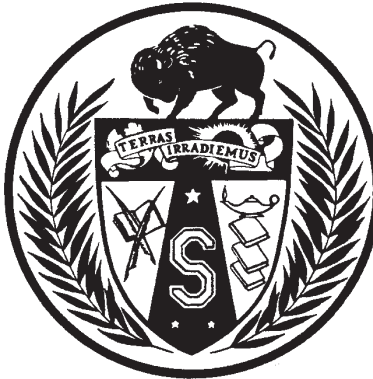


SHAKER HIGH SCHOOL

Latham, New York

Guide to Program Planning



2012-2013

North Colonie Central Schools

A guide to...

PROGRAM PLANNING

North Colonie Central Schools

Shaker High School

Latham, New York

Richard W. Murphy, Building Principal

Shaker High School is accredited by the New York State Board of Regents.

Published by

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January, 2012

FOREWORD

The twenty-first century will present opportunities and challenges to you as you prepare for the future. All students will need to demonstrate mastery of the core knowledge and skills needed to be successful in life and careers. The junior and senior years present opportunities to elect courses based around your interests and your desire to develop new skills and improve existing skills. Please review this guide carefully to insure your future options and to effectively meet your academic and personal needs. Remember that the faculty and staff of Shaker High School are here to assist you as you plan your program.

Best wishes for a rewarding and satisfying high school experience.

A handwritten signature in black ink that reads "D. Joseph Corr". The signature is written in a cursive style with a large, stylized "D" at the beginning.

D. Joseph Corr

Superintendent of Schools

SHAKER HIGH SCHOOL

VISION

Our enduring vision is, and will continue to be, to maintain a safe and wholesome school environment—one that constantly improves our comprehensive educational system, providing opportunities, services, and instruction of the highest quality and value to all children. Therefore, we have developed programs designed to enable our students to succeed academically and socially and prepare them for the demands of the global work place. To that end, students need to understand the fundamental principles of economics and economic systems. They must acquire this necessary knowledge in order to be contributing and successful citizens in a democratic society. To achieve these goals, they must become independent learners, mastering core academic and technological skills. This mastery will enable them to solve problems and communicate effectively, both orally and in writing. We must encourage Shaker students to foster lifelong reading and critical thinking habits, as well as to gain knowledge of a foreign language and the fine arts. Lastly, they should learn to embrace healthy life styles and activities, exercise civility, self-discipline, demonstrate respect for others, and make good decisions.

EQUAL OPPORTUNITY INFORMATION

The North Colonie Central School District hereby advises students, parents, employees and the general public that it offers equal employment and educational opportunities, including vocational education opportunities, without regard to age, race, creed, color, national origin, sex, sexual orientation, religion, disability, marital status, genetic disposition, or HIV or hepatitis carrier status. Equality of opportunity in employment shall include hiring, firing, wages and salaries, promotion or any terms, conditions or privileges of employment.

Inquiries regarding this nondiscrimination policy may be directed to Title IX (Discrimination) Compliance Officer, Ms. Kathleen Skeals at Shaker High School, Latham, New York 12110, telephone (518) 785-5511, ext. 3381 or Section 504 (Disabled) Compliance Officer, David T. Semo at Shaker High School, Latham, New York, 12110, telephone (518) 785-5511, ext. 3333.

Procedures and forms related to the established grievance procedures may be obtained from the appropriate compliance officer.

NORTH COLONIE CENTRAL SCHOOL DISTRICT

Latham, New York

Board of Education

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Superintendent of Schools

Kathleen Skeals
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A MESSAGE FROM THE PRINCIPAL

Shaker High School offers rich and diverse courses of studies. Each year for four years students and parents are asked to decide on a course of study. This is one of the most important decisions made during a student's high school years. These academic choices begin to define students' interests, expectations, and future career path. Students and parents must reflect on students' strengths, interests, and teacher recommendations. Each student's school counselor will assist in reviewing a student's academic record to insure that the appropriate courses are chosen.

