



YONKERS PUBLIC SCHOOLS

2007-2008 COURSE CATALOG FOR HIGH SCHOOLS

This document assists students and parents/guardians in making decisions about the courses high school students will take next year. The catalog provides descriptions of the courses offered in the high schools, by content area and school program. The courses are standards-based and designed for success on state assessments.

The following information can be found in this document:

- Counseling Programs
- Career and College Planning and Preparation
- Graduation and Diploma Requirements
- Special Education and Bilingual Services
- Honors Level Programs
- School Environmental Science Programs

In order to make informed decisions about academic choices, students should review the information contained in this catalog with parents/guardians, teachers, school counselors and administrators. Additional information about academic programs or career choices can be obtained at the high schools.

Gorton High School: 376-8350
School Counseling Office: 376-8360

Lincoln High School: 376-8400
School Counseling Office: 376-8380

Riverside High School for Engineering and Design: 376-8425
School Counseling Office: 376-8469

Roosevelt High School: 376-8500
School Counseling Office: 376-8510

Saunders Trades and Technical High School: 376-8150
School Counseling Office: 376-8145

Yonkers International Baccalaureate High School: 376-8191
School Counseling Office: 376-8191, 8247

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HIGH SCHOOLS COURSE INFORMATION

The Secondary School Counseling Program

School counseling has long been established as an integral part of the total educational program. The School Counseling Department, in cooperation with the efforts of students, parents, teachers and administrators, assists students in developing their full potential and to achieve self-direction by providing school counseling services in educational/ career development, personal and social areas.

The counseling program at the secondary level provides a number of activities. Some of these include career life planning, dissemination of educational and career development information, student programming and maintenance of student records. In addition, the program provides for the coordination of services with a wide range of community agencies for students who are in need of, or could benefit from specialized services.

Career and College Planning

School Counseling offices provide students with interest inventories to assist them in exploring career options. Interest inventories may vary from school to school but provide students with similar foundations. The Armed Services Vocational Aptitude Battery (ASVAB) is administered in the district to those students who choose to take this assessment. Various websites on career development, job sites, scholarships, and financial aid provide a myriad of information to all students via the use of the Internet.

A. Recommended Preparation For Two-Year or Four-Year College:

1. College Degree
 - Regents level mathematics - 3 credits
 - Regents level science - 3 credits
 - Foreign Language course - 3 credits
 - fourth level of above strongly recommended

3. Other determining factors:
 - grade point average and class rank
 - SAT Reasoning/ACT Test
 - SAT Subject Test
 - extra-curricular activities and community involvement
 - attendance
 - recommendations from faculty members
 - Honors level course work
 - College-link courses
 - A.P./I.B. course work

B. College Admissions Tests:

1. PSAT/NMSQT (Preliminary Scholastic Assessment Test/National Merit Scholarship Qualifying Test)
 - used as a practice SAT
 - used for National Merit Scholarship selection
 - administered in grades 10 and 11

2. SAT Reasoning Test *
 - contains writing, mathematics, and critical reading sections
 - should be taken in grade 11 (spring) and again in grade 12 (fall)
 - information available at www.collegeboard.com

3. SAT Subject Test *
 - measures knowledge in a subject area (e.g., Chemistry, Literature, Foreign Language)
 - *should be taken immediately upon the completion of a particular subject or as close to the completion of that subject as possible*
 - these tests are required by many competitive colleges and universities
 - information is available at www.collegeboard.com
4. ACT (American College Tests)
 - college entrance examination
 - contains English, mathematics, reading, and science
 - should be taken in grade 11 (spring) and again in grade 12 (fall)
 - information available at www.act.org
5. TOEFL (Test of English as a Foreign Language)
 - college admissions examination is required to evaluate the English proficiency of students for whom English is not their native language
 - should be taken in grade 11 (spring) to evaluate English proficiency for colleges and universities whose instruction is in English. Recommended for ESOL students
 - information is available at www.toefl.org

RESOURCES FOR CAREER AND COLLEGE PLANNING

Those students planning to pursue careers in business, industry, skilled trades, and civil service may consider training programs ranging from an apprenticeship with a union to one and two-year programs at both state and private schools. A good reference for occupations is the “Career Zone” and in “My Roads.” College guides which cover both private and public colleges should also be consulted. These references, along with many other career and college materials, are available in the guidance office.

While in high school, all students should consider courses in the occupational/vocational areas and the offerings in technology, business, art and music, as outlined in this guide. Many of our graduates who take specific career and technical programs while in high school are able to demonstrate skills which employers need and want. Such individuals enter the world of work or the military upon completion of high school.

Individual and group counseling, combined with workshops on careers offered by the School Counseling Department and specialized Community Groups, can be most helpful in career and college planning. Students and parents/guardians are urged to avail themselves of these opportunities.

CREDIT GUIDELINES FOR PROMOTION

- 4 credits must be earned upon the completion of 9th grade (**must include English and Social Studies**)
- 10 credits must be earned upon the completion of 10th grade
- 15 credits must be earned upon the completion of 11th grade

Students who have not earned sufficient credits will be retained in their respective grade levels.

DIPLOMA REQUIREMENTS

Regents Diploma

English	4 Credits
Social Studies	4 Credits
Math	3 Credits
Science	3 Credits
Physical Education	2 Credits
Art or Music	1 Credit
Health	½ Credit
LOTE (Foreign Language)	1 Credit
Electives	3½ Credits
Total =	22 Credits

Must Pass the Following:

- English Regents
- Math Regents
- Global History Regents
- U.S. History Regents
- Science and Lab Regents

Regents Diploma With Advanced Designation

English	4 Credits
Social Studies	4 Credits
Math	3 Credits
Science	3 Credits
Physical Education	2 Credits
Art or Music	1 Credit
Health	½ Credit
LOTE (Foreign Language)	3 Credits
Electives	1½ Credits
Total =	22 Credits

Must Pass the Following:

- English Regents
- Math Regents
- 2nd Math Regents
- Global History Regents
- U.S. History Regents
- Science and Lab Regents
- 2nd Science and Lab Regents
- Foreign Language Regents

Graduation/Diploma Requirements:

- A total of 22 credits are required to graduate. **Students who attend Saunders High School or the International Baccalaureate Programme at Yonkers High School, have additional graduation requirements, see the individual high school section for details.**
- A student identified as having an educational disability may be excused from the Language Other Than English (L.O.T.E.) requirement if such student's Individualized Educational Plan (IEP) indicates that such requirements are not appropriate for the student's special educational needs.

**NEW YORK STATE EDUCATION DEPARTMENT
DIPLOMA REQUIREMENTS
BASED ON JUNE 2005 BOARD OF REGENTS ACTION TO PHASE IN**

THE 65 GRADUATION STANDARD ON REQUIRED REGENTS EXAMS

Entering Grade 9 (Freshman Class)	Local Diploma Requirements	Regents Diploma Requirements	Regents Diploma with Advanced Designation Requirements
2005 (Seniors - 9/2008) ¹ Class of 2009	Score 65 or above on 2 required Regents exams and score 55 or above on 3 required Regents exams. Earn 22 units of credit.	Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.
2006 (Juniors - 9/2008) ¹ Class of 2010	Score 65 or above on 3 required Regents exams and score 55 or above on 2 required Regents exams. Earn 22 units of credit.	Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.
2007 (Sophomores - 9/2008) ¹ Class of 2011	Score 65 or above on 4 required Regents exams and score 55 or above on 1 required Regents exam. Earn 22 units of credit.	Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.
2008 (Freshman - 9/2008) ¹ Class of 2012		Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.

Footnotes:

¹ Assumes students complete diploma requirements in four years.

² A local school district may provide students the option of using a score of 55-64 on one or more of the required Regents examinations for a local diploma.

- Note: The Regents Competency Test safety net for students with disabilities will continue to be available for students entering grade 9 prior to September 2010. Students using this safety net will receive a local diploma. The low-pass option of scoring between 55-64 on the required Regents exams to earn a local diploma will continue to be available for students with disabilities, without local option.
- Actions did not affect graduation requirements for students entering grade 9 prior to the fall of 2000. Sequence requirements were not affected by these actions.
- Students may opt for a Regents Diploma with an Advanced Designation in Career and Technical Education by passing local mastery exams in designated occupational education subjects.

INDIVIDUALIZED EDUCATIONAL PLAN (IEP) DIPLOMA

An IEP diploma is different from a local or Regents diploma in that it states that “...*the award is based on the student's successful achievement of the educational goals specified in the student's current Individualized Educational Program as recommended by the Committee on Special Education.*”

A student with a disability may be awarded an IEP diploma provided that:

1. He/she has met the educational goals of the IEP as determined by the CSE.
2. The student wishes to leave school after completing at least 12 years after kindergarten to be employed or receive outside vocational training.
3. The student will not receive a local or Regents diploma because of lack of credits and/or not passing the RCT requirements.
4. The student and parent have received written assurances that the candidate for an IEP diploma can continue to be eligible to attend school until the age of 21 or until they received the IEP diploma.
5. Once a student receives an IEP Diploma, he or she is not eligible to return to one of our high schools.
6. The student has achieved the age of 21 and has met the goals of the IEP during the school year in which the diploma is to be awarded.

STANDARDIZED TESTING PROGRAMS

Listed below are some of the standardized tests that students may need to take during high school depending upon their post-high school plans. The Counseling staff is available to discuss individual requirements.

Examination Name	Type of Examination	Who Should Take It	When Given	Where
PSAT	The Preliminary Scholastic Assessment Test (PSAT) is a practice exam for the SAT and also the qualifying exam for the National Merit Scholarship for juniors.	All Sophomores and Juniors.	October	High Schools
SAT Reasoning Test	The Scholastic Assessment Test (SAT) is a 3¾ hour exam and a required part of a student's application for admission to most colleges and universities. The test consists of verbal, writing and math sections. Students receive a score between 200-800 on each section, for a maximum score of 2400.	Juniors/Seniors planning to attend college. <i>Note: Pre-registration and a testing fee are required. Registration materials are available in the School Counseling Office. Students send applications directly to the College Board.</i>	October November December January April May June	Test centers as determined by The College Board.
SAT Subject Tests	One-hour subject tests in eighteen (18) specific areas (i.e., math, science, history, etc.). Many of the more competitive colleges and universities require one or more SAT-II tests for admission.	Students planning to attend competitive four-year colleges. <i>Note: Pre-registration and a testing fee are required. Registration materials are available in the School Counseling Office. Students send applications directly to the College Board.</i>	October November December January May June	Test centers as determined by The College Board.
ACT	The American College Test (ACT) is a 2½ hour test with four (4) sections - English, mathematics, reading, and science reasoning. Students receive a score of 1-36 for each exam and a composite score. Like the SAT, this exam is often a required part of a student's college admission application. The ACT is also offered with a Writing Section, which is highly recommended.	Sophomores, Juniors, and Seniors planning to attend college. <i>Note: Pre-registration and a testing fee are required. Registration materials are available in the School Counseling Office. Students send applications directly to ACT.</i>	October December April June	Test centers as determined by The College Board.
AP	Advanced Placement Examinations - These exams offered and graded by the Educational Testing Service at Princeton are challenging exams designed to evaluate a student's level of achievement in course work designed by ETS and college professors. Yonkers offers students the opportunity to take these exams and encourages students who plan to attend selective colleges to participate in the A.P. program.	Juniors and Seniors planning to attend college. <i>Note: Pre-registration and a testing fee are required. Registration materials are distributed in each A.P. class and in the School Counseling Office. Fee waivers are available to qualified students.</i>	May	Test centers determined by High Schools.
IB	The International Baccalaureate Diploma Examinations. These exams offered and graded by the International Baccalaureate Organization (IBO) are challenging exams designed to evaluate a student's level of achievement in course work designed by IBO. Yonkers High School offers students the opportunity to take these exams and encourages students who plan to attend selective colleges to participate in the I.B. program.	Juniors and Seniors planning to attend college. <i>Note: Pre-registration and a testing fee are required. Registration materials are distributed in each IB class. Fee waivers are available to qualified students.</i>	May	Yonkers High School only.
REGENTS	These are New York State comprehensive examinations in various subject areas prepared by a selected committee of educators and administered to students in Regents courses.	All high school students.	January June August	High Schools
TOEFL	Test of English as a Foreign Language. College admissions examination is required to evaluate the English proficiency of students for whom English is not their native language.	Should be taken in grade 11 (spring) to evaluate English proficiency for colleges and universities whose instruction is in English. Recommended for ESOL students	spring	High Schools

TESTING PROGRAM

At the high school, the testing program is coordinated by the Guidance Department and school administration.

GRADE	TEST	DATES
9	New York State Regents Exams (RCT if applicable) SUPERA (Bilingual students only) New York State English as a Second Language Achievement Test (NYSESLAT) Lab R - New entrants, ELL School-wide Exams	January/ June Spring Spring Ongoing January/ June
10	New York State Regents Exams (RCT if applicable) SUPERA (Bilingual students only) New York State English as a Second Language Achievement Test (NYSESLAT) Lab R - New entrants, ELL School-wide Exams Preliminary Scholastic Assessment Test (PSAT) Scholastic Assessment Testing (SAT) Subject Tests (selective) AP	January/ June Spring Spring Ongoing January/ June October May/ June
11	New York State Regents Exams (RCT if applicable) New York State English as a Second Language Achievement Test (NYSESLAT) Lab R - New entrants, ELL School-wide Exams Preliminary Scholastic Assessment Test (PSAT) Scholastic Assessment Test (SAT) Reasoning(selective) Scholastic Assessment Test (SAT) Subject Tests (selective) Advanced Placement Exams (AP) International Baccalaureate Exams (IB) (Yonkers High School only)	January/ June Spring Ongoing January/ June October March/ May/ June May/ June May May
12	New York State Regents Exams (RCT if applicable) New York State English as a Second Language Achievement Test (NYSESLAT) Lab R - New entrants, ELL School-wide Exams Scholastic Assessment Test (SAT) Reasoning(selective) Scholastic Assessment Test (SAT) Subject Tests (selective) Advanced Placement Exams (AP) International Baccalaureate Exams (IB) (Yonkers High School only)	January/ June Spring Ongoing January/ June November/ December November/ December May May
Secondary	New York State Alternative Assessment (Portfolio Assessment)	Scored in April

Registration for Preliminary Scholastic Assessment Test, National Merit Qualifying Test, College Board Exams, Scholastic Assessment Tests, SAT Subject Tests, and the ACT are assisted by Guidance Office and publicized through student announcements prior to the test dates. For many tests, “electronic” registration is encouraged.

NOTE: Not all Regents exams are offered in January or August. Not all SAT Reasoning and SAT Subject tests are offered on all dates. SAT Reasoning and SAT Subject scores are not part of a student’s permanent record/ transcript. They must be reported to colleges by the student.

HONORS PROGRAM

CENTURY HONORS

The Century Honors program is offered at Gorton, Lincoln, Riverside, Roosevelt, and Saunders High Schools. Students attend honors classes in each academic discipline and are expected to take Advanced Placement and college-link courses. At the same time, they are enrolled in the program of their choice. These programs prepare students for entrance into college.

Applicants are required to take an entrance examination, provide teacher recommendations, recent report card and standardized test results.

INTERNATIONAL BACCALAUREATE PROGRAMME

The International Baccalaureate Diploma Programme is offered at Yonkers High School. It provides highly motivated college-bound students with an opportunity to pursue a rich liberal arts curriculum, as well as a foundation for all instruction to prepare them to meet the requirements for courses in a variety of subjects. College credit may be granted by individual colleges and universities depending upon the student's performance on the I.B. examinations.

Students are required to sit for the I.B. exams in the I.B. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

I.B. students are evaluated for admission based on the following criteria:

- **balloting**
- **a student's academic record, including grades of "B+" in the five (5) academic areas (Math, Science, Social Studies, English and Foreign Language)**
- **standardized test scores in reading, language arts and mathematics**

ADVANCED PLACEMENT PROGRAM

The Advanced Placement (AP) courses offered at Gorton, Lincoln, Riverside, Roosevelt and Saunders High Schools are a part of the national program of college level courses and examinations administered by the College Board. The cost for each A.P. examination varies from year to year. College credit may be granted by individual colleges and universities depending upon the student's performance on the A.P. examinations.

Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

COLLEGE-LEVEL COURSES

College-level courses are taught in our high schools. College credit is granted by the college upon the successful completion of the course. Students pay a registration fee and/or reduced tuition to the college at the beginning of each semester only if they wish to secure college credit. Students may ask for a transfer of these credits to other colleges. It is the student's responsibility to research which colleges accept such transfer credits.

Admission into these courses is based on:

- an evaluation of standardized test scores
- past grades in that subject area, if applicable
- teacher recommendation

Students who are enrolled in advanced college level courses that are not offered by the district will be awarded one (1) Carnegie credit for each course successfully completed. Non-academic specialty courses will not be considered in this category. The advanced course will be ranked as an Advanced Placement course.

Students who are taking college level courses in place of a high school requirement will receive one (1) Carnegie credit upon successful completion of the course. However, the ranking of the course will remain at the 1.1 rating. The college level course will be placed on the permanent transcript in place of the required high school course during the semester earned.

EXPLANATION OF TERMS

Study these terms carefully before selecting courses listed on the following pages:

- | | |
|-----------------|---|
| Co-requisite | course which must be taken at the same time as another course |
| Core Subjects | include English, social studies, science and mathematics courses |
| Elective Course | course which may be selected in addition to New York State mandated subjects and graduation requirements |
| Prerequisite | course which must be successfully completed before the next level course of the same subject area may be selected |

WEIGHTING OF GRADES

High School course grades will be weighted as follows for the purpose of determining the Grade Point Average and Rank in Class: For students entering grade 9 in 2003 and thereafter

- | | |
|---|------|
| • Honors Courses and Pre-IB Courses | 1.05 |
| • College-link and Advanced College-Level Courses | 1.1 |
| • A.P. / I.B. Courses | 1.1 |
| • <i>All other courses</i> | 1.0 |

HONOR ROLLS

There are three Honor Rolls in each High School. The Honor Rolls are based upon grades received in each marking period according to the following criteria: N.M. (no mark) does not disqualify a student if all other criteria are met.

- **PRINCIPAL'S HONOR ROLL:** A student must achieve a grade of 90 or higher in all subjects being taken during the marking period, including Physical Education.
- **HIGH HONOR ROLL:** A student must achieve a cumulative average of 90 or higher during the marking period in all course work.
- **HONOR ROLL:** A student must achieve a cumulative average of 85 or higher during the marking period, in all course work.

NOTE: STUDENTS ARE DISQUALIFIED FROM ALL HONOR ROLLS IF:

- A student fails any subject, including Physical Education, during the marking period.
- A student receives an Incomplete grade (INC) in any subject, including Physical Education, during the marking period for which the Honor Roll is being determined. However, once the Incomplete has been made up, the student can be placed on the appropriate Honor Roll retroactively, if qualified.
- A student receives a No Credit grade (NC) in any subject, including Physical Education, during the marking period for which the Honor Roll is being determined.

Comprehensive Alternative Reform Educational Program Twilight High School Program

The Comprehensive Alternative Reform Educational Program provides a non-traditional educational setting for students seeking credits to earn a high school diploma. The goal is to improve the students' overall academic performance and address those barriers that hinder their achievement. C.A.R.E.'s philosophy is one of empowerment which requires the students to recognize their individual strengths, skills, and talents, thereby fostering students' sense of work and direction.

C.A.R.E. is an alternative approach to education through which students can obtain credits towards their high school diploma. Students are encouraged to enroll in the program if they feel they can benefit from a change in the location and time of the day they attend school. The major thrust of this program focuses on students who are not meeting graduation requirements in their regular school. *High school students may take courses to remediate or accelerate their academic progress.*

Courses offered include but may not be limited to:

- English 9, 10 11 and 12 (ENG001, ENG202, ENG302, ENG408)
- Global History 9 & 10 (SST001, SST202); United States History (SST302), Economics/ Preparation in Government (SST401)
- Earth Science (SCI102 & SCI103), Living Environment (SCI202 & SCI203), Chemistry (SCI301 & SCI302)
- Mathematics A2 (MTH210), Algebra Part 1 (MTH151)
- Spanish Beginners and Advanced (FLG103 & FLG203)
- Studio in Art (ART201)
- Physical Education (PED100, PED200), Health (HTH101)
- Advanced Placement Psychology (SST501)

The program operates from 4:00 p.m. to 8:30 p.m. weekdays. For further information contact (914) 376-8648.

ENGLISH LANGUAGE ARTS COURSE OFFERINGS

- 4 credits required for graduation
- Regents Examination
- Skills and S.A.T. Prep course credit can only be used beyond the mandated credits

ENG102 **Reading and Writing Skills**; (part-time); Grades 9, 10 ; ½ Credit

ENG103 **Reading and Writing Skills**; (part-time); Grades 11, 12; ½ Credit

YEG102 **Reading and Writing Skills**; (part-time); Grades 9-12; ½ Credit (as stated on IEP)

These courses are designed to assist students in building their reading comprehension, vocabulary and writing skills. Emphasis is placed on language development, writing for different purposes and audiences and practicing for state-mandated Regents Comprehensive Examination in English.

ENG001 **English 9**; Grade 9; 1 Credit

ENG104 **English 9**; Grades 9-12; 1 Credit

YEG104 **English 9**; Grades 9-12; 1 Credit (as stated on IEP)

These courses are designed to develop students' sensitivity to diverse social, historical and cultural dimensions of literature. The study of literature includes novels, short stories, plays, poems and a special unit on *Romeo and Juliet* by William Shakespeare. Students' writing skills are developed as they write responses to literature, character sketches, letters, reports, interviews, and stories.

ENG105 **Century Honors English 9**; Grade 9; 1 Credit

This course is designed to expand students' ability to analyze the diverse social, historical and cultural dimensions of literature. A wide range of literature is studied including novels, short stories, plays, poems and a special unit in Shakespearean Literature. Students write responses to literature, character sketches, reports, letters, compositions, and participate in both oral and written enrichment projects.

ENG202 **English 10**; Grades 10-12; 1 Credit

YEG202 **English 10**; Grades 10-12; 1 Credit (as stated on IEP)

These courses are designed to build students' skills in reading, writing, listening and speaking for varied purposes: to express self, to narrate, to describe, to persuade, to analyze and evaluate. Students learn to interpret literature and to respond personally and aesthetically to a variety of genres: novels, plays, short stories, poems and essays.

ENG203 **Century Honors English 10**; Grade 10; 1 Credit

This course is designed to enhance students' appreciation and understanding of both classic and contemporary works. Enrichment units in poetry, short story, public speaking and research techniques are included. Stress is also placed on building students' writing skills, style, and self-evaluation techniques. A formal research paper is required.

ENG302 **English 11**; Grades 11, 12; 1 Credit

YEG302 **English 11**; Grades 11, 12; 1 Credit (as stated on IEP)

These courses are designed to build students' competence in reading and writing for critical analysis and evaluation. Students learn to write formal essays as well as descriptive, informational, narrative and argumentative compositions. Strategies for developing vocabulary, spelling, and analytical reading are taught. The study of literature includes major American authors and covers a wide variety of novels, plays, poems, short stories, and essays, in addition to a Shakespearean tragedy. Students must pass the Regents Comprehensive Examination in English at the completion of the mandated course of study. A formal persuasive research paper is required.

ENG303 **Century Honors English 11**; Grade 11; 1 Credit

This course is designed to build students' skills in analysis, synthesis and evaluation. Students learn to write formal essays, as well as descriptive, narrative and argumentative compositions. The study of literature includes major American authors and covers a wide variety of novels, plays, short stories, essays, as well as a Shakespearean tragedy and enrichment projects. All students must pass the Regents Comprehensive Examination in English at the completion of the mandated course of study. A formal research paper is required.

ENG304 **A.P. English Language**; Grades 11, 12; 1 Credit

This course is intended to provide high school students who are interested in studying and writing various kinds of analytic or persuasive essays on non-literary topics with a college level English option in language, rhetoric and expository writing. In addition to the eleventh grade curriculum, readings will emphasize non-fiction. A formal persuasive research paper and numerous essays are required. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

ENG401 **Contemporary English 12**; Grade 12; 1 Credit (for students who need to take English Regents)

In addition to covering the curriculum of Comprehensive English 12 (ENG408), students will prepare for the English Regents Examination in January. Writing is integrated with the literature, and writing tasks are designed to parallel the four Regents essay tasks. Students in this course will meet all requirements of Comprehensive English 12, including a full-length research paper.

ENG408 **Comprehensive English 12**; Grade 12; 1 Credit

YEG408 **Comprehensive English 12**; Grade 12; 1 Credit (as stated on IEP)

These courses are designed to develop students' critical thinking, communications skills, and lifelong learning habits. The study of literature centers on British, American and global authors. Students read novels, plays, short stories, poems and non-fiction, as well as a major Shakespearean play. Writing is integrated with the literature and a full-length research paper is required.

ENG405 **Century Honors English 12**; Grade 12; 1 Credit

This course is for Century Honors students to further their critical and analytical reading, writing, and thinking skills. There is an emphasis on world and British classics. Formal research papers on literary topics will be required. Students will be prepared for college level writing and literature courses. A formal research paper is required.

ENG400 **A.P. English Literature**; Grades 11, 12; 1 Credit (Prerequisite ENG302 or ENG303)

This course is designed to involve students in intensive reading of many of the classic works of literature with emphasis on interpretation and literary criticism. Formal research papers will be required as well as essays and group discussions. Students who pass the Advanced Placement exam may be eligible to receive college credit. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

ENG406 **Creative Writing / Journalism**; Grades 11, 12; 1 Credit

This course is designed to involve students in intensive writing both for publication and for pleasure. Students will develop style and voice, experiment with creative techniques, and write short stories, poems, plays, and essays. Students may assist in the production of a literary magazine or the publication of a school newspaper.

ENG407 **Research Writing**; Grade 12; 1 Credit (Prerequisite must have passed English Regents)

This course is designed to teach students the skills of gathering research, analyzing data and proving a thesis. This course may be taken in lieu of Comprehensive English 12 (ENG408).

ENG409 Modern Drama: Literature in Action; Grade 12; 1 Credit

This course is designed to develop an appreciation and in-depth understanding of drama as a genre and an art form. Students will analyze the genre through a bodily kinesthetic approach using the stage as a medium for studying literature. This course is also designed to enhance communication skills through exercises in body language, eye contact, diction, and voice projection. This course may be taken in lieu of Comprehensive English 12 (ENG408).

ENG410 Composition and Literature; Grade 12; College Link; 1 Credit (Departmental approval.)

Composition and Literature is a reading and writing course. Readings may come from all forms of literature with emphasis on active exploration of published and student texts. Students will write essays, which demonstrate their ability to articulate personal response, to draw inferences, to synthesize, and to express informed opinion. Research and its proper documentation will be included in this process.

ENG411 Multicultural Perspectives in American Literature; Grade 12; 1 Credit

This course will intensely examine a variety of cultures such as Latino, African-American and Asian perspectives in American literature of the 21st century. Students will read and analyze novels, dramas, short stories, poetry, and non-fictional excerpts of modern American minority writers, in order to understand their concerns, struggles and accomplishments. Emphasis is placed on reading, critical thinking and effective listening skills. Students will produce a year-long writing portfolio. A research paper is also required. This course may be taken in lieu of Comprehensive English 12 (ENG408).

ENG412 Public Speaking; Grade 12; ½ Credit

This course is designed to enhance communication skills through exercises in body language, eye contact, diction, and voice projection.

ENG420 Principles of Writing; Grade 12, 1 Credit (College-link, Departmental Approval)

This college-link course with Lehman College involves a study of different writing genres including narrative, expository and persuasive. Students will study the different writing styles and create original pieces within the three genres. Emphasis will be on grammar and writing style.

ENG421 The Experience of Literature; Grade 12, 1 Credit (College-link, Departmental Approval)

This college-link course with Lehman College will explore three different literary genres: poetry, prose, drama. Students will read representations from the three genres and group discussions will ensure. There will be several graded written assignments.

ENG422 Public Speaking/ Computer Communications; Grade 12; 1 Credit (College link)

This course is designed to enhance communication skills through exercises in body language, eye contact, diction, and voice projection.

ENG500 Syracuse University Project Advance (S.U.P.A.) English; Grade 12; 1 Credit (Prerequisite ENG301 or ENG 302 and 80 or better on English Regents.)

Unique college link consisting of two semester courses resulting in six(6) college credits of freshman English.

SEMESTER I

Writing Studio I: Practices of Academic Writing

Designed to engage students in the ways people in the academy read and write; to introduce students to literary practices of a university. Writing, in this course, is a way of encouraging active intellectual engagement.

SEMESTER II

Narratives of Culture: Introduction to Issues in Critical Reading

This is a theory inflected, reading intensive writing course, designed to introduce students to contemporary literacy and cultural theory. Students then use theory to understand a variety of texts, both verbal and non-verbal.

SAT300 **S.A.T. English Prep**; Grades 10-12; ½ Credit

This course prepares students for the Scholastic Assessment Test of verbal ability. An extensive review is given in vocabulary building, analogies, sentence completions, and critical reading. It is also used for New York State Regents Scholarship selection and should be taken in preparation for this examination.

SOCIAL STUDIES COURSE OFFERINGS

- 4 Credits required for graduation
- 2 Regents Examinations required for graduation

SST001 **Global History/Geography 9**; Grade 9; 1 Credit

SST101 **Global History/Geography 9**; Grade 9; 1 Credit

YST101 **Global History/Geography 9**; Grade 9; 1 Credit (as stated on IEP)

ESB111 **Global History/Geography 9**; (Roosevelt only); Grade 9; 1 Credit (for Bilingual Education students)

These courses are designed as the first parts of a two-year sequence. They will focus on the five (5) social studies standards, common themes that recur across time and place, and historical eras. These courses present a chronological history of the world beginning with the Ancient World and concluding with the Age of Absolutism.

SST102 **Century Honors Global History/Geography 9**; Grade 9; 1 Credit

This course is designed as the first part of a two-year sequence. The course will focus on the five (5) social studies standards, common themes that recur across time and place and historical eras and present a chronological history of the world beginning with the Ancient World and concluding with the Age of Absolutism. *Special enhancement activities utilizing intellectual thinking, creative writing, and research will be implemented.*

SST103 **Century Honors World History**; Grade 9, 1 Credit

This course is the first half of a two-year experience designed to develop a greater understanding of the evolution of global processes and contacts, and interaction with various types of human societies. This half of the course centers on developing a global perspective on connections between the emergence of early complex societies of the ancient world to the effects of trade interactions in 1500 C. E. and the interdependent world of contemporary times. Upon completion of the second half of this course, students must take the Advanced Placement Examination in May, as well as, the New York State Global History and Geography Regents in June.

