of Spanish in countries which are becoming more closely allied to Iberian and Hispanic culture. This will also be closely linked to increasing the students' knowledge in relation to those aspects of ethnocentrism which are prevalent in non-Spanish speaking countries, relating specifically to multiculturalism. A local exam will be given at the end of the year.

Spanish IB SL consists of two years of study in 11th and 12th grades. It is an advanced language course intended for students who have successfully completed the previous two years of Spanish in grades 9 and 10 (Spanish IB Initio), or have had at least four years of previous instruction in the Spanish language.

The course will offer a continuous process of learning to speak Spanish at an advanced level with a deeper understanding of Spanish culture with emphasis on interactive communications in the target language. The course is based on the communicative principles of listening, speaking, reading and writing and skills are developed through the study and use of a range of written texts and audio-visual materials.

A variety of oral and written examinations will be used to monitor students' progress in all the different areas of study. Upon completion of this course students will be able to use the language spontaneously in a variety of situations and contexts, orally and in writing. Juniors and seniors in this course should be of serious intent to pursue the IB Spanish. The proficiencies of comprehending, speaking, reading, and writing Spanish will be demonstrated through the rigors of the IB examination

**1 Unit**

### **Spanish II**

Level III students are expected to comprehend short conversations on topics in everyday situations and to initiate and sustain a conversation within the limits of their experience. They are expected to understand authentic reading materials, and to write notes, letters and short reports. A local comprehensive final exam will be given at the end of the course.

### **Spanish III R**

**1 Unit**

Level III Spanish completes the sequence of courses to prepare students for the Regents examination. At this level students are expected to comprehend short conversations on topics in everyday situations and to initiate and sustain a conversation within the limits of their experience. They are expected to understand authentic reading materials, and they are expected to write notes, letters and short reports. A NYS Comprehensive Regents Exam will be given at the end of the course.

### **Spanish IV & V**

**1 Unit each**

. The focus of these courses is oral and written fluency. Conversation will be a large part of the class. Other aspects of grammar will be taught in conjunction with readings. Students will make extensive use of Spanish newspapers, magazines, web sites, etc. Page length compositions will be required periodically. Local exams will be given at the end of these courses.

**Latin II**                      **1 Unit**

Latin II continues to sharpen the students' language skills through reading and vocabulary acquisition. Reading material in Latin is based on stories from Roman and Greek mythology and history. Second year Latin students increase their Latin vocabulary, attain a greater knowledge of Latin elements in English and delve more deeply into the Roman way of life. A local exam will be given at the end of the course.

**Latin III**                      **1 Unit**

Latin III provides the final course in the sequence for the Regents examination. At this third year level, students read extracts from Roman authors such as Ovid, Pliny, Caesar, Catullus and Cicero. The third year Latin student will have a proficient Latin vocabulary and knowledge of Latin grammar and culture. A local comprehensive exam will be given at the end of this course.

**Latin IV/V IB**                      **1 Unit**

This course is for advanced students who wish to continue their study of Latin beyond the Regents level. In this course, students continue to develop reading fluency. Students will also be reading material in translation drawn from top Roman historians. The prerequisite for this course is successful completion of Latin III as well as a comprehensive exam score of 65 or higher. Those students who elect to participate in an IB program will take an IB test at the end of the second year of the IB course.

## Japanese

**Japanese I**                      **1 Unit**

Japanese I students experience Japan's culture and language. Japanese I focuses on speaking Japanese in specific contexts: riding trains and subways, introductions, entering Japanese homes, etc. By the end of the year students will be able to converse about many subjects. Japanese I students will also have the opportunity to learn one of Japan's two syllabaries and use it to write authentic Japanese dialogues. A local exam will be given at the end of this course.

**Japanese II**                      **1 Unit**

Japanese II students will build on the skills gained in Japanese I. Cultural topics will be expanded, and students speaking skills will be sharpened and greatly increased. Japanese II students will also learn a second Japanese syllabary. A local exam will be given at the end of this course.

**Japanese III**                      **1 Unit**

This course focuses on the continued study of the four skills of speaking, listening, reading and writing in preparation for the NYS Regents examination. Students will continue to learn how to handle both survival Japanese and conversational Japanese. There will also be extensive review of hiragana and katakana (authentic Japanese syllabaries) and the introduction of 168 kanji (Chinese characters). Students will learn how to read short, simple reading materials. They will also learn how to write short sentences and simple letters comfortably. A local exam is given at the end of this course, which satisfies the Regents requirements for a regents diploma.

**Japanese IV**                      **1 Unit**

This provides students additional study of Japanese language and culture in accordance with Checkpoint C of New York State learning standards for languages other than English. Objectives are as follows: 1. Understand standard speech delivered in different settings. 2. Engage in discussions on a variety of topics. 3. Comprehend content of most texts of interest to native speakers. 4. Write multi-paragraphed essays. 5. Exhibit more comprehensive knowledge of cultural traits. The prerequisite for this course is successful completion of Japanese III with a Regents grade of 65 or higher.

# Business

## Introduction to Occupations ½ Unit

This course must be taken by all students majoring in vocational education. There are no prerequisites. It is composed of two modules: The Working Citizen and Personal Resource Management.

The purpose of the Working Citizen Module is to introduce students to the realities of the working world. Each topic focuses upon a specific area of information and personal development that help individuals integrate their role within the workplace and the home. This module is designed to provide students with information and experience that will help them make future choices concerning work.

Personal Resource Management is organized into three topics dealing with Interrelationships among resources and needs, wants, goals and lifestyles and on the managerial aspects of assessing, enriching and using personal and financial resources to ensure responsible, participatory and fulfilling personal and work life. Management and decision making skills are used to solve appropriate problems and students are guided to further develop coping and critical thinking skills.

## Accounting 1 1 Unit

There are no prerequisites for this full year course designed to develop occupational competencies in bookkeeping. Course content encompasses the complete account cycle and provides opportunities for incorporation of computer technology into the instructional format.

## Accounting II 1 Unit

A full year course offered as an extension of the Accounting 1 Course. The introduction of additional topics involving more complex accounting applications significantly extends the basic accounting concepts and skills.