The Guide to Program Planning contains information on the courses and programs offered at Shaker High School. This document is updated yearly to reflect the changes and additions to the curricula at Shaker High School. Students and parents are encouraged to take time to review the many choices and options for study. The faculty and administration are available to aid in this important process. Please call upon them with questions.

Deadlines have been established for program and course selection decisions. Course changes will not be allowed after July 1. Students and parents must be sure that they have reviewed and considered all of the program options prior to making their final course selections.

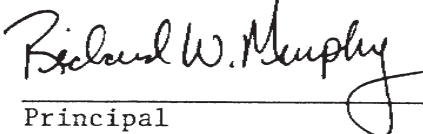

Principal

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REQUIREMENTS AND PROCEDURES

Introduction

Planning a program of study for each of the four years of high school is one of many important decisions students must make. In this decision-making process, students are encouraged to use the advice and counsel of their parents, counselors and teachers as well as students who have preceded them at Shaker High School.

Confidentiality

A cumulative record (K-12) for each student enrolled at Shaker High School is maintained by the Guidance Department subject to specified Board of Education Policy and approved Administrative Regulations. Students, by appointment with their counselors, are entitled to receive an interpretation of all information contained in their records. Parents, or persons in parental roles, are also authorized to review, by appointment, their child’s record as well as receive an interpretation of it from appropriate school personnel. ***However, no third party including peace officers, lawyers, or agents shall be permitted access to information contained in any student’s record without the expressed written permission of the person in a parental relationship to the student or the written permission of a student eighteen years or older.***

Homework

North Colonie Administrative Regulations define homework “as that activity which is intended to extend beyond the time of the instructional period, and which is to be completed in the study hall or out of school.” Homework will be assigned in English, social studies, mathematics, science, foreign languages and business with a maximum intended length of 45 minutes per class lesson. Other departments may assign homework where appropriate within this guideline. (For further details, please refer to complete Board of Education policy.)

also provides an opportunity for the student, with the assistance of a counselor, to review the student’s academic history, standardized test results, and the recommendations of the professional staff regarding an appropriate program of study. In each subsequent year, students and counselors will meet individually and in small groups to review and plan the next year’s program. If a student requests a course but does not meet the prerequisite(s), he/she may contact the guidance counselor to pursue the Request for a Waiver of Prerequisite process. If a student with a disability does not meet the prerequisite(s) for a course, the parent and student should meet with the guidance counselor and the Director of Pupil Services to discuss reasonable accommodations to ensure access and then the Request for a Waiver of Prerequisite may be pursued. Parents are also expected to review their child’s program. They are provided with a written copy of the child’s tentative program for the next academic year in sufficient time to request desired modifications prior to July 1. If conflicts in scheduling develop, students will be notified during the summer so that alternate courses may be selected.

Doubling

No student may concurrently pursue two full-year courses that are ordinarily taken in sequence, e.g., English 9 and 10, Languages 1 and 2, Global Studies 9 and 10, Global Studies 10 and American History and Government 11, Math 9 and 10. Only in his or her senior year would a student be permitted to take English 11 and English 12 or U.S. History and Economics and Government concurrently.

Elective Subjects

Because of possible schedule conflicts, students may not always find it possible to elect a particular subject. Electives described in this publication are open to all students regardless of sex and will be taught providing conditions of enrollment, staff availability and other pertinent factors as determined by the building principal.

PROGRAM OPTIONS

Selecting a Course of Study

Prior to entering grade 9, each student and his parents meet with a school counselor in order to plan the high school program the student wishes to pursue. This conference provides an opportunity for the student and his parents to share with the counselor their educational goals and objectives. It

Changes of Program

While students may exercise wide latitude of freedom and choice in determining their academic program, all program requests for the next year must be finalized by July 1. Students needing to have program adjustments as a result of summer school must effect such changes prior to September 1. After these dates, requests for a program change can be initiated only under the most unusual circumstances via the Special Program Procedure available in the Counseling Office. Withdrawal from courses will be noted on the final transcript.