SST202 **Global History/Geography 10**; Grades 10-12; 1 Credit

YST202 **Global History/Geography 10**; Grades 10-12; 1 Credit (as stated on IEP)

ESB221 **Global History/Geography 10**; Grades 10-12; 1 Credit (for Bilingual Education students)

These courses are designed as the second part of a full, two-year sequence. They will focus on the five (5) social studies standards, common themes that recur across time and place, and historical eras. These courses present a chronological history of the world beginning with the Age of Political Revolutions and concluding with contemporary events in the 21st century. All students must pass the Global History/Geography Regents at the completion of the mandated course of study as a graduation requirement.

SST203 **Century Honors Global History/Geography 10** Grade 10; 1 Credit

This course is designed as the second part of a full, two-year sequence. It will focus on the five (5) social studies standards, common themes that recur across time and place, and historical eras and present a chronological history of the world beginning with the Age of Absolutism and concluding with contemporary events in the 21st century. All students must pass the Global History/Geography Regents at the completion of the mandated course of study, as a graduation requirement. *Special enhancement activities utilizing intellectual thinking, creative writing and research will be implemented.*

SST410 **A.P. World History**; Grades 10-12; 1 Credit (Prerequisite SST103)

The A.P. World History course is designed to develop a greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course focus is primarily on the past thousand years of global experience but builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage prior to 1000 A.D. Along with the A.P. Examination in May, students must take the New York State Global History and Geography Regents in June. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SST302 **U.S. History/Government**; Grades 11, 12; 1 Credit

YST302 **U.S. History/Government**; Grades 11, 12; 1 Credit (as stated on IEP)

ESB321 **U.S. History/Government**; Grades 11, 12; 1 Credit (for Bilingual Education students)

IST205 **U.S. History/Government**; (Roosevelt only); Grades 11, 12; 1 Credit

These courses are designed to provide students with an in-depth study of United States history from the pre-Civil War period to the present. Major themes include constitutional issues, civic values in democracy, the development of the American economic system and the global interaction between the United States and the world. At the end of the mandated course of study, students are required to take and pass the Regents Examination as a graduation requirement.

SST303 **Century Honors U.S. History/Government**; Grade 11; 1 Credit

This course is designed to provide students with an in-depth study of United States history from the pre-Civil War period to the present. Major themes include constitutional issues, civic values in democracy, the development of the American system and the global interaction between the United States and the world. *Special enhancement activities utilizing intellectual thinking, creative writing and research will be implemented. At the end of the mandated course of study, students are required to take and pass the Regents Examination as a graduation requirement.*

SST304 **A.P. United States History**; Grades 11, 12; 1 Credit

This course is designed to provide college level instruction on the following topics: the American Revolution, the Constitution, the Jacksonian Era, Sectionalism, the Civil War and Reconstruction, the Populist and Progressive Eras, the Great Depression and New Deal and International Affairs. Students are required to take the Advanced Placement examination in May as well as the United States History/ Government Regents in June. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SST401 **Economics/Participation in Government**; Grade 12; 1 Credit

YST401 **Economics/Participation in Government**; Grade 12; 1 Credit (as stated on IEP)

ESB411 **Economics/Participation in Government**; (Roosevelt only); Grade 12; 1 Credit (Bilingual Education students)

IST301 **Economics/Participation in Government**; (Roosevelt only); Grades 9-12; 1 Credit

SST402 **Century Honors Economics/Participation in Government**; Grade 12; 1 Credit

These courses are designed to provide students with an in-depth study of economic/civic concepts and principles which will develop their skills for participating in a democratic society. These courses must be passed to meet the 4-credit graduation requirement in Social Studies.

SST403 **Economics/Participation in Government (Junior Achievement)**; Grade 12; 1 Credit

This course is designed to provide students with fundamental economic/government themes and concepts. The major focus of this course will be on the operation of private enterprise within the format of principles/practices of the Junior Achievement program and will address the knowledge, skills, and attitudes which are necessary to ensure full participation in the political processes of local, state, national, and global levels.

SST404 **Economics/Participation in Government (NFTE)**; Grade 12; 1 Credit

YST404 **Economics/Participation in Government (NFTE)**; Grade 12; 1 Credit

This course is designed to provide students with fundamental economic/government themes and concepts. The major focus of this course will be on the operation of private enterprise within the format of principles/practices of the NFTE program and will address the knowledge, skills, and attitudes which are necessary to ensure full participation in the political processes of local, state, national, and global levels.

SST416 **Economics/ Participation in Government**; Grade 12; 1 Credit (College-Link, Departmental approval.)

This course is designed as a three (3)-credit college course offered through Mercy College. Students will learn macroeconomics as well as personal finance, stock market and wealth preservation. This part of the course is designed to provide students with a familiarity of how government works, knowledge of other governments, and the understanding of what their role in government is and how to become actively involved.

SST406 **Cultural Studies**; Grades 11, 12; department approval; 1 Credit

This course is designed to provide students with a broad overview of the contributions, achievements, as well as the trials and tribulations of the many ethnic groups that came to America, (i.e., African Americans, Irish Americans, Jewish Americans, Hispanic Americans, Italian Americans, Near & Far Eastern Americans).

SST412 **Constitutional Law**; Grade 12 (Saunders only); College-link; 1 Credit

A study of the nature of United States federalism, the structure and work of the national government, the executive branch, the Congress, with emphasis on its committee system and executive-legislative relationship; the federal judiciary with reference to appropriate constitutional cases and the departments and administrative establishment.

SST411 **A.P. United States Government and Politics**; Grades 11, 12; 1 Credit

This A.P. course in U.S. Government and Politics will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SST413 **A.P. European History**; Grades 11, 12; 1 Credit (Prerequisite Global History 9 and 10)

The study of European History since 1450 A.D. introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, goals of the course are to develop a) an understanding of some of the principal themes on modern European History, b) an ability to analyze historical evidence and historical interpretation, and c) an ability to express historical understanding in writing. Summer assignments are required. Students taking this course are required to take the Advanced Placement Examination.

SST415 **A.P. Comparative Government and Politics**; Grade 12; 1 Credit

A well-designed A.P. course in Comparative Government and Politics will provide students with the conceptual tools necessary to develop and understanding of some of the world's diverse political structures and practices. The course should encompass the study of both specific countries and their governments and general concepts used to interpret the political relationships and institutions found in virtually all national policies. Great Britain, France, China and Russia/ the former Soviet Union - are commonly covered because they provide a foundation for developing paradigms of different types of political systems. For the fifth country, teachers may choose to cover India, Mexico or Nigeria. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SST419 **A.P. Human Geography**; Grades 10-12, 1 Credit

The purpose of the A.P. course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SST409 **A.P. Micro-Economics**; Grade 12; 1 Credit

The purpose of an AP course in Micro-economics is to provide a thorough understanding of the principles of economics that apply to the functions of individual decision-makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

SST501 **A.P. Psychology**; Grade 12; 1 Credit

The A.P. Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and animals. A.P. Psychology introduces students to the discipline of psychology by emphasizing the history of psychology as a science, the different theoretical approaches that underlie explanations of behavior, and the many different fields within psychology. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. They also learn about ethics and methods psychologists use in their science and practice. The aim of this course is to provide the student with a learning experience equivalent to that obtained in most college introductory psychology courses. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SCIENCE COURSE OFFERINGS

- 3 credits required for graduation
- One (1) Regents Examination required for Regents Diploma
- Two (2) Regents Examinations required for Advanced Regents Diploma

SCI102 **Earth Science/Regents**; Grades 9-12; & SCI103; **Earth Science Lab**; Grades 9-12; 1 Credit

YSC102 **Earth Science/Regents**; Grades 9-12; & YSC103; **Earth Science Lab**; Grades 9-12; 1 Credit (as stated on IEP)

ESB113 **Earth Science/Regents**; Grades 9-12; 1 Credit & ESB114 **Earth Science Lab** Grades 9-12; 1 Credit (for Bilingual Education students)

These courses are based on the new Physical Setting/Earth Science curriculum. The courses are designed as a comprehensive program in earth science. The courses meet a minimum of seven (7) periods per week, including laboratory periods. Topics include earth's dimensions, minerals and rocks, the dynamic crust, earth's history, the atmosphere, water cycles, climates and the earth in space. All students who have completed all course and laboratory requirements take the Regents Science Assessment in Earth Science.

SCI104 **Century Honors Earth Science/Regents**; & SCI105 **Century Honors Earth Science Lab**; Grades 9-12; 1 Credit

YSC204 **Living Environment Skills (A)**; Grades 9-12, 1 Credit (as stated in IEP)

These courses are similar to Earth Science/Regents with unit topics studied in greater depth including extended projects and research.

SCI204 **Living Environment Skills (A)**; Grades 9-12; 1 Credit.

This course builds skills necessary for Living Environment Course; begins the curriculum.

SCI207 **Living Environment (B) + SCI208 Lab**; Grades 9-12; 1 Credit

YSC207 **Living Environment (B) + YSC208 Lab**; Grades 9-12, 1 Credit (as stated in IEP)

These courses follow the Living Environment core curriculum. A Regents is given in June. Must be preceded by SCI204.

SCI202 **Living Environment/Regents**; & SCI203 **Living Environment Lab**; Grades 9-12; 1 Credit

ESB207 **Living Environment/Regents**; & ESB208 **Living Environment Lab**; Grades 9-12; 1 Credit (for Bilingual Education students)

YSC202 **Living Environment/Regents**; & YSC203 **Living Environment Lab**; Grades 9-12; 1 Credit (as stated on IEP)

IST210 **Living Environment/Regents** & IST211 **Living Environment Lab**; Grades 9-12; 1 Credit

These courses are based on the new Living Environment Core Curriculum. The courses meet seven (7) periods a week, including the laboratory section. Topics include unity and diversity, reproduction and development, genetics, evolution and ecology. All students who have completed the course and laboratory requirements take the New York State Living Environment Regents.

SCI205 **Century Honors Living Environment/Regents**; Grades 9-12 & SCI206 **Century Honors Lab**; 1 Credit

This course is similar to the Living Environment/Regents with unit topics studied in greater depth including extended projects and research.

SCI301 **Chemistry/Regents**; & SCI302 **Chemistry Lab**; Grades 10-12; 1 Credit (Prerequisite 1 year Regents Science & 1 year Regents Math)

ESB313 **Chemistry/Regents**; & ESB314 **Chemistry Lab**; Grades 10-12; 1 Credit (Prerequisite 1 year Regents Science & 1 year Regents Math); (for Bilingual Education students)

YSC301 **Chemistry/Regents** & YSC302 **Chemistry Lab**; Grades 10-12; 1 Credit (Prerequisite 1 year Regents Science & 1 year Regents Math); (as stated on IEP)

These courses are based on the new *Physical Setting/ Chemistry Core Curriculum* from the New York State Education Department. The courses meet a minimum of seven (7) periods a week, including the laboratory section. Topics include matter, atomic structure, bonding, kinetics and organic chemistry. All students who have completed the courses and laboratory requirements take the new *Physical Setting/ Chemistry Regents* at the end of the course.

SCI306 **Century Honors Chemistry/Regents**; & SCI307 **Century Honors Chemistry Lab**; Grades 10, 11; 1 Credit

This course is similar to Chemistry/Regents with unit topics studied in greater depth including extended projects and research.

SCI401 **Physics/Regents**; & SCI402 **Physics Lab**; Grades 11, 12; 1 Credit (Prerequisite 2 years Regents Science, Regents Chemistry and Earth Science or Living Environment & 2 years Regents Math)

This course is based on the new *Physical Setting/Physics Core Curriculum* from the New York State Education Department. The course meets a minimum of seven (7) periods a week, including the laboratory section. Topics include mechanics, energy, electricity and magnetism, waves, and modern physics. All students who have complete the course and laboratory requirements take the new *Physical Setting/ Physics Regents* at the end of the year.

SCI404 **Century Honors Physics/Regents**; & SCI405 **Century Honors Physics Lab**; Grades 11, 12 Credit (College-link)

This course is similar to Physics/Regents with unit topics studied in greater depth. Saunders High School students, upon successful completion of these courses, will receive four (4) college credits (*PHYS123 - College Physics I* and *PHYS124 - College Physics I Lab*) at Westchester Community College.

SCI106 **Environmental Studies**; Grades 11, 12; 1 Credit

YSC106 **Environmental Studies**; Grades 11, 12; 1 Credit

These courses provide students with a coherent perspective on the environment. It will be a scientific approach that enables the students to adopt an informed and responsible stance on the wide range of pressing environmental issues that they will eventually face. The students should develop an understanding of the environment, rooted in the underlying principles of science, they will explore the moral and political factors that are involved in the environment. *This course has labs embedded in the curriculum.*

SCI201 **Living Environment Studies**; Grades 11, 12; 1 Credit

YSC201 **Living Environment Studies**; Grades 11, 12; 1 Credit (as stated on IEP)

ESB213 **Living Environment Studies**; Grades 11, 12; 1 Credit (for Bilingual Education students)

IST208 **Living Environment Studies**; (Roosevelt Only); Grades 10-12; 1 Credit

These courses are designed for a student seeking a local diploma. The courses follow a conceptual approach to the study of living things. Topics include cell theory, classification and human physiology, genetics and evolution.

SCI100 **Earth Science Studies**; Grades 11, 12; 1 Credit

YSC100 **Earth Science Studies**; Grades 11, 12; 1 Credit (as stated on IEP)

ESB108 **Earth Science Studies**; Grades 11, 12; 1 Credit (for Bilingual Education students)

These courses are designed to introduce students to the basic principles of earth science. These courses include such topics as scientific methodology, measurement, geology, meteorology, astronomy and aerospace science. *This course has labs embedded in the curriculum.*

SCI305 **Chemical Studies**; Grades 11, 12; 1 Credit

YSC305 **Chemical Studies**; Grades 11, 12; 1 Credit (as stated on IEP)

ESB312 **Chemical Studies**; Grades 11, 12; 1 Credit (for Bilingual Education students)

These courses are designed to demonstrate the role of chemistry in daily life. Topics include the properties of matter, atomic theory, the periodic table, bonding and environmental chemistry. *This course has labs embedded in the curriculum.*

SCI320 **Conceptual Physical Science Studies**; Grades 11, 12; 1 Credit (Prerequisite 2 years Regents Science, Regents Chemistry and Earth Science or Living Environment & 2 years Regents Math.)

This course is intended to help students to explore concepts and ideas relevant to our physical world. Physics is the study of nature's basic rules. This course will treat physics conceptually, which means concepts are presented in familiar English, with equations as "guides to thinking." Comprehension of concepts before calculation is crucial for understanding.

SCI217 **Forensic Science**; Grades 10-12; 1 Credit (Prerequisite SCI202 and SCI203)

In this course students will study the scientific techniques of criminal investigation utilizing an inquiry approach, data analysis, and case studies. Students will have an opportunity to explore the various departments found in a forensics lab.

SCI218 **Century Honors Forensic Science**; Grades 11, 12; 1 Credit (Prerequisite SCI205 and SCI206)

This course brings students through an investigative study of the scientific techniques of criminal investigation utilizing an inquiry approach, data analysis, and case studies. Students will have an opportunity to explore forensic laboratory procedures.

SCI309 **Principles of Nutrition**; Grades 9-12; 1 Credit

This course integrates the study of the physical and chemical properties of food and the changes that occur during food processes. It also incorporates health topics and the purchase, safe handling, preparation, serving, storing of food and food related items.

SCI315 **Scientific Principles of Digital Imagery**; Grade 11; 1 Credit

This course is intended to provide students with the scientific foundation of Graphic Communications. The course breaks down this interdisciplinary field into a biological component (brain physiology, visual perception) and a physical science component (color science). The course integrates this with relevant aspects of computer architecture and functioning. Students will gain an understanding of analog vs. digital systems as well as the processing, storage, transmission and retrieval of digitized images.

SCI406 **A.P. Biology**; Grades 11, 12; 1 Credit (Double period); (Prerequisite SCI202 or SCI205 and SCI301 or SCI306)

Advanced Placement Biology is designed for advanced students who have successfully completed two years of Regents science. This program is based on the National Advanced Placement Curricula in Living Environment, and is designed for students who wish to pursue college-level studies while still in high school. All students who complete the course requirements take the Advanced Placement Exam. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SCI415 **College Link Biology**; Grades 11, 12; 1 Credit (Prerequisite SCI202 or SCI205 and SCI301 or SCI306)

This advanced course in college biology is designed for students who have successfully completed the Biology and Chemistry Regents courses. Course topics include human anatomy and physiology, biochemistry, genetics, evolution and classification.

SCI413 **A.P. Chemistry**; and SCI414 **A.P. Chemistry Lab**; Grades 11, 12; 1 Credit (Double period); (Prerequisite SCI202 or SCI205 and SCI301 or SCI306); (*Saunders students can also use CHT301, CHT302, CHT401, CHT407*)

Advanced Placement Chemistry is designed for advanced students who have most successfully completed four years of Regents science. This program is based on the National Advanced Placement Curricula in Chemistry, and is designed for students who wish to pursue college-level studies in chemistry while still in high school. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SCI410 **College Link Chemistry**; Grades 11, 12; 1 Credit (Prerequisite SCI202 or SCI205, SCI301 or SCI306, and SCI401 or SCI404)

This advanced course in college chemistry is designed for students who have successfully completed the Biology, Chemistry and Physics Regents courses. Among the course topics are the following: matter, atomic theory, stoichiometry, quantum theory, chemical bonding, kinetics, thermodynamics and nuclear chemistry.

SCI421 **College Link Geology**; Grades 11, 12; 1 Credit (College link); (Prerequisite SCI202 and SCI301)

This course focuses on the study of structure of Earth rocks and minerals, topography, plate tectonics (mountain-building, volcanoes, earthquakes), weathering and erosion, soil formation, and geologic history. Lab will be incorporated into the class.

SCI407 **A.P. Environmental Science**; Grades 11, 12; 1 Credit

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

SCI408 **A.P. Physics**; Grade 12; 1 Credit (Double period); (Prerequisite SCI202 or SCI205, SCI301 or SCI306 and SCI401 or SCI404)

Advanced Placement Physics is designed for advanced students who have most successfully completed four years of Regents science. This program is based on the National Advanced Placement Curricula in Physics, and is designed for students who wish to pursue college-level studies in physics while still in high school. All students who complete the course requirements take the Advanced Placement Exam in Physics. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

MATHEMATICS COURSE OFFERINGS

- 3 credits required for students entering grade 9 in September 2001 and thereafter
- Skills, Title 1 Math Lab, and SAT course credit can only be used beyond the mandated credits
- Regents examination required

MTH102 **Mathematics Skills**; (part-time); Grades 9, 10; ½ Credit

MTH103 **Mathematics Skills**; (part-time); Grades 11, 12; ½ Credit

YMH102 **Mathematics Skills**; (part-time); Grades 9-12; ½ Credit (as stated on IEP)

ESB010 **Mathematics Skills**; (part-time); Grades 9-12; ½ Credit (for Bilingual Education students)

These courses are designed to help students in the basic areas of mathematics. Emphasis is placed on concepts and skills that will prepare students for the Regents in Mathematics. Units in the course will include the set of integers, rational numbers, graphing, probability and statistics, measurement of plane geometric figures, ratio, proportion, fractions, decimals and percentages.

PMH104 **Title 1 Math Lab**; Grades 9-12; ½ Credit

Individualized instruction for students needing assistance in mathematics.

MTH210 **Math A2**; Grades 9-12; 1 Credit

YMH210 **Math A2**; Grades 9-12; 1 Credit (as stated on IEP)

ESB230 **Math A2**; Grades 9-12; 1 Credit (for Bilingual Education students)

These courses are designed as the second year of a two-year comprehensive program in integrated mathematics. Year two of the Math A2 courses include problem-solving, logic, geometry, quadratic equations, probability and statistics, radicals and graphing. All of the students who have completed the requirements of the courses take the Math Course A Regents at the end of the year.

MTH212 **Century Honors Math A2**; Grades 9 - 10; 1 Credit

This course is designed to be the same course as Math A2 with topics studied in greater depth.

MTH149 **Algebra**; Grade 9; 1 Credit

This one-year course will develop student skills to identify, explore, reason, justify, proof, and apply mathematical relationships in algebra. Utilizing both the process and content performance indicators students will acquire and demonstrate mathematical reasoning ability when solving problems. Students are expected to take a Mathematics Regents Examination at the end of the year.

MTH150 **Century Honors Algebra**; Grade 9, 1 Credit

This course is designed to be same course as MTH149 Algebra with unit topics studied in greater depth.

MTH151 **Algebra Part I**; Grades 9, 10; 1 Credit

YMH151 **Algebra Part I**; Grades 9, 10; 1 Credit

ESB151 **Algebra Part I**; Grades 9, 10; 1 Credit

IST151 **Algebra Part I**; Grades 9, 10; 1 Credit

These courses, which are Part 1 of a 2-year program, will develop student skills to identify, explore, reason, justify, proof, and apply mathematical relationships in algebra. Utilizing both the process and content performance indicators students will acquire and demonstrate mathematical reasoning ability when solving problems. Students are expected to take a Mathematics Regents Examination at the end of year 2.

MTH152 **Century Honors Algebra Part I**; Grades 9, 10; 1 Credit

This course is designed to be the same course as Algebra Part I, with topics studied in greater depth. Students are expected to take a Mathematics Regents Examination at the end of year 2.

MTH251 **Algebra Part II**; Grades 9-12; 1 Credit (Prerequisite MTH151)

YMH251 **Algebra Part II**; Grades 9-12; 1 Credit (Prerequisite YMH151)

ESB251 **Algebra Part II**; Grades 9-12; 1 Credit (Prerequisite ESB151)

IST251 **Algebra Part II**; Grades 9-12; 1 Credit (Prerequisite IST151)

These courses will develop student skills to identify, explore, reason, justify, proof, and apply mathematical relationships in algebra. Utilizing both the process and content performance indicators students will acquire and demonstrate mathematical reasoning ability when solving problems. These courses are the second year of a two-year Algebra program, and will end in a Math Regents Examination.

MTH252 **Century Honors Algebra II**; Grades 9, 10; 1 Credit

This course is designed to be the same course as Algebra Part I, with topics studied in greater depth. This course is the second year of a two-year Algebra program, and will end in a Math Regents Examination.

MTH121 **Consumer/ Business Math**; Grades 9-12; 1 Credit (Prerequisite passing grade on Mathematics Regents)

A knowledge of basic mathematical operations is essential for success in this course. Students will understand and utilize terminology relating to personal and business mathematical applications. The application of basic mathematical problem-solving skills will be used to solve consumer and business problems. Topics will include simple and compound interest, APR, tax documents including W4, W2, 1040, Form B, credit cards, loans, investments, banking, purchasing vs. leasing automobiles, scale drawing, floor planning and budgeting, etc. Students are required to use a calculator throughout the course.

YMH121 **Consumer/ Business Math**; Grades 9-12; 1 Credit (as stated on IEP)

The related math course is designed to provide occupational students with practical applications of basic mathematical knowledge and skills as related to their specific occupational field. The syllabus will go beyond a first year course and provide each student with mathematical and personal finance background essential for success as a working citizen.

MTH227 **Math B1**; Grades 9-12; 1 Credit

MTH228 **Century Honors Math B1**; Grades 9-12; 1 Credit

These courses are for students who have successfully completed Math A and passed the Math A Regents Examination with a score above 80. It includes topics in complex numbers, functions, transformation geometry, and probability and statistics. (It encompasses the Algebra 2/ Trigonometry curriculum.)

MTH230 **Math B2**; Grades 9-12; 1 Credit (Prerequisite MTH227)

MTH232 **Century Honors Math B2**; Grades 9-12; 1 Credit (Prerequisite MTH227 or MTH228)

These courses follow Math B1. They focus on trigonometry and geometry concepts. All of the students who have completed the requirements of the course take the Math B Regents Examination at the end of the year.

MTH329 **Pre-Calculus**; Grades 11, 12; 1 Credit (Prerequisite Math B Regents)

This course is designed to be a pre-calculus course which includes topics in algebraic and trigonometric analysis, an introduction to analytic geometry and the theory of limits, theory of equations, exponential and logarithmic equations, arithmetic and geometric progressions, summations, mathematical inductions, and matrices. Topics in analytic geometry, polar coordinates and parametric equations are considered.

MTH322 **Applications of Advanced Mathematical Concepts**; Grades 9-12; 1 Credit

YMH322 **Application of Advanced Mathematical Concepts**; Grades 9-12; 1 Credit (as stated in IEP)

ESB322 **Application of Advanced Mathematical Concepts**; Grades 9-12; 1 Credit (for Bilingual Education students)

These courses are for students who have successfully passed Math A Regents Examination with a score lower than 80. It will include advanced topics in Algebra, Geometry (including circles), and Trigonometry. Preparation in SAT topics will also be included. Applications of concepts in concrete settings and the use of technology, especially the graphing calculator will be emphasized.

MTH325 **Essential Topics for Mathematics - Year 3**; Grades 11, 12; 1 Credit (Prerequisite MTH210)

YMH325 **Essential Topics for Mathematics - Year 3**; Grades 11, 12; 1 Credit (Prerequisite YMH210)

ESB325 **Essential Topics for Mathematics - Year 3**; Grades 11, 12; 1 Credit (Prerequisite ESB230)

These are local courses designed for students who have passed MathA2, but have not yet attained a passing grade on the New York State Math A Regents Examination. The course will reinforce topics from the Math A curriculum and progress into topics from Intermediate Algebra, the circle and Trigonometry. Everyday applications and the use of the graphing calculator will be emphasized. Preparation for the SAT will also be included. The students will be required to re-take the Math A Regents Examination in January.

SAT301 **SAT Mathematics Prep**; Grades 10-12; ½ Credit

This SAT preparation course reviews basic mathematical concepts in arithmetic, algebra, geometry and quantitative comparisons. It provides students with test-taking techniques and is used for New York State Regents Scholarship selection.

MTH326 **Advanced Mathematical Applications (Infinity Project)**; Grades 11, 12; 1 Credit (Prerequisite Mathematics B1, and knowledge of graphing calculator model TI-84 or 83+)

This course focuses on the application of fundamental science and mathematics concepts to solve contemporary engineering problems. Students use a graphical programming, lab-based software to develop their understanding of topics including digital sound and images, automation and networking. Advanced mathematical concepts include, but are not limited to, trigonometric functions, exponential/logarithmic equations, matrix theory, number systems and probability.

MTH400 **Advanced Math 12**; Grades 11, 12; 1 Credit (Prerequisite Century Honors Math B1)

Pre-calculus is intended to prepare students for a course in Calculus. Topics from Algebra, Analytic Geometry, Trigonometry, and The Theory of Equations are included in this course. Emphasis is placed upon functions and their graphs. Polynomial, rational, trigonometric, exponential, and logarithmic functions will be studied. Students will begin their study of limits, continuity, and derivatives. Students will take the Math B Regents Examination in January.

MTH402 **Basic Calculus (College Link Optional)**; Grades 11, 12; 1 Credit (Prerequisite MTH329)

This course is designed to be an extension of MTH329 Pre-calculus. It is for those students who still need a stronger foundation prior to placement in A.P. Calculus.

MTH403 **A.P. Mathematics (Calculus)**; Grades 11, 12; 1 Credit (Prerequisite MTH329 or MTH402)

This course is designed to be a Calculus course. Topics covered are coordinates, graphs, lines, functions and limits, differentiation, integration, logarithmic and exponential functions, inverse trigonometric and hyperbolic functions and techniques of integration. The Advanced Placement AB Calculus examination is required. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

MTH405 **A.P. Mathematics (Statistics)**; Grades 11, 12; 1 Credit (Prerequisite passing grade on Mathematics Regents)

This course is designed to be a statistics course. The course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students who successfully complete the course and examination may receive credit, advanced placement, or both for one-semester introduction college statistics course. The Advanced Placement Statistics examination is required. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

LANGUAGES OTHER THAN ENGLISH (L.O.T.E.) COURSE OFFERINGS

- One (1) credit is required for graduation.
- All students will be able to begin L.O.T.E. in grade seven in all schools.
- Middle School students who complete two (2) years of L.O.T.E. must ALSO pass the Proficiency Examination before they can take HS Checkpoint B (year 1). Middle School students who complete only Checkpoint A (year 1 MS) may not take the Proficiency Examination or receive high school credit for this study unless they are in an approved accelerated program.

Checkpoint A - Learning outcomes for one credit completed in grades kindergarten through nine. A student will be able to earn Regents credit below grade nine by passing a State Proficiency Examination. In this course students will master the entrance level communicative proficiencies of listening, speaking, reading and writing with respect to the target language, as well as an introductory cultural awareness. Students will gain a facility with simple statements and will be able to initiate, respond and engage in conversation within the parameters of structure, vocabulary and phonology consistent with situations and functions of this level. The beginner will achieve a comprehension of simple informative or social material and will be able to give written expression of personal needs, as well as short messages, in familiar contextual settings.

FLG101 **Italian - Checkpoint A**; Grades 9-12; 1 Credit

FLG102 **French - Checkpoint A**; Grades 9-12; 1 Credit

FLG103 **Spanish - Checkpoint A**; Grades 9-12; 1 Credit

YFL103 **Spanish - Checkpoint A**; Grades 9-12; 1 Credit (as stated in IEP)

Checkpoint B - (2 years) Learning outcomes for three credits culminating in a Regents Comprehensive Examination. In this course the student will continue to develop his/her skills with respect to the communicative proficiencies of listening, speaking, reading and writing as well as an understanding of the evolution of cultures and their value systems. Students will expand their listening proficiencies to include the comprehension of short conversations on familiar topics and situations. Speaking proficiencies will be developed through increased vocabulary and students will be able to initiate and sustain conversation. More time will be devoted to reading and writing activities in order to function with simple narratives and descriptive materials, as well as simple notes, letters and reports.