## Business Law ½ Unit

This half-year course emphasizes business law as it relates to an individual's personal life as well as occupational life. Applications of the law as affecting the individual are stressed.

## Keyboarding ½ Unit

This half-year course is designed to develop touch keyboarding skills to the extent that students may use the skill in their personal lives or as a supportive skill in their jobs.

## Marketing ½ Unit

This half-year course is designed to give students an understanding of the world of marketing and the careers associated with marketing. Students will learn that they need to develop a product, bring it to market and promote the product to make it successful. Students must be upper classmen.

## Business Analysis ½ Unit

This course offers a broad overview of modern business organization and operation. Students learn that today's business organizations rely on a variety of systems and subsystems to complete transactions as they adapt to the emerging information age. Students examine how businesses are organized to provide a product, a service, an idea, or a combination of these, and are acquainted with activities commonly utilized by most businesses to enable them to meet customers' needs and demands. A business plan for a simulated business is the final product of this course.

## Business Computer Applications ½ Unit

This course stresses a hands-on approach in providing students specific application of computer technology in business and industry. Word processing, databases, spreadsheets, and Power Point, are thoroughly explored. Keyboarding I is a prerequisite for this course.

### **Advanced Accounting**

**1 Unit**

This full year course is offered as an extension of the Accounting II course. The introduction of more advanced accounting applications extends accounting concepts for those who may be considering accounting as a career.

## **Animal Sciences**

### **Animal Science**

**½ Unit**

This course covers the basics of Animal Science. Units on the large animal industry, dairy science, poultry science, equine science, aquaculture and the small animal industry lead into the study animal genetics, selection, reproduction and behavior. Various activities are used to strengthen the concepts learned including examining the parts of a poultry egg and making soft cheese. The issue of animal welfare is also covered.

### **Equine Science**

**½ Unit**

This course is designed to provide students with a basic knowledge of equine anatomy, care, housing and the equine industry. This course will not require students to participate in hands on activities with horses, however, we will take field trips to various locations involved with the equine industry, and students may have contact with horses on these occasions. Topics that will be covered include safely working with horses, nutrition, equine genetics, grooming and general care.

### **Pre-Veterinary Science**

**1 Unit**

This course serves as an introduction to veterinary sciences. Students will become familiar with the various aspects of veterinary medicine such as anatomy, clinic practice, disease, and health records. Students will learn skills that will enable them to be employed as a veterinary assistant or go on to technician or veterinary school. They will learn anatomy and physiology of common animals as well as diseases and parasites of those animals. Veterinary terminology and basic veterinary office procedures are covered.

### **Small Animal Care**

**½ Unit**

This course covers the basics of the small animal industry. Students will become familiar with the different breeds of small animals, and exotics. They will learn proper care of these animals including nutrition and feeding, handling, common diseases, and grooming. Students will gain hands-on experience in caring for small animals.

### **Wildlife & Natural Resource Management**

**½ Unit**

This course covers the basics in conservation and natural resource management. Topics will include the history of wildlife management in America, conservation and the wise use of our natural resources, administration of wildlife management, and human impact on wildlife, American sport hunting, wildlife identification, and tree identification. Wilderness survival and navigation will also be covered. Careers in wildlife and natural resources will conclude the course.

### **Biotechnology**

**1 Unit**

Students will learn various principles and techniques of biotechnology including, but not limited to, DNA analysis, DNA typing, DNA Electrophoresis, plant cell cloning, plant callus formation, bacteria population dynamics, enzyme usage, hydroponics, aquaponics and biotechnological applications to food science. Students should have successfully completed Living Environment (Biology) or Environmental Science before attempting this course.

### **Introduction to Agriculture Occupations**

**½ Unit**

This introductory course in agricultural science allows students the opportunity to explore the career opportunities in the food and fiber industries. Students in the 9<sup>th</sup> and 10<sup>th</sup> grades must take this course as part of their agricultural sequence. Topics include an introduction to agriculture, natural resource management, biotechnology applications in agriculture, agricultural mechanics, plant and animal science, leadership, environmental science, floriculture, and food science.

### **Leadership**

**½ Unit**

Students will learn skills necessary for them to become leaders within their own groups, families, and/or communities. Areas of investigation include understanding self, developing positive attitudes, goal setting, motivation, parliamentary procedure and public speaking.

## **Construction Sciences**

### **Computer Aided Drafting**

**1 Unit**

This elective course will involve mechanical drafting to be taught using AutoCAD (or a similar computer program) on the computer. Subject areas covered will include both engineering and architectural renderings.

### **Construction Engineering and Management**

**1 Unit**

This "hands-on" course is designed to help student's gain the necessary skills associated with building trades. Students will learn sketching and drawing out plans, calculating a bill of materials, and the many safety precautions associated with constructing a building, residential wiring, foundations and masonry techniques, as well as public utility connections.

### **Product Design and Engineering**

**1 Unit**

This "hands on" course will provide students with the knowledge and skills needed for an appreciation of woodworking. Through practical applications students will gain knowledge of wood types, joints, equipment and tool safety. Projects could include a variety of topics with furniture/cabinet making as the final goal.

## **Mechanical Sciences**

### **Principles of Engineering**

**1 Unit**

This course offers students the opportunity to explore the physical systems and structures used in occupational industries. Real life examples and activities will help students learn the basics of electricity, hydraulics, engines, structures, and more. These systems are utilized almost everywhere and the industry needs more qualified people to maintain existing systems, as well as design new ones. Students must take small engines and welding as a prerequisite for this course.

### **Small Engine Repair**

**½ Unit**

This twenty week agricultural course will cover all aspects of small engine repair and safety. Upon successful completion of this course, students should be able to meet the employment demands of local industries, start a small engine repair business of their own or continue their post-secondary education. This course is a prerequisite for Mechanical Systems.

### **Materials Processing**

**½ Unit**

This course is designed to show students the basic principles of welding and use of various types of welders. They will learn how to weld safely in all positions (flat, horizontal and vertical) while using different types of welders. During this semester students will learn how to weld different metals. Students will be able to design a project or bring in a project to weld during the course. This is a prerequisite for Mechanization, Systems and Structures.