Independent Study

Any student may choose to learn about a topic or subject that is for elective credit through the Independent Study project. Independent Study may involve an investigation of one specific area of a subject for which both advisor and student share an appreciation. It may involve out-of-school endeavors or a vocational interest.

This involves an individual student working with a faculty advisor on a project approved by the principal. The project results from a written application made to the advisor by the student prior to the commencement of study. A minimum of 75 hours is required for one-half unit of credit and a minimum of 150 hours is required for one unit of credit. Independent Study is excluded from the required minimum of classes in a student's schedule.

Applications for the Independent Study Contract Agreement may be obtained from the Main Office.

EARNING CREDITS

A student's homeroom placement is determined by the number of units earned and by the highest grade level of English or social studies in which the student is enrolled. Assignment to a 10th grade homeroom requires a student to have earned five (5) units of credit, exclusive of physical education, including one unit in English 9 or Social Studies 9. Assignment to a grade 11 homeroom requires nine (9) units of credit, exclusive of physical education, and successful completion of either English 10 or Social Studies 10. Exception: all candidates for graduation in that academic year will be assigned to a 12th grade homeroom.

Course Load Requirements

In meeting these requirements, each student in grades 9, 10 and 11 must enroll in a minimum of six courses each semester. Students in grade 12 must enroll in a minimum of five courses each semester. In addition, all students must enroll in physical education each semester.

GRADUATION REQUIREMENTS

Graduation Requirements

Regents Diploma		Regents w/Advanced Designation	
Required Courses	Credits	Required Courses	Credits
English	4	English	4
Social Studies	4	Social Studies	4
Math[a]	3	Math	3
Science[a]	3	Science	3
LOTE	1[b]	LOTE[c]	3
Art/Music	1	Art/Music	1
Health	.5	Health	.5
Physical Education	2	Physical Education	2
Sequence/Electives	4.5	Sequence/Electives	2.5
TOTAL	23	TOTAL	23

Regents Diploma	Regents w/Advanced Designation
Required Exams <i>[All exams require a score of 65 or above]</i>	Required Exams <i>[All exams require a score of 65 or above]</i>
English Comprehensive Exam	English Comprehensive Exam
Regents Integrated Algebra Exam	Regents Integrated Algebra Exam, Regents Geometry Exam, and Regents Algebra 2/Trigonometry Exam
Regents Global Studies Exam	Regents Global Studies Exam
Regents U.S. History Exam	Regents U.S. History Exam
Regents Science Exam	2 Regents Science Exams
	LOTE Exam [c]

- [a] An integrated course in mathematics/science/technology may be used to satisfy the requirement for third unit of credit in mathematics or science.
- [b] Students must complete two years of seat time in a Language Other Than English (LOTE) by the end of 9th grade. They must also pass a locally-developed examination that is aligned to the checkpoint A learning standards for Languages Other Than English (LOTE) OR they must pass a high school Language Other Than English course.
- [c] Students acquiring 5 units of credit in one of the following may be exempt from the Language Other Than English requirement: Art, Music, Business or Career and Technical Education.

Let's Take These Requirements One At A Time:

1. English – Four units are required. Passing the Comprehensive English Regents is required of all students for a diploma. The test is first administered in June of grade 11. Students who do not pass the Regents exam will be scheduled for remediation until they do so.
2. Social Studies – Four units are required. Both the second-year program in Global History, and the third-year program in United States History and Government require passing the Regents examination. Students who do not receive passing grades on the Regents must be scheduled into a remediation program. The fourth year must include 1/2 unit in Government and 1/2 unit in Economics.
3. Mathematics – Three units are required. A Regents Examination (Integrated Algebra) in mathematics is required for all students prior to graduation. Students who do not pass a Regents will be scheduled for math remediation until they do so.
4. Science – Three units are required. A Regents examination in Science is required for all students prior to graduation. Students who do not pass a Regents exam will be scheduled for remediation until they do so.
5. Health – A 1/2 unit is required.
6. Art and/or Music – One unit is required. Specific courses in art and music fulfill this requirement. Alternative options may be selected.
7. Foreign Language – Students are required to have completed two years of seat time in a Language Other Than English (LOTE) by the end of their 9th year. In order to achieve a basic Regents diploma, students must also pass a

locally-developed examination that is aligned to the checkpoint A learning standards for Languages Other Than English (LOTE) OR they must pass a high school Language Other Than English course.

For an Advanced Regents diploma, the student needs to pass a minimum of three years of high school Languages Other Than English (LOTE) AND the exam that is aligned to the Checkpoint B Learning Standards for LOTE. Any student who acquires 5 units of credit in art, music, business, or career and technical education may be exempt from the LOTE requirement for the Advanced Regents diploma.

8. Physical Education – All students must complete physical education each semester they are in school. Four years (two credits) of physical education are required for graduation. One-quarter unit of credit is earned each semester. Students must successfully pass eight semesters.

DIPLOMAS

Students who earn a 90 average on required Regents examinations will qualify for a “Regents with Honors” or “Advanced Regents with Honors” endorsement.

SPECIALIZED SHAKER HIGH SCHOOL DIPLOMAS

In order to encourage students to take full advantage of the program of course offerings at Shaker High School, specialized diplomas will be awarded to students who complete the prescribed programs of study exceeding the basic Regents and Advanced Regents requirements. Students completing the more rigorous program with a 3 1/2 year average of 88-92 will receive specialized diplomas “with honors.” Those earning a 3 1/2 year average of 93, or higher, will receive the specialized diplomas “with high honors.”

Liberal Arts Diploma		Scientific Diploma
4 units Regents level or above	English	4 units Regents level or above
4 units Regents level or above	Social Studies	4 units Regents level or above
4 units Regents level or above	Science	5 units Regents level or above
4 units Regents level or above	Math	5 units Regents level or above
5 units plus LOTE examination, or 6 years of two different foreign languages with LOTE examinations	Foreign Languages	3 units with LOTE examination
	Computer Science or Computer Applications for College Mathematics	1/2 unit
2 units	Fine Art and/or Music	1 unit
1/2 unit	Health	1/2 unit
4 years (or each semester in attendance)	Physical Education	4 years (or each semester in attendance)

SENIOR OPTIONS

Early Admission to College and Graduation from The Shaker High School

A limited number of students who have not completed all of the requirements for graduation from The Shaker High School may be accepted into college at the end of their junior year. In order to be eligible for this program a student must have attended The Shaker High School as a full-time student for a period of one school year. In addition, students wishing to pursue this option must have successfully completed three years of physical education, English and social studies and passed all of the Regents Examinations that are required for graduation. Interested students must also complete an application and submit it through their guidance counselor to the building principal for approval. Those students who receive approval will be awarded a Shaker High School diploma after successfully completing their first year of college, which must include the equivalent of two semesters of English and social studies and confirmed by the submission of a completed official transcript to the Shaker High School Guidance Office. Those students wishing to participate in the graduation ceremonies of The Shaker High School must notify the Taft Hall Principal by April 1 of the year in which they plan to graduate.

January Graduation from Shaker High School

Students who wish to complete graduation requirements in January of their senior year must complete the appropriate application and submit it to their counselor prior to the end of grade 11. Students choosing this option must complete one unit in both English and social studies during the first semester of the senior year. Final approval of all requests will be subject to available space in appropriate classes as determined by the school's administration.

Early Graduation from Shaker High School

Students who wish to graduate from Shaker High School at the end of three years must indicate this intention in the appropriate application and submit it to their counselor prior to the end of the sophomore (grade 10) year. Students choosing this option must complete all graduation requirements.