FLG201 **Italian - Checkpoint B1**; Grades 9-12; 1 Credit (Prerequisite Checkpoint A years 1 & 2 M.S. and Proficiency Exam or Checkpoint A High School)

FLG301 **Italian - Checkpoint B2**; (Regents Examination); Grades 9-12; 1 Credit (Prerequisite Checkpoint B1)

FLG202 **French - Checkpoint B1**; Grades 9-12; 1 Credit (Prerequisite Checkpoint A years 1 & 2 M.S. and Proficiency Exam or Checkpoint A High School)

FLG302 **French - Checkpoint B2**; (Regents Examination); Grades 9-12; 1 Credit (Prerequisite Checkpoint B1)

FLG203 **Spanish - Checkpoint B1**; Grades 9-12; 1 Credit (Prerequisite Checkpoint A years 1 & 2 M.S. and Proficiency Exam or Checkpoint A High School)

FLG303 **Spanish - Checkpoint B2**; (Regents Examination); Grades 9-12; 1 Credit (Prerequisite Checkpoint B1)

Checkpoint C - Learning outcomes beyond the Regents examination. Students will reinforce and expand their skills with complex grammatical structures in order to broaden their experience in listening, speaking, reading and writing. Greater emphasis is placed on comprehension and oral expression. At this level, students are exposed to introductory historical and literary works. Students will gain a fuller understanding of many behavioral characteristics of the culture of the target language.

FLG401 **Italian - Checkpoint C (College-Link Optional)**; Grades 9-12; 1 Credit (Prerequisite Checkpoint B years 1 & 2)

FLG402 **French - Checkpoint C (College-Link Optional)**; Grades 9-12; 1 Credit (Prerequisite Checkpoint B years 1 & 2)

FLG403 **Spanish - Checkpoint C (College-Link Optional)**; Grades 9-12; 1 Credit (Prerequisite Checkpoint B years 1&2)

FLG404 **Spanish Literature for Native Speakers - Checkpoint C (College-Link Optional)**; Grades 9-12; 1 Credit
(Prerequisite Checkpoint B1 & B2)

These courses are designed for native speakers of Spanish who have passed the Regents Exam and who need additional credit in Language. Spanish Literature is introduced in this course.

FLG501 **A.P. Italian Language & Culture**; Grades 10-12; 1 Credit (Prerequisite three (3) Regents Credits)

FLG502 **A.P. French Language & Culture**; Grades 10-12; 1 Credit (Prerequisite three (3) Regents Credits)

FLG503 **A.P. Spanish Literature**; Grades 10-12; 1 Credit (Prerequisite three (3) Regents Credits)

FLG504 **A.P. Spanish Language**; Grades 10-12; 1 Credit (Prerequisite three (3) Regents Credits)

CAREER AND TECHNICAL EDUCATION COURSE OFFERINGS

- All Occupational Education **SEQUENCES**, including Occupational Programs, require one (1) credit in **CAREER AND FINANCIAL MANAGEMENT**
- ½ Credit of Mandated Modules
- ½ Credit of Optional Modules may be met through related course work in grades 9-12
- Recommended structure for completing the Occupational Education mandate as of September 2004
- Cooperative Work Experience **may** be used to earn up to two (2) credits for all Career and Technical Education sequences, as a substitute for Senior Course Work. **State guidelines must be followed.**

A. For **Career and Technical Students**:

IOC109 **CFM Computers** (Mandated Modules); ½ Credit; **plus**
for **BUSINESS** students, CBM100 **Keyboarding**; ½ Credit; **or**
for **TECHNOLOGY** students, TEC102 **Basic Systems of Construction/Basic Systems of Energy**; ½ Credit

B. For **Career and Technical students**:

IOC109 **CFM Computers**; (Mandate modules); ½ Credit; **plus**
related optional modules infused in Exploratory or Programmatic courses.

YCM191 **Marketing/Retailing I**; Grades 9-12; Co-requisite YCM192; 1 Credit (as stated on IEP)

This course is designed to introduce students to the concepts of retailing. Students will learn about sales, purchasing, forecasting, inventory and payroll. In addition, students will be instructed in the work ethic and will explore the appropriate dress, behavior, punctuality, attendance and courtesy that is expected in a business environment.

YCM192 **Marketing/Retailing Lab**; Grades 9-12; Co-requisite YCM191 or YCM292; 1 Credit (as stated on IEP)

This course is designed to provide a hands-on experience in a retail training facility utilizing concepts learned in Marketing/Retailing I.

YCM291 **Marketing/ Retailing II**; Grades 10-12; Co-requisite YCM192, 1 Credit (as stated on IEP)

This course is designed to reinforce skills learned in Marketing/ Retailing I, while introducing new skills necessary for a career in retailing.

YIC101 **Career and Financial Management; Mandated Modules**; Grades 9-12; ½ Credit (as stated on IEP)

The purpose of Career and Financial Management is to provide students with the opportunity to learn about the features of our economy, explore a variety of careers, learn the skills and competencies needed for success in the workplace and to begin to become financially literate. Students will continue to develop a career plan at the commencement level, apply academic skills to solve real-world problems and become familiar with the universal foundation skills (SCANS skills) that are needed to become successful citizens, employers, and employees.

IOC105 **Career and Financial Management/ Business**; (half-year); Grades 9-12; ½ Credit

IOC106 **Career and Financial Management/ Technology**; (half-year); Grades 9-12; ½ Credit

IOC108 **Career and Financial Management**; (half-year); Grades 9-12; ½ Credit

IOC113 **Career and Financial Management/ Computers**; (half-year); Grades 9-12; ½ Credit

This course will present an overview of computer software and software applications, including word processing, data entry, and spreadsheet applications. Students will learn the basics of Microsoft Office software.

BUSINESS

CBM201 **Business Analysis/Basic Computer Applications**; Grades 10-12; 1 Credit

Business Analysis offers a broad overview of modern business organization and operation. Students learn that today's business organizations rely on a variety of systems and sub-systems to complete transactions. Business Computer Applications provides a hands-on opportunity to students to explore computer software tools used by business.

CBM232 **Accounting**; Grades 10-12; 1 Credit

This course is designed to develop competence in the application of accounting theory. Students will process transactions through the entire accounting cycle in a service and merchandising business.

CBM317 **Business Law**; Grades 10-12; 1 Credit

This course is designed to be used as a component of a Business/Marketing Education sequence, and/or as the fifth unit of Social Studies. Applications of business laws, as they affect the individual, are featured; the relationship of the laws to an individual's personal, as well as occupational life are emphasized.

CBM233 **Principles of Marketing**; Grades 10-12; 1 Credit

This course is designed to introduce students to the important role that marketing plays in our economic system. Content revolves around the basic marketing functions of financing, risk management, selling, promotion, pricing, purchasing, marketing information management, production/service/ideal planning and distribution.

YCM296 **Multi-Care/Work-Site Occupational Program**; (Double period, Roosevelt High School only); Grades 10-12; 2 Credits (as stated on IEP)

This course is designed to introduce and reinforce a variety of work skills and work behaviors through actual hands-on experiences in a multi-care facility within a community setting. Work-site possibilities include such areas as institutional purchasing and food services, with emphasis on nutrition and diet. Through a mentorship model, students will gain practical work experiences that are needed for successful employment in a structured, professional setting.

YCM300 **Career Management/ Computers**; Grades 9-12; 1 Credit (as stated on IEP)

This course will present an overview of computer software and their applications including a word processor, a database and a spreadsheet. Students will learn the basics of Microsoft Office software.

YCM167 **Career and Financial Management/ Business Computers**; Grades 10-12; 1 Credit

This course is designed to teach the concepts of basic typing and as an introduction to computers. The students will be introduced to an overview of computer software with emphasis in word processing.

COMPUTER PROGRAMMING

CMP100 **Career and Technical Management/ Computer Science**; Grades 9, 10; 1 Credit

CMP105 **Computer Technology/ Java**; Grades 9, 10; 1 Credit

CMP106 **Introduction to Programming/ Web Design**; Grades 9, 10; ½ Credit

CMP301 **Advanced Topics in Computer Science**; Grades 10-12; 1 Credit

CMP304 **Desktop Publishing/ Computer Graphics I**; Grades 11, 12; 1 Credit (Departmental approval)

CMP305 **Computer Graphics II**; Grade 12; 1 Credit (Prerequisite CMP304 or Departmental approval)

CMP306 **Programming in C++**; Grades 11, 12; 1 Credit (Departmental approval)

These courses provide a sequence related to the computer sciences. Students learn to write structured programs in addition to learning computer graphics, applications, programming and computer operating systems. These courses emphasize techniques of logical thinking and problem-solving skills.

OCC232 **Career and Financial Management/ Woodworking Fundamentals**; Grades 9-12; 1 Credit

Students will learn fundamental woodworking processes and the correct use of basic tools and machines (jigsaw, bandsaw, drill press, wood lathe, disc sander, belt sander, jointer, circular saw, planer, grinder) while constructing a variety of shop projects. Excellent course for students with no prior experience in woodworking.

TEC206 **Production Systems/Construction Systems**; Grades 10-12; 1 Credit

Production Systems is designed to provide instruction in the systems of manufacturing, their resources, processes, products and quality assurance. Construction Systems is designed to provide instruction in five (5) topics which have been specifically tailored to the construction of a structure on-site.

OCCUPATIONAL EDUCATION

OCC231 **Building Maintenance**; (Double period) Grades 10-12; 2 Credits

This course is designed to develop beginning-worker competency in such occupational areas as carpentry, electrical wiring, plumbing and building maintenance. This course offers instruction in the semi-skilled occupations involved in the repair and maintenance of residential and commercial buildings.

OCC331 **Advanced Building Maintenance**; (Double period) Grades 11, 12; 2 Credits

This course is designed to reinforce the skills learned under Building Maintenance I. More advanced techniques of framing, taping and construction related skills presented on an individual basis.

TEC101 **Design and Drawing for Production**; Grades 9-12; 1 Credit

Required for Technology sequence and Scenery/Display Program (satisfies Art/Music requirement). This course is designed to encourage visual problem-solving, using a common graphic language to describe forms in the man-made environment. Included are six (6) basic areas of technical drawing: orthographic, projection, pictorial drawing, sections auxiliaries, revolutions, transitions and developments, plus elements of design.

HCS205 **Culinary Arts I**; Grades 9, 10; (as stated on IEP); 1 Credit

Students will learn equipment identification, safety and sanitation procedures. They will also be introduced to baking and pastry making. Items such as cakes, pies, cookies, breads and dough will be introduced. In the course, they will also learn basic cooking methods and their application to food.

HCS206 **Culinary Arts II**; (Double Period); (as stated on IEP); Grades 10-12; 2 Credits

Students will study production identification, stock preparation, soups and sauces. Meat cutting, meal presentation and plate presentation will be introduced.

FDS405 **Hotel Management**; Grades 9-12; 2 Credits

IEP405 **Hotel Management**; Grades 9-12; 2 Credits (as stated in IEP)

These courses allow students to gain employable and management skills which are required in the hospitality industry. The hotel and restaurant management curriculum prepares students to understand and apply the practical skills needed

for entry level positions in hospitality industry. With this preparation, students will learn an overview of hospitality industry, organization and structure, and careers opportunities. The job prospects for high school graduates is positive and promising because it allows them to gain better qualifications upon entering various colleges.

ELECTRICITY & BASIC ELECTRONICS:

This program emphasizes the importance electricity plays in our everyday living. It helps students to understand electrical theory, acquire site work habits, develop skills in using tools in constructing simple electrical and electronic projects and kits. Students also learn the intricacies of everyday home tools such as phones and personal computers. They get valuable hands on experience performing installation and repair services for their school community as well as community job sites such as Habitat for Humanity.

MER100 **Career and Financial Management/ Exploring Medical Electronics and Robotics**; (Gorton only); Grades 9, 10; 1 Credit

MER201 **Basic Electronics and Robotics**; (Gorton only); Grades 9-12; 2 Credits
Students are introduced to basic electronics and are instructed in house-wiring, small appliances and computer repair.

MER301 **Advanced Electronics and Robotics**; (Gorton only; Double period); Grades 11, 12; 2 Credits

ART COURSE OFFERINGS

- One (1) credit required of either Art or Music for graduation, must be earned in any of the following courses: ART201, YAT201.

ART102 **Introduction to Occupations/Art**; Grades 9-12; ½ Credit

YAT102 **Introduction to Occupations/Art**; Grades 9-12; ½ Credit (as stated on IEP)

These courses are designed to increase students' knowledge and skills in a variety of visual arts mediums. Aligned with the New York Learning Standards for the arts, students develop knowledge, appreciation and aesthetic judgement of all types of art and related careers.

ART104 **Studio in Advertising Design**; (Lincoln only); Grades 9-12; 1 Credit

This course is designed to teach fundamentals of layout and lettering, color and design in advertizing and packaging. Students learn to use pencil, pen and ink, ink wash, water colors, markers, colored pencils and air brush.

ART201 **Studio in Art**; Grades 9-12; 1 Credit

YAT201 **Studio in Art**; (Lincoln & Gorton only); Grades 9-12; 1 Credit (as stated on IEP)

These courses are aligned with the New York State Learning Standards for the Arts. Students will explore, understand and produce works of art in various mediums such as painting, drawing, collage, print-making and sculpture in order to creatively express their artistic abilities. Art history and critiquing techniques will be part of the instruction.

ART202 **Art Appreciation**; (part-time); Grades 10-12; ½ Credit

This course is designed to increase students' understanding and appreciation of art. Students will learn the important aesthetic contributions made through the ages by various cultures and countries by responding to and analyzing works of art. To improve insight into the art worlds, students may engage in creating works of art.

- **ART202 does not meet graduation requirements.**

ART203 **Studio in Drawing and Painting**; Grades 10-12; 1 Credit (Prerequisite ART 201)

Aligned with the New York State Learning Standards for the Arts, this course is designed to extend the students' range of technique, media, traditional and modern forms of art through the intensive investigation of drawing and painting. Stressing both technical skills and individual expression, this course is for students who wish to improve and expand their talent.

ART204 **Studio in Sculpture and Ceramics**; Grades 10-12; 1 Credit

This course is designed to introduce the principles of three-dimensional design and composition to produce a variety of projects. An array of materials are used including clay, metal and plaster.

ART401 **A.P. Art**; Grades 11, 12; 1 Credit

The A.P. Program in Studio Art is intended for highly motivated students who are seriously interested in the study of art. Students should be made aware that A.P. work involves significantly more commitment and accomplishment than the typical high school course and that the program is not for the casually interested. It is required that A.P. students have previous course work in art, including at least two (2) years of study at the high school level. A portfolio, a written statement and a teacher's recommendation will be required for review by the Art Department before being accepted into the program. Portfolio must have a minimum of twelve (12) of the student's best work. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

ART483 **A.P. 3-Dimensional Design**; Grades 11, 12 ; 1 Credit

The A.P. program in three-dimensional design is intended for highly motivated students who are seriously interested in the study of art. Students should be made aware that A.P. work involves significantly more commitment and accomplishment than the typical high school course and that the program is not for the casually interested. It is required that A.P. students have previous course work in art. A portfolio, a written statement and a teacher's recommendation will be required for review by the Art Department before being accepted into the program. Portfolio must have a minimum of twelve (12) of the student's best work. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

MUSIC COURSE OFFERINGS

- One (1) credit required of Art or Music for graduation, must be earned in any of the following courses: MUS111, MUS109, MUS103.

MUS101 **Instrumental Music**; Grades 9-12; 1 Credit

MUS102 **Instrumental Music**; (Part-time); Grades 9-12; ½ Credit

MUS111 **Instrumental Music**; Grades 9-12; 1 Credit

Aligned with the New York State Learning Standards for the Arts, these courses are designed to teach music reading, instrumental technique, and ensemble and solo performance skills. Knowledge of music literature and musical discrimination are developed through the study of a wide variety of music including classical, jazz and contemporary styles.

MUS103 **Choir**; Grades 9-12; 1 Credit

MUS104 **Choir**; (part-time); Grades 9-12; ½ Credit

MUS105 **Introduction to Music**; (half-year); Grades 9-12; ½ Credit

Aligned with the New York State Learning Standards for the Arts, these courses are designed to teach music theory, music reading and performance skills. A wide variety of ethnic, classical and contemporary music is performed, created and analyzed. The students will explore the cultural contributions of music.

MUS109 **Music in Our Lives**; Grades 9-12; 1 Credit

This course is recommended to meet the one unit of credit graduation requirement in music. Students will compose original music and perform music written by others, and understand and use the basic elements of music in their performances and compositions. Students will use various resources to expand their knowledge of listening experiences, performance opportunities, and/or information about music. Students will demonstrate the capacity to listen to and comment on music and will use concepts from other disciplines to enhance their understanding of music. Students will develop a performing and listening repertoire of music of various genres, styles and cultures.

MUS201 **Music Appreciation**; (part-time); Grades 10-12; ½ Credit

YMC201 **Music Appreciation**; (part-time); Grades 10-12; ½ Credit (as stated on IEP)

This course is designed to develop knowledge, appreciation and aesthetic judgement of all types of music. Familiarity with cultural resources and media is learned through discriminating listening and attending live performances.

- **MUS201 and YMC201 do not meet graduation requirements.**

PHYSICAL EDUCATION COURSE OFFERINGS

- Two (2) credits required for graduation

These courses are designed in compliance with New York State Learning Standards in Physical Education; Standard 1 - Personal Health and Fitness, Standard 2 - A Safe and Healthy Environment, Standard 3 - Resource Management. Students will perform basic motor and manipulative skills.

Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility and muscular strength. Students will demonstrate responsible personal and social behavior while engaged in physical activity. Students will be aware of, and be able to access opportunities within their community to engage in physical activity.

Each student must attend physical education class. The regulation is: “*...all pupils shall attend and participate in the physical education program as approved in the school plan for physical education and as indicated by physician's examinations and other tests approved by the Commissioner of Education. Written and practical examinations may be given for student evaluation for each unit covered. Individual medical certificates of limitations must indicate the area of the program in which the pupil may participate.*” All students must complete two (2) credits in the physical education program in order to receive a diploma.

PED100 **Physical Education 9/10**; Grades 9, 10; ½ Credit

The program for grades 9-10 is skill oriented, with the focus on individual and team sports skills, physical fitness and conditioning, game fundamentals, strategies, and rules and regulations are stressed. Recreational leisure activities for immediate use as well as for later life are introduced.

PED103 **Modified Physical Education**; (Medical) Grades 9-12; ½ Credit

Students who are temporarily or permanently unable to participate in physical education receive modified physical education instruction. The modified physical education program consists primarily of activities which may be either vigorous, moderate or restful based upon the needs of the student. Temporary or short-term adaptations are made by the certified physical education teacher in consultation with the school nurse, appropriate medical personnel and the adaptive physical education teacher(s). Permanent or long-term program modifications are designed based upon recommendations from the family physician and/or school doctor.

PED200 Physical Education 11/12; Grades 11, 12; ½ Credit

The program for grades 11, 12 is sequentially based on experience given at lower levels and is built upon and expanded. Emphasis is on physical fitness, individual and life-time activities. Students are provided opportunities to select activities they wish to participate in from a group of team sports, individual sports, weight training and conditioning.

YPE131 Adaptive Physical Education; (full-time); Grades 9-12; 1 Credit

The adaptive physical education program is a specially designed program of developmental activities, games sports and rhythms suited to the interests, capacities and limitations of students with disabling conditions who may not safely or successfully engage in unrestricted participation in the activities of the regular physical education program.

An Individualized Educational Plan (IEP) is written when any specialized physical education program is deemed an educational need for a student with disabling conditions. When an IEP is written for a student with disabilities, a student assessment is conducted by an Adaptive Physical Education teacher and appropriate instructional activities are provided. This program is taught by certified physical education teachers possessing specialization in the field of adaptive physical education.

PED301 Fit for Life - Wellness Program; Grades 9, 10; ½ Credit

PED302 Fit for Life - Wellness Program; Grades 11, 12; ½ Credit

The Wellness Program meets in the Wellness Center which is designed in a corporate image. The Wellness Program is designed to improve the health and well-being of the whole person. Rather than being a one dimensional fitness program, it addresses the Six Dimensions of Wellness: spiritual, emotional, social, intellectual, physical and occupational. Students are exposed to experiences that emphasize the relationship between body and mind.

HEALTH COURSE OFFERINGS

- One-half (½) credit required for graduation.

HTH101 Health 9-12; Grades 9-12; ½ Credit

YHT101 Health 9-12; Grades 9-12; ½ Credit (as stated on IEP)

ESB217 Health 9-12; Grades 9-12; ½ Credit (for Bilingual Education students)

These courses are designed in compliance with state guidelines for health education at the senior high school level. The curriculum covers eleven (11) major conceptual areas. Instruction covers specific information on alcohol and other drugs, human growth and development, parenting, A.I.D.S. and other health topics of concern to adolescents and young adults.

INDIVIDUALIZED EDUCATION PLAN (IEP) SUPPORT OFFERINGS

YRS190 **Resource**; Grades 9-12; No Credit (as stated on IEP)

This program is designed to provide specific instruction on a regularly scheduled basis for special education students in regular education classes. The focus is on support and remediation so that the student is maintained in regular education. Students receive a minimum of three (3) periods of resource per week.

YRS191 **Resource/Consultant**; (full-year); Grades 9-12; No Credit (as stated on IEP)

This special education program is designed to provide direct and/or indirect services on a regularly scheduled basis for students in general education classes. The focus is on remediation, provision of alternative strategies and compensatory skills in order to maintain the student in general education.

YRS291 **Resource/ H.I.**; Grades 9-12; No Credit (as stated on IEP)

This special education program is designed to develop effective learning strategies and communication skills necessary to meet the academic; social and language needs of students with impaired hearing.

YRS292 **Inclusion Collaboration**; Grades 9-12; No Credit (as stated on IEP)

This program is designed to provide direct support instruction to students enrolled in a general education inclusion program. The focus is to provide skills to meet the necessary academic needs in general education.

INDIVIDUALIZED EDUCATIONAL PLAN (IEP) COURSE OFFERINGS

Students assigned to self-contained Special Education classes (as stated on IEP) receive equivalent instruction. The Special Education courses have the same title and reflect the equivalent content as the general education courses. For example, YEG104 covers the same topics as general education ENG104 (English Language Arts 9). However, the techniques and strategies employed are specialized and adapted to the learning style of the student.

The same number of courses and credits needed to attain a local diploma for General Education students are required of Special Education students. The Individual Education Program (IEP) indicates the type of diploma being sought (Regents or IEP). This is decided at the Annual Review meetings with the parents and school building personnel. Students in Basic Learning Skills and Basic Learning Skills/Therapeutic Intervention Program self-contained classes receive instruction in Reading and Writing, Mathematics, Science and Social Studies. The content of these courses is focused on providing transition to independence and the world of work.

IEP090 **Reading and Writing**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to help students in the development of basic reading and writing principles. Emphasis will be placed on the development of practical reading and writing skills that will impact the student's adult life.

IEP091 **Mathematics**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to help students understand the basic principles of computation, concepts, work problems and practical math application. Emphasis is placed on how mathematics affects daily life.

IEP092 **Science**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to help students understand the basic principles of science. Emphasis will be on an exploration of how science impacts the student's daily life.

IEP093 **Social Studies**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to help students understand the basic principles of history, geography, government, economics and current events. Emphasis is placed on the practical application of how one's culture affects daily life. Students in Independent Living Skills self-contained classes receive instruction in Activities of Daily Living, Banking, Recreational Activities, Community Awareness and Career Exploration. The content of these courses is focused on providing transition to independence and the world of work.

IEP194 **Activities of Daily Living**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to increase awareness of practical living skills. Students practice skills that will help them function independently as young adults.

IEP195 **Banking Program**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to help students gain an awareness of basic banking skills. Students learn basic banking skills and the components necessary to make a basic bank transaction at an actual off-site local banking location. By walking or using public transportation, travel training is also emphasized.

IEP196 **Recreational Activities**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to present off-site physical activities within our local community to our students. Students participate in a bowling activity in a community-sponsored site, which enables them to develop hobbies, team camaraderie and appropriate social behaviors and interactions.

IEP197 **Community Awareness**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to increase the student's awareness of his local community and/or neighborhood. Students are also given the opportunity to travel on public transportation in order to visit local stores and participate in community activities.

IEP198 **Career Exploration**; Grades 9-12; 1 Credit (as stated on IEP)

This course is designed to maximize career opportunities for students within the school facilities. The students perform career-related tasks throughout the various departments within the building. This course builds responsibility, self-esteem and career awareness.

IEP199 **Critical Thinking Skills**; Grades 9-12; 1 Credit (as stated on IEP)

The course is designed to sharpen deductive thinking skills by encouraging students to comprehend and organize sets of clues, direct and indirect, to reach logical conclusions. The skills developed and utilized improve reading comprehension, math, writing, science and test-taking abilities at all grade and aptitude levels.

IEP275 **Reading/Literacy**; Grades 9-12; 1 Credit (as stated on IEP)

Students will be introduced to strategic approaches to literacy and the implementation of a reading model.

English Language Learners (ELLs)

The English for Speakers of Other Languages (ESOL) courses are designed to develop English language skills and proficiency among students. These courses utilize second language teaching techniques and approaches that are designed for the purpose of developmental English language learning. English Language Learners (ELLs) in grades nine through twelve must receive the following:

- * Beginner Level of English Proficiency: a minimum of three units of study or its equivalent (3 class periods per day)
- * Intermediate Level of English Proficiency: a minimum of two units of study or its equivalent (2 class periods per day)
- * Advanced Level of English Proficiency: a minimum of one unit of study or its equivalent (1 class period per day)

The courses stress the integration of all four language skills: listening, speaking, reading and writing, to promote communicative and academic level of proficiency. Grouping is by ability: Beginner, Intermediate and Advanced. Student placement is determined by the LAB-R, the initial screening placement for all newcomers, and the NYSESLAT, the New York State English as a Second Language Achievement Test, which is required for all ELLs and administered in the spring. Placement should consider achievement in both language skills and content areas. All levels of instruction focus on Learning Standards in English as a Second Language which are aligned with the State's English Language Arts Standards. Former ELLs academic progress is monitored one year after exiting the ESOL Program.

ESB001 **ESOL Beginning**; Grades 9-12; 1 Credit (1 ELA and 2 ESL); (Roosevelt only); (Triple period); ISTEP

ESB002 **Dual Literacy**; Grades 9-11; 1 Credit (Triple period); (Roosevelt only)

ESB101 **ESOL Beginning**; Grade 9; 1 Credit (1 ELA and 2 ESL); (Triple period)

Emphasis on English listening, speaking, reading, and writing skills. Proficiency levels are determined by the LAB-R and NYSESLAT.

ESB102 **ESOL Beginning**; Grade 10; 1 Credit (1 ELA and 2 ESL); (Triple period)

Emphasis on English listening, speaking, reading, and writing skills. Proficiency levels are determined by the LAB-R and NYSESLAT.

ESB103 **ESOL Beginning**; Grade 11; 1 Credit (1 ELA and 2 ESL); (Triple period)

Emphasis on English listening, speaking, reading, and writing skills. Proficiency levels are determined by the LAB-R and NYSESLAT.

ESB104 **ESOL Beginning**; Grade 12; 1 Credit (1 ELA and 2 ESL); (Triple period)

Emphasis on English listening, speaking, reading, and writing skills. Proficiency levels are determined by the LAB-R and NYSESLAT.

ESB201 **ESOL Intermediate**; Grade 9; 1 Credit (1 ELA and 1 ESL); (Double period)

Emphasis on English listening, speaking, reading, and writing skills; additionally covers all aspects of the district's comprehensive English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.

ESB202 **ESOL Intermediate**; Grade 10; 1 Credit (1 ELA and 1 ESL); (Double period)

Emphasis on English listening, speaking, reading, and writing skills; additionally covers all aspects of the district's comprehensive English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.

- ESB203 **ESOL Intermediate**; Grade 11; 1 Credit (1 ELA and 1 ESL); (Double period)
Emphasis on English listening, speaking, reading, and writing skills; additionally covers all aspects of the district's comprehensive English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.
- ESB204 **ESOL Intermediate**; Grade 12; 1 Credit (1 ESL and 1 ESL); (Double period)
Emphasis on English listening, speaking, reading, and writing skills; additionally covers all aspects of the district's comprehensive English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.
- ESB301 **ESOL Advanced**; Grade 9; 1 Credit (ESL)
Students receive instruction, which emphasizes all aspects of the district's English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.
- ESB302 **ESOL Advanced**; Grade 10; 1 Credit (ESL)
Students receive instruction, which emphasizes all aspects of the district's English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.
- ESB303 **ESOL Advanced**; Grade 11; 1 Credit (ESL)
Students receive instruction, which emphasizes all aspects of the district's English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.
- ESB304 **ESOL Advanced**; Grade 12; 1 Credit (ESL)
Students receive instruction, which emphasizes all aspects of the district's English Language Arts program. Proficiency levels are determined by the LAB-R and NYSESLAT.
- IST200 **English for Specific Purpose (ESP) English Through Americana**; Grades 10-12; 1 Credit (Roosevelt only)
This course uses the techniques and methodologies of English as a Second Language (ESL) to introduce English Language Learners (ELLs) to the American culture through musical themes from early songs to patriotic compositions. Students' appreciation for the English language and the American culture are enhanced through performances.
- IST202 **English for Specific Purpose (ESP) Communications-Media**; Grades 10-12; 1 Credit (Roosevelt only)
This course uses the techniques and methodologies of English as a Second Language (ESL) to introduce English Language Learners (ELLs) to basic concepts and skills of a television studio. Students learn the use of video camera and sound effects and develop video graphics on an Amiga computer, video editing, interviewing techniques, as well as participate in the production crew of taping live studio shows in English and other languages.
- IST203 **English for Specific Purpose (ESP) Photography**; Grades 10-12; 1 Credit (Roosevelt only)
This course uses the techniques and methodologies of English as a Second Language (ESL), to introduce English Language Learners (ELLs) to basic concepts and skills of photography such as F-stops, focusing, lighting and composition. Students learn techniques of darkroom developing of negatives and printing. Hands-on projects are assigned.
- IST209 **English for Specific Purposes (ESP) Introduction to Computers**; Grades 9-12; 1 Credit
This course will present an overview of computer applications to students of various English Language Learner levels. Instruction will include vocabulary and grammar structures that are necessary to use a personal computer as a tool in writing and designing.

BILINGUAL EDUCATION COURSE OFFERINGS

NOTA: La descripción de los cursos de educación bilingüe se describen en el catálogo suplementario en español. Favor de pedir al consejero de su hijo/a. También se describen en inglés en la sección del área del programa de estudios en este catálogo general inglés del distrito. El catálogo suplementario está disponible en las escuelas secundarias donde se ofrece el programa de educación bilingüe.

ESB116 **Spanish Language Arts for Spanish-Speaking Students**; Grades 9-12; 1 Credit (for Bilingual Education students)

This course is designed to assist students in building their reading comprehension, vocabulary and writing skills with emphasis on language development. At each level between grades 9-12, the complexity of the program increases to enhance student ability to read challenging texts and to speak and write for a wide range of purposes and audiences. Students should be encouraged to write book reports, letters, essays, and persuasive compositions. The study of literature includes authors from Spain, Central and South America, as well as authors from the Caribbean and Spanish-speaking countries.