## **Environmental Sciences**

### **Environmental Science**

**1 Unit**

This course is designed to introduce students to the environment they live in. Students will participate in a number of indoor and outdoor activities that emphasize environmental problems and management techniques to prevent and solve those problems. The course will expose students to careers and educational opportunities related to the environment and natural resources. Some of the topics covered include terrestrial and aquatic ecosystems, population dynamics, recycling, pollution, soil conservation, water conservation and integrated pest management.

**Floral Design**

**½ Unit**

Explore the floriculture industry from basic design principles to marketing and management of your own business. The use of color, shape and texture will be incorporated into designing several arrangements. Topics will include the care and storage of flowers, the identification of commonly used flowers in the floral industry and flowers for special occasions. This is a “hands on” course where students will gain experience in designing with fresh, silk and dried flowers.

**Landscaping Principles and Design** ½ Unit

This course will cover the basic principles of landscape design, layout and the drafting of a landscaping project area. Key topics include plant identification, ground covers and the aesthetic uses of plants in the landscape. The pricing and estimating of a landscape project will be covered. Students will have the opportunity to participate in the installation, construction and maintenance of outdoor projects. The culmination of the course will be a landscape project designed by the student.

**Plant Science**

**½ Unit**

This course familiarizes students with the scientific concepts and principles in the growth of plants. The parts of the plant, plant propagation and a unit on landscaping will be covered. This is a project based course that makes use of the greenhouse and grounds in the instruction.

**Food Science**

**½ Unit**

Have you ever wondered how your milk gets from the cow into your glass? Have you ever wondered what is really in a hotdog? Then this course is for you! This course is designed to expose students to where their food comes from—farmer to consumer. Topics covered include food safety, production, processing, nutrition, careers and National & International issues related to the food industry. Students will complete many hands-on labs, have guest speakers and attend related field trips.

**Art**

**Studio Art**

**½ Unit** (Prerequisite for all other art courses. Satisfies the ½ unit of local credit required for art and/or music)

Studio art is the foundation course for all other art electives and fulfills the art requirement for graduation. In studio art students develop an understanding of the principles and elements of art through exploration in a variety of materials and techniques. Assessment is based on effort, creativity, and craftsmanship.

**Studio Painting**

**½ Unit**

This is an advanced art course for students who have completed Studio Art. This class develops a foundation of exploratory experiences in painting. Students might experiment with both transparent and opaque painting media on a variety of surfaces, using different sizes and types of brushes to achieve a variety of strokes and techniques.

Students will paint a still live and try to simulate the various textures in the objects, such as glass, fabric and wood. They will also paint a landscape that contains simple figures in action or repose. The remainder of the course will be devoted to building a strong background in the students’ chose area of concentration.

**Painting II**

**½ Unit**

This course builds on the learned skills of color theory and painting techniques to explore creative and unconventional painting projects. We will study the avant-garde artists of today and create our own solutions to the problems of illusion, sculptural painting and the emotions of color. Painting I is a prerequisite.

**Studio Drawing**

**½ Unit**

This is an advanced art course that can be elected after the students have completed Studio Art. This class develops a foundation of exploratory experiences in drawing using such materials as graphite, carbon, chalk, charcoal, pastels and assorted types of papers with a variety of surfaces.

The introductory phase of this course will introduce the students to a wide variety of experiences in these media. The students are encouraged to test and explore materials.

**Drawing II** **½ Unit**

Prerequisite: Drawing I. This course builds on the principles and elements learned in Drawing I through a variety of advanced projects. Emphasis is on originality, creativity and craft. Portfolio requirements are also addressed.

**Ceramics** **½ Unit**

This is a studio course emphasizing hand-building techniques with clay. A wide variety of the elements of form are explored through the basic techniques of coil, slab and modeling. Glazing and painting techniques are also addressed. Projects are often self-directed with an emphasis on creativity, originality and craft.

**Sculpture** **½ Unit**

Sculpture is a studio course where students will explore the concepts of 3-dimensional form through a variety of materials. Students use the elements of size, form, color, line and texture to explore such concepts as humor, emotion, tension and functionality. The course covers techniques from assemblage to wood carving.

**Graphics** **½ Unit**

Students explore the principles and elements of 2-D design through the printmaking process. From stencils to linenum block to silkscreen, the four "C's" of clarity, composition, creativity and craftsmanship are emphasized.

**Digital Photography** **½ Unit**

This course is designed to introduce students to the principles, procedures and history of digital photography. Students will learn the photographic process, utilizing Adobe Photo workshop on the computer. Students are expected to complete all class work, assignments and research projects. Digital cameras are available for student use for those enrolled in the course.

**Portfolio Course** **½ Unit**

This course is for Art majors to start a portfolio, showing the students strongest attributes as an artist. The student will start to create a portfolio that will eventually contain 10 to 15 pieces of their best artwork to date. For many art schools, a portfolio is a requirement for admission. This is a must course for art majors.

**Art History** **½ Unit**

Ever wonder what the most valuable artwork ever created was? Or who was the most talented artist ever? Or why a platter painting can be worth so much money when anyone could do one? This course will answer all your questions about art as we discuss, analyze, and write about the most famous artworks ever created by man or woman.

**AP Art History** **1 Unit**

This is a survey of western civilization and its greatest artistic accomplishments. The class will take a visual time-travel through 30,000 years of civilization and their changing aesthetics. Through analytical writing, research, class discussion, and museum visits, students will develop an understanding of art and its role in cultural development.

**Design and Drawing for Production** **1 Unit**

Formerly entitled Mechanical Drawing, this course utilizes conventional drafting and model building techniques to solve visual problems and to describe forms in the man-made environment. Design problems range from logos to architectural rendering and model building.

## Music

### Music in Our Lives ½ Unit *(Satisfies the ½ unit of local credit required for art and/or music)*

Music in Our Lives is a basic music course dealing with music in our everyday lives. Topics covered include Elements of music, music theory and music in film. This course fulfills the half-credit local course requirement in art/music for graduation.