Student Release Programs

Seniors may request early release from school in order to participate in a variety of programs. The opportunities described below are available only in grade twelve.

Early Release: Only students in grade 12 who meet the minimum course load as defined by Board of Education Policy may request early release.

Guidelines for Senior Release Privilege:

- Only prospective seniors who have completed the required application, including written permission of their parent or guardian, will be considered for the senior release privilege;
- Requests for senior release privilege must be approved by the Taft Hall principal and will not be honored if there are conflicts with requested courses of study;
- Students who have earned 16 units of credit by the beginning of their senior year may request 1 period of Senior Release Program;
- Students who have earned 15 1/2, or fewer, units of credit by the beginning of their senior year do not qualify for Senior Release Program;
- Students must leave the building, exiting via the nonclassroom areas, and be out of the corridors by the beginning of the next period;
- When an 8th period class is scheduled, and period 8 replaces period 7, Senior Release Program students will not be granted an early dismissal.

College Courses

Seniors may be interested in taking one or more college courses on one of the local college campuses. Students who wish to pursue this option must notify their counselor and their request will be handled through a special program. One college course may be applied toward meeting the Board of Education requirement which states that each student must be enrolled in a minimum of five courses. Acceptance in college courses is dependent upon the student's achievement during the first three years of high school. Cost of tuition and transportation for such courses is the responsibility of the student.

SUMMER STUDY

Summer school study may be pursued in an approved secondary summer school upon the recommendation and permission of a counselor. Tutorial study is a remediation option for courses NOT offered during the summer session, either at Shaker's summer session or a neighboring district's summer session. Procedural guidelines are available from each counselor. Questions regarding certified tutors, curriculum, and textbooks should be directed to the department supervisor. The application for tutorial study must be submitted to the building principal by the end of the first week in July.

August Regents Examinations

Students may be admitted to August Regents Examinations at Shaker High School, or other high schools, by applying directly to the summer school principal. The request must be signed by the student and a parent or guardian and authorized by the principal of the student's home school. Summer school, or a formal tutorial program, is strongly recommended for students taking August walk-in Regents examinations.

Course failures may be remediated during the summer either in an approved accredited summer school or in a tutorial program approved in advance by the building principal.

GRADE REPORTING

Reporting and Marking

All grades are numerical.

The passing grade for all levels is 65 while the recommended grade for a student preparing for college is 75. In interpreting a student's report card, the following letter designations which indicate the student's level of study should be considered:

An H indicates that a student is enrolled in an honors program of enriched or accelerated courses. The expected range of achievement for students in these courses is between 85-100.

An R indicates that a student is enrolled in a Regents level program where the expected range of achievement is between 75-100.

A B indicates that a student is enrolled in a Basic program where the expected range of achievement is between 65-80.

An E indicates that the subject is an Elective. The expected range of achievement in these courses is between 65-100.

A mark for the first semester is the result of averaging first and second quarter marks with the semester test, where applicable.

A second-semester mark is the result of averaging third and fourth quarter marks with the final examination, where applicable.

The final school mark (FSM) is found by averaging first and second semester averages. In effect, class work counts two-thirds of the final mark and examinations, one-third. The final school mark and Regents grade are recorded on a student's secondary school record and are entered on transcripts sent to colleges and employers.

Prepared on data processing equipment, report cards are mailed directly to parents and need not be returned.

Class Rank

In order to provide information which students may be required to submit to colleges or employers, and to recognize the district's highest achieving students, a rank in class will be computed according to established regulations (4741-R) for each student completing grade 11 at Shaker High School, **or those Shaker High School students who have declared by the end of the sophomore year to be a 3 year graduate (Policy 4770#7A).**

The top five percent of each graduating class will be designated honor graduates.