ACADEMIC INTERVENTION SERVICES

AIS100 **Academic Intervention Support Services**; Grades 9-12; 0 Credits

AIS101 **English Language Arts/AIS**; Grades 9-12; 0 Credits

AIS102 **Mathematics/AIS**; Grades 9-12; 0 Credits

AIS103 **Science/AIS**; Grades 9-12; 0 Credits

AIS104 **Social Studies/AIS**; Grades 9-12; 0 Credits

AIS105 **Study Skills**; Grades 9-12; ½ Credit

MIS115 **Service Learning**; Grades 9-12; ½ Credit

**GORTON HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Computer Science	Academy of Information Technology	Law and Public Service	Commercial Horticulture, Electronics and Building Maintenance Academy	Medical/ Health Professions Academy (Medical Technology Sequence)	Medical/ Health Professions Academy (Medical Preparations Sequence)
<p>9th Grade:</p> <ul style="list-style-type: none"> · Strategies in Computer Science (1 Credit) · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Math (1 Credit) · Living Environment (1 Credit) · Living Environment Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · Strategies in Computer Science (1 Credit) · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Math (1 Credit) · Living Environment (1 Credit) · Living Environment Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · Introduction to Law I (1 Credit) · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Math (1 Credit) · Living Environment (1 Credit) · Living Environment Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · Commercial Horticulture /Floriculture (2 Credits) or, Exploring Electronics and Robotics (1 Credit), or, Design and Drawing for Production (1 Credit) · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Math (1 Credit) · Science (1 Credit) · Science Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · Survey of Medicine (1 Credit) · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Math (1 Credit) · Living Environment (1 Credit) · Living Environment Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · Survey of Medicine (1 Credit) · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Math (1 Credit) · Living Environment (1 Credit) · Living Environment Lab · Physical Education (½ Credit) · Foreign Language (1 Credit)
<p>10th Grade:</p> <ul style="list-style-type: none"> · Computer Applications (1 Credit) · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Math (1 Credit) · Chemistry (1 Credit) · Chemistry Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · Introduction to the Internet and Programming Logic (1 Credit) · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Math (1 Credit) · Chemistry (1 Credit) · Chemistry Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · Introduction to Law II (1 Credit) · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Math (1 Credit) · Chemistry (1 Credit) · Chemistry Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · Commercial Horticulture/ Floriculture (2 Credits), or, Basic Electronics and Robotics (2 Credits), or, Production Systems/ Construction systems (1 Credit), or, Building Maintenance (2 Credits) · English 10 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Science Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · Medical Technology I (1 Credit) · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Math (1 Credit) · Chemistry (1 Credit) · Chemistry Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · Medical Microbiology (1 Credit) · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Math (1 Credit) · Chemistry (1 Credit) · Chemistry Lab · Physical Education (½ Credit) · Foreign Language (1 Credit)
<p>11th Grade:</p> <ul style="list-style-type: none"> · Introduction to Programming Visual Basic (1 Credit), and/or Computer Graphics (1 Credit) · English 11 (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · Advanced Web Tools (1 Credit), and · A.P. Computer Science (1 Credit), or, S.U.P.A. Computers 	<p>11th Grade:</p> <ul style="list-style-type: none"> · Trial Advocacy or Criminal Justice (1 Credit), or · American Legal History (1 Credit), or Entertainment and Sports Law (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · Commercial Horticulture Advanced (2 Credits) or, Advanced Electronics and Robotics (2 Credits) or, Advanced 	<p>11th Grade:</p> <ul style="list-style-type: none"> · Medical Technology II (1 Credit) · Medical Internship · English 11 (1 Credit) · Social Studies 11 (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · Anatomy/ Physiology I (1 Credit) · Medical Internship (½ Credit) · English 11 (1 Credit)

**GORTON HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Computer Science	Academy of Information Technology	Law and Public Service	Commercial Horticulture, Electronics and Building Maintenance Academy	Medical/ Health Professions Academy (Medical Technology Sequence)	Medical/ Health Professions Academy (Medical Preparations Sequence)
<ul style="list-style-type: none"> · Social Studies 11 (1 Credit) · Math (1 Credit) · Science Elective (1 Credit) · Science Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) · Elective (1 Credit) · Health/ Art/ Music (½ -1 Credit) 	<ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit) · Math (1 Credit) · Physics or A.P. Science (1 Credit) · Science Lab · Physical Education (½ Credit) 	<ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit) · Math (1 Credit) · Science Elective (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Health/ Art/ Music (½ -1 Credit) 	<ul style="list-style-type: none"> · Building Maintenance (2 Credits) · English 11 (1 Credit) · Social Studies 11 (1 Credit) · Math (1 Credit) · Science Elective (1 Credit) · Science Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) · Health/ Art/ Music (½ -1 Credit) 	<ul style="list-style-type: none"> · Math (1 Credit) · Science (1 Credit) · Science Lab · Physical Education (½ Credit) · Foreign Language (1 Credit) · Health/ Art/ Music (½ -1 Credit) 	<ul style="list-style-type: none"> · Social Studies 11(1 Credit) · Math (1 Credit) · Physics or A.P. Science (1 Credit) · Science Lab · Physical Education (½ Credit) · Health/ Art/ Music (½ -1 Credit)
<p>12th Grade:</p> <ul style="list-style-type: none"> · Introduction to Web Page Design (1 Credit) and/ or Publications I · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Math Elective (1 Credit) · Science Elective (1 Credit) · Physical Education (½ Credit) · Foreign Language (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · Systems Support and Maintenance/ Digital Networks (1 Credit) · Database Management/ Digital Media (1 Credit) · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Math Elective (1 Credit) · Science Elective (1 Credit) · Physical Education (½ Credit) · Health (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · Ethics (1 Credit) · Foreign Language (1 Credit) · Legal Internship · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Math Elective (1 Credit) · Foreign Language Elective (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · Commercial Horticulture Advanced (2 Credits) or, Advanced Electronics and Robotics (2 Credits) or, Advanced Building Maintenance (2 Credits) · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Math Elective (1 Credit) · Science Elective (1 Credit) · Physical Education (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · Medical Technology III (1 Credit) · Medical Internship · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Math Elective (1 Credit) · Science Elective (1 Credit) · Physical Education (½ Credit) · Foreign Language Elective (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · Anatomy & Physiology II (1 Credit) · Medical Internship · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Math Elective (1 Credit) · Physics or A.P. Science (1 Credit) · Science Lab · Physical Education (½ Credit) · Foreign Language Elective (1 Credit)

GORTON HIGH SCHOOL PROGRAM COURSE OFFERINGS

ACADEMY OF COMPUTER SCIENCE

Computer Science Academy provides a sequence of courses related to the computer sciences. Students master the most widely used integrated applications product (Microsoft Office) and learn to write structured programs using such languages as Visual BASIC. Additional courses are offered in Computer Graphics and Web Page Design. Using fully-equipped facilities, the Computer Science program emphasizes techniques of logical thinking and problem-solving skills. For this reason, students are expected to take four years of math and science during their high school career. Students will work both independently and in collaboration with others on projects in all course work and be expected to do formal presentations.

CMP102 Strategies for Success in Computer Science; Grade 9; 1 Credit

The Computer Science introductory program offers students a wide-ranging overview of the computer science field. Students will get hands-on experience using state-of-the-art hardware and software in model laboratory facilities. Students will develop an understanding of the many and varied uses for the computer in their own daily lives and as a tool to help them solve problems in the future. Emphasis is placed on developing problem-solving strategies, using computer languages and understanding the ethics of computer usage. Additionally students will begin to explore their abilities, experiences, interests and values in preparing an academic plan to reach their career goals. The computer applications segment of the course covers the following topics: presentation, word processing, spreadsheet, e-mail, browser, and desktop publishing.

CMP201 Computer Applications; Grades 10-12; 1 Credit (Prerequisite CMP102 or departmental approval)

In this course students learn several different word processing, database management and spreadsheet design programs and strategies for integrating them. All students will benefit from this course. A survey level student can gain valuable practical preparation for the world of work. Comprehensive level students can develop skills that will help them in college. Instruction will be given using all components of the Microsoft Office Suite or the Sun Microsystems equivalent Star Office. Other business graphics programs may be included, such as an introduction to web design using HTML.

CMP302 College Link Computer Science; Grade 11; 1 Credit (4 College Credits); (Prerequisite CMP201)

This course provides an introduction to problem-solving, data representation, algorithm design, programming and application. Programs requiring a variety of control structures and data structures will be assigned for computer solutions.

CMP304 Desktop Publishing/ Computer Graphics I; Grades 11, 12; 1 Credit (Pre-/Co-requisite CMP201 and CMP301)

Students demonstrate their artistic ability through projects involving original programming as well as through the application of "professional quality" graphics programs. Students are introduced to desktop publishing using such programs as Adobe Photoshop, and Microsoft Publisher, and additional graphical packages such as Bryce and Poser.

CMP307 Computer Science; Grade 11; 1 Credit (College link); (Prerequisite CMP201)

This course provides an introduction to problem-solving, data representation, algorithm design, programming and application. Programs requiring a variety of control structures and data structures will be assigned for computer solutions.

CMP402 Introduction to Web Page Design; Grade 12; 1 Credit

This is the senior course for computer science students. They will learn the basics of organizing, efficiency, formatting, and finally designing web pages. Using Macromedia's Web Design Studio, students will develop their own web page. They will be proficient in Dreamweaver, Flash, Fireworks, and Freehand.

CMP410 Publications; Grades 9-12; 1 Credit

This course is an introduction to the media and publishing. Students will learn about news writing and feature writing, as well as student press law. In addition, students will use computer technology and publishing software, including Photoshop and PageMaker, to learn how to complete page layout. Students enrolled in this course will design and be responsible for the publication of the school newspaper and yearbook.

THE ACADEMY OF INFORMATION TECHNOLOGY

The Academy of Information Technology is a specialized program within the Computer Science Program. The academy is affiliated with the National Academy Foundation and offers a high powered, industry-based curriculum that will prepare those students who intend to major in computer science, computer engineering, network and systems analysis, and multimedia software development in college. Among members of the academy's local Advisory Board are Consumers Union, Junior Achievement, BAE Systems, City of Yonkers IT Department, the Yonkers Public Library, Jewish Council of Yonkers, Y.M.C.A. and Stew Leonard's. The educational representatives provide college affiliations with Syracuse University, Iona College, The College of Westchester, and Westchester Community College. Students take courses in Web Page Development, Java or C++, HTML, Digital Media, System Support and Maintenance, Cyber Security, and Database Management using training software developed by such computer industry leaders as Cisco, Oracle, and SunMicrosystems. In partnerships between businesses and the Yonkers Public Schools, qualified students participate in quality, paid internships at the end of their junior year.

AIT201 Introduction to the Internet and Programming Logic; Grade 10; 1 Credit (Prerequisite CMP102)

This course presents the basics of web page design. Students will develop web pages using the HTML programming language. They will investigate design constructs such as image format, performance efficiency, hyperlinks, and the use of plug-ins. The course will culminate in the creation of an interdisciplinary "multimedia" magazine project. Students learn how to describe, analyze and solve programming problems, paying attention to details. These skills will be acquired while learning the syntax of the Scheme programming language. It is important to note here, however, that learning programming skills, not this specific language, will be the main course objective.

AIT301 Advanced Web Tools; Grade 11; 1 Credit (Prerequisite AIT201; Co-requisite AIT302)

In this course, students are introduced to more advanced web topics such as web scripting, web server administration, and the various multimedia tools and concepts available. Tool sets and concepts such as plug-ins and Macromedia Design Studio are covered.

AIT302 Syracuse University Project Advance (S.U.P.A.) Information Technologies; Grade 11; 1 Credit (College link, 3 College Credits); (Prerequisite AIT201 and Co-requisite AIT502)

This is a basic course in personal information management tools and information technology in the workplace.

AIT401 Systems Support and Maintenance / Digital Networks; Grade 12; 1 Credit (Prerequisite AIT301 and AIT302; Co-requisite AIT402)

Each component of this course is covered in a semester. In Systems Support and Maintenance, students are introduced to the computer's inner workings. Students learn how to troubleshoot and repair various hardware, software, and configuration problems. Students also learn how to install basic computer components as well as to install and configure software ranging from operating systems to applications. In Digital Networks, basic concepts of functionally connecting multiple computing devices are addressed in this course.

Physical connections as well as logical connections are presented. Concepts such as bandwidth, access time, data rate, error detection and correction, as well as other appropriate topics are covered.

AIT402 **Database Management/Digital Media**; Grade 12; 1 Credit (Prerequisite AIT301 and AIT302; Co-requisite AIT401)
Each component of this course is covered in a semester. As part of Database Management, students are introduced to the basic concepts of relational database engines and the tools to use them. Database concepts of tables, rows, indexes, constraints, triggers, SQL syntax, and storage are among the concepts presented. The importance of data relationships is also addressed. In the digital media component, students study appropriate digital media and other topics including audio, video, graphics, text, and animation tools. Concepts such as color and presentation are also addressed.

AIT502 **Syracuse University Project Advance (S.U.P.A.) Computer Science**; Grade 11; 1 Credit (College link, 6 College Credits); (Prerequisite AIT201 and Co-requisite AIT501)
Unique college link course consisting of two semester courses resulting in 6 college credits of computer science.

SEMESTER I

Introduction to Computing (C++)

This course covers computing concepts, principles of programming, applications of computing concepts, and problem-solving in engineering and computer science. Laboratory topics will include problem-solving projects from various engineering disciplines.

SEMESTER II

Computer Software Engineering Design Principles (C++)

This course focuses on software design principles. The course covers the design of computer programs including top-down and object-oriented design, analysis, testing, user interface, documentation, data structures, and graphic I/O. Applications are drawn from science and engineering and are programmed in C++.

AIT503 **Syracuse University Project Advance (S.U.P.A.) Introduction to Cyber Security**; Grade 12; 1 Credit (College link, 3 college credits)

This course introduces students to the fundamental concepts of network organization, operation, and security; as well as mechanisms and history of software, hardware and OS security. Students will be able to differentiate between physical, organizational and personal security. There is a significant hands-on laboratory component with demonstrations and projects.

HORTICULTURE, FLORICULTURE, AND BUILDING MAINTENANCE ACADEMY

This program is designed to prepare students for entry into the Horticulture, Floriculture, and Building Maintenance industries.

Horticulture students learn about landscaping, lawn care, tree care, and greenhouse production. Learning experiences are provided off-campus at Yonkers Education and Cultural Arts Center (Y.E.C.A.C.), and Lenoir Nature Preserve. Students combine course work with hands-on learning and practical applications of their studies.

Floriculture students learn about designing and arranging fresh-cut, dried, and silk flowers. Learning experiences are provided off-campus at Yonkers Education and Cultural Arts Center (Y.E.C.A.C.). Students combine work with hands-on learning and practical applications of their studies.

Building Maintenance students are prepared for a career in the construction field. The students receive hands-on training in woodworking, design and drafting skills, with weekly visits to a construction site. A partnership with Habitat for Humanity affords the students the opportunity to help build and remodel homes in our community.

HRT200 **Floriculture**; Grades 10-12; 2 Credits (Double-period, located off-campus)

This course concentrates on designing and arranging floral products. The class structure provides a professional environment similar to what would be experienced at a florist. Students take floral orders, create floral arrangements, and market their products.

HRT300 **Horticulture**; Grades 10-12; 2 Credits (Double-period, located off-campus)

This course concentrates on growing, installing, maintaining, designing, and using plants, shrubs, and trees in a landscape. Students use various hand tools and power equipment to install and maintain landscapes both on and off campus. Students also grow and care for plants in a greenhouse.

TEC101 **Design and Drawing for Production**; Grades 9-12; 1 Credit

TEC206 **Production Systems/ Construction Systems**; Grades 10-12; 1 Credit

OCC231 **Building Maintenance**; Grades 10-12; 2 Credits

OCC331 **Advanced Building Maintenance**; Grades 11, 12; 2 Credits

LAW AND PUBLIC SERVICE ACADEMY

This program concentrates on helping students to become better informed, knowledgeable, and self-assured citizens. Students are provided with many unique opportunities to examine the various aspects of the world of law and public service.

The Law Program's special courtroom/ classroom is designed as a "courtroom." In this specially built facility, students learn and "live" the law. They not only get to discuss legal issues with professionals who come in and visit, but also "do" trials and other law-related activities. Students experience "the law" through many different courses offered in the Law Program. From *Juvenile Law* to *Criminal Justice* to *Trial Advocacy* to *Civil Law*, students get a feel of the diversity of the legal world. In each and every course, students go through a variety of activities: arguing viewpoints, demonstrating/ "doing" trials, portraying police situations, and making decisions in numerous student-lead situations, many different topics are explored.

The curriculum is designed in such a way that by senior year, students may opt for the *Legal Internships* course. In this course, students can work in real-life situations with professionals outside of school. This real school-to-work program has been in existence for the past fourteen (14) years. Over this time, students have worked in numerous attorneys' offices, Yonkers City Government, Yonkers City Court, and for other elected officials here in Yonkers or in White Plains.

Throughout the Law Program, students are given many unique and special opportunities. These range from learning first-hand information from guest speakers to going on specially arranged trips to law enforcement facilities and courtrooms. The Law Program has also developed a college link wherein students can obtain college credit for several of our courses.

LAW100 **Introduction to Law I**; Grade 9; 1 Credit

This course's focus is on an examination of juvenile law. Issues include delinquency, biological, psychological, and sociological explanations of delinquencies. Other topics studied include juveniles and the police, gangs, court process and due process.

LAW201 **Introduction to Law II**; Grade 10; 1 Credit

This course provides an overview of how law affects us individually and as a society, provides an introduction to the "reality versus the myths" of law, and sets the basis for all the other Law Program courses.

LAW301 **Criminal Justice**; Grades 11, 12; 1 Credit (Prerequisite LAW201)

This is an in-depth look at our Criminal Justice System focusing on knowledge of various types of crimes -- their differences and degrees; who commits these crimes; what role the police have; recent police-related issues; what happens before-during-and-after trial; the purpose of corrections; and prison life. This course is similar to "Law Enforcement" with a focus on the "system" and how it operates, rather than jobs related to the "system."

LAW304 **Ethics and the Law I**; Grades 11, 12; 1 Credit

The course is designed to allow students to explore the relationship between ethical, moral and legal issues. It aims to clear some of the apparent contradictions found in the laws and rules that society enacts and enforces with evolving social norms. The course asks students to debate why some actions may be considered immoral and yet are legal and why some actions, long considered illegal, may no longer qualify as immoral. Students will become more sensitive to the ethical issues around them at home, in school, in the community and throughout the nation; appreciate the

individual and cultural diversity that is present in American life; listen to, understand, and respect ethical points of view that differ from their own. Students will recognize the value of a life long search for the best answers to life's problems, the best ethical principles to live by, and, eventually, the good life. In the words of Socrates: "...not life, but a good life is to be chiefly valued."

LAW306 Forensic Investigations and Law Enforcement; Grades 11, 12; 1 Credit (Prerequisite LAW201)

An in-depth examination of law enforcement, security, and public safety occupation is provided. The use of actual forms, manuals and materials from various Law Enforcement departments and agencies are part of this course. This course is similar to the Criminal Justice course, but with sole focus on the training, operating procedures and issues related to the people involved in the Law Enforcement careers (i.e., Police, F.B.I., Secret Service, Private Investigators, Bail Bondsman, Correctional Officers, etc.). The Forensic Investigation component introduces the student to numerous investigative techniques: photographing, taking notes, sketching, identifying, collection, examining and processing physical evidence; obtaining information; developing, locating and identifying suspects; conducting surveillance, undercover assignments and raids. College credits are available for this course. Students will also learn the how investigation relates to the criminal justice system, how to prepare a case for trial and how to testify.

LAW307 Forensics; Grades 11, 12; 1 Credit

This course is intended to examine various scientific procedures in a criminal investigation.

LAW401 Trial Advocacy & Tactics; Grades 11, 12; 1 Credit (Prerequisite LAW201)

This course provides an extensive examination of trial tactics. Students prepare and present all aspects of trial work utilizing a variety of different groups and people as judge and jury (i.e., cross-grade level trials). Yonkers City Court as well as our Gorton High School courtroom provide the setting. College credits are available for this course.

LAW402 Legal Internship; Grade 12 only; 1 Credit

Students divide time between class seminars and "on-site" experiences. Vast opportunities to see behind-the-scenes professionals at work. This course is based upon college internship courses. The possibility of three (3) college credits are available for this course.

LAW403 Ethics and the Law II; Grades 11, 12; 1 Credit

The course is designed to allow students to explore the relationship between ethical, moral and legal issues. It aims to clear some of the apparent contradictions found in the laws and rules that society enacts and enforces with evolving social norms. The course asks students to debate why some actions may be considered immoral and yet are legal and why some actions, long considered illegal, may no longer qualify as immoral. Students will become more sensitive to the ethical issues around them at home, in school, in the community and throughout the nation; appreciate the individual and cultural diversity that is present in American life; listen to, understand, and respect ethical points of view that differ from their own. Students will recognize the value of a lifelong search for the best answers to life's problems, the best ethical principles to live by, and, eventually, the good life. In the words of Socrates, "...not life, but a good life is to be chiefly valued."

LAW404 American Legal History; Grades 11, 12; 1 Credit

This course is designed to let the documents of legal history speak for themselves. At the same time, it will take an expansive view of American legal culture, including material that is found in casebooks, such as speeches, government reports, and works of philosophy. These documents will serve as an avenue to explore the changing social, economic, and political developments in our time. The course will act as a reinforcement for students to review the many interesting topics covered in United States history and government, while fulfilling the mandates set forth by New York State Board of Regents in standard five - civics/government.

The sections of the course will include: the Beginning of American Law to 1760; Law in a Republican Revolution, 1760-1815; The Active State and Mixed Economy, 1812-1860; Slavery, the Civil War, and Reconstruction; 19th

Century Law and Society, 1800-1900; Bench, Bar, and Legal Reform in the 19th Century; Industrialization and the Regulatory State, 1860-1920; Total War, Civil Liberties, and Civil Rights; The Rise of Legal Liberalism, Economic Reform, and the New Deal, 1900-1945; and the Tensions of Contemporary Law and Society, 1945-present.

LAW405 **Entertainment and Sports Law**; Grades 11, 12; 1 Credit

This course will be devoted to the study and understanding of entertainment sports, arts, intellectual property law, and other related areas. It endeavors to provide current, practical information as well as public policy and scholarly viewpoints that are of potential professional and academic interest to our students. The course will explore topics in the sports and entertainment fields. In the Sports field, topics will include: the business of baseball - a look at contracts, trades, free agency; the economics and legalities of team ownership; building stadiums - impacts on environment, community and business owners; disciplinary actions against players - the Sprewell incident; conduct of players on and off the field - legal implications; the role of player agents and contract negotiations; leagues and monopolies - how much power should they have?; and antitrust violations.

In the Entertainment field, topics will include: motion picture, television, cable, and radio licensing, distribution and ownership rights; industry contracts, music groups and musicians - how to get started in the music industry, negotiating a contract, cutting your CD; autographing and memorabilia ownership rights; legitimate theater and performing arts; literary publishing rights - writing your first work and getting it published; interactive media and new technology laws; visual arts; censorship laws, First Amendment issues and the entertainment media; and merchandising and licensing laws.

ACADEMY OF MEDICAL PROFESSIONS

The Academy of Medical Professions program is designed for students who are interested in pursuing careers in the areas of medicine, dentistry, pharmacy, veterinary medicine, biotechnology, and hospital administration. The design and curriculum of the academy is based on the National Healthcare Skills Standards. Students are provided with a broad blend of scientific studies, medical arts, and technological principles through academic classes in medical terminology, medical microbiology, and anatomy and physiology. In addition, the students participate in hands-on experiences in the classroom and through specialized practicums, mentorships, and internships that mirror their interest.

Practicums/ internships reflect the diagnostic, therapeutic, biotechnology (research and development), health informatics, and support services career clusters. These opportunities are provided through affiliations with St. Joseph's Medical Center, St. John's Riverside Hospital, Cochran School of Nursing, Queen's Daughters' Day Nursery, St. Peter's Child Care Center, County Animal Specialty Clinic, and the Community Wellness Center at Gorton High School. In addition, students are encouraged to take college classes through local colleges. State (Emergency Medical Technician and Certified Nurse Aide) and national (Pharmacy Technician) certification programs are offered through the academy.

- Two practicums (1 Credit) are required to graduate from this program.

MED100 **Survey of Medicine**; Grade 9; 1 Credit

This course exposes the student to a broad spectrum of career opportunities within the field of medicine, prepares the student for advancement into the workplace or higher education, and is designed to identify areas of interest, improve abilities, and facilitate the use of these abilities in future endeavors.

MED200 **Medical Internship Program**; Grades 9-12; 1 Credit

One credit is granted at the time of graduation for completion of two practicums or internships. Practicum opportunities occur at various sites through hands-on experiences at local hospitals, day care centers, veterinary facilities, and other community agencies. Credit is also granted for college-link classes.

MED201 Medical Microbiology; Grade 10; 1 Credit

This course introduces the student to the fields of Medical Microbiology and Immunology and professions relating to these areas of study. As part of this course, the student is prepared to make "healthy" lifestyle choices through the study of nutrition, the cardiovascular system, and CPR.

MED203 Medical Technology I; Grade 10; 1 Credit

This course offers a chance to explore basic skills needed for many technological and medically related fields of study, to become certified in First Aid and CPR, and to study infectious diseases and their transmission.

MED204 Authentic Science Research; Grades 10-12; 1 Credit

This course is an independent science research class offered in conjunction with the State University at Albany (up to 12 college credits). In the first year, students perform an extensive scientific literature search on a topic of their choice; in the second year students engage in an original piece of research under the supervision of their mentor; and in the third year, students prepare a research paper for publication and submission to the Intel Science Talent Search.

MED420 Independent Science Research I; Grade 10; 1 Credit

MED421 Independent Science Research II; Grade 11; 1 Credit

MED422 Independent Science Research III; Grade 12; 1 Credit

These courses introduce the student to the skills and methodology of independent scientific research on a topic of the individual's choice. The original research is performed under the supervision of a mentor with expertise in that particular topic. Successful completion requires a scientific research paper suitable for publication in a scientific journal.

MED301 Anatomy and Physiology I; Grade 11; 1 Credit

This course focuses on the structure and function of the human body. The course systematically describes the body through cells, tissues, organs, systems and how they are integrated. Major areas of study are the musculoskeletal and renal functions of the body that coincide with field trips to St. Joseph's Medical Center.

MED303 Medical Technology II; Grade 11; 1 Credit

This course explores the basics in Anatomy and Physiology and familiarizes the students with body structures, systems, and their interrelationships.

MED401 Anatomy and Physiology II; Grade 12; 1 Credit (Prerequisite Anatomy and Physiology I)

This course is a continuation of Anatomy and Physiology I and covers the cardiovascular, lymphatic, digestive, reproduction, and endocrine systems.

MED403 Medical Technology III; Grade 12; 1 Credit

This is a basic course covering several topics in Anatomy and Physiology that focus on a realistic approach to a successful entrance into medical careers. Students are encouraged to achieve the goals of this course at a pace that is appropriate for their ability levels.

YHE204 Hospital Work-Site Occupational Program; Grades 10-12; 2 Credits (Double period); (as stated on IEP)

This course is designed to introduce and reinforce a variety of work skills and work behaviors through actual hands-on experiences in a hospital and/or nursing home setting. Work-site possibilities include such areas as housekeeping, central supply, transport, laundry and reception.

MED400 Health Promotion; Grades 11, 12; 1 Credit (2 College Credits)

This course addresses research and theories related to the promotion of health, prevention of disease, and the maintenance of individuals, families, and communities. The focus is on strategies to enhance wellness across the life span.

MED402 Contemporary Moral Issues; Grades 11, 12; 1 Credit (3 College Credits)

This course will address fundamental ethical theories and their applications to current moral issues, such as capital punishment, abortion, sexual equality, economic justice, and issues in medical and other professional ethics.

MED407 Introduction to Veterinary Science; Grades 10-12; 1 Credit (3 College Credits)

This course serves as an introduction to medical terminology, clinical pathology, biomedical ethics and research, and fundamentals of disease in animals and provides students with a view of various medical careers serving animals. (Mercy College)

MED408 Kinesiology; Grades 10-12; 1 Credit (3 College Credits)

This course studies the normal functional movement of the human body from a mechanical perspective as it relates to biological tissues. This course is a prerequisite to fields of study involving physical and occupational therapy, sports medicine, and physical education. (Mercy College)

MED409 College Success; Grades 9-12; 1 Credit (3 College Credits)

This course is designed to help students to develop a plan for success and sharpen skills which are essential for success in college. Topics that are emphasized are goal-setting, time management, achievement motivation, and financial management. (Westchester Community College)

MED410 College Algebra; Grades 9-12; 1 Credit (3 College Credits)

This course provides an introduction to functions and graphing, linear functions, quadratic and exponential functions, rate of change, modeling data, systems of linear equations, exponents, radicals, and logarithms. (Westchester Asset Exam) (Westchester Community College)

MED411 Medical Terminology; Grades 10-12; 1 Credit (4 College Credits)

This course introduces medical terms commonly used in health related areas. Stress is on prefixes, suffixes, and word roots. Anatomy and physiology of the human body, disease process, surgical and diagnostic procedures, and medical abbreviations will be included in the course. (Westchester Asset Exam)

MED412 Anatomy and Physiology I and Lab; Grades 10-12; 1 Credit (4 College Credits)

This course is a study of the structure and function of the various systems of the human body. Topics included are the skeletal system, musculature, the nervous system, the endocrine system, and the reproductive system. (Westchester Asset Exam) (Westchester Community College)

MED413 Emergency Medical Services I; Grade 12; 1 Credit (5 College Credits)

This course introduces the student to EMS systems, basic human topographical anatomy, basic life support (CPR), and assessment and various treatment modalities for medical and traumatic emergencies. Ten hours of hospital emergency department observation is required. Upon successful completion of all course work and practical skills examination, students at the age of eighteen will be eligible to take the New York State Department of Health certification examination for EMT. (Westchester Community College)

MED414 Intermediate Science Research; Grade 11; 1 Credit (6 College Credits)

This course introduces the student to the skills and methodology of independent scientific research on a topic of the individual's choice. The original research is performed under the supervision of a mentor with expertise in that particular topic. Successful completion requires a scientific research paper suitable for publication in a scientific journal. (S.U.N.Y. Albany)

MED415 Anatomy and Physiology II and Lab; Grade 12; 1 Credit (4 College Credits)

Continuation of Anatomy and Physiology I. Topics included are: the circulatory system, the respiratory system, the digestive system, metabolism, the urinary system, fluid and pH balance. (Westchester Asset Examination.)