### High School Chorus ½ Unit

The high school chorus is a performing group that focuses on all musical styles from medieval to modern. Chorus gives students the opportunity to take time to enjoy music. Students will be taught the proper singing methods. In addition, students will learn to read music and understand the theory behind what they are singing.

### Select Treble Chorus ½ Unit

The select treble high school chorus is a performing group that focuses on all musical styles from medieval to modern. The treble chorus is for soprano and alto voices singing in two to four parts. Chorus gives students the opportunity to take time to enjoy music. Students will be taught the proper singing methods. In addition, students will learn to read music and understand the theory behind what they are singing.

### Concert Band ½ Unit

The concert band is an instrumental ensemble, which includes students in grades 9 through 12. This group rehearses every other school day and prepares for three concerts per year, two parades and the graduation ceremony in June. The instructional program includes full ensemble rehearsal, individual or small group instruction, some small ensemble playing and solo opportunities.

### Jazz Ensemble ½ Unit

The jazz ensemble consists of students in grades 9 through 12. This group rehearses every other school day and prepares for numerous concerts, civic programs and festivals. Students who wish to participate in the jazz ensemble must also be members of the concert band with the exception of piano, bass and guitar players. The instruction of the jazz program includes an understanding and appreciation of jazz styles, the application of jazz principles to musical material and improvisation. Students must audition for this group.

### Vocal & Instrumental Lessons Non-credit

In addition to the full ensemble rehearsal, students are also required to participate in some form of individual or small class instruction which is the responsibility of the teacher of that particular performing group. Such instruction is usually done on a rotation system which permits homogeneous grouping without interfering with the students' academic pursuits.

### Music Theory 1 Unit

Music Theory is a one-year elective course that explores and develops many elements of music including rhythm, harmony, melody, tempo, dynamics, key signatures and scales. Students will apply these elements of music to compose original pieces, analyze music excerpts and gain knowledge of the piano keyboard. This course will loosely follow music history from Gregorian Chant through Jazz and into 21<sup>st</sup> century music. **This course is open to students in grades 10-12. The students must have been in school band or chorus for the previous two years or must have studied privately with a certified music instructor for the previous two years to take this course.**

### Music Technology 1 Unit

This course is designed to give students who are interested in music related careers the opportunity to acquire functional knowledge about music technology. Students will learn the basics of Midi sound production, sequencing and editing. This course is designed for juniors and seniors with a strong technology or music interest who may or may not be traditional performers. There is no music pre-requisite for this course.

# Health and Physical Education

## Physical Education 9/10 and 11/12     ½ Unit

Physical Education in the high school will provide the students the opportunity to participate and learn about lifetime fitness and team activities. The emphasis is on promoting healthy lifestyles and skills that students can apply to their personal well-being and fitness throughout their life. For example, the high school will offer mountain biking, cross-country skiing, snow-shoeing, cross-country running, trail walking and aerobics. The team activities will encourage the students to apply the following life skills communication, teamwork, sportsmanship and cooperation. Physical Education begins with warm-up exercises—running in place, push-ups, sit-ups and jumping jacks. The New York State Fitness Test is given to each student in the fall and spring. Physical education curriculum for:

All students are required to change clothes in order to participate. Each marking period there is a written test on the major unit. A written final is given in June, which covers the years' work. Grades are given on participation, skill tests, written tests and attitude. ***All students are required to take four years of physical education as mandated by the State of New York. Each full year of PE will be one ½ credit, fulfilling the 2 units needed for graduation.***

## Health     ½ Unit

The health curriculum is based on the New York State mandates concerning social, emotional, physical and spiritual health. It is a Skills-based curriculum that includes planning and goal-setting, decision-making, communication, stress-management, relationship management, self-management, and advocacy skills. Content areas include personal health, emotional health, substance use and abuse, disease prevention, family life/sexuality, nutrition, injury prevention and safety, and consumer health. Health Education is a requirement for graduation and is offered usually in the junior or senior year.

## First Aid & Fitness     ½ Unit

This elective course requires students to actively participate in both the first aid and fitness components. Students will be certified in American Red Cross Standard First Aid and CPR (Cardiopulmonary Resuscitation-Adult, Child, Infant), and AED (Automated External Defibrillation). In addition, the Fitness component emphasizes the importance of proper nutrition and physical fitness. Topics such as weight control, aerobics, weight lifting, care of athletic injuries, and health clubs are explored. Students must design an individual fitness program incorporating criteria discussed in class. Various forms of fitness training will be examined and students must participate in these activities. This course is primarily offered to grades 11 and 12, though 9<sup>th</sup> and 10<sup>th</sup> graders may take the course if room is available. Class size is limited to 10 due to American Red Cross standards.

# Home and Careers

## Child Development     1 Unit

This is a one-unit course in which students learn about the development of a child from conception to age six. They also explore parenting techniques. The course will include observation and participation in classes at the elementary school. The students will be offered the opportunity to receive extra credit through the student tutoring program.

## Early Childhood Learning     1-3 Units

This course provides an in-depth study of early childhood education including management, lesson planning, curriculum planning, and child development theory. It includes extensive work with children: student's develop programs and participate in clinical laboratory experiences for a minimum of six hours per week for the entire school year. They will plan, prepare, and present activities for the group's physical, interpersonal, and learning development. This course should be taken as a sequence during the 11<sup>th</sup> and 12<sup>th</sup> grade years. The sequence should include Introduction to occupations, and Child Development, as well as the Human Development Core and Food and Nutrition Core which can be taken independently. **Students taking this course must have TB testing, which is provided by Head Start.**

**Food and Nutrition** **½ Unit**

This course consists of lecture and class participation in the kitchen (at least two days per week) during food preparation units. Grades will be based in part on participation in class discussions and completion of all assignments. Topics covered will include: beginning food preparation, meal management and food purchasing, meal service, basic food preparation and nutrition and careers in food and nutrition. This course is a required part of a sequence in Early Childhood Education. This is a beginning level course.

**Human Development** **½ Unit**

This course is primarily concerned with the adolescent period in human development focusing on the adolescent stages of development and the place of the adolescent in the family and work place. Also covered are topics relating to careers in working with children and adults. Projects such as fund raisers and stuffed animal making for the in-school Head Start Program will be a major part of this course. Class participation and involvement in projects are essential. This course plus Food and Nutrition are requirements for a sequence in Early Childhood Education. This is a beginning level course.