Averages will be reported to the nearest whole number and rank will be reported to colleges in deciles. Physical education, health, college keyboarding and independent study will not be included in the ranking. Should a student repeat a subject, the higher of the two grades will be used for class rank purposes. However, both grades will be recorded on the student's transcript. (For complete procedure, please refer to Board of Education Policy.)

Honor and Merit Rolls

Grade level high honor, honor, and merit rolls are established each marking period. To qualify for the high honor roll a student must have an average of 93 in all courses with no grade less than 90. To qualify for the honor roll a student must have an average of 90 in all courses with no grade less than 85. To qualify for the merit roll a student must have an average of 85 in all courses with no grade less than 80. To qualify for high honor, honor, or merit roll a student must have a citizenship grade of "1" or "2."

Student Transfers from Other Schools

Students transferring into Shaker High School must be accompanied by a parent or legal guardian. Credentials of students transferring to Shaker will be evaluated in terms of the requirements of the student's previous school system and New York State Education Department requirements. Necessary changes in a transfer student's program of studies may be made in consultation with the student's counselor any time prior to the end of the student's second full week in Shaker High School.

For class rank purposes only, students who transfer with letter grades will have these grades transposed to numerical grades using the following conversion:

A+	98	B+	88	C+	78	D+	69
A	95	B	85	C	75	D	67
A-	91	B-	81	C-	71	D-	65
						F	60

Students who transfer after the first 5 weeks of school will have grades computed as determined by the Guidance Counselor, Department Supervisors and Hall Principal.

SUPPORT SERVICES

Library – Audio-Visual Services – Media Center

The Media Center is open 7:15 am - 3:35 pm Monday through Thursday, and 7:15 am - 3:30 pm on Fridays. Students may use the Media Center for research or leisure reading at any time when they are not scheduled to be in class. Those students in grades 9 and 10 who want to use the Media Center during a study hall period must have a special pass which will be issued by the library staff upon the presentation of the student's ID card. Also, during period 6, all students wishing to use the Media Center must receive a pass upon entering. Both of the above policies are designed to ensure seating availability and an environment conducive to academic work.

Instructional resources selected for both the interests and the academic needs of the students are provided. A book collection of 24,000 volumes and a large, up-to-date reference collection are available to students and faculty. Local and national magazines and newspapers are located in the periodical area. There is a large video/DVD collection available to faculty members for instructional purposes.

The Media Center offers a wide variety of online databases with full-text articles. The databases cover the following areas: academic journals, newspapers and magazines, government, literature, business, health, careers, science, general encyclopedias, social issues, biographies, ancient history, modern world history, and U.S. history. Articles from the databases can be printed in the Media Center. The databases are also accessible to students from home.

Students are issued an ID card which also serves as their library card for checking out books.

Interlibrary loan services provide students and faculty access to materials from the Upper Hudson Public Library consortium, local colleges, the NYS Health Department, Albany Medical Center, and the New York State Library.

PUPIL SERVICES

Incorporated in the pupil services department are counseling services, health services, psychological services, speech therapy, remedial reading and special education. It should be noted except in instances where the physical safety of the students is involved or where the commission of a crime is involved, students shall have the right to enter into privileged communication with their counselor, the school psychologist, the school physician or school nurse.

A brief description of each service follows:

Counseling Services

The primary objective of the counseling services is to aid students in their development of a responsible approach to decision making. Each grade level presents specific challenges to students, and the guidance program is therefore designed to provide appropriate individual and group counseling experiences for students in assisting them to meet these challenges.

Counselors are assigned to students on an alphabetical basis. Students meet with their counselors in the counseling center which is located at the east end of the library-media center. A counselor is always on duty to assist students during the time when their own counselor may already be meeting with other students, parents, teachers, or representatives from colleges and industries. All counselors are available to students in the counseling center during midmorning. Other than during midmorning, students should normally make an appointment to see their counselor.