MED416 **Pharmacy Technician Training Program**; Grade 12; 1 Credit

Interactive multimedia program designed to prepare students to pass the nationally recognized Pharmacy Technician Certificate Board Examination.

MED417 **Advanced Science Research**; Grade 11; 1 Credit (up to 6 College Credits)

This course introduces the student to the skills and methodology of independent scientific research on a topic of the individual's choice. The original research is performed under the supervision of a mentor with expertise in that particular topic. Successful completion requires a scientific research paper suitable for publication in a scientific journal. (S.U.N.Y. Albany)

MED418 **Psychology**; Grades 11, 12; 1 Credit (3 College Credits)

Introductory course in psychology offered through Lehman College.

MED419 **Certified Nurses Aide Program**; Grades 10-12; 1 Credit

Skills, knowledge and behaviors to obtain State Certification and employment in an acute or long-term care facility. (Offered through St. Joseph's Medical Center.)

**LINCOLN HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Officer Training Leadership	Pre-Teaching and Educational Services Academy	The Academy of Finance	Technology Occupation Center	Business Manufacturing
<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Introduction to Leadership (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Exploratory Educational Opportunities/ Child Development (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Exploring Finance/ Computer Applications (½ Credit each) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Career and Financial Management (1 Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies 9 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Small Business or Career and Financial Management (1 Credit each)
<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Music (½ Credit each) · Leadership Techniques (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Music (½ Credit each) · Introduction to Sociology/ Applications in Technology (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Music (½ Credit each) · Accelerated Accounting (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Music (½ Credit each) · Computer Technology/ Communications or Accounting I or Internet Technology I (1 Credit) · Business Computer Applications (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies 10 (1 Credit) · Science (1 Credit) · Science Lab · Math (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Music (½ Credit each) · Design/ Drawing (1 Credit)
<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies 11 (1 Credit)

**LINCOLN HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Officer Training Leadership	Pre-Teaching and Educational Services Academy	The Academy of Finance	Technology Occupation Center	Business Manufacturing
<ul style="list-style-type: none"> Credit) · Science (1 Credit) · Science Lab · Geometry (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Health (½ Credit each) · Leadership Techniques II (1 Credit) 	<ul style="list-style-type: none"> · Science (1 Credit) · Science Lab · Geometry (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Health (½ Credit each) · Introduction to Psychology (1 Credit) · Topics in Adolescent Psychology (1 Credit) 	<ul style="list-style-type: none"> · Science (1 Credit) · Science Lab · Geometry (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Health (½ Credit each) · World of Finance (½ Credit) · Financial Planning (½ Credit) 	<ul style="list-style-type: none"> Credit) · Science (1 Credit) · Science Lab · Geometry (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Health (½ Credit each) · Principles of Marketing or Accounting I (1 Credit) 	<ul style="list-style-type: none"> · Science (1 Credit) · Science Lab · Geometry (1 Credit) · Foreign Language (1 Credit) · Physical Education/ Health (½ Credit each) · Production Systems (1 Credit)
<p>12th Grade:</p> <ul style="list-style-type: none"> · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Science Elective (1 Credit) · Science Lab · Algebra 12 or Pre-Calculus or Calculus (1 Credit) · Language/ Electives (1 Credit) · Physical Education/ Art (½ Credit each) · Public Speaking/ Computer Communications (1 Credit) · Field Work Internship in Education (1 Credit) · Advanced Leadership (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Science Elective (1 Credit) · Science Lab · Algebra 12 or Pre-Calculus or Calculus (1 Credit) · Language/ Elective (1 Credit) · Physical Education/ Art (½ Credit each) · Public Speaking/ Computer Communications (1 Credit) · Field Work Internship in Education (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English 12 (1 Credit) · Social Studies (1 Credit) · Science Elective (1 Credit) · Science Lab · Algebra 12 or Pre-Calculus or Calculus (1 Credit) · Language/ Elective (1 Credit) · Physical Education/ Art (½ Credit each) · Advanced Computer Communications/ Public Speaking (1 Credit) · Banking & Credit (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Science Elective (1 Credit) · Science Lab · Algebra 12 or Pre-Calculus or Calculus (1 Credit) · Language/ Elective (1 Credit) · Physical Education/ Art (½ Credit each) · Advanced Accounting or Internet/ E-Commerce (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English 12 (1 Credit) · Social Studies 12 (1 Credit) · Science Elective (1 Credit) · Science Lab · Algebra 12 or Pre-Calculus or Calculus (1 Credit) · Language/ Elective (1 Credit) · Physical Education/ Art (½ Credit each) · Manufacturing Systems (1 Credit)

**LINCOLN HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Instrumental Music	Stagecraft	Acting	Vocal Music	Culinary Arts
9th Grade: English 9 (1 Credit) Social Studies 9 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education (½ Credit) Instrumental Music (1 Credit)	9th Grade: English 9 (1 Credit) Social Studies 9 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education (½ Credit) Exploratory Stage (1 Credit)	9th Grade: English 9 (1 Credit) Social Studies 9 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education (½ Credit) Introduction to Acting (1 Credit)	9th Grade: English 9 (1 Credit) Social Studies 9 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education (½ Credit) Beginning Vocal (1 Credit)	9th Grade: English 9 (1 Credit) Social Studies 9 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education (½ Credit) Culinary Arts Exploratory (1 Credit)
10th Grade: English 10 (1 Credit) Social Studies 10 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education (½ Credit) Intro to Music (½ Credit) Instrumental Music (1 Credit)	10th Grade: English 10 (1 Credit) Social Studies 10 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education/ Music (½ Credit each) Stage/ Scenic Design (1 Credit)	10th Grade: English 10 (1 Credit) Social Studies 10 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education/ Music (½ Credit each) Acting II (1 Credit)	10th Grade: English 10 (1 Credit) Social Studies 10 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education/ Music (½ Credit each) Intermediate Vocal(1 Credit)	10th Grade: English 10 (1 Credit) Social Studies 10 (1 Credit) Science (1 Credit) Science Lab Math (1 Credit) Foreign Language (1 Credit) Physical Education/ Health (½ Credit each) Culinary Arts I (1 Credit)
11th Grade: English 11 (1 Credit) Social Studies 11 (1 Credit) Science (1 Credit) Science Lab Geometry (1 Credit) Foreign Language (1 Credit) Physical Education/ Health (½ Credit each) Instrumental Music (1 Credit)	11th Grade: English 11 (1 Credit) Social Studies 11 (1 Credit) Science (1 Credit) Science Lab Geometry (1 Credit) Foreign Language (1 Credit) Physical Education/ Health (½ Credit each) Advanced Stagecraft I (1 Credit)	11th Grade: English 11 (1 Credit) Social Studies 11 (1 Credit) Science (1 Credit) Science Lab Geometry (1 Credit) Foreign Language (1 Credit) Physical Education/ Health (½ Credit each) Acting III (1 Credit)	11th Grade: English 11 (1 Credit) Social Studies 11 (1 Credit) Science (1 Credit) Science Lab Geometry (1 Credit) Foreign Language (1 Credit) Physical Education/ Health (½ Credit each) Advanced Vocal Music (1 Credit)	11th Grade: English 11 (1 Credit) Social Studies 11 (1 Credit) Science (1 Credit) Science Lab Geometry (1 Credit) Foreign Language (1 Credit) Physical Education/ Health (½ Credit each) Culinary Arts II (1 Credit)
12th Grade:	12th Grade	12th Grade:	12th Grade:	12th Grade:

**LINCOLN HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Instrumental Music	Stagecraft	Acting	Vocal Music	Culinary Arts
English 12 (1 Credit) Social Studies (1 Credit) Science Elective (1 Credit) Science Lab Algebra 12 or Pre-Calculus or Calculus (1 Credit) Language (1 Credit) Physical Education/ Art (½ Credit each) Instrumental Music (1 Credit) Music in our Lives (1 Credit)	English 12 (1 Credit) Social Studies (1 Credit) Science Elective (1 Credit) Science Lab Algebra 12 or Pre-Calculus or Calculus (1 Credit) Language/ Elective (1 Credit) Physical Education/ Art (½ Credit each) Advanced Stage II (1 Credit)	English 12 (1 Credit) Social Studies 12 (1 Credit) Science Elective (1 Credit) Science Lab Algebra 12 or Pre-Calculus or Calculus (1 Credit) Language/ Elective (1 Credit) Physical Education/ Art (1 Credit each) Acting IV (1 Credit)	English 12 (1 Credit) Social Studies 12 (1 Credit) Science Elective (1 Credit) Science Lab Algebra 12 or Pre-Calculus or Calculus (1 Credit) Language/ Elective (1 Credit) Physical Education/ Art (½ Credit each) Advanced Vocal Music (1 Credit)	English 12 (1 Credit) Social Studies 12 (1 Credit) Science Elective (1 Credit) Science Lab Algebra 12 or Pre-Calculus or Calculus (1 Credit) Math (1 Credit) Language/ Elective (1 Credit) Physical Education/ Art (½ Credit each) Principles of Nutrition (1 Credit)

LINCOLN HIGH SCHOOL PROGRAM COURSE OFFERINGS

HIGH SCHOOL FOR THE ARTS, BUSINESS/FINANCE AND EDUCATIONAL SERVICES

Lincoln High School's course offerings provide for the whole child. The students select a strong academic program that incorporates and teaches them the skills necessary for career choices in the Arts, Business/Finance or Educational Services. However, whether or not a student becomes a great musician, CEO of a corporation or renowned psychologist -- as some of the graduates have, every student leaves Lincoln High School with a strong academic foundation. This is clearly evidenced by the fact that approximately 80% of our graduates go on to higher education.

BUSINESS AND FINANCE ACADEMY

A strong academic foundation supports each of the three majors in the Business and Finance Academy. Students can elect to take a course of study in: The Academy of Finance, Technology Occupations and Business and Manufacturing.

THE ACADEMY OF FINANCE

Is the nationally acclaimed program sponsored by Citigroup and American Express. This program for the four-year college bound student focuses on their preparation of academic excellence and financial expertise. The Academy relies on a strong partnership between business and the public schools. It is designed to bridge the gap between the classroom and the world of work. Hands-on experiences in the form of job-shadowing, paid summer internships, visitations to leading corporations, and financial conferences with the financial "movers and shakers" are all part of this innovative curriculum. In addition, more than 98% of the Academy students go on to post-secondary education.

FIN100 **Exploring Finance**; Grade 9; ½ Credit

FIN102 **Computer Applications**; Grade 9; ½ Credit

FIN202 **Accelerated Accounting Century Honors**; Grade 10; 1 Credit

FIN300 **Financial Planning**; Grade 11; ½ Credit

FIN302 **World of Finance**; Grade 11; ½ Credit

FIN403 **Advanced Computer Communications Century Honors**; Grade 12; ½ Credit /ENG412 **Public Speaking**; Grade 12; ½ Credit

FIN500 **Banking and Credit**; Grade 12; 1 Credit

TECHNOLOGY OCCUPATION CENTER

Designed to give students a solid foundation in the various skills necessary to successfully compete in a 21st century office. Besides offering the traditional courses in accounting and marketing, Lincoln High School also offers the nationally recognized A+ certification.

IOC106 **Career and Financial Management**; Grade 9; (half-year); ½ Credit

CBM102 **Computer Technology/Communications**; Grades 10-12; 1 Credit

Basic business terminology will be discussed and analyzed, terms such as supply and demand, profit and loss, stocks and bonds, expenses, taxes, finance charges, interest rates, etc. Types of business and marketing strategies both on-line and on land will be covered. Students will utilize business software such as Excel, PowerPoint, Word, Access, etc. Business attire and proper interoffice behavior will also be addressed. The Internet will be utilized as a learning tool for research and demonstration of E-commerce.

YIC102 **Introduction to Computer Keyboarding**; Grades 9-12; 1 Credit (as stated in IEP)

Introduction to navigation of computer hardware and software and the terminology that accompanies this navigation.

YCM201 **Business Analysis/Business Computer Applications**; Grades 10-12; 1 Credit (as stated in IEP)

CBM233 **Principles of Marketing**; Grades 10-12; 1 Credit

This course is designed to introduce students to the important role that marketing plays in our economic system. Content revolves around the basic marketing functions of financing, risk management, selling, promotion, pricing, purchasing, marketing information management, production/service/ideal planning and distribution.

CBM301 **Accounting I (Basic Principles)**; Grades 10-12; 1 Credit

Introduction to the basic and beginning principles of accounting; how it is applied in both business and household environments. Career exploration and overall analysis of the role of accounting in American society will also be explored.

CBM309 **Internet Technology I**; Grades 10-12; 1 Credit

This course will offer students a detailed exploration of the hardware components in personal computers and their operating systems while teaching students the necessary skills to design their own personal web page and digital portfolio. Students will investigate Internet marketing structures and strategies.

YCM308 **Office Technology I**; Grades 11, 12; 1 Credit (Prerequisite YCM201); (as stated in IEP)

CBM400 **Advanced Accounting**; Grade 12; 1 Credit

YCM180 **Office Services**; Grades 9-12; 2 Credits (as stated in IEP)

YCM233 **Principles of Marketing**; Grades 10-12; 1 Credit (as stated in IEP)

TEC303 **Telecommunications/A+ Certification**; Grade 10; 2 Credits

TEC101 **Design and Drawing for Production**; Grades 9-12; 1 Credit

Required for Technology sequence and Scenery/Display Program (satisfies Art/Music requirement). This course is designed to encourage visual problem-solving, using a common graphic language to describe forms in the man-made environment. Included are six (6) basic areas of technical drawing: orthographic, projection, pictorial drawing, sections auxiliaries, revolutions, transitions and developments, plus elements of design.

YHE203 **Human Resource Services**; Grades 10-12; 2 Credits; (Double period, Lincoln only); (as stated in IEP)

This program is designed to prepare students for unsubsidized employment in a variety of situations involving skills basic not only to the care of children, but also for an aging population. Students are being prepared for entry-level support positions only, to work with and under the direction and supervision of more experienced staff.

THE BUSINESS AND MANUFACTURING CENTER

Designed to provide students with a broad understanding of manufacturing and the role that marketing plays in business success. Students will become proficient in market research, product planning and manufacturing, distribution, pricing, promotions and related marketing activities. Students will receive hands-on experiences in all aspects of business operations including the use of computer robotics.

TEC103 **Exploring Occupations/ Business Manufacturing**; Grade 9; ½ Credit (half-year)

TEC101 **Design and Drawing for Production**; Grades 10-12; 1 Credit: (satisfies Art/Music requirement)

TEC206 **Production Systems/Construction Systems**; Grades 11, 12; 1 Credit

TEC302 **Manufacturing Systems**; Grade 12; 1 Credit

PRE-TEACHING AND EDUCATIONAL SERVICES ACADEMY

The Pre-Teaching and Educational Services Academy is professional preparation program for college bound high school students. Pre-Teaching students are introduced to careers in teaching, psychology, social work, counseling and related fields. This research-based academic program provides the skills students need for academic success in high school and advanced college study in one of the above mentioned areas. Students are encouraged to enroll in core-area Century Honors, Advanced Placement and college link classes. Through linkages with local elementary schools and the International Junior Achievement Program, students have the opportunities for “hands-on” teaching experience. All courses have a technology component. This is where you will find tomorrow’s teachers.

SVC102 Exploring Educational Opportunities/Child Development; Grades 9, 10; 1 Credit

Students will gain initial exposure to the world of work. Careers that are involved in helping others, with an emphasis on children, such as teaching, psychology, counseling, and social work, will be explored. Through the study of child development and learning styles, students will begin to develop insight into contemporary issues related to the field of care-giving and early childhood education.

SVC105 Introduction to Sociology/Applications in Technology; Grade 10; 1 Credit

The study of sociology will provide students with an understanding of the formations of groups and social structures - why we form groups and how the groups enable us to survive. We will study the theories of sociologists who believe that the groups or social structures one belongs to have a profound influence over the way individuals think, feel, and act. This class will provide students with the tools to understand what social structures are, how they affect our beliefs and behaviors, and how individuals relate to each other. Career exploration in the related fields of sociology will bring new possibilities to each student.

HCS104 Topics in Adolescent Psychology; Grade 11, 12; 1 Credit

Students will explore the main topics of psychology, with an emphasis on adolescence. Included in the curriculum will be the physical, emotional, and social aspects of adolescence. The importance of nutrition, hygiene, exercise, and sleep will be investigated. Through a variety of classroom exercises and activities students will gain an understanding of careers that relate to psychology.

HCS105 Introduction to Psychology; Grade 11; 1 Credit

This class will introduce students to the systematic and scientific study of the behavior and mental processes of human beings. We will investigate personality theories, social psychology, perception, learning theories, and scientific research methods. We will also explore careers relating to the field of psychology and students will be given the opportunity to acquire the tools for making effective personal decisions through the use of self-assessment instruments.

SVC402 Field Work Internship in Education; Grade 12; 1 Credit

Students will complete field work at an elementary/ middle school in conjunction with mentoring in educational theory and methodology (practices). Students will compile a journal of field experiences and complete a reflective or research-based paper under the supervision of the school-based teacher/mentor.

ENG422 Public Speaking/ Computer Communications; Grade 12; 1 Credit (College link)

This course is designed to enhance communication skills through exercises in body language, eye contact, diction, and voice projection.

*** Students should complete a minimum of 4 of the above courses as a full-time magnet member.**

ARTS ACADEMY

Through a broad-based liberal arts curriculum which includes Advanced Placement and college credit courses, students concentrate on a major in either the visual arts or the performing arts (i.e., theater, vocal, instrumental music or stagecraft). Unique and educationally sound opportunities abound for the students through linkages with the prestigious Lincoln Center Institute, S.U.N.Y. Purchase, (Neuberger Museum of Art and Katonah Museum of Art). Further, the students who select this program will benefit academically as Arts education enhances academic performance. The Arts Academy will provide students with the forum to develop their own talents while working with professionals in front of the public and behind the scenes. *

ART201 **Studio in Art**; Grades 9-12; 1 Credit

YAT201 **Studio in Art**; Grades 9-12; 1 Credit (as stated in IEP)

This course offers a foundation for all students interested in a general creative experience, and should be a prerequisite for all other art courses. In this course, students learn to recognize and use the elements and principals of art as well as experiment with a variety of art materials and techniques.

ART203 **Drawing and Painting**; Grades 10-12; 1 Credit (Prerequisite ART 201)

Using a problem-solving approach, students will improve their drawing skills, gain a better understanding of color, and learn to organize more exciting compositions.

ART204 **Ceramics and Sculpture**; Grades 10-12; 1 Credit

In Ceramics and Sculpture students learn to apply the principals of three dimensional design and composition to produce a variety of projects. Materials such as clay, plaster, wood, metal, and plastic are used.

ART401 **A. P. Art**; Grades 10-12; 1 Credit (Prerequisites: Art Foundation, Drawing and Painting or Ceramics and Sculpture, portfolio review, and teacher recommendation.)

The AP program in three-dimensional design, two-dimensional design, and drawing and painting is intended for highly motivated students who are seriously interested in the study of art. Students should be made aware that AP work involves significantly more commitment and accomplishment than the typical high school course and that the program is not for the casually interested. It is required that AP students have previous course work in art. A portfolio, a written statement and a teacher's recommendation will be required for review by the Art Department before being accepted into the program. Portfolio must have a minimum of twelve (12) pieces of the student's best work. Students are required to sit for the AP exams in the AP course taken. Students who fail to sit for the exam will not receive a weighted grade.

PRF112 **Introduction to Acting**; Grades 9-12; 1 Credit

Students learn basic principles of acting. Beginning students proceed through a sequence of acting units that includes focus and concentration; theatre games, pantomime and improvisation; story theatre; Shakespearean acting; play reading and play writing. Field trip participation for all drama students is highly encouraged.

PRF312 **Acting II**; Grade 10; 1 Credit

PRF412 **Acting III**; Grade 11; 1 Credit

PRF405 **Acting IV**; Grades 11, 12; 1 Credit (Advanced students by instructor's recommendations)

Advanced Acting II thru Acting IV are open only to students who have taken the prerequisite classes. Students continue their learning by active participation and build on their fundamental skills adding advanced mask and movement skills; advanced characterization; Shakespearean acting; acting styles; play writing, producing, and directing; acting in film. Advanced drama students are also informed about appropriate college professional training opportunities, and career opportunities.

PRF204 **Exploratory Stage**; Grade 9; 1 Credit

Reading of scale ruler and building scale models from architectural plans. Design and execution of stage sets and props from drawing or creative imagining. Use of manual and electric shop tools.

PRF304 **Stage/Scenic Design**; Grade 10; 1 Credit (Prerequisite PRF204)

Students will read plays and design and build scale models of the appropriate set. Responsibility for determining materials needed and making a list with prices. Construction and installation of life-size sets. Students are given training on lighting and sound equipment. *

PRF242 **Advanced Stage**; Grade 11; 1 Credit (Prerequisite PRF304)

Advanced students are responsible for the technical coordination of shows including: plays, holiday concerts, talent shows, etc. Students are assigned managerial positions in the areas of direct production of shows, lighting, sound and grip work.

PRF243 **Advanced Stage 2**; Grade 12; 1 Credit (Prerequisite PRF242)

A continuation of PRF242, students interact with other performing arts teachers and staff to coordinate productions for upcoming shows. Also, students may be given the possibility to work with professional companies and may receive monetary remuneration for their services.

*** Satisfies New York State credit requirement for Art/Music.**

Beginning, Intermediate and Advanced Vocal Classes

Designed to help students develop their voices for singing. They will be instructed in vocal techniques that will improve the quality of their voices. They will learn about diction, phrasing, dynamics, expression, posture, breath control, and vocal resonance. They will also learn how to cope with the fear of singing in front of others.

PRF121 **Beginning Vocal Music**; Grade 9 and any new student who wishes to enroll in a Vocal Music Program for the first time; 1 Credit

Students develop their vocal skills and learn music of various periods and styles. Students will learn basic skills needed to read, write and analyze music. They will learn the physical make-up of the vocal mechanism. Students will perform three major concerts for the year and may be required to rehearse during the evening.

PRF210 **Intermediate Voice Class**; Grades 10-12; 1 Credit (Prerequisite PRF121 Beginning Vocal Music)

Students will continue to develop skills necessary to read melodies by sight, learn skills for dictating music, and composition skills. They will begin studies of modalities, scales, triads, seventh chords, cadences, and conducting patterns. Students will be required to perform three concerts per year with some scheduled evening rehearsals.

PRF310 **Advanced Voice Class**; Grades 10-12; 1 Credit (Prerequisite PRF121 and PRF210)

This course will prepare students for level three theory and performance skills.

PRF132 **Instrumental Music**; Grades 9-12; 1 Credit (Prerequisite knowledge of elementary skills on instruments.)

Play with instrumental ensembles, develop instrumental performance skills, perform a variety of music including, Jazz, Latin, Classical, and contemporary styles. Students will perform music written by others. They will understand and use the basic elements of music in their performances.

MUS105 **Introduction to Music**; (half-year); Grades 9-12; ½ Credit

Aligned with the New York State Learning Standards for the Arts, these courses are designed to teach music theory, music reading and performance skills. A wide variety of ethnic, classical and contemporary music is performed, created and analyzed. The students will explore the cultural contributions of music.

MUS109 Music in Our Lives; Grades 9-12; 1 Credit

This course is recommended to meet the one unit of credit graduation requirement in music. Students will compose original music and perform music written by others, and understand and use the basic elements of music in their performances and compositions. Students will use various resources to expand their knowledge of listening experiences, performance opportunities, and/or information about music. Students will demonstrate the capacity to listen to and comment on music and will use concepts from other disciplines to enhance their understanding of music. Students will develop a performing and listening repertoire of music of various genres, styles and cultures.

CULINARY ARTS PROGRAM

The program begins with the fundamentals of culinary arts such as food safety and sanitation, equipment identification and uses of commercial equipment. Students learn the basics in baking from yeast dough production to cakes, pies and custards. All participants learn the basics in soup production, sauces, starches, meats and vegetables. From there, all students learn the essence of dining room service from setting tables for many occasions, proper table service and creating a “check” and calculating tax and tip. Many functions are conducted on and off site, where students gain valuable experience working with people outside school.

HCS102 Culinary Arts Exploratory; Grade 9-10; 1 Credit

HCS205 Culinary Arts I; Grade 10; 1 Credit

HCS206 Culinary Arts II; Grade 11; 2 Credits

SCI309 Principles of Nutrition; Grade 12; 1 Credit

OFFICERS TRAINING LEADERSHIP

This center represents a cooperative effort by Lincoln High School and the United States Marine Corps through J.R.O.T.C. It develops the leadership potential of each student and employs techniques of individual and group motivation to inspired students to strive for academic excellence and social responsibility. The program emphasizes team work, self-confidence and self-discipline. A full range of before and after-school activities is available including male and female National Award winning Drill team. Graduates are eligible for special consideration for admission to a Service Academy, R.O.T.C., scholarships to college, advance placement in college R.O.T.C. and accelerated promotion upon enlistment.

There is no Military obligation after high school.

Courses may be used as sequence for graduation.

SVC111 Introduction to Marine J.R.O.T.C. Leadership Corp I: Grades 9-12; 1 Credit

Students will be introduced to the different aspects of leadership behavior, patriotism, citizenship, personal growth, and responsibility.

SVC112 Introduction to Leadership Techniques I: Grades 9, 10; 1 Credit

Students learn and explain the primary and secondary objectives of Leadership.

SVC212 Leadership II: Grades 10, 11; 1 Credit

Students are familiarized with the description of mission accomplishment and team effort.

SVC412 Advanced Leadership: Grade 12; 1 Credit (Prerequisite SVS112, SVS212 and SVS312)

Students participate in peer mentoring, and resolving group conflicts applying their leadership skills.

**RIVERSIDE HIGH SCHOOL FOR ENGINEERING AND DESIGN
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

ECO - Landscape and Infrastructure Management	Video Marketing, Hospitality and Eco-Tourism	Environmental Engineering	Graphics and Interior Space Design
<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Living Environment or Earth Science or AP Biology and Lab (1 Credit) · Spanish or Italian or Mandarin Chinese (1 Credit) · Career & Technical Education Exploratory (1 Credit) · Physical Education (½ Credit) · Health (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Living Environment or Earth Science or AP Biology and Lab (1 Credit) · Spanish or Italian or Mandarin Chinese (1 Credit) · Career and Technical Education Exploratory (1 Credit) · Physical Education (½ Credit) · Health (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Living Environment or Earth Science or AP Biology and Lab (1 Credit) · Spanish or Italian or Mandarin Chinese (1 Credit) · Career and Technical Education Exploratory (1 Credit) · Physical Education (½ Credit) · Health (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Living Environment or Earth Science or AP Biology and Lab (1 Credit) · Spanish or Italian or Mandarin Chinese (1 Credit) · Career and Technical Education Exploratory (1 Credit) · Physical Education (½ Credit) · Health (½ Credit)
<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Physical Science and Lab (1 Credit) · Foreign Language (1 Credit) · ECO Landscape Design Fundamentals (½ Credit) · “Green” Building Materials (½ Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Physical Science and Lab (1 Credit) · Foreign Language (1 Credit) · Introduction to Digital Video and Animation for Eco-Tourism (½ Credit) · Introduction to Eco-Tourism (½ Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Physical Science and Lab (1 Credit) · Foreign Language (1 Credit) · Environmental Construction Materials (½ Credit) · Electrical Engineering and Residential Applications (½ Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Physical Science and Lab (1 Credit) · Foreign Language (1 Credit) · Introduction to Graphics and Interior Space Design/ Technical Drawing (½ Credit) · Introduction to Auto CAD 2007 for Interior Design (½ Credit) · Physical Education (½ Credit)
<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math B, Pre-Calculus, Calculus or higher (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math B, Pre-Calculus, Calculus or higher (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math B, Pre-Calculus, Calculus or higher (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math B, Pre-Calculus, Calculus, or higher (1 Credit)

**RIVERSIDE HIGH SCHOOL FOR ENGINEERING AND DESIGN
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

ECO - Landscape and Infrastructure Management	Video Marketing, Hospitality and Eco-Tourism	Environmental Engineering	Graphics and Interior Space Design
<ul style="list-style-type: none"> · Regents Chemistry and Lab (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Auto CAD 2007 Landscape Design (1 Credit) · Introduction to Infrastructure Management & Computer Business Applications (½ Credit) 	<ul style="list-style-type: none"> · Regents Chemistry and Lab (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Intermediate Digital Video and Virtual Tours (½ Credit) · Video Journalism and Geography for Eco-Tourism (½ Credit) 	<ul style="list-style-type: none"> · Regents Chemistry and Lab or AP Chemistry (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Environmental Engineering and Design Elective (1 Credit) · Environmental Micro-Biology Elective (1 Credit) 	<ul style="list-style-type: none"> · Regents Chemistry and Lab (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) · Intermediate Desktop Publishing for Space Design (½ Credit) · Introduction to Urban Design and Development (½ Credit)
<p>12th Grade</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Regents Physics and Lab (1 Credit) · Art History or Music (1 Credit) · Physical Education (½ Credit) · Environmental Science or Law Elective (1 Credit) · Advanced Auto CAD 2007 for Golf Courses and Irrigation Systems (½ Credit) · Landscape Design Studio (½ Credit) · Internship with Local Business Developers (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Regents Physics and Lab (1 Credit) · Art History or Music (1 Credit) · Physical Education (½ Credit) · Sports, Entertainment and Events Management (½ Credit) · Internship with Cornell University School for Hospitality and Tourism (1 Credit) · Internship with Local Tour Agencies (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Regents Physics and Lab or AP Physics (1 Credit) · Art History or Music (1 Credit) · Physical Education (½ Credit) · Environmental Law and EPA Regulations Elective (1 Credit) · On-Line or Distance Learning with Accredited Universities Elective · Internship with Manhattan College of Engineering (1 Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Regents Physics and Lab (1 Credit) · Art History or Music (1 Credit) · Physical Education (½ Credit) · Advanced CAD Drafting Techniques for Space Designers and Urban Planners (1 Credit) · Space Planning, Textiles and Fabrics (½ Credit) · Internship with Local Designers and Urban Planners (1 Credit)

RIVERSIDE HIGH SCHOOL OF ENGINEERING AND DESIGN PROGRAM COURSE OFFERINGS

Ninth Grade Program

ECO100 Ecological Landscape and Construction Management Exploratory; Grade 9; ¼ Credit

Students will create sustainable, productive, and aesthetically appealing human environments using natural ecosystems as models. Through experiential, participatory, and classroom learning, students will explore the relationship between personal, social, and ecological sustainability in the rich context of life. In addition, students will explore the habitats, geography, and history of the Hudson River through the interactive experiences in the Hudson River Museum. The objective of this course is to provide the student with the knowledge and technical skills required for a landscape design project. The Yonkers Urban Waterfront Development Project will be our hands-on laboratory.