**Parenting** **½ Unit**

This is an advanced course which focuses on the roles and responsibilities of being a parent. It includes nurturing and guidance of the child from birth through adolescence. Discussions include the physical care, discipline techniques, and socialization. This course is designed for 11<sup>th</sup> and 12<sup>th</sup> grade students.

## **Special Education Services**

The special education programs offered at Greenville Central School District are an integral and integrated component of the regular education programs. Most students are assigned to a homeroom and therefore have the opportunity to participate in school wide activities throughout each school year. Based on individual academic, social, physical, and/or management needs and abilities, each student with a disability is placed in regular education programs to the greatest extent possible.

Special education programs and services are designed to provide a continuum of services for students. This continuum may include consultant teacher, resource room, self-contained instruction, or a combination of those services. All students have an opportunity to participate in a foreign language. However, based on student's needs, the foreign language requirement may be waived.

In addition, specialized reading instruction, speech/language, occupational, and/or physical therapy services may be provided as specified in the student's Individualized Education Program.

## **Tutoring**

**Student Tutoring Program** **¼ Unit per semester**

This program is recommended for students interested in working with children as day care workers, nursery school teachers or elementary school teachers. Students are assigned to work with an elementary school teacher two periods per week. Some of the activities in which they will participate are reading to the children, playing games, using flash cards, passing out materials, or anything the cooperating teacher requests. Students are limited to 4 semesters of credit.

## **Alternative Learning Program**

Greenville High School / Questar III's Alternative Learning Program provides students the opportunity to earn a NYS Regents diploma. Developed to serve students who may be in danger of dropping out of high school, this program serves students who may previously have had difficulties with attendance, motivation or grades. The teachers in the program treat all students as adults and maintain an efficient workplace-like atmosphere. The teacher/student ratio, matched with the use of appropriate computer-based instruction, allows each student much more time and much more individualized treatment than is possible with a traditional class of 25 to 30. Teacher and student work together on one course at a time, so the student completes all learning tasks for one course before moving on to the next. Since the student concentrates on that one course for the entire school day, that student retains better focus on the work at hand. Achievement progresses at a completely different pace, and the recognition of achievement keeps them going. The small individualized group instruction fosters a positive learning environment and encourages maturity and social skills. Classes are taught by certified teachers and aligned with NYS Learning Standards. Students are expected to pass the required Regents exams and to complete all graduation requirements necessary for their high school diploma.

# Questar III Programs

## New Visions

This program is offered through Questar III BOCES, it provides students an opportunity to explore career options from a real world perspective. New Vision students gain valuable insight into careers and fields of interest, something previously reserved for college upperclassmen. Through academics, site visits, guest speakers, mentoring and a senior project, New Vision students work at a level that prepares them for college. Students get a jump start on their futures by developing advanced writing, communication, problem solving skills and taking a first hand look at a chosen career field.

To enroll in any New Vision program, students need to complete an application available in the guidance office and participate in an interview/ selection process. The student should:

- Maintain a 85% average in the subject area
- Obtain the previous year teacher recommendation
- Continue to have a positive attendance pattern
- Posses maturity to work independently or in teams
- Have strong communication skills
- Exhibit high levels of motivation
- Demonstrate a clear understanding of the material and thorough conceptual knowledge

## Career and Technical Education (CTE)

Questar III's Career and Technical Education (CTE) programs offer high school students the opportunity to learn career skills while earning a Regents diploma. The half-day programs are a great way for students to explore a variety of careers and develop specialized skills through hands-on learning and integrated academics. Programs are based at Columbia-Greene Educational Center in Hudson. Students can earn four credits each year of successful study and can earn college credit in some programs. The aim of the Career and Tech. Programs are:

- To acquire skills for employment
- To provide practical experience while learning
- To prepare for further trade, technical and/or future training
- To provide credit toward graduation from high school
- To appreciate the world of work

A decision to enter the Career and Tech. Program should be made carefully. Greenville is committed to pay tuition for students who are taking these programs. It is not always possible to provide other courses to replace Career and Tech. Programs that are dropped once the year is underway. For these reasons, the student, parent and counselor consider all of the issues before deciding on a specific program. Students are urged to visit the appropriate programs and campus to help them understand the courses that are offered before they decide to attend. Students must fill out applications and have it signed by their parents and counselors before they are considered for enrollment in a Career and Tech program.

# International Baccalaureate Diploma Programme

## Program Overview

Greenville High School is proud to offer students the opportunity to participate in the most rigorous curriculum offered anywhere. There are two ways students can participate in the IB Program. Students can simply opt to take an IB course in a particular subject, or they may challenge themselves to complete the full IB Diploma, which is currently recognized in over 125 countries.

To receive the full IB diploma, the candidates complete courses in six areas of study: English, a Language Other Than English, history, science, Mathematics, and the Arts. Students also participate in Creativity, Action and Service Programs and write an extended essay on a particular area of study, and participate in a two-year philosophy course titled Theory of Knowledge.

As the popularity of the IB Program grows, so does the number of colleges granting credit for IB courses successfully completed. There are now over 2200 colleges and universities that have published IB recognition policies--this includes over 800 from the United States alone. IB Diploma candidates are attending Brown University, United States Military Academy at West Point, University of Virginia, University of Notre Dame and many more.

Students enrolled in IB courses are required to complete all the IB Internal Assessments and to take the IB exams. As with other courses where college credit is possible, there are fees, which for the May 2009 exam session were approximately \$129 for the first exam and \$88 for each additional exam. Fee waivers are available for students who meet the Federal Requirements for free or reduced lunch. Students who fail to complete the second year of a two-year IB course will have this change reflected on their transcript. Similarly, students who do not sit for an IB exam are subject to having the IB designation removed from their transcript.

## Questions about the IB Program

### *Why participate in the IB program?*

While the IB program is a rigorous pre-collegiate curriculum, it also challenges students to think about global issues, cultural assumptions and our place in the world community. When taken in its entirety, the diploma program requires a deep focus in many areas, both academic and non-academic. Students move beyond the classroom, become involved in service in their community, and work creatively. Through the Theory of Knowledge course, students are challenged to think about what knowledge means in the various disciplines they are studying. Ideally, these elements converge through the experience of designing and executing an individual research question or project in the Extended Essay.

Students who best succeed in the program have a strong commitment to the ideals of the mission statement, and a genuine enthusiasm about learning as well as sincere curiosity about other cultures and the world around them.

Under our weighted grades procedure, IB Diploma and Certificate students will receive the benefit of weighted grades. All IB courses, with the exception of CAS (Creativity Action Service) and Extended Essay, are weighted.

### *Do I have to do the full Diploma program?*

There are two ways to participate in the International Baccalaureate Diploma Program at Greenville High School:

#### **Option A: The Diploma Program**

- Participate in and complete internal/external assessments for six IB courses:
  - 3 (or not more than 4) Higher Level Courses
  - 3 (or 2) Standard Level courses
- Complete Theory of Knowledge (TOK)
- Submit an original Extended Essay, an in-depth study (no more than 4,000 words in length) of a limited topic chosen by the student.
- Complete a Creativity, Action, Service (CAS) Project divided among the categories completed over two years

#### **Option B: Individual Subject Certificates**

All students are invited to participate in IB classes. A certificate student participating in an IB class completes all internal and external assessments for that course. Students who choose to take exams and pass will receive certificates from IBO in a given subject, and may choose to apply for college credit or advanced standing as available.

## Diploma Program Testing Requirements

Diploma students must test in all courses except the Theory of Knowledge (TOK), Creativity Action Service (CAS) and Extended Essay. To earn the IB Diploma, students must receive either a total of 24 points with each HL score at least 3 or higher, or HL subject scores totaling 12 or more points. If a 2 is scored on an HL exam or less than 12 points total in HL, then a total score of 28 is required. Students may also earn up to 3 extra points for their Extended Essay and TOK marks. Failure to complete the Extended Essay and TOK requirements will result in students' ineligibility to receive the IB Diploma.

## The IB Learner Profile

International Baccalaureate programs aim to develop students to become:

- Inquirers: Who acquire the skills necessary to conduct purposeful, constructive research.
- Thinkers: Who exercise initiative in applying thinking skills critically and creatively to make sound decisions and to solve complex problems.
- Communicators: Who receive and express ideas and information confidently in more than one language, including the language of mathematical symbols.
- Risk-takers: Who approach unfamiliar situations without anxiety, have confidence and independence, are courageous and articulate in defending things in which they believe.
- Knowledgeable: Who have spent time in school exploring themes with global relevance and importance, and have acquired a critical mass of significant knowledge.
- Principled: Who have a sound grasp of the principles of moral reasoning, integrity, honesty and a sense of fairness and justice.
- Caring: Who show sensitivity towards the needs and feelings of others and have a personal commitment to action and service.
- Open-minded: Who respect the views, values and traditions of other individuals and cultures and who are accustomed to seeking and considering a range of points of view.
- Well-balanced: Who understand the importance of physical and mental balance and personal well-being.
- Reflective: Who give thoughtful consideration to their own learning and who analyze their personal strengths and weaknesses in a constructive manner.

## IB Mission Statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

## The Core - Full Diploma Students Only

### IB Theory of Knowledge

The Theory of Knowledge (TOK) course is one of the core elements of the International Baccalaureate Diploma Programme. The TOK course requires participants to think critically about how individuals gain knowledge, and how knowledge is applied to different disciplines. Participants must also reflect on themselves as knowers, and the unique perspectives and experiences a knower brings to problems in our global society. We will ask questions such as "how do we know what we know?" and "how does what we know influence our perspectives and our actions?"

TOK is an interdisciplinary course, and will cover elements of all areas of knowledge from an international perspective. Areas of knowledge covered include mathematics, natural sciences, human sciences, history, the arts and ethics. The goal of the course is for each student to develop into a reflective, open-minded learner who understands that different perspectives of knowledge issues result from differences in background, culture and social setting. Successful completion of the course requires that participants use inquiry skills to step outside of their traditional way of knowing and gain insights into how people from backgrounds different from their own approach global issues.

Students will be assessed based on their completion of internal and external assessments as well as participation in classroom discussions. The external assessment is an essay on a topic chosen from a list of ten titles prescribed by the IBO. The internal assessment is a presentation to the class on a knowledge issue chosen by the student. Additional essays and presentations may be used to determine the students' school-level grades for the course.

## CAS – Creativity Action Service

Every IB Diploma candidate is required to complete a CAS program. This requirement should span the two years in which a diploma student is enrolled in IB coursework. At the completion of a student's CAS program he/she should have met all eight Learning Outcomes, which are: increase self-awareness, undertake new challenges, plan and initiate new activities, collaborate with others, persevere and commit, engage in global issues, make an ethical impact and develop new skills. CAS stands for Creativity, Action, Service. Student programs should be a balance of all three of these components.

- Creativity is interpreted broadly to include a wide range of arts activities as well as the creativity students demonstrate in designing and implementing service projects.
- Action can include not only participation in individual and team sports but also taking part in expeditions and in local or international projects.
- Service encompasses a host of community and social service activities.

## Extended Essay

The extended essay is required of all IB Diploma candidates. The extended essay is a 4,000 word research essay written on a focused topic of interest chosen by the student. The essay can be written in any subject currently taught in Greenville High School's IB program. The IBO guidelines state that students must plan on at least forty hours of work to properly research and write the essay.

## Course Descriptions

### Group 1: English

#### English

AP/IB English A1-HL is a two-year, four-semester course that will culminate in the IB Language A1 exams taken in May of the senior year. The AP (Advanced Placement) exam will also be given in May of the senior year.

The focus of the course is on each student's development of critical thinking and communication skills in oral and written forms. The students will view literature as both an art form and a universal language. Course readings include the classics of world literature and a broad range of modern writing, in a variety of literary genres, styles and contexts.