EED100 Engineering Technology Exploratory; Grade 9; ¼ Credit

Students will be introduced to basic engineering fundamentals. Analysis and problem-solving concepts will be introduced through the use of robotics design. This hands-on course engages students in merging engineering concepts, computer programming and Lego Mindstorms. They will build robots with Lego bricks, motors and sensors to accomplish a series of missions. Students will work in teams to build, test and investigate the interplay between electronics and mechanics as applied to Control Technology. Their projects will reflect scientific principles and environmental awareness, and will be showcased in a community gallery.

DES100 The Fundamentals of Graphics and Interior Space Design Exploratory; Grade 9; ¼ Credit

This program will enable students to develop a working knowledge of the key processes involved in creative information technologies. Topics include production of effective advertising and media to create a variety of multimedia projects, including websites, digital portfolios and virtual tours. Students will be utilizing Adobe Photoshop, Illustrator, In-Design, Quark Express, as well as Final Cut Pro and Dream Weaver/Flash MX. The Hudson River Museum will provide visual literacy support, that is, essential art history, architecture, and graphic design elements.

HTV100 Video Marketing, Hospitality and Eco-Tourism Exploratory; Grade 9; ¼ Credit

This program will provide interdisciplinary experiences for students to master both interpersonal and technical skills for success in the Video Marketing, Hospitality and Eco-Tourism industries. Students will be prepared for careers in film making, hotel and event management, sports and entertainment, and tourism.

ECO- LANDSCAPE PROGRAM

Students will create eco-friendly, sustainable, productive, and aesthetically appealing human environments using natural ecosystems as models. Landscape architects or designers participate in the development of neighborhoods, towns, cities and larger regions. They prepare plans for civic and community centers, housing projects, shopping centers, school and recreation facilities so as to assure that such large-scale projects take their proper place in the overall city plan. They plan the recreational development of national, state, county, metropolitan, and municipal parks. The students will be initially exposed to a basic course in design. The students will learn the use of Computer Aided Design (CAD) in landscaping and will also learn how to implement landscape-planting designs in addition to selecting and constructing a site.

ECO200 ECO Landscape Design Fundamentals; Grade 10; ½ Credit

Students will be introduced to construction plans and landscape specifications with emphasis on reading and interpreting them. There will be a focus on architectural/engineering design plans and building code specifications used in construction and sustainable, productive landscaping.

ECO201 “Green” Building Materials; Grade 10; ½ Credit

Students will be introduced to basic building materials, with an emphasis on techniques for assembly and utilization in residential and light construction, including materials such as concrete, brick and wood. An overview of environmentally friendly materials and their interactions, use and misuse of the physical environment will be presented.

ECO300 Auto CAD 2007 Landscape Design & Computer Applications; Grade 11; 1 Credit

This is an introductory course in automated programs for planning, scheduling, and controlling construction projects. Students will also learn the utilization of current state-of-the-art integration of Computer Aided Design (CAD), scheduling and estimating, including advanced concepts such as resource leveling, schedule compression and cash flow projections.

ECO301 Introduction to Infrastructure Management; Grade 11; ½ Credit

Students will learn the fundamentals of landscape contracting and construction management. Areas of emphasis include landscape design and planning, plant identification, plant diseases, pesticides, soils, turf-grass management, horticulture power equipment, and landscape practices. Students will apply their knowledge to developing a landscape management project that will help enhance the local environment and improve the quality of life.

ECO400 Advanced Auto CAD 2007 Golf Course Design and Irrigation Systems; Grade 12; 1 Credit

Students will be introduced to the major historic, aesthetic, business, and technical issues of golf course design, while concurrently incorporating the design, installation, maintenance, and operation of both sprinkler and drip irrigation systems. Selection to planning, financing, construction, and environmental concerns will also be taken into consideration. Students will be able to create their own course and system designs using Advanced Auto CAD 2007 and Landscape K4407 Landscape Design Studio IV: Advanced Planning and Design.

ECO401 Environmental Science; Grade 12; ½ Credit

Students will study current issues and trends in environmental science and opportunities for volunteerism, internships, careers, and professional mentorships. Seniors must be on track to graduation. Students will participate in an on-the-job environmental work experience under the direct supervision of professionals in a corporation or government agency. They will also receive exposure to waterfront and urban development; ecological issues for creating eco-friendly environments.

ECO402 ECO-Landscape and Infrastructure Management Internship; Grade 12; 1 Credit

This urban planning, theme-based internship will draw students out of the classroom and into their community to develop skills that will move them toward higher education and professional careers with Yonkers employers as mentors and the city as their laboratory.

ENVIRONMENTAL ENGINEERING PROGRAM

Environmental Engineering programs deal with structures, equipment and systems that are designed to protect and enhance the quality of the environment and to protect and enhance public health and welfare. Environmental Engineering focuses on the design of collection and treatment processes for air, water, wastewater, and solid and hazardous waste, including study of the scientific principles underlying biological, physical, and chemical treatment. Therefore, environmental engineering must have a thorough understanding of physical, chemical and biological processes, the source and nature of waste materials that contribute to water, air and soil pollution, and relevant management and control technologies.

EED200 Environmental Engineering and Design; Grade 10; 1 Credit

Students will develop an understanding of engineering design aspects relating to construction and the environment. This course provides realistic, thorough, and advanced design experience with an environmental engineering problem that gives students experience with how consulting engineers perform projects through the use of concepts of environmental engineering, hydraulics, hydrology, and soil mechanics.

EED201 Environmental Webinars; Grade 10; ½ Credit

Students will participate in Webinars on environmental issues including global warming, and tide pools. Students will also participate in Riverkeeper and Clearwater mentoring.

EED300 Robotics Engineering Analysis and Problem-Solving; Grade 11; 1 Credit

This course will cover an introduction to building mobile robots. Students will learn how to design and construct a robot using time, material, and marketing constraints. Using Lego Mindstorm Component Kits, students will learn how to program the robot and determine how the robot reacts to its environment. Inputs, outputs, sensors, loops and simple program construction will be covered through the use of robotic projects. This program will also engage students in designing, developing, and evaluating activities. Students will think and problem-solve through theoretical, scientific, and mathematical knowledge.

EED301 Environmental Webinars; Grade 11; ½ Credit

Students will participate in Webinars on environmental issues including global warming, “green chemistry,” and “green” nano-technology. Students will also participate in Riverkeeper and Clearwater mentoring.

EED400 Environmental Law, Ethics and Economics; Grade 12; 1 Credit

This course offers a basic examination of the rapidly growing body of law concerned with interrelationships between human activities and the larger environment. It addresses rationales for environmental protection, risk assessment and priorities, and the attributes of markets and of government policies. It will also focus on a choice of policy instruments for environmental protection, the roles of different branches and levels of government and non-governmental agencies, the interplay of scientific, economic, social and other factors in the development of environmental law. These topics are analyzed in the context of common law and statutory law regimes for air, water, hazardous waste and toxic material, resource use, and biodiversity and ecosystems. The focus is on the United States legal system, with some illustrations from foreign, international and global economies.

EED401 Environmental Webinars; Grade 12; ½ Credit

Students will participate in Webinars on environmental issues including global warming, and the twelve principles of “green” chemistry, including such subjects as; hazardous and non-hazardous substances, design for energy efficiency, and pollution prevention. Students will also participate in Riverkeeper and Clearwater mentoring.

EED402 Environmental Engineering Senior Capstone Project; Grade 12; 1 Credit

This internship is a project-based approach presented in partnership with environmental engineering faculty and students at Manhattan College of Engineering. This course will involve an open-ended activity requiring research at the college and outside of the traditional classroom. In addition to completing the Advanced Regents Diploma, this will ensure a hands-on foundation in math, biology and environmental engineering issues.

GRAPHICS AND INTERIOR SPACE DESIGN STUDIO

Interior Design is the process of shaping the experience of the interior space, through the manipulation of spatial volume, as well as, surface treatment. Interior design is a creative practice that analyzes programmatic information, establishes a conceptual direction, refines the design direction, and produces graphic communication and construction documents.

Graphic design program places emphasis on two main areas: the concept of design as information organization, and the integration of computer technology into visual communication.

DES200 Introduction to Graphic and Interior Space Design; Grade 10; ½ Credit

The course introduces students to the variety of ways people use technology to communicate. Students will learn to think conceptually and to develop their visual communication skills through understanding the combination of image and message. They will acquire the technical skills necessary for design principles of typography, layout, photography and illustration and the part they play in graphic communication and interior space design. Students finish the program with a final presentation to industry partners.

DES201 **Introduction to Auto CAD 2007 for Interior Space Design**; Grade 10; ½ Credit

Introduction to Auto CAD is a foundation graphic course that provides orientation to the language of engineering graphics for environmental engineering students. This course is designed to help students develop and refine their ability to use appropriate CAD tools to produce 2D and 3D objects, geometric construction and orthographic projections utilized in the engineering field.

DES300 **Intermediate Environmental Graphics and Desktop Publishing**; Grade 11; ½ Credit

Students will demonstrate their artistic ability through projects involving original programming as well as through the application of professional quality programs. Students will be introduced to desktop publishing using such programs as Adobe Photoshop, Advanced Auto CAD 2007, Adobe Illustration, Adobe In-Design and Quark Express. Students will examine the creative development and use of environmental graphics as public informational tools.

DES301 **Urban Design and Development Studio**; Grade 11; ½ Credit

This course investigates the use of media and technologies to transform the experience of urban space. Students will cover the classics of urban design, social dynamics of small urban spaces, and the multimedia technologies for transforming these spaces. A final project will highlight both new and traditional timeless qualities of digitally mediated urban spaces through virtual tours.

DES400 **Advanced CAD Drafting Techniques for Space Design**; Grade 12; ½ Credit

This course is an introduction to the fundamentals of space design for human activity. Design problems involving hospitality design in restaurants and hotels, and other public interiors such as resorts, convention centers, and other facilities for entertainment. Emphasis is placed on space planning, sequencing of spaces, fixture design and details, signage and logo design, materials and texture, and furnishings and equipment within nonresidential, public interiors oriented to the establishment of comfort, pleasure and entertaining. Project design assignments include the use of AutoCAD and other digital graphics programs to present a broad range of spatial and theme types from hotels, restaurants, and spas, to historic interiors for specialized clientele.

DES401 **Space Planning Textiles and Fabrics**; Grade 12; ½ Credit

Students will learn the principles and factors of space planning and practice the space planning process through residential and light commercial applications. Emphasis is on the study of fabrics, fibers, weaves, finishes, dyeing, and printing methods for residential and commercial carpets. Students will explore the design potential found in geometry and in nature. They will implement painted patterns and designs applicable to fashion, surfaces and related areas of applied design which will be created with emphasis on color, balance and proportion.

DES402 **The Riverside Individualized Senior Experience (R.I.S.E)**; Grade 12; ½ Credit

The Riverside Individualized Senior Experience is a program for second semester 12th graders that encourages the development of independence, confidence, and a sense of responsibility. Students design and implement their own self-directed projects during their senior year. Students are paired with a mentor and are required to keep a journal, which serves as the communication link between the mentor and the student.

DES403 **Graphics and Interior Design Internship**; Grade 12; 1 Credit

Through collaboration with various local area colleges and businesses, seniors will develop their skills, gain work experience, and receive exposure to the graphic communication and advertising industry. Participants who successfully complete the program will be eligible to receive college credit from one of our partner schools.

VIDEO MARKETING, HOSPITALITY AND ECO-TOURISM ACADEMY

The hospitality and tourism industry currently represents the second largest employer in the United States, and is the major part of the rapidly growing services sector of the economy. Students will prepare for professions including lodging, conventions and destination services management, food service, travel and tourism, financial management and technology, and recreation related industries. The curriculum is designed to prepare students for a broad range of managerial roles across the hospitality and tourism industry. The program will provide students with the knowledge, skills and ability to identify opportunities and challenges in the hospitality and tourism industry, and to apply creative decision techniques in responding to those opportunities.

HTV200 Introduction to Digital Video and Animation for Eco-Tourism; Grade 10; ½ Credit

Students will develop a foundation of video and animation skills that are in demand across a variety of fields, such as web design, television, film, architecture, commercials, forensics and medical imaging as well as hospitality and eco-tourism.

HTV201 Introduction to Eco-Tourism; Grade 10; ½ Credit

Students will learn the techniques necessary to successfully achieve environmental conservation, cultural preservation, and economic development. The course emphasizes specific methods for achieving environmental sustainability and economic feasibility. The student will learn how to integrate diverse environmental, cultural and economic factors within the context of an eco-tourism program plan.

HTV300 Intermediate Digital Video and Virtual Tours; Grade 11; ½ Credit

Students will utilize the fundamentals of digital video design and editing for marketing and commercial applications. They will synthesize the techniques of graphic communication, digital video and imaging to create visual compositions utilized in interactive media, hospitality and eco-tourism. They will develop brochures, TV commercials and other promotional materials. Students finish the course with a mini-documentary using Microsoft Movie Maker and Sony Las Vegas Digital Video presented to industry partners.

HTV301 Video Journalism and Geography for Tourism Management; Grade 11; ½ Credit

The combination of theory and practice will prepare students to analyze tourism markets, assess regional and national strengths, as well as the security concerns associated with tourism. We will also introduce themes of cultural tourism, including historical sites, cultural landmarks, special events and festivals, theme parks, and gastronomy.

HTV400 Sports, Entertainment and Events Management; Grade 12; ½ Credit

This course will provide a broad overview of sports, entertainment and events management. Emphasis is on the management of such facilities in addition to transportation, security, time management and technical demands of setting up these events. Special attention will be given to video and sound recording, identifying experts and obtaining corporate sponsorship.

HTV401 Video Marketing, Hospitality and Eco-Tourism Internship with Cornell University School for Hospitality and Tourism; Grade 12; 1 Credit

Through Cornell University School for Hospitality and Tourism, students will intern in local establishments with a focus on marketing and sales, lodging management, front desk operations, food, beverage and culinary services. Entrepreneurship, economics and the financial principles of hospitality and tourism will also play an important role as part of this rigorous program.

HTV402 Video Marketing, Hospitality and Eco-Tourism Internship with Local Tour Agencies; Grade 12; ½ Credit

The prime focus of this internship will be travel and transportation systems along with travel destinations. Students will work with business computer applications, and hone in on personal and technical communication skills.

ROOSEVELT HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL
Communication Media/ Fine Arts Academy

Commercial Illustration	Fine Arts	Commercial Photography	Television Production/ Broadcast Journalism	Print Journalism	Computer Technology
<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit)
<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Commercial Illustration I (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Commercial Photography I (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Television Production (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Journalism (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Introduction to Technology Literature or Introduction to Computer Graphics (1 Credit) · Physical Education (½ Credit)
<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Commercial Illustration II (1 Credit) · Foreign Language or 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Fine Arts II (1 Credit) · Foreign Language or Elective (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Commercial Photography II (1 Credit) · Foreign Language or Elective 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Television News Production, or 3-D Computer Animation I (1 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Journalism II (1 Credit) · Foreign Language, or Art, or Music (1 Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Introduction to Computer Repair or Web Design (1 Credit)

ROOSEVELT HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL
Communication Media/ Fine Arts Academy

Commercial Illustration	Fine Arts	Commercial Photography	Television Production/ Broadcast Journalism	Print Journalism	Computer Technology
<ul style="list-style-type: none"> · Elective (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) 	<ul style="list-style-type: none"> · Health (½ Credit) · Physical Education (½ Credit) 	<ul style="list-style-type: none"> · (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) 	<ul style="list-style-type: none"> · Credit) · Foreign Language or Elective (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) 	<ul style="list-style-type: none"> · Health (½ Credit) · Physical Education (½ Credit) 	<ul style="list-style-type: none"> · Foreign Language, or Art, or Music (1 Credit) · Health (½ Credit) · Physical Education (½ Credit)
<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Commercial Illustration III (1 Credit) · Commercial Illustration Studio (1 Credit) · Physical Education (½ Credit) · Elective (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Fine Arts III (1 Credit) · A.P. Art (1 Credit) · Physical Education (½ Credit) · Elective (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Commercial Photography III (1 Credit) · Advanced Computer Graphics (1 Credit) · Physical Education (½ Credit) · Elective (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Television Internship or Computer Animation II (1 Credit) · Physical Education (½ Credit) · Elective (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Journalism III (1 Credit) · Publications or Art or Music (1 Credit) · Physical Education (½ Credit) · Elective (½ Credit) 	<p>12th Grade:</p> <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Programming in C++ or Advanced Computer Graphics (1 Credit) · Elective or Art or Music (1 Credit) · Physical Education (½ Credit) · Elective (½ Credit)

ROOSEVELT HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL
Public Service Academy

Scientific Studies	Air Force Junior R.O.T.C.	Public Safety	Occupational Services
<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit) 	<p>9th Grade:</p> <ul style="list-style-type: none"> · English 9 (1 Credit) · Social Studies (1 Credit) · Algebra I or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Magnet Exploratory (1 Credit) · Physical Education (½ Credit)
<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Principles of Nutrition, or Astronomy I, or Marine Biology, or Environmental Studies (1 Credit) · Physical Education (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Aerospace/ Leadership I (1 Credit) · Physical Education (1 Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Introduction to Police/ EMS or Forensic Science (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade:</p> <ul style="list-style-type: none"> · English 10 (1 Credit) · Social Studies (1 Credit) · Algebra II or higher (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language (1 Credit) · Woodworking or Accounting or Auto I (1 or 2 Credits) · Physical Education (½ Credit)
<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Regents Science (1 Credit) · Science Lab · Foreign Language or Art or Music (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) · Elective (½ Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Aerospace/ Leadership II (1 Credit) · Foreign Language or Art or Music (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Basic Police Officer or Introduction to Criminal Justice (1 Credit) · Foreign Language or Art or Music (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) 	<p>11th Grade:</p> <ul style="list-style-type: none"> · English 11 (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Production Systems or Business Law or Auto II (1 or 2 Credits) · Art or Music (1 Credit) · Health (½ Credit) · Physical Education (½ Credit)

ROOSEVELT HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL
Public Service Academy

Scientific Studies	Air Force Junior R.O.T.C.	Public Safety	Occupational Services
12th Grade: <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · A.P. Biology or A.P. Environmental Studies (1 Credit) · Science Elective (1 Credit) · Elective or Art or Music (1 Credit) · Physical Education (½ Credit) · Elective (1 Credit) 	12th Grade: <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Regents Science (1 Credit) · Science Lab · Aerospace/ Leadership III (1 Credit) · Aerospace/ Leadership IV or Art or Music (1 Credit) · Physical Education (½ Credit) 	12th Grade: <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Regents Science (1 Credit) · Science Lab · Sociology of Crime or Basic Police Officer Internship (1 Credit) · A.P. Psychology or Art or Music (1 Credit) · Physical Education (½ Credit) 	12th Grade: <ul style="list-style-type: none"> · English (1 Credit) · Social Studies (1 Credit) · Math (1 Credit) · Science (1 Credit) · Building Maintenance or Marketing or Auto III (1 or 2 Credits) · Physical Education (½ Credit) · Electives (1 Credit) · Elective (½ Credit)

ROOSEVELT HIGH SCHOOL PROGRAM COURSE OFFERINGS

COMMUNICATION MEDIA/ FINE ARTS ACADEMY

The Communication Media and Fine Arts Academy is committed to academic rigor that will empower students to critique, analyze and become producers of the media and fine arts. In our mission to infuse media and fine arts throughout our academy, students will become creative, proactive participants in their community and the world around them. Through their education and experiences in the Communication Media and Fine Arts academy students will be exposed to exciting, attainable careers in media and fine arts.

Ninth Grade Program

Incoming ninth graders to Roosevelt High School will have the opportunity to experience all of the magnet options in the Communication Media/ Fine Arts Academy. Student schedules will rotate each marking period giving them the opportunity to explore Commercial Illustration/ Fine Arts, Commercial Photography, Computer Technology, and Television/Broadcast Journalism. At the conclusion of their ninth grade year, students will choose the sequence of study they want to follow for grades 10-12.

CMI100 **Commercial Illustration/ Fine Arts Exploratory**; Grade 9; ¼ Credit

CPH100 **Photography Exploratory**; Grade 9; ¼ Credit

IOC100 **Introduction to Technology Exploratory**; Grade 9; ¼ Credit

TVP100 **Television/ Journalism Exploratory**; Grade 9; ¼ Credit

Commercial Illustration is an opportunity for students to learn and develop the skills necessary for careers in the visual arts such as advertising, book and magazine illustration, and cartooning. Some of the skills and techniques covered include pencil drawing, pen and ink, marker, airbrush and colored pencil rendering as well as introduction to the industry standard software Photoshop, Illustrator and Quark.

CMI201 **Commercial Illustration I**; (Advertising Arts); Grades 10-12; 1 Credit

CMI301 **Commercial Illustration II**; (Layout and Design); Grades 11, 12; 1 Credit (Prerequisite CMI201)

CMI302 **Commercial Illustration III**; (Graphic Design); Grades 11, 12; 1 Credit (Prerequisite CMI301)

CMI303 **Commercial Illustration Studio**; Grade 12; 1 Credit (Prerequisite CMI301 or Co-Requisite CMI302)

Commercial Photography students learn techniques of camera operation, composition and lighting, principles of film exposure and processing necessary for employment and future study in the field of commercial photography. This program has a computer-based photography laboratory.

CPH201 **Commercial Photography I**; Grades 10-12; 1 Credit

Students will explore traditional black and white photography through film development and darkroom techniques. The use of simple point and shoot cameras as well as more advanced types will be covered.

CPH301 **Commercial Photography II**; Grades 11, 12; 1 Credit (Prerequisite CPH201)

Students will continue their study of photography with an emphasis on software and computers that make digital imaging possible. Picture-taking with digital cameras, photo-manipulation software, scanning and printing will all be covered.

CPH401 **Commercial Photography III**; Grade 12; 1 Credit (Prerequisite CPH301)

This is an intensive course focusing on the art and science of photography coupled with the refinement of commercial photography skills. This course will be conducted in seminar style where students share their work and critique each other's work.

Print Journalism magnet students' course of study will provide them with intensive writing for both publication and

enjoyment. Students will develop style and voice as they experiment with creative techniques. Students write for and assist in the publication of Roosevelt High school's newspaper *The New Echo*. The magnet provides the student body with articles about our school as well as information on topics of importance and interest. Students will also research and discuss careers involving journalism and writing.

JRN101 **Journalism I**; Grades 10-12; 1 Credit (Fulfills English Core Area Requirement)

Students will learn the vocabulary of "journalism" and apply the terminology properly. Students will be introduced to the parts of the newspaper and the function, need, and appeal of each part.

JRN200 **Journalism II**; Grades 11, 12; 1 Credit (Prerequisite JRN101; Fulfills English Core Area Requirement)

An intense writing course focusing on skills and techniques in writing for publication. This will be a seminar style course in which students share their work and critique each other's.

JRN300 **Journalism III**; Grade 12; 1 Credit (Prerequisite JRN200 and Co-Requisite CMP410)

An intense writing course focusing on skills and techniques in writing for publication. This will be a seminar style course in which students share their work and critique each other's.

CMP410 **Publications**; Grade 12; 1 Credit (Prerequisite JRN200 and Co-Requisite JRN300)

This course is designed to teach students to utilize technology in generating a variety of publications. Students will participate in the development of the school literary magazine and the senior class yearbook.

Fine Arts students receive three (3) years of high level art instruction based on the New York State Learning Standards for the Arts. Course of study includes drawing, painting, sculpture, graphic design, and A.P. art. Instruction includes portfolio development, art history and aesthetics. The curriculum is based on the belief that successful artists and designers of the 21st century must be skilled in traditional art forms as well as current technological trends. Students participate in college link programs, art residencies, museum experiences and exhibit their artwork city-wide.

FNA301 **Fine Arts I**; Grades 10-12; 1 Credit

This course is the beginning art class for students interested in pursuing a sequence of study in art. Course work covers drawing, painting, and the importance of art in everyday life.

FNA302 **Fine Arts II**; Grades 11, 12; 1 Credit (Prerequisite FNA301)

Emphasis is on advanced drawing and painting, as well as portfolio preparation. Successful completion of this course allows students to continue on to Advanced Fine Arts or A.P. Art.

FNA303 **Advanced Fine Arts**; (Portfolio); Grade 12; 1 Credit (Prerequisite FNA302)

Students will create a body of work including advanced work, painting, and three-dimensional design. This course is an alternative to A.P. Art for students who wish to further their course of study in the arts but are unsure if they will major in art on the college level.

ART401 **A.P. Art**; Grades 11, 12; 1 Credit (Prerequisite FNA302)

The A.P. Program in Studio Art is intended for highly motivated students who are seriously interested in the study of art. Students should be made aware that A.P. work involves significantly more commitment and accomplishment than the typical high school course and that the program is not for the casually interested. It is required that A.P. students have previous course work in art, including at least two (2) years of study at the high school level. A portfolio, a written statement and a teacher's recommendation will be required for review by the Art Department before being accepted into the program. Portfolio must be maintained. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

Computer Technology students will be provided with courses related to the computer sciences. Students begin their sequence of study learning Microsoft applications. Additional courses are offered in Computer Graphics, Programming in C++, Computer Repair and Web Page Design. Students will work both independently and in collaboration with others on projects in all course work and be expected to make formal presentations.

CMP110 Introduction to Technology Literacy; Grades 10-12; 1 Credit

Nine themes are covered in this course: technology ethics, network awareness, keyboarding and word processing, desktop publishing, databases, research skills, the Internet, and multimedia and graphic presentation skills.

CMP304 Desktop Publishing / Computer Graphics I; Grades 10-12; 1 Credit

This course is designed to introduce students to the world of graphics using industry standard software applications Adobe Photoshop & Illustrator. Students will learn basic fundamentals of design, graphic techniques, and manipulation of images. Students will gain valuable and marketable skills through project-based learning.

CMP405 Introduction to Business Computer Repair; Grades 11, 12; 1 Credit (Prerequisite CMP110)

This course introduces and provides students with a basic understanding of the operation of binary numbers, data code, ASCII computer code, Boolean expressions along with the electrical characteristics of commonly used logic families. Students explore the PC system from hardware and operating system point of view and are introduced to PC networking. Hardware topics include system boards, processors, memory, power supplies, input/output (I/O) ports, internal adapters, printers and basic networking devices. The Windows operating system is introduced in peer-to-peer and client/server configurations. Students assemble and use basic test equipment such as the digital multi-meter; signal generator and power supply to test and troubleshoot simple integrated circuits. Computer software is used for digital circuit simulation exercises.

CMP402 Introduction to Web Design; Grades 11, 12; 1 Credit (Prerequisite CMP304)

This course is designed to introduce students to the Internet through the introduction of HyperText Markup Language (HTML). Learning HTML will provide students with a solid foundation for developing quality web pages. Students will also learn JavaScript language as a supplement to HTML, which will enhance the capabilities of their web pages.

CMP404 Advanced Computer Graphics; Grade 12; 1 Credit (Prerequisite CMP402)

This course is designed to integrate design and code into the creation, management, and maintenance of web sites. Using Macromedia's Dreamweaver and Flash, students will access the tools necessary to create colorful and eye-catching web pages.

CMP306 Programming in C++; Grade 12; 1 Credit (Prerequisites: complete Regents Math; and CMP110)

This course provides a sequence related to the computer sciences. Students learn to write structured programs in addition to learning computer graphics, applications, programming and computer operating systems. These courses emphasize techniques of logical thinking and problem-solving skills.

Television/Broadcast Journalism is designed to give students the opportunity to develop journalism skills and apply them to actual broadcast applications on the Yonkers Public Schools Educational Cable Television Channel 22. Students concentrate on writing, public speaking, editing and organizational skills. Students will participate in and experience many of the career roles associated with broadcast television news production.

Television Production is designed to prepare and train students in the many fields of telecommunications. Students are encouraged to explore and develop skills in planning, producing, directing, and editing productions. Areas that students work in are video, audio, radio, broadcast journalism, and computer graphics. Students make use of satellite communications, computer databases and internship assignments at the Yonkers Public Schools Educational Cable Television Channel 22.

TVP300 Television Production; Grades 10-12; 1 Credit

IST202 **ESP Communications Media**; Grades 10-12; 1 Credit (for Bilingual Education students)

TVP305 **Television News Production/Writing**; Grades 11, 12; 1 Credit (Prerequisite TVP300)

TVP306 **Television Channel Internship**; Grade 12; 1 Credit (Prerequisite or Co-Requisite TVP305)

TVP400 **3-D Computer Animation/ Graphics for Television I**; Grades 11, 12; 1 Credit (Prerequisite TVP300)

This course is designed to introduce students to the field of 3-D computer animation and how it can be applied to the television industry. Students will become familiar with the basics of 3-D geometry and the 3-D computer environment, and how they relate to the world around us. This project-based course will also incorporate the use of video and audio with basic television production skills.

TVP401 **3-D Computer Animation/ Graphics for Television II**; Grade 12; 1 Credit (Prerequisite TVP400)

An intense course in 3-D computer animation requiring students to apply previously learned knowledge in the ever-evolving area of television production.

PUBLIC SERVICE ACADEMY

The Public Service Academy of Roosevelt High School is committed to provide students with a rigorous academic program helping them to explore future career paths encompassing leadership, professionalism, citizenship, problem-solving and communication skills. Our innovative, yet structured curriculum will emphasize opportunities for students to develop responsibility, self-esteem, and the vocational and technological skills necessary to become self-sufficient, contributing citizens of the 21st century.

Ninth Grade Program

Incoming ninth graders to Roosevelt High School will have the opportunity to experience all of the magnet options in the Public Service Academy. Student schedules will rotate each marking period giving them the opportunity to explore Public Safety, Junior Reserve Officer Training Corp (J.R.O.T.C), Scientific Studies, and Occupational Services. At the conclusion of their ninth grade year students will choose the sequence of study they want to follow for grades 10-12.

ASR100 **Aerospace Exploratory**; Grade 9; ¼ Credit

IOC001 **Introduction to Occupations Exploratory**; Grade 9; ¼ Credit

IOC101 **Careers Exploratory**; Grade 9; ¼ Credit

LET001 **Police Exploratory**; Grade 9; ¼ Credit

Air Force Junior Reserve Officer Training Corps (JROTC)

Air Force Junior Reserve Officer Training Corps (JROTC) builds better citizens, strengthens character, teaches responsibility and acquaints students/ cadets with the aerospace age and aviation careers. Most importantly, Air Force Junior ROTC will help students/ cadets become leaders who are confident, self-reliant and self-disciplined.

Career-minded students who complete a three-year Air Force Junior ROTC aerospace program will:

- Be prepared to work in an expanding technological world - as a civilian or in the military
- Be eligible to enter the Air Force, Army, Navy, or Marine Corps at two pay grades higher than other enlistees (worth between \$5,000 to \$8,000 per year in basic pay)

College-bound students can:

- Receive Military Academy nominations worth \$250,000, an ROTC scholarship for full tuition or a great portion of it in addition to \$250 per month. These are contingent on qualifications and recommendations from the Air Force Junior ROTC unit.
- Receive credit for the first year of an Air Force ROTC four-year college program
- Receive an Air Force ROTC college scholarship nomination from the Senior Aerospace Science Instructor

Cadets must meet Air Force grooming standards; wear the cadet uniform one school day each week, and attend Corps-wide formations and functions, outside school hours, throughout the school year.

Uniform (valued at approximately \$300) is issued free of charge, but must be maintained clean and then returned at the end of the school year in a professionally laundered condition. Any part of the uniform that must be altered to fit will be at the cadet's expense.

ASR111 **Aerospace I and Leadership I**; Grades 10-12; 1 Credit

This is a course in Science of Flight covering the principles involved with aircraft flight, power for flight, weather and aerial navigation. Areas explored include aerodynamics, operation of aircraft engines, the atmosphere and its changes, tools and materials of aerial navigation, airports, electronics and problems with air power. Cadets are introduced to AFJROTC mission and organization, military customs and courtesies, military drill and ceremonies, wearing of the Air Force uniform, and the meaning of standards, discipline and conduct.

ASR211 **Aerospace II and Leadership II**; Grades 11, 12; 1 Credit (Prerequisite ASR111)

A course in the frontiers of aviation and U.S. military history covering the origins of flight, historical perspective of air power development, and U.S. policy and national objectives dealing with aerospace technology. Students teach drill and ceremonies to new students. The leadership program introduces effective communication skills, personal growth enhancement through "Unlocking Your Potential" process, understanding individual behavior and group dynamics, and learning the keys to effective leadership.

ASR311 **Aerospace III and Leadership III**; Grade 12; 1 Credit (Prerequisite ASR211)

A course in exploration of space covering space development, and social aspects of aerospace as well as technical aspects of navigation and propulsion systems technology. The leadership program introduces management concepts discussing stress and personal financial management through the National Endowment for Financial Education (NEFE), citizenship, and ethics.

ASR411 **Aerospace IV and Leadership IV**; Grade 12; 1 Credit (Prerequisite or Co-Requisite ASR311)

A program covering the importance of leadership and a highly technical environment in advanced aerodynamic principles in the aerospace environment. Cadets are expected to assist with instruction to underclass cadets. The leadership program focuses on life after high school to include job search techniques, such as résumés, applications, and interviews to apply for jobs in federal government, aerospace industry and military job opportunities as well as the private industries.

Scientific Studies provides students with a rigorous academic program using an inquiry-based approach to the study of science and related technologies. In a learning-centered environment, students immerse themselves in various related disciplines with the overall focus on scientific endeavor. Students and staff will be trained and work closely with a number of supporting industries and federal programs. A key goal of this program is to provide each student with an understanding and appreciation of science and the application of technology.

SCI309 **Principles of Nutrition**; Grades 10-12; 1 Credit (Prerequisite a Science Regents course)

This course integrates the study of the physical and chemical properties of food and the changes that occur during food processes. It also incorporates health topics and the purchase, safe handling, preparation, serving, storing of food and food-related items.

SCI210 **Astronomy I**; Grades 10-12; 1 Credit (Prerequisite a Science Regents course)

This course will examine such topics as the origin and structure of our solar system, stellar evolution, and the history and large-scale structure of the universe. Students will use the observatory equipment to practice and apply such astronomical techniques as astro-photography, spectroscopy, and photometry.

SCI420 **Marine Biology** ; Grades 10-12; 1 Credit (Prerequisite a Science Regents course)

This course studies the history of ocean exploration, the physical characteristics of the ocean habitat, and the physiology of marine organisms.

SCI106 **Environmental Studies**; Grades 10-12; 1 Credit (Prerequisite a Science Regents course)

This course provides students with a coherent perspective on the environment. It will be a scientific approach that enables the students to adopt an informed and responsible stance on the wide range of pressing environmental issues that they will eventually face. The students should develop an understanding of the environment, rooted in the underlying principles of science, they will explore the moral and political factors that are involved in the environment.

SCI310 **Astronomy II**; Grades 11, 12; 1 Credit (Prerequisite SCI210)

This course will examine such topics as the origin and structure of our solar system, stellar evolution, and the history and large-scale structure of the universe. Students will use the observatory equipment to practice and apply such astronomical techniques as astro-photography, spectroscopy, and photometry.

HCS104 **Topics in Adolescent Psychology**; Grades 10-12; 1 Credit (Prerequisite a Science Regents course)

Students will explore the main topics of psychology, with an emphasis on adolescence. Included in the curriculum will be the physical, emotional, and social aspects of adolescence. The importance of nutrition, hygiene, exercise, and sleep will be investigated. Through a variety of classroom exercises and activities students will gain an understanding of careers that relate to psychology.

SCI406 **A.P. Biology**; Grade 12; 1 Credit (Double period); (Prerequisite SCI202 or SCI205 and SCI301 or SCI306)

Advanced Placement Biology is designed for advanced students who have successfully completed two years of Regents science. This program is based on the National Advanced Placement Curricula in Living Environment, and is designed for students who wish to pursue college-level studies while still in high school. All students who complete the course requirements take the Advanced Placement Exam. Students are required to sit for the A.P. exams in the A.P. courses taken. Students who fail to sit for the exam will not receive a weighted grade.

SCI407 **A.P. Environmental Science**; Grade 12; 1 Credit (Prerequisite SCI202 or SCI205 and SCI301 or SCI306)

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

Public Safety

Public Safety courses provide police and emergency response entry-level training for local, state, federal, and private sector law enforcement agencies. Students examine the participatory roles of law enforcement personnel, and the regulations that govern public safety.

This program will include practical training with several technical devices and scientific procedures used in police investigation. Participants in this course of study, where possible, will also be trained in the rigorously physical Cooper Standards used for police personnel. All cadets will receive Community Emergency Response Team Training and New York State Certification.

During the course of their studies, students will have the opportunity to work with police officers and emergency personnel. This experience will result in a theoretical/practical approach to their career path of choice. The Public Safety courses will promote awareness of current issues and controversies relating to public safety and encourage effective citizen participation in our legal system. This curriculum will foster a greater sense of justice, tolerance, fairness, and a willingness to resolve disputes through informal and formal techniques. The graduates of this program will be eligible to receive college credits for courses offered at Roosevelt and to receive scholarship incentives. The knowledge gained in this program will serve as a solid foundation upon which to build a career in Law Enforcement.

First Year Cadet

LET100 **Introduction to Police/Emergency Medical Services**; Grades 10-12; 1 Credit

This course will expose students to basic police and emergency procedures. The course includes practical training in many aspects of these career paths. All students who complete this course will receive their National Junior Police Academy Completion Certificates. Cadets who take this course will also receive Community Emergency Response Team Training from the Yonkers Office of Emergency Management.

LET104 **Forensic Science**; Grades 10-12; 1 Credit

An intensive study of the scientific techniques of criminal investigation of evidence will be explored. This course will expose students to actual cases involving physical evidence and will explore how laboratory analyses are an integral part of criminal investigation in an effort to explain how the laboratory analyses are an integral part of the investigation.

Advanced First Aid Course: included as part of course number LET104.

This course is based on the National Safety Council/American Heart Association Heart Saver FACTS program. This program includes basic instruction in: patient assessment, use of basic life support equipment, ability to perform cardiopulmonary resuscitation (CPR), control bleeding, provide treatment for shock/low blood pressure, manage environmental emergencies, provide initial care in medical and trauma emergencies and emergency childbirth.

***Special Note:** Successful completion of this program with a GPA of 70% will allow students to receive a completion certificate. Students completing the program with a GPA of at least 85% on written exams will receive National Safety Council/American Heart Association certification.

Second Year Cadet

LET201 **Basic Police Officer**; Grades 11, 12; 1 Credit (Prerequisite LET100)

Students will pursue an in-depth study of the topics covered in the introductory course and detailed in the Junior Police Academy Curriculum. The course focuses on the different techniques of discovering a crime and the criminal responsible; examines the end result of crime fighting, that is, the arrest, prosecution and incarceration of criminals and discusses terrorism and how it affects the world in which we live.

HRD102 **Introduction to Criminal Justice**; Grades 11, 12; 1 Credit

Students will receive an overview of the Criminal Justice System, including its functions, sociology, current practices and its origins.

Third Year Cadet

LET108 **Sociology of Crime**; Grades 11, 12; 1 Credit (Prerequisite HRD102)

This course is designed to study the development and structure of society and social relationships as they pertain to offenses of public law. Criminal behavior is reviewed and crime causation is analyzed.

LET111 **Basic Police Officer Internship**; Grade 12; 1 Credit (Prerequisite LET201)

Students will have the opportunity to work alongside police officers in facilities learning necessary paperwork, procedures, and possibly working in the Police Forensics Lab learning about forensic science.

Occupational Services is a fourth program in the Public Service Academy. The purpose of this program is to explore a variety of careers, learn the skills and competencies needed for success in the workplace and to begin to become financially literate. Students will apply academic skills to solve real-world problems that will help them become successful citizens, employers, and employees.

- OCC232 **Career and Financial Management/ Woodworking Fundamentals**; Grades 10-12; 1 Credit
Students will learn fundamental woodworking processes and the correct use of basic tools and machines (jigsaw, bandsaw, drill press, wood lathe, disc sander, belt sander, jointer, circular saw, planer, grinder) while constructing a variety of shop projects. Excellent course for students with no prior experience in woodworking.
- TEC206 **Production Systems/Construction Systems**; Grades 11, 12; 1 Credit (Prerequisite OCC232)
Production Systems is designed to provide instruction in the systems of manufacturing, their resources, processes, products and quality assurance. Construction Systems is designed to provide instruction in five (5) topics which have been specifically tailored to the construction of a structure on-site.
- OCC231 **Building Maintenance**; Grade 12; 2 Credits (Double-period); (Prerequisite TEC206)
This course is designed to develop beginning-worker competency in such occupational areas as carpentry, electrical wiring, plumbing and building maintenance. This course offers instruction in the semi-skilled occupations involved in the repair and maintenance of residential and commercial buildings.
- CBM317 **Business Law**; Grades 11, 12; 1 Credit (Prerequisite CBM232)
This course is designed to be used as a component of a Business/Marketing Education sequence, and/or as the fifth unit of Social Studies. Applications of business laws, as they affect the individual, are featured; the relationship of the laws to an individual's personal, as well as occupational life are emphasized.
- CBM232 **Accounting**; Grades 10-12; 1 Credit
This course is designed to develop competence in the application of accounting theory. Students will process transactions through the entire accounting cycle in a service and merchandising business.
- CBM233 **Principles of Marketing**; Grade 12; 1 Credit (Prerequisite CBM317)
This course is designed to introduce students to the important role that marketing plays in our economic system. Content revolves around the basic marketing functions of financing, risk management, selling, promotion, pricing, purchasing, marketing information management, production/service/ideal planning and distribution.
- AUT200 **Automotive Mechanics 10**; Grade 10; 2 Credits (Double-period)
Students will be instructed in the history and development of the automobile industry and the principles and theory of the internal combustion engine.
- AUT300 **Automotive Mechanics 11**; Grade 11; 2 Credits (Double-period); (Prerequisite AUT200)
Students will build upon the theories and principles explored in Automotive Mechanics 10. Students will examine topics such as automotive electricity, fuel injection, transmissions, switches, brakes, tune-ups, wheel alignment, and emission control operations.
- AUT400 **Automotive Mechanics 12**; Grade 12; 2 Credits (Double-period); (Prerequisite AUT300)
This third-year course will give students the opportunity to gain technical knowledge and further their experience.

**SAUNDERS TRADES & TECHNICAL HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Technical Exploratory	Vocational Exploratory	Occupational Exploratory	Architecture Technology
9th Grade <ul style="list-style-type: none"> · English 9 (1 Credit) · Global Studies (1 Credit) · Regents Math (1 Credit) · Living Environment (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) · Foreign Language (1 Credit) · Software Integration (½ Credit) · Living Environment Lab · Career and Financial Management · Technical Exploratory (1 Credit) 	9th Grade <ul style="list-style-type: none"> · English 9 (1 Credit) · Global Studies (1 Credit) · Regents Math (1 Credit) · Living Environment (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) · Foreign Language (1 Credit) · Software Integration (½ Credit) · Living Environment Lab · Career and Financial Management · Vocational Exploratory (1 Credit) 	9th Grade <ul style="list-style-type: none"> · English 9 (1 Credit) · Global Studies (1 Credit) · Regents Math (1 Credit) · Living Environment (1 Credit) · Health (½ Credit) · Physical Education (½ Credit) · Foreign Language (1 Credit) · Software Integration (½ Credit) · Living Environment Lab · Career and Financial Management Occupational Exploratory (1 Credit) 	
			10th Grade <ul style="list-style-type: none"> · Architectural Drafting (2 Credits) · Architectural Magnet Science (1 Credit) · Architectural Theory (½ Credit) · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit)
			11th Grade <ul style="list-style-type: none"> · Architectural Drafting (2 Credits) · Art Rendering (1 Credit) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 11 (1 Credit) · United States History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)
			12th Grade <ul style="list-style-type: none"> · Architectural Drafting (2 Credits) · CAD Estimating (1 Credit) · Strength of Materials (1 Credit) · Physics (1 Credit) · Physics Lab · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Physical Education (½ Credit)

Note: All 12th grade students have the option to participate in the Cooperative Work Experience Program if offered in their major.

**SAUNDERS TRADES & TECHNICAL HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Construction/ Facilities Management	Chemical Technology	Environmental Technology	Electronics/ Computer Circuitry
<p>10th Grade</p> <ul style="list-style-type: none"> · Architectural Drafting (2 Credits) · Architectural Magnet Science (1 Credit) · Architectural Theory (½ Credit) · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade</p> <ul style="list-style-type: none"> · Chemical Technology Theory (1 Credit) · Regents Chemistry (1 Credit) · Regents Physical Science Elective (1 Credit) · Regents Physical Science Elective Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit) 	<p>10th Grade</p> <ul style="list-style-type: none"> · Advanced Bio-Environmental (2 Credits) · Advanced Bio-Environmental Lab (½ Credit) · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Foreign Language (1 Credit) · Art Appreciation A (½ Credit) · Physical Education (½ Credit) 	<p>10th Grade</p> <ul style="list-style-type: none"> · AC/DC Circuitry Theory (1 Credit) · AC/DC Circuitry Lab (1½ Credits) · ECC Drafting (½ Credit) · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit)
<p>11th Grade</p> <ul style="list-style-type: none"> · Construction Facilities Management 11 (2 Credits) · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · Physical Education (½ Credit) 	<p>11th Grade</p> <ul style="list-style-type: none"> · Analytical Chemistry (1 Credit) · Analytical Chemistry Lab (2 Credits) · Regents Physics (1 Credit) · Regents Physics Lab · Art Appreciation A (½ Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit) 	<p>11th Grade</p> <ul style="list-style-type: none"> · Environmental Technology Theory (1 Credit) · Water Resource Lab (2 Credits) · Regents Chemistry (1 Credit) · Regents Chemistry Lab · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit) 	<p>11th Grade</p> <ul style="list-style-type: none"> · Digital Circuitry/Computer Theory 11 (1 Credit) · Digital Circuitry/Computer Lab 11 (2 Credits) · ECC Drafting (½ Credit) · Regents Chemistry (1 Credit) · Regents Chemistry Lab · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)
<p>12th Grade</p> <ul style="list-style-type: none"> · Construction Facilities Management 12 (1 Credit) · Computer Aided Design 12 (2 Credits) · English 12 (1 Credit) · Eco/ Government 12 (1 Credit) · Elective · Regents Physical Science or Math Elective (1 Credit) · Regents Physical Science Lab · Physical Education (½ Credit) 	<p>12th Grade</p> <ul style="list-style-type: none"> · Instrumental Analytical Lab (2 Credits) · AP Chemistry (1 Credit) · English 12 (1 Credit) · Eco/ Government 12 (1 Credit) · Art Appreciation B (½ Credit) · Physical Education (½ Credit) · Regents Physical Science Elective/ Regents Math Elective (1 Credit) 	<p>12th Grade</p> <ul style="list-style-type: none"> · AP Environmental Science (1 Credit) · Environmental Technology Lab 12 (2 Credits) · Regents Physical Science or Math Elective (1 Credit) · Regents Physical Science Lab · Art Appreciation B (½ Credit) · English 12 (1 Credit) · Eco/ Government 12 (1 Credit) · Physical Education (½ Credit) 	<p>12th Grade</p> <ul style="list-style-type: none"> · Solid State Electrical Theory (1 Credit) · Solid State Electrical Lab (2 Credits) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Regents Physics (1 Credit) · Regents Physics Lab · Regents Math Elective (1 Credit) · Physical Education (½ Credit)

Note: All 12th grade students have the option to participate in the Cooperative Work Experience Program if offered in their major.

**SAUNDERS TRADES & TECHNICAL HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Computerized Industrial Design	Automotive Technology	Carpentry	Heating/Ventilation and Air Conditioning
10th Grade · CID Lab (2 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Foreign Language (1 Credit) · Physical Education (½ Credit)	10th Grade · Auto Lab 10 (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	10th Grade · Carpentry Lab 10 (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	10th Grade · Heating/Air Lab 10 (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)
11th Grade · CID Drafting 11 (1 Credit) · CAD/CAM Lab 11 (2 Credits) · Regents Physics (1 Credit) · Regents Physics Lab · Regents Math (1 Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Physical Education (½ Credit)	11th Grade · Auto Lab 11 (3 Credits) · Auto Drafting 11 (½ Credit) · English 11 (1 Credit) · Scientific & Environmental Applications in Auto Technology (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	11th Grade · Carpentry Lab 11 (3 Credits) · CAD Carpentry Drafting (½ Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Scientific & Environmental Applications in Construction Restoration (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	11th Grade · Heating/Air Lab 11 (3 Credits) · HVAC Drafting (½ Credit) · Scientific & Environmental Applications in HVAC (1 Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)
12th Grade · CNC Programming (1 Credit) · CID Project Lab (2 Credits) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Regents Physical Science or Math Elective (1 Credit) · Physical Education (½ Credit)	12th Grade · Auto Technology (3 Credits) · ASE (½ Credit) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Auto Welding (1 Credit) · Elective (1 Credit) · Physical Education (½ Credit)	12th Grade · Carpentry Lab 12 (3 Credits) · Carpentry Drafting (½ Credit) · Carpentry Welding (1 Credit) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Elective (1 Credit) · Physical Education (½ Credit)	12th Grade · Heating/Air Lab 12 (3 Credits) · HVAC Drafting (½ Credit) · HVAC Welding (1 Credit) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Elective (1 Credit) · Physical Education (½ Credit)

Note: All 12th grade students have the option to participate in the Cooperative Work Experience Program if offered in their major.

**SAUNDERS TRADES & TECHNICAL HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

Graphic Communications/ Pre-Press Production	Fashion Design	Culinary Arts and Restaurant Management	Cosmetology
10th Grade · Graphic Communications/ Pre-Press Production 10 (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	10th Grade · Fashion Design Lab (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	10th Grade · Food Lab 10 (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	10th Grade · Cosmetology Lab 10 (3 Credits) · Regents Physical Science (1 Credit) · Regents Physical Science Lab · English 10 (1 Credit) · Global Studies 10 (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)
11th Grade · Graphic Communications/ Pre-Press Production 11 (3 Credits) · Scientific Principles of Digital Imagery (1 Credit) · Regents Math (1 Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Elective (½ Credit) · Physical Education (½ Credit)	11th Grade · Fashion Design Lab 11 (3 Credits) · Fashion Related Art (1 Credit) · Introduction to Apparel/CAD (½ Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	11th Grade · Food Lab 11 (3 Credits) · Principles of Nutrition (1 Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)	11th Grade · Cosmetology Lab 11 (3 Credits) · Chemistry of Cosmetology (1 Credit) · Cosmetology Related Art (1 Credit) · English 11 (1 Credit) · U.S. History (1 Credit) · Regents Math (1 Credit) · Physical Education (½ Credit)
12th Grade · Graphic Communications/ Pre-Press Production 12 (3 Credits) · Graphic Illustration 12 (1 Credit) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Elective (1 Credit) · Physical Education (½ Credit)	12th Grade · Fashion Design Lab 12 (3 Credits) · Fashion Related Art (1 Credit) · Advanced Apparel/CAD 12 (½ Credit) · Textile Science (1 Credit) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Physical Education (½ Credit)	12th Grade · Food Lab 12 (3 Credits) · Food Related Art (1 Credit) · English 12 (1 Credit) · Eco/Government 12 (1 Credit) · Elective (1 Credit) · Physical Education (½ Credit)	12th Grade · Cosmetology Lab 12 (3 Credits) · Cosmetology Theory (1 Credit) · English 12 (1 Credit) · Eco/Government (1 Credit) · Elective (1 Credit) · Physical Education (½ Credit)

Note: All 12th grade students have the option to participate in the Cooperative Work Experience Program if offered in their major.

Career and Financial Management for Technical Exploratory in Architecture, Chemical Technology, Computerized Industrial Design, Electronic and Computer Circuitry, and Environmental Technology. Selection of the Exploratory Program in Technological Sciences requires pre-, or co-requisites of a Foreign Language.

Career and Financial Management for Vocational Exploratory in Heating/ Ventilation and Air Conditioning, Automotive Technology and Carpentry.

Career and Financial Management for Occupational Exploratory in Cosmetology, Fashion Design, Culinary Arts and Restaurant Management, and Graphic Communications/ Pre-Press Production.

CFO101 **Introduction to Career and Financial Management**; Grade 9; ½ Credit

CFO110 **Career and Financial Management for Technical Exploratory**; Grade 9; ½ Credit

CFO111 **Career and Financial Management for Vocational Exploratory**; Grade 9; ½ Credit

CFO112 **Career and Financial Management for Occupational Exploratory**; Grade 9; ½ Credit

TECHNOLOGICAL SCIENCES PROGRAM (Prerequisites: Algebra, Earth Science Regents or Living Environment Regents required; Language Other Than English required.)

Architectural Technology prepares students for college and provides a strong foundation for anyone wishing to enter the architectural or construction industry in design, management or supervisory areas. Technical training is provided in all phases of architectural technology with emphasis on working drawings, construction, structural detailing, rendering, estimating and computer-aided design and drafting. Instructors will advise first year architecture students of the availability of the **Construction and Facilities Management Program** at the end of the sophomore year. An articulation agreement for this program exists with the New York Institute of Technology.

ARC202 **Architectural Drafting 10**; Grade 10; 2 Credits

ARC206 **Architectural Magnet Science 10**; Grade 10; 1 Credit

ARC203 **Architectural Theory 10**; Grade 10; ½ Credit

ARC302 **Architectural Drafting Lab 11**; Grade 11; 2 Credits

ARC304 **Art Rendering**; Grade 11; 1 Credit

ARC404 **Architectural Drafting Lab 12**; Grade 12; 2 Credits

ARC402 **CAD Estimating**; Grade 12; 1 Credit

ARC405 **Strength of Materials**; Grade 12; 1 Credit

Construction and Facilities Management allows the student to explore and gain a firm foundation in all aspects of the construction-related industries including architecture, engineering, construction and facilities management, as well as providing a solid academic base for college. Technical training beginning in grade eleven concentrates on estimating, surveying, construction methods and materials, landscape design and interior space planning, construction and facilities management, computer-aided drafting and design.

ARC202 **Architectural Drafting 10**; Grade 10; 2 Credits

ARC206 **Architectural Magnet Science 10**; Grade 10; 1 Credit

ARC203 **Architectural Theory 10**; Grade 10; ½ Credit

CFM301 **Construction Facilities Management 11**; Grade 11; 2 Credits

CFM401 **Construction Facilities Management 12**; Grade 12; 1 Credit

CFM402 **Computer Aided Design 12**; Grade 12; 2 Credits

Environmental Technology helps prepare students for college through various fields of study including, but not limited to: Biology, Medicine, Veterinary Medicine, Zoology, Environmental Engineering, Environmental Law and Forestry. A sample of topics covered includes ecology, biology, population growth, resource allocation, air pollution, and conservation of energy, to name a few. Students visit local ecosystems and assay air, water, and soil using Environmental Protection Agency (EPA) accepted methods. Hands-on, self-directed laboratory activities are stressed during the three-year course. Students will complete an independent research project that will span their three-year experience. Advanced Placement Biology is offered as an option in the sophomore year, Advanced Placement Environmental Science is offered in the senior year. Students can earn college credit based on exit exam grades in these Advanced Placement courses. In addition, students are encouraged to take the SAT II in Biology.

ENV202 **Advanced Environmental Science and Lab**; Grade 10; 2½ Credits

ENV302 **Water Resource Lab**; Grade 11; 2 Credits

ENV305 **Environmental Technology Theory**; Grade 11; 1 Credit

SCI407 **A.P. Environmental Science**; Grade 12; 1 Credit

ENV406 **Environmental Technology Lab**; Grade 12; 2 Credits

Chemical Technology * prepares science-oriented students with college-level knowledge and experience in the field of analytical and organic chemistry, and provides a foundation for any college major requiring focus, reasoning and writing skills, and the ability to network and communicate. Students perform interesting and challenging experiments in basic and advanced chemistry in a fully equipped laboratory. Trips and speakers give students exposure to careers and opportunities available to the chemist. Each student conducts an independent research project that is presented to visitors from industry and academia on Tech Prep Day. Students are prepared to take the SAT II in Chemistry. Advanced Placement Chemistry is embedded throughout both years.

CHT201 **Chemical Technology Theory**; Grade 10; 1 Credit

CHT301 **Analytical Chemistry**; Grade 11; 1 Credit

CHT302 **Analytical Chemistry Lab**; Grade 11; 2 Credits

CHT407 **Instrumental Analytical Lab**; Grade 12; 2 Credits

SCI413 **AP Chemistry**; Grade 12; 1 Credit

Computerized Industrial Design * is a pre-engineering course where students are given the chance to explore a wide variety of science and math concepts that relate to the fields of engineering. It prepares the student for a post-secondary education in Mechanical/Industrial Engineering. The C.I.D. students are given the unique opportunity of gaining the theoretical knowledge required for intense engineering programs across the country, while applying these specialized skills in lab projects, group competitions and design projects that involve many types of machines and materials. The learning approach used in C.I.D. is designed to introduce students to engineering problem-solving techniques through hands-on laboratory experience, lectures and group activities that foster higher-level thinking.

CID202 **Computerized Industrial Design Lab 10**; Grade 10; 2 Credits

CID301 **Computerized Industrial Design Drafting 11**; Grade 11; 1 Credit

CID302 **CAD/CAM Lab 11**; Grade 11; 2 Credits

CID401 **CNC Programming**; Grade 12; 1 Credit

CID405 **Computerized Industrial Design Project Lab**; Grade 12; 2 Credits

Electronics and Computer Circuitry * is a pre-engineering/technical program in electronics and computers that prepares students for either college or for direct employment in industry. A broad background is offered in both theory and laboratory. In the lab, students are trained to use a wide range of industrial test equipment ranging from Digital Multimeters to Oscilloscopes. The Cisco networking curriculum is used to train students how to repair computers and setup. The senior year incorporates the use of knowledge from all three (3) years with a design project. The student is required to design and construct a project which has to be presented to engineers from both industry and academia.

ECC201 **AC/DC Circuitry Theory**; Grade 10; 1 Credit

ECC202 **AC/DC Circuitry Lab**; Grade 10; 1½ Credits

ECC206 **Electronic and Computer Circuitry Drafting 10**; Grade 10; ½ Credit

ECC301 **Digital Circuitry/Computer Theory 11**; Grade 11; 1 Credit

ECC302 **Digital Circuitry/Computer Lab 11**; Grade 11; 2 Credits

ECC306 **Electronic and Computer Circuitry Drafting 11**; Grade 11; ½ Credit

ECC401 **Solid State Electrical Theory**; Grade 12; 1 Credit

ECC402 **Solid State Electrical Lab**; Grade 12; 2 Credits

* **Tech Prep** is an inter-disciplinary enhancement project (Environmental Technology, Chemical Technology, Computerized Industrial Design, Electronic and Computer Circuitry) operated in conjunction with several two, and four-year local colleges, emphasizing technologies and offering the opportunity for advanced standing.

VOCATIONAL SCIENCES PROGRAM

Heating/ Ventilation and Air Conditioning students receive instruction in various types of pipe installations, basic burner and electrical installation, installing equipment and piping for domestic hot water supply, bench testing oil burner components, combination testing procedures, repairing and rebuilding oil burners, automatic heating systems, installation of fuel oil tanks, electric, oil and gas heating systems. This program is currently affiliated with the National Association of Oil Heating, Service Managers, Inc. - Westchester Chapter.

HAC201 **Heating/Air Lab 10**; Grade 10; 3 Credits

HAC301 **Heating/Air Lab 11**; Grade 11; 3 Credits

HAC302 **HVAC Drafting I**; Grade 11; ½ Credit

SCI106 **Environmental Studies**; Grade 11; 1 Credit

HAC401 **Heating/Air Lab 12**; Grade 12; 3 Credits

HAC405 **HVAC Drafting II**; Grade 12; ½ Credit

HAC407 **HVAC Welding**; Grade 12; 1 Credit

Automotive Technology students have the opportunity to gain technical knowledge and obtain practical experience to become well qualified apprentice mechanics after graduation. They are instructed in the principles and theory of the internal combustion engine, automotive electricity, fuel injection, transmissions, switches, brakes, tune-ups, drive line, wheel alignment, emission control operations, computer controls and troubleshooting. The program is currently certified by the National Automotive Training and Education Foundation (NATEF), an arm of the Automotive Service Excellence (ASE).