Prerequisites: Students enrolled in AP/IB English will be participating in a college-level course with college-level expectations. It is recommended, although not required, that students successfully complete Honors English 7, 8, and 9, as well as A.P. English Language and Composition before the junior year.

### Group 2: Languages

#### Latin SL

This Latin IB course is a rigorous course for Latin students who have passed the Latin Regent's exam in the 10th grade. The content of the course follows the curriculum set by the IB Organization. This course is intended for highly motivated students. Juniors and seniors in this course should be serious in their intent to do high level work in Latin.

The Latin IB SL course itself consist of three integrated parts:

- READINGS from Ovid or Cicero
- EXTENDED ESSAY focusing on some specific aspect of Roman culture
- INTERNAL ASSESSMENT involving a research project or Latin composition.

The central focus of this course is critical thinking rather than fact regurgitation.

## Spanish B SL

This advanced language course consists of two years of study in the 11<sup>th</sup> and 12<sup>th</sup> grades. This course is intended for highly motivated students who have successfully completed the previous two years of Spanish in grades 9<sup>th</sup> and 10<sup>th</sup>, or have had at least four years of previous instruction in the Spanish language. The course will offer a continued process of learning to speak Spanish at an advanced level with a deeper understanding of Spanish culture. A variety of oral and written examinations will be used to monitor students' progress in all the different areas of study. Upon completion of this course students will be able to use the language spontaneously in a variety of situations and contexts, orally and in writing. Juniors and seniors in this course should be of serious intent to pursue the IB Spanish. The proficiencies of comprehension, speaking, reading, and writing Spanish will be demonstrated through the rigors of the IB examination.

The Spanish IB SL course comprises three basic but fully integrated parts:

- Language: development of the four linguistic skills (listening, speaking, writing and reading) and handling the language systems (grammar, syntax, etc) accurately
- Texts: Use of a wide range of written and oral texts selected in view of communicative competence and reflective of the entire Hispanic world (i.e. Latin America and Spain)
- Cultural awareness: materials studied reflect the various Spanish-speaking cultures designed to increase cultural, social, political understanding and greater global perspective.

During the first year students will strive for proficiency based on principles of listening, speaking, reading and writing. A series of topics and structure of language will be considered. The first year course will include readings and discussions from a variety of printed sources. Students will make verbal presentations to an intended audience on specific topics, listen to and respond to questions based on the presentations as well as responding and interacting appropriately to oral stimuli. Students will also write essays, letters, notes, reflective pieces, and articles of 100 to 250 words in reaction to a reading source.

The second year is a continuation of the Year One course. Emphasis will be on a more profound comprehension of cultural, historical and verbal aspects. Year two will also continue to deepen the student's ability to communicate using speaking, reading, listening and writing. Some specific literature and poetry from Hispanic authors will be presented. Students will interact through panel discussions, interviews, debates and oral presentations, which will continue to lean toward the conversational approach. Use of our school's technology will better integrate the oral, aural and written nuances of the language. Internal and external IB assessment will be taken at the end of the second year.

## Spanish IB Initio

### Introduction

The aim of this course is to introduce the student to a variety of situations likely to be encountered in everyday social situations, to be able to function efficiently in an alien environment and to be able to communicate effectively. The focus of the course is to be centered on language acquisition thus elementary contemporary grammar and vocabulary will be the central keystone. The course will include all four of the skills required i.e. listening, speaking, reading and writing. A further aim is to be able to communicate clearly and in situations encountered in both Spanish and Hispanic countries. Integral to this aspect will be to introduce the student to the multicultural nature of the language, including the increasing use of Spanish in countries, which are becoming more closely allied to Iberian and Hispanic culture. This will also be closely linked to increasing the students' knowledge in relation to those aspects of ethnocentrism, which are prevalent in non-Spanish speaking countries, relating specifically to multiculturalism.

### Content

The course will develop competence in Listening, Reading, Speaking and Writing in a range of registers. Students will learn these through the topics based around: the individual, education and work, town and services, food and drink, leisure and travel, the environment, health and emergencies.

## Assessment

The external assessment comprises two written papers. These include questions based on a number of texts and short writing tasks chosen from a choice of questions. These two papers make up 70% of the total marks. The oral component, making up the remaining 30% of the marks, is assessed internally and externally moderated. This is an individual oral based on a stimulus chosen by the candidate, plus an additional interactive oral activity.

### Group 3: Social Studies

This course is a combination of college level United States History and selected topics in both Latin American and Canadian History. The objective of this course is to examine the similarities and differences between these regions and ideally lead to an understanding of what historical events have occurred as well as why and how they took place. The course requires intensive reading and writing analysis. A variety of projects, simulations and extensive research work will be part of successful completion of the course. A study of historiography and history is a vital part of this class and communication of individual ideas through writing and speaking will be accordingly emphasized.

IB History of the Americas is one regional option in the Higher Level IB History Program. While there is a focus on the history of the US, that history is in the context of the history of the entire continent, including Canadian, Spanish, Portuguese and other European areas of Latin America, the Caribbean, and the US. The main idea of the course is to cover history in more depth, rather than a broad survey course of all history.

Internal and external assessments require a strong understanding of particular issues studied throughout the year and an ability to critically analyze events within the context of a global view.

### Group 4: Biology, ESS, Group 4 Project

#### Biology HL

The Biology HL IB program will consist of a two-year Biology course, which will include each of the topics that is generally covered in a first-year college or university course. The course is designed to allow the opportunity for a student to pursue the Biology field in a more in-depth manner than they previously have experienced. The course will include course work and laboratory experiences that will prepare them for the Higher Level IB Biology exam that they are required to take in May of the second year. The core curriculum includes both cellular and biochemical processes of living things, structure and function of animals and plants, genetics, human health and physiology, ecology, evolution and the optional Higher Level will include a further study of ecology and human physiology. Current events and problems on both the local and global level will be discussed and examined. Students will be expected to learn, inquire, understand, question, and apply these concepts of Biology. A Group 4 project is required (description can be seen below) and it is a student-driven laboratory design that will require an independent effort by the students. This course is student driven and requires ownership by the student to achieve their success. The course is designed to allow an opportunity for a unique pursuit of science knowledge in much greater depth than the student has experienced in prior science classes.