AUT201 **Auto Tech Lab 10**; Grade 10; 3 Credits

AUT301 **Auto Tech Lab 11**; Grade 11; 3 Credits

AUT304 **Auto Drafting 11**; Grade 11; ½ Credit

AUT407 **Auto Welding**; Grade 12; 1 Credit

AUT401 **Auto Tech Lab 12**; Grade 12; 3 Credits

SCI106 **Environmental Studies**; Grades 10-12; 1 Credit

Carpentry prepares students for the residential and commercial building industry. Students receive instruction in fundamental woodworking, concrete form work, wall and roof framing, trim work, stair building, cabinet construction, millwork, blueprint reading, drafting and estimating, as well as introductory electrical wiring, heating, air conditioning and plumbing. Construction technology related courses provide students with training in blueprint reading, drafting and welding.

- CRP202 **Carpentry Lab 10**; Grade 10; 3 Credits
- CRP304 **CAD Carpentry Drafting**; Grade 11; ½ Credit
- CRP307 **Carpentry Lab 11**; Grade 11; 3 Credits
- SCI106 **Environmental Studies**; Grade 11; 1 Credit
- CRP402 **Carpentry Lab 12**; Grade 12; 3 Credits
- CRP403 **Carpentry Welding**; Grade 12; 1 Credit
- CRP404 **Carpentry Drafting**; Grade 12; ½ Credit

OCCUPATIONAL SCIENCES PROGRAM

Cosmetology consists of 1,200 hours of training, where students learn hair cutting, dyeing, frosting and permanent waving, State Board Requirements, manicuring, nail sculpturing, facials, make-up applications, pedicures and many other procedures. At the end of the three-year program, students take a New York State mandated practical and written exam which is required in order to obtain a license. Chemistry of Cosmetology includes knowledge of chemical treatments for the hair.

- COS201 **Cosmetology Lab 10**; Grade 10; 3 Credits
- COS301 **Cosmetology Lab 11**; Grade 11; 3 Credits
- SCI313 **Chemistry of Cosmetology**; Grade 11; 1 Credit
- COS401 **Cosmetology Lab 12**; Grade 12; 3 Credits
- COS404 **Cosmetology Theory 12**; Grade 12; 1 Credit

Culinary Arts and Restaurant Management begins with an introduction to the hospitality industry providing instruction in safety, the use and care of knives and other equipment. Students learn recipe development and analysis, nutrition, cooking of soups, sauces, meats, starches, vegetables and salads. Baking from yeast dough to quick breads, all types of cakes including decorating, pastries and dessert presentation is required. Classes are taught under actual restaurant conditions. Menu development, merchandising, cost analysis and dining room management and plan, design, and repair are part of the program.

- FDS202 **Culinary Lab 10**; Grade 10; 3 Credits
- FDS302 **Culinary Lab 11**; Grade 11; 3 Credits
- SCI309 **Principles of Nutrition**; Grade 11; 1 Credit
- FDS402 **Culinary Lab 12**; Grade 12; 3 Credits

Fashion Design is designed for students who have an interest in designing and making clothes. Students are required to create original and fashionable designs. Particular emphasis is placed on cutting, assembling, fitting and finishing a professional garment from the basic pattern to the finished product. Students receive instruction in hand sewing, machine sewing, pattern layout, draping and design, pattern-making, tailoring, techniques in ready-to-wear garment construction, selection and care of fabrics, advanced theory of sewing and special tailoring processes. In addition, all fashion design students will be introduced to Fashion Apparel CAD in grade levels 11 and 12.

- FAS201 **Fashion Design Lab 10**; Grade 10; 3 Credits
- FAS302 **Fashion Related Art**; Grade 11; 1 Credit
- FAS301 **Fashion Design Lab 11**; Grade 11; 3 Credits
- FAS306 **Introduction to Apparel/CAD 11**; Grade 11; ½ Credit

FAS401 **Fashion Design Lab 12**; Grade 12; 3 Credits
SCI314 **Textile Science**; Grade 11; 1 Credit
FAS403 **Fashion Related Art**; Grade 12; 1 Credit
FAS406 **Advanced Apparel/CAD 12**; Grade 12; ½ Credit

Graphic Communications/ Pre-Press Production produces students who are both technically and artistically competent graphic professionals, well-rounded and fundamentally prepared for jobs in the graphic communication marketplace. Additionally, students will be prepared for post-secondary programs in graphic communications. This program provides a sound theoretical and practical exposure to computer graphics hardware and software technology. Students are immersed in key graphics software applications, including Adobe Photoshop, Adobe Illustrator, QuarkXpress, and various aspects of marketing, desktop publishing, and electronic media. The program also focuses on utilizing these tools in greater detail with respect to developing the student's expressive abilities through the visual arts and an understanding of the role of graphic arts as a cornerstone of communications. Graduates will possess a complete state-of-the-art and dynamic graphic communications portfolio, comprised of both printed and electronic media, including web design and multimedia business presentations.

PRT202 **Graphic Communication/ Pre-Press Production 10**; Grade 10; 3 Credits
PRT302 **Graphic Communication/ Pre-Press Production 11**; Grade 11; 3 Credits
SCI315 **Scientific Principles of Digital Imagery**; Grade 11; 1 Credit
PRT402 **Graphic Communication/ Pre-Press Productions 12**; Grade 12; 3 Credits
PRT408 **Graphic Illustration**; Grade 12; 1 Credit

**YONKERS HIGH SCHOOL
CAREER PLAN BY PROGRAM AND GRADE LEVEL**

International Baccalaureate Programme

9th Grade:

- Pre-I.B. English (1 Credit)
- Pre-I.B. Global History (1 Credit)
- Pre-I.B. Algebra Year 1 or Pre-I.B. Mathematics A/B (1 Credit)
- Pre-I.B. Mathematics A2 (1 Credit)
- Pre-I.B. Living Environment (1 Credit)
- Pre-I.B. Living Environment Lab
- Pre-I.B. French, Italian, Spanish (1 Credit)
- Pre-I.B. Physical Education (½ Credit)
- Pre-I.B. Art (½ Credit)
- Pre-I.B. Music (½ Credit)
- Pre-I.B. Computer Technology (½ Credit)

10th Grade:

- Pre-I.B. English (1 Credit)
- Pre-I.B. Global History II (1 Credit)
- Pre-I.B. Algebra Year 2 or Pre-I.B. Mathematics B1-B2 or Pre-I.B. Pre-Calculus or Pre I.B. Math B1 (1 Credit)
- Pre-I.B. Chemistry (1 Credit)
- Pre-I.B. Chemistry Lab
- Pre-I.B. French, Italian, Spanish (1 Credit)
- Physical Education (½ Credit)
- Health (½ Credit)
- Elective (½ Credit)

11th Grade:

- I.B. English Regents (1 Credit)
- I.B. History of the Americas Regents (1 Credit)
- I.B. Mathematics Studies (Yr. 1) or Math B1 or Math B2
- I.B. Biology HL (Yr. 1) (1 Credit)
- I.B. Physics (1 Credit)
- I.B. Science Lab
- I.B. French, Italian, Spanish (1 Credit)
- I.B. Chemistry (1 Credit)
- I.B. Art (1 Credit)
- I.B. Music (1 Credit)
- I.B. Psychology (1 Credit)
- Physical Education (½ Credit)
- Elective (½ Credit)

12th Grade:

- I.B. English (1 Credit)
- I.B. History/ 20th Century (1 Credit)
- I.B. Mathematics Studies (Yr. 2) or Math B2 or Calculus (1 Credit)
- I.B. Biology HL (Yr. 2) (1 Credit)
- I.B. Physics/ I.B. Chemistry
- I.B. Science Lab
- I.B. French, Italian, Spanish (1 Credit)
- I.B. Art (1 Credit)
- I.B. Music (1 Credit)
- Physical Education (½ Credit)
- Elective (½ Credit)

**YONKERS HIGH SCHOOL
INTERNATIONAL BACCALAUREATE PROGRAMME
DIPLOMA SEQUENCE**

Subject	Grade 9	Grade 10	Grade 11	Grade 12
LANGUAGE A	Pre-I.B. English	Pre-I.B. English	I.B. English HL (Year 1)	I.B. English HL (Year 2)
LANGUAGE B	Pre-I.B. Spanish, Italian <i>B1</i> or <i>B2</i>	Pre-I.B., Spanish, Italian <i>B2</i> or <i>CPC</i>	I.B. French, Spanish, Italian <i>SL/HL</i>	I.B. French, Spanish, Italian <i>SL/HL</i>
INDIVIDUALS AND SOCIETY	Pre-I.B. Global History I	Pre-I.B. Global History II Regents	I.B. History of the Americas HL (Year 1) (Regents)	I.B. History/20th Century Topics HL (Year 2)
EXPERIMENTAL SCIENCES	Pre-I.B. Living Environment (Regents)	Pre-I.B. Chemistry (Regents)	I.B. Physics/SL Regents I.B. Biology/HL (Yr. 1) I.B. Chemistry SL	I.B. Physics SL Regents I.B. Biology HL (Yr. 2) I.B. Chemistry SL
MATHEMATICS	Pre-I.B Algebra Year 1; A2 Math A/B	Pre-I.B. Algebra Year 2 or Math B	Pre-Calculus I.B. Math Studies SL (Yr. 1)	Calculus I.B. Math Studies SL (Year 2)
ELECTIVES	Pre-I.B. Art, Music, Technology	Pre-I.B. Art, Music, Technology	I.B. Music SL I.B. Art SL I.B. Psychology SL I.B. Geography I.B. Social and Cultural Anthropology	I.B. Art I.B. SL I.B. Music I.B. SL I.B. Psychology SL I.B. Geography I.B. Social and Cultural Anthropology
N.Y.S. REQUIREMENTS	Physical Education	Physical Education, Health	Physical Education	Physical Education
FURTHER I.B. REQUIREMENTS		Research Writing	C.A.S. Theory of Knowledge I Extended Essay	C.A.S. Theory of Knowledge II Extended Essay

The International Baccalaureate Programme is designed to meet the highest standards of high schools throughout the world. Students take international exams in six (6) subjects and meet community service and writing requirements specific to International Baccalaureate. The diploma received will often translate to college credit.

Yonkers High School offers a rigorous comprehensive learning approach to all of its students designed to prepare students for the demands of post high school education. Students may pursue the challenges of acquiring an International Baccalaureate Diploma in their 11th and 12th grade years. It is expected that all students will take a minimum of two I.B. courses in 11th or 12th grade. Pre-I.B. courses are offered to 9th and 10th grade students in preparation for the full range of I.B. course work.

Unique aspects of the I.B. Diploma Programme include:

- Students are required to complete all State assessments and Regents exams
- Successful completion of a rigorous academic based curriculum in the Six Program Studies Group (Language A; Language B; Individuals and Societies; Experimental Sciences; Mathematics; and Electives)
- Completion of a minimum of one-hundred-fifty (150) hours in the Community Service Program (C.A.S.)
- Completion of the Theory of Knowledge courses and a Theory of Knowledge essay
- The writing and submission of an Extended Essay of 4,000 words in an area of interest to the student

Student Assessment

Yonkers High School offers a variety of assessments, both internal and external. Internal assessment addresses learning in a broad variety of measures. Some measures include oral presentations and research projects as required by IB. External assessment consists of a committee which accepts a candidate's work and grades it based on the rubrics established by I.B.

Student Placement

Students are placed in I.B. classes based on a mastery of the given topic as demonstrated by class performance, Regents Courses, and Regents exams. Due to the intense requirements of the I.B. curriculum, admission to I.B. classes will depend on a solid demonstration of potential.

It is strongly recommended that all students take a minimum of two (2) I.B. courses in their junior or senior years.

Program Studies for I.B. Diploma

Areas of study consist of courses in six (6) subject areas:

- Group 1 (**Language A**) - the student's first language including the study of selections from world literature
- Group 2 (**Language B**) - the student's second language (French, Spanish, Italian)
- Group 3 (**Individuals and Societies**) - history and geography
- Group 4 (**Experimental Sciences**) - biology/physics, and chemistry
- Group 5 (**Mathematics**) - math studies, mathematics HL
- Group 6 (**Elective**) - art, music, second science, psychology, computers, social and cultural anthropology, or geography

Extended Essay

The extended essay (4,000 words) is defined as an in-depth study of a limited topic chosen from one of the six (6) groups of the I.B. curriculum. It is designed to provide the I.B. diploma candidate the opportunity to engage in independent research. Students are encouraged to pursue an area of special interest to them. In the second semester of the junior year, the student decides on a topic and seeks the sponsorship of a faculty advisor. Students are expected to begin work on the project during the junior year, and the summer between the junior and senior years, under the supervision of an advisor. The extended essay is submitted at the end of the first semester of the senior year. It can become a valuable component of the college application packet.

Theory of Knowledge

Theory of Knowledge (TOK) is a year-long course divided between the junior and senior years which is required for I.B. diploma candidates. The TOK student examines the philosophical framework of each academic discipline while learning to reflect critically and logically on ideas originating in the other courses.

CAS Program (Creativity, Action, Service)

While the Creativity and Action components of CAS are largely met through curricular and extra-curricular programs, the Service component is the responsibility of the student. Each diploma candidate must complete a minimum of one-hundred-fifty (150) CAS hours during the last two years of high school. Advisors assist students in fulfilling this requirement.

ENG108 Pre-I.B. English Grade 9; Grade 9; 1 Credit

This course integrates writing development and introduction to high school English. Students study Shakespeare and Greek drama, epic poetry and modern world literature. Thematic links and parallel study skills are present in both the social studies and foreign language programs. The writing program is primarily expository writing based on the analysis of literature.

ENG282 Pre-I.B. English Grade 10; Grade 10; 1 Credit

This course integrates communication skills and the study of literature. Students combine written work and oral presentations in the study of literature including modern world literature, novels, short stories, autobiographies, contemporary poetry, and Shakespearean and modern drama. Writing is a major portion of the literature analysis.

ENG382 I.B. English HL Grade 11; Grade 11; 1 Credit

Students complete an in-depth analysis of several literary works and a rigorous writing program designed to prepare them for University-level English class. Students analyze a Shakespearean tragedy, characteristic works of major poets and several world literary works. Students write one paper on world literature for grading by the English department, review by the International Baccalaureate Organization; and must also prepare one oral presentation. Students need an 85 average in English 10 to be considered for the program. Maturity, open-mindedness and confidence are other factors considered for acceptance into the program.

ENG482 I.B. English HL Grade 12; Grade 12; 1 Credit

This course is a continued in-depth analysis of literary works and a rigorous writing program. Formal research papers will be required as students analyze authors and literary works. Additionally, students are required to write a 1,500 word in-depth analytical essay on a work of World Literature, prepare for a recorded oral presentation, and take a written examination in May.

SST108 Pre-I.B. Global History 9; Grade 9; 1 Credit

This course focuses on the study of the history of democratic government through western thought by tracing its origins from the Ancient World to the Age of Political Revolution. Topics include purpose, structure, function and operation of government; rights and responsibilities of citizens; comparative studies of different forms of government; and international problems among various forms of government. The five (5) social studies standards are addressed. Creative writing, authentic documentation and intellectual thinking are critical components.

SST282 Pre-I.B. Global History 10/ Regents; Grade 10; 1 Credit

Students survey common themes that recur across time and place, and historical eras. The course presents a chronological history of the world beginning with the Age of Political Revolutions and concluding with contemporary events of the 20th century. The five (5) Social Studies standards are addressed. Creative writing, authentic documentation and intellectual thinking are critical components. All students must pass the Global History/ Geography Regents at the completion of the mandated course of study as a graduation requirement.

SST382 I.B. History of the Americas HL; Grade 11; 1 Credit

I.B. History of the Americas (IBHOA) focuses on key social, political, economic and cultural themes and events in the United States, Canada and Latin America, as well as key topics throughout the world in the 20th century. I.B. History of the Americas follows both a thematic and chronological format. It is important to emphasize this is not simply a U.S. history course. I.B. History of the Americas is a comparative inquiry wherein students examine relationships and interactions among nations and peoples. Students will be prepared for the I.B. exams in May of their senior year as well as for the New York State Regents Exam in social studies and content standards for 11th grade U.S. History & Government.

SST484 I.B. Twentieth Century World History Topics HL; Grade 12; 1 Credit (Prerequisite SST382)

This course encompasses international history, history and events from WWI to the collapse of the Soviet Union. It focuses on two major themes; causes, practices and effects of war and the Cold War (1945-1995). During the course of the academic year, students will complete "The Historical Investigation," a 2,000-word essay in which candidates demonstrate skills and knowledge of an historian. Students sit for International Examinations in May (HL Course).

MTH153 Pre-I.B. Algebra; Grade 9; 1 Credit

This course will develop student skills to identify, explore, reason, justify, proof, and apply mathematical relationships in algebra. Utilizing both the process and content performance indicators students will acquire and demonstrate mathematical reasoning ability when solving problems. This course will end in a Math Regents Examination.

MTH154 Pre-I.B. Algebra I; Grades 9, 10; 1 Credit

This course will develop student skills to identify, explore, reason, justify, proof, and apply mathematical relationships in algebra. Utilizing both the process and content performance indicators students will acquire and demonstrate mathematical reasoning ability when solving problems. In the 9th grade students will complete Part I of a 2-year course.

MTH254 Pre-I.B. Algebra II; Grades 10-12; 1 Credit

This course will develop student skills to identify, explore, reason, justify, proof, and apply mathematical relationships in algebra. Utilizing both the process and content performance indicators students will acquire and demonstrate mathematical reasoning ability when solving problems. This course is the second year of a two-year Algebra program, and will end in a Math Regents Examination.

MTH214 Pre-I.B. Math A2; Grades 9, 10; 1 Credit

This course is designed to be the same course as Math A2 with topics studied in greater depth.

MTH229 Pre-I.B. Math B1; Grades 9-12; 1 Credit

This course is for students who have successfully completed Math A1 and Math A2 and the Math A Regents Examination. It will include topics in complex numbers, functions, transformation geometry, probability and statistics. (It encompasses the Algebra 2/ Trigonometry curriculum.)

MTH484 **I.B. Mathematics Studies 11 SL (Year 1)**; Grade 11; 1 Credit

MTH488 **I.B. Mathematics Studies 12 SL (Year 2)**; Grade 12; ½ Credit

Compulsory Core Includes: advanced algebra, arithmetic and geometric sequences and series, inequalities and solutions of quadratics; sets and logic; geometry, vectors and trigonometry; statistics and probability; functions: concepts, graphing, properties; financial mathematics; matrices and graph theory; introduction to differential calculus. Utilization of the graphing calculator in addition to an extensive mathematics project is required.

SCI212 **Pre-I.B. Living Environment/ Regents + SCI213 Lab**; Grades 9, 10; 1 Credit

SCI311 **Pre-I.B. Chemistry/ Regents + SCI312 Chemistry Lab**; Grades 10-12; 1 Credit

SCI481 **I.B. Chemistry SL** and SCI482 **I.B. Chemistry Lab SL**; Grades 11, 12; 1 Credit (Prerequisites: SCI311; 85 or better average on Chemistry and Living Environment Regents)

The Chemistry course presents a modern view of chemistry with a major emphasis on understanding the many interactions of matter. The course is designed to correlate with National Standards in Science. A significant portion of the course deals with a contemporary description of atomic structure, which is used to explain the chemical behavior of the elements. In order to develop a systematic approach to the principles of chemical reactions, extensive use is made of the Periodic Table of the Elements.

SCI411 **I.B. Physics SL Regents** and SCI412 **I.B. Physics Lab SL**; Grades 11, 12; 1 Credit

A mathematically based one year course that exceeds the topics covered in Regents Physics. I.B. Physics requires the student to show initiative in both lecture and in performing labs many of which are independent inquiries. The student is also expected to write essays on selected topics in Physics. Lab work and end-of-year test are evaluated by an independent committee and ends in a Regents Examination.

SCI416 **I.B. Biology 11 SL**; Grades 11, 12; 1 Credit

SCI418 **I.B. Biology Lab 11 SL**

SCI417 **I.B. Biology 12 HL**; Grade 12; 1 Credit (Prerequisite SCI416)

SCI419 **I.B. Biology Lab 12 HL**

This is a rigorous pre-university course in micro and macro-biology. This meets the needs of highly motivated secondary school students culminating in a group project and examination.

I.B. Languages Other Than English (L.O.T.E.)

Checkpoint A - Learning outcomes for one (1) credit completed in grades six through eight. A student will be able to earn high school credit below grade nine by passing the State Proficiency Examination. However, entrance into the Pre-I.B. Checkpoint B1 classes will require a grade of 85 or better on this exam. In this course, students will master the entrance level communicative proficiencies of listening, speaking, reading and writing with respect to the target language, as well as an introductory cultural awareness. Students will gain a facility with simple statements and introductory cultural awareness. Students will gain a facility with simple statements and will be able to initiate and respond and engage in conversation within the parameters of structure, vocabulary and phonology consistent with situations and functions of this level. The beginner will achieve a comprehension of simple informative or social material and will be able to give written expression of personal needs, as well as short messages in familiar contextual settings.

FLG181 **Pre-I.B. Italian - Checkpoint A**; Grades 8, 9; 1 Credit

FLG183 **Pre-I.B. Spanish - Checkpoint A**; Grades 8, 9; 1 Credit

Checkpoint B (2 Years) - Learning outcomes for three (3) credits culminating in a Regents Comprehensive Examination. Entrance into the **I.B. Diploma or Certificate Program** will require that the student show mastery of the target language with a grade of 85 or better on the Regents Exam. In this course, the student will continue to develop his/her skills with respect to the communicative proficiencies of listening, speaking, reading and writing as well as an understanding of the evolution of cultures and their value systems. Students will expand their listening proficiencies to include the comprehension of short conversations on familiar topics and situations. Speaking proficiencies will be developed through

increased vocabulary and students will be able to initiate and sustain conversation. In addition, students will be responsible for individual oral presentations on a variety of culturally-based topics. More time will be devoted to reading and writing activities in order to function with narratives and descriptive materials, as well as essays, letters and reports.

FLG391 **Pre-I.B. Italian - Checkpoint B2**; Grades 9, 10; 1 Credit

FLG393 **Pre-I.B. Spanish - Checkpoint B2**; Grades 9, 10; 1 Credit

* **Note:** If a **9th grade student** plans to become an **I.B. Diploma or Certificate Candidate** and is only at the **Checkpoint-A** proficiency level of the target language, he/she must take an accelerated **Checkpoint CPB1-B2** combination course culminating in a Regents Comprehensive Examination in the **10th grade** in order to insure that the student has met the **minimum** criteria for entrance into the **I.B. Diploma or Certificate Program**.

FLG381 **Pre-I.B. Italian - Checkpoint CPB1-B2**; Grade 10; 1 Credit

FLG383 **Pre-I.B. Spanish - Checkpoint CPB1-B2**; Grade 10; 1 Credit

Checkpoint C - Learning outcomes beyond the Regents Examination for one (1) credit completed in the 10th grade. In this course, the student will continue to develop his/her communicative skills at an advanced level. This course bridges the gap between Checkpoint B and the I.B. language courses in the 11th and 12th grades. It is an introduction to historical and literary analysis combined with the advanced study of the target audience and its culture.

I.B. Italian, French and Spanish: All are two-year courses of study at the end of which the students will take oral and written examinations towards either the I.B. Diploma or individual certificates. Each of the modern language courses is generally set in different communicative and interactive situations, thus reflecting the different expectations of language proficiency. All languages are offered in both the standard level and the higher level.

Language B: The main focus of the program is on language acquisition and development; the study of literature and other culturally-based texts will play an important part in the process.

Language A2: Designed for study by heritage speakers/bilingual students with a high competency in the target language. In this course, the student explores the subtleties of the language in a wide variety of contexts, including literature.

FLG514 **I.B. Spanish 11-B (SL)**; Grade 11; 1 Credit

FLG515 **I.B. Spanish 11-A2 (SL)**; Grade 11; 1 Credit

FLG525 **I.B. Spanish 11-A2 (HL)**; Grade 11; 1 Credit

FLG526 **I.B. Spanish 11-B (HL)**; Grade 11; 1 Credit

FLG512 **I.B. Italian 11-B (SL)**; Grade 11; 1 Credit

FLG522 **I.B. Italian 11-B (HL)**; Grade 11; 1 Credit

FLG511 **I.B. Italian Ab Initio 11**; Grade 11; 1 Credit

FLG513 **I.B. French 11-B (SL)**; Grade 11; 1 Credit

FLG523 **I.B. French 11-B (HL)**; Grade 11; 1 Credit

FLG616 **I.B. Spanish 12-B (SL)**; Grade 12; 1 Credit

FLG614 **I.B. Spanish 12-A2 (SL)**; Grade 12; 1 Credit

FLG624 **I.B. Spanish 12-A2 (HL)**; Grade 12; 1 Credit

FLG626 **I.B. Spanish 12-B (HL)**; Grade 12; 1 Credit

FLG612 **I.B. Italian 12-B (SL)**; Grade 12; 1 Credit

FLG622 **I.B. Italian 12-B (HL)**; Grade 12; 1 Credit

FLG615 **I.B. Italian 12-Ab. Initio (SL)**; Grades 11, 12; 1 Credit

FLG613 **I.B. French 12-B (SL)**; Grade 12; 1 Credit

FLG623 **I.B. French 12-B (HL)**; Grade 12; 1 Credit

ART118 **Pre-I.B. Art Appreciation 9**; Grade 9; ½ Credit

This course is designed to explore and understand the fundamentals of art and to develop an appreciation of art history and the humanities.

ART119 **Pre-I.B. Art Appreciation 10**; Grade 10; ½ Credit (Prerequisite ART118)

This course is designed to continue understanding and exploring the fundamentals of art and to develop an appreciation of art history and humanities, while preparing students for I.B. Art.

ART481 **I.B. Art Design SL-1**; Grades 11, 12; 1 Credit (Prerequisite ART118 and ART119)

In this course students will develop a portfolio which is part of the assessments for I.B. certificate and/or diploma.

ART482 **I.B. Art Design SL-2**; Grades 11, 12; 1 Credit (Prerequisite ART481)

HUM100 **I.B. Theory of Knowledge I**; Grade 11; ½ Credit

Theory of Knowledge (TOK) is given over a two-year period to grade eleven and twelve students. Students enroll in their junior year and complete the course during their senior year. The TOK student examines the philosophical framework of each academic discipline while learning to reflect critically and logically on ideas originating in other courses. Each student will be required to complete 75 C.A.S. hours and submit a rough draft of Theory of Knowledge (T.O.K.) essay.

HUM101 **I.B. Theory of Knowledge II**; Grade 12; ½ Credit (Half-year); (Prerequisite HUM 110)

The second of these courses (see HUM110) examining the philosophical framework of academic disciplines while teaching students to reflect critically and think logically. Students culminate work on their extended essay. Each student will be required to complete 150 C.A.S. hours and submit final copy of the Theory of Knowledge (T.O.K.) essay.

HUM212 **I.B. Philosophy**; Grade 11, 12; 1 Credit

The aim of this course is to encourage students to develop the ability to reason and argue and to learn to take a personal and independent position on philosophical issues. Students study themes and develop the ability to become independent thinkers.

SOS110 **I.B. Psychology SL**; Grades 11, 12; 1 Credit

This course focuses on the nature of human beings, appreciation of psychology and methods of psychological inquiry. Students examine the work of six authors whose works reflect four subject areas (developmental psychology, social psychology, cognition and learning, and personality). The studies include three key themes: biological/psychological, humanistic/phenomenological, and behavioral. This course will satisfy the Group-6 component of the I.B. curriculum.

MUS202 **Pre-I.B. Keyboarding/Composition**; Grades 9-11; ½ Credit (Prerequisite Note Reading)

Ninth grade students learn the fundamentals of keyboard playing (i.e., simple melodies and modified compositions of classical composers). Grades 10 and 11 students focus on performance and original compositions.

MUS106 **Pre-I.B. Music Appreciation I**; Grade 9; 1 Credit

MUS107 **Pre-I.B. Music Appreciation II**; Grade 10; 1 Credit

These courses are designed to develop knowledge, appreciation, and aesthetic judgment of all types of music. Familiarity with cultural resources and media is learned through discriminating listening and attending live performances.

MUS481 **I.B. Music SL**; Grades 11, 12; 1 Credit (Prerequisite MUS101)

This course is geared for students who already sing or play an instrument well enough to perform several recorded recitals during the year. These recordings will be submitted and account for 50% of the overall grade. Music of many genres and styles are studied from all parts of the world, along with study of music theory and history. Other requirements are a musical investigation/ research paper, and formal written I.B. examination.

CMP107 **Introduction to Programming in JAVA**; Grades 9-12, ½ Credit

CMP301 **Advanced Topics in Computer Science**; Grades 10-12; 1 Credit

CMP420 **I.B. Computer Science SL**; Grades 11, 12; 1 Credit

This course uses the C++ programming language to teach programming concepts. Topics include data types, functions, arrays, strings, structures, classes and objects as well as others. Students learn how to plan and create well-structured programs and solve problems.

FNA305 **I.B. Film 11 SL (Year 1)**; Grade 11; 1 Credit

The study of film will be approached through its various genres. Films will be viewed in class and discussed. Individual viewing of a selected film will also be required. The student will either write an essay or present to the class their analysis of the genre they selected from. The first year students will concentrate on practicing film analysis and film production. The final film that the students produce will be their final exam grade.

FNA405 **I.B. Film 12 SL Year 2**; Grade 12; 1 Credit

This year the study of film is done in three tracks simultaneously. Each track culminating in one of the three assessments required by IBO. The tracks include; independent study of four films in at least two different cultures, film analysis with oral presentations, and a 7-minute detailed group film.

SST388 **I.B. Social and Cultural Anthropology SL**; Grades 11, 12; 1 Credit

This course requires students to compare and contrast characteristics of specific societies and cultures, identify and examine the principles underlying social and cultural life, and examine how cultural and personal preconceptions and assumptions shape people's understanding of their own and other societies and cultures.

SST389 **I.B. Geography SL**; Grades 11, 12; 1 Credit

This course will require students to demonstrate knowledge of relevant factual information. Students will apply geographical terminology, recognize and appreciate the interaction between people, places and the environment, understand the use of human and physical resources, and evaluate the management strategies involved.