#### ESS IB Environmental Systems and Societies/AP Environmental Science - SL

The Environmental Systems and Societies course is an interdisciplinary course that uses a systems approach to intertwine concepts from group 3 (individuals and societies) with concepts from group 4 (experimental sciences). Students will be encouraged to use an open-minded approach to gaining knowledge in topic areas such as Earth systems and models, population studies, ecosystems, biodiversity, energy resources, pollution, global climate change and land and water use. Students will also explore their own relationship with the environment to develop reflective, informed personal responses to current, pressing environmental issues. Students will evaluate the scientific, ethical and socio-political aspects of environmental issues, and will come to appreciate the interrelationships between environmental systems and societies. The course will also include laboratory investigations for most topics. Students enrolling in IB ESS and/or AP ES should be comfortable with basic laboratory procedures. Students will have the ability to develop their inquiry and research skills through the laboratories as well as through participation in the group 4 project.

This course will be co-seated with AP Environmental Science. Students will have the option of taking the AP exam during May of the first year of the course. AP topics, and required AP laboratory hours, will be included during the first year of the course.

As part of the assessment for the course, students will participate in laboratories in class and will complete independent research. Students will also attend field trips to the Cornell Cooperative Extension Suislaw Model Forest and Hudson River Field Station to complete ongoing field research over the two year period. Students must also complete two exam papers in May of the second year of the course for the external assessment.

### *Group 4 Project*

The group 4 project is an interdisciplinary activity in which students from certain group 4 disciplines research and analyze a common problem. The project is a collaborative effort, and focuses on the process of a scientific investigation rather than the results, or products, of the research. The group 4 project consists of ten hours of work separated into three project stages: planning, action and evaluation. During the planning stage students collaborate to determine what topic will be investigated, and what activities will be completed during the investigation. In the action stage students work in groups to carry out the investigations decided upon in the planning stage. Groups then collaborate to share the results from their investigations. During the evaluation stage students share their findings with all other students working on the group 4 project. The format of the evaluation stage will be decided by the students during the planning stage, and may be a "science fair," a symposium, or a large group discussion.

The topic for the group 4 project may vary by each cohort and will be chosen by the students during the collaborative planning stage.

### Group 5: Math

#### Mathematical Studies—SL

*Prerequisites:* Successful completion of Algebra IA/Algebra IB or Algebra/Geometry

This course is a two-year program available at standard level (SL) only. It is intended for students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course need to be already equipped with fundamental skills and a rudimentary knowledge of basic processes. This course concentrates on mathematics that can be applied to contexts related as far as possible to other subjects being studied, to common real-world occurrences and to topics that relate to home, work and leisure situations. The course requires students to produce a project, a piece of written work based on personal research, guided and supervised by the teacher. The project provides an opportunity for students to carry out a mathematical investigation in the context of another course being studied, a hobby or interest of their choice using skills learned before and during the course. Students taking this course will utilize a TI-84 graphing calculator.

#### Mathematics—SL 1-4 (Two-year program)

*Prerequisites:* Successful completion of Algebra/Geometry or Algebra/Geometry/Algebra II & Trigonometry

This is a two-year program in mathematics that prepares the student for the IB Mathematics SL exam. This program is intended for students who already possess knowledge of basic mathematical concepts and who are equipped with the skills needed to apply mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as Chemistry, Economics, Psychology, and Business Administration.

The internally assessed component, the portfolio, offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and modeling. Students are provided with opportunities to take a considered approach to these activities and to explore different ways of approaching a problem. Students will be required to develop skills they need for communicating mathematical ideas. Students taking this course will utilize a TI-84 graphing calculator.

#### Mathematics HL 1-4

*Prerequisites:* Successful completion of Algebra/Geometry/Algebra II & Trigonometry

This is a two-year program in mathematics that prepares the student for the IB Mathematics HL exam. This program is intended for students with a good background in mathematics and strong ability in analytical and technical skills. The program is a demanding one, requiring students to study a broad range of mathematical topics to varying degrees of depth. Students should have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems. This program develops mathematical concepts in a comprehensible, coherent, and rigorous way. Development of each topic will feature justification and proof of results. The internally assessed component, the portfolio, offers students a framework for developing independence on their mathematical learning by engaging in mathematical investigation and modeling. Students are provided with opportunities to take a considered approach to these activities and to explore different ways of approaching a problem. Students will be required to develop skills they need for communicating mathematical ideas. Students taking this course will utilize a TI-84 graphing calculator.

## Group 6: Arts

### Music

Music provides insight into the individual and cultural identities of people and their communities. Through the study of music, we will investigate the lives and times of musicians who are distanced by geography and chronology. The variety and richness of global music invites all learners to maintain open-mindedness while exploring familiar and unfamiliar musical worlds. The International Baccalaureate (IB) program will foster discussion and comparison as students discover relationships and links from within and out of their own culture.

Students will perform, compose, analyze, critique, and reflect upon a variety of music throughout this two-year course. IB Music provides an outstanding foundation for further study in music at the college level in all music career pathways. It also provides a valuable and edifying academic course for those who may pursue alternate careers, but IB Music ultimately empowers students to become lifelong participants in the world of music.

All IB Assessment takes place in the second year:

- Listening Paper
- Musical Links Investigation
- Musical Performance/Composition (recital)

### Theatre

IB Theatre is a two-year course of study taken in the junior and senior years. This course will provide a diverse exploration of theatre in its many forms and encourage an appreciation for the richness of intercultural diversity reflected in theatrical traditions. Students will work both individually and as part of an ensemble to develop personal, academic, aesthetic, and practical theatre skills.

The following topics will be covered: Theatre in the Making/Production, Theatre in Performance, and Theatre in the World. Students are expected to record all activities and experiences in a journal, a key component and source for the assessment process.

Criteria based assessment takes place in the second year of study:

- External Assessment
  - Research Investigation
  - Practical Performance Proposal
- Internal Assessment (IBO moderated)
  - Theatre Performance and Production Presentation
  - Independent Project and Portfolio

# Notes for Personal Planning

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# **Notes for Personal Planning**

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