Counseling provides assistance to students in understanding their educational strengths, in making realistic career choices and in making decisions in areas of personal concerns such as school adjustment, relationships with peers and other social situations confronting teenagers. While counselors may invite specific students to join in particular group counseling activities, participation in all such groups is voluntary. Frequently, many students after meeting in groups wish to meet individually with their counselor to discuss how various issues relate personally to them.

Through evening parent meetings and individual conferences, counselors attempt to involve parents in student's educational and vocational planning. Parents are encouraged to call the guidance office with suggestions, questions and concerns.

Since counselors are normally in the counseling center with students during the school day, telephone calls usually will be returned after students leave the building at 2:15 p.m.

Health Services

An experienced health staff consisting of a school physician, school nurse and health office assistant, is available to students. A physical appraisal is required for all tenth grade students. In addition, students competing in athletics or seeking working papers must receive a physical examination by the school physician. Students who have specific concerns about any aspect of their physical health are encouraged to meet with a member of the health services staff.

Psychological Services

Students who wish to utilize the service of the school psychologist may make an appointment in the school psychologist's office or may ask their counselor to arrange for the appointment. Parents, teachers and others may also request that the psychologist have contact with a particular student. The school psychologist acts as a consultant-advocate for students in a wide variety of educational and social adjustment domains. In addition, this individual may act as a resource and provide information on community specialists, agencies and available programs.

Remedial Reading

A reading specialist is available to work with students who require assistance. Performance below the district standardized test reference point or the New York State ELA reference point and/or teacher recommendation qualify a student for services. Such services are offered on a group basis. In order to help the greatest number of students, the reading specialist works closely with the English Department which emphasizes reading skills as a major part of the English curriculum.

Speech/Language Therapy

Students who wish help in improving their speech may take advantage of this service. Meeting on a regular basis with a speech/language therapist provides the opportunity to gain in self-confidence and to correct any problems which may make it difficult for the student to communicate clearly with others.

Special Education

Special Education is available to students with disabilities upon completion of an appropriate evaluation, program visitation by parent, student and staff, consultation with parents, approval by the building Pupil Service Team, the District Committee on Special Education, the Board of Education and the parents. Based on the educational needs of the student the following options are available: Learning Resource Area (LRA), Academic Skills Class (ASC) and Consultation Teacher Services (CTS).

The LRA is for students who participate in mainstream classes at least 50% of the day and require academic support in the areas of reading, math and/or language arts. Students who require instruction in the academic areas within a special education class but who can successfully function in special areas and nonacademic classes may participate in an ASC. CTS are provided to students who are mainstreamed 100% of the day that require support from a special education teacher but who do not need a special education program.

COURSE DESCRIPTIONS

The letters written as part of the title of a course are used simply to designate the level of instruction.

The letters H, R, B and E refer to the various levels of instruction at which a course is taught as indicated on page 11 under “Reporting and Marking.” These designations are also found on the individual student’s Grade Report.

Where a course title is preceded by an asterisk(*), the course is newly recommended and is subject to final Board of Education approval.

Prerequisite

A (P) following a course title indicates a prerequisite exists. Several of the course descriptions found herein have stated prerequisites which must be met before a student can be enrolled in that particular course. Each prerequisite is determined through experience over several years and is established in order to aid students in selecting courses in which they have reasonable assurance of success. Where a student, for any reason, cannot meet all prerequisites for a given course, the Department Supervisor may, nonetheless, give permission for the course to be taken where adequate grounds exist for the student not having met prerequisites and, in the opinion of the Department Supervisor, where there is a reasonable likelihood the student will be successful in the course. If a student and his parents wish to have the student’s case reviewed because of failure to meet a stated prerequisite, this request for Waiver of Prerequisite must be submitted through the student’s guidance counselor to the appropriate department supervisor.

Students and their parents are reminded that program or individual subject offerings may vary from year to year as circumstances warrant necessary changes.

All courses are one unit courses except those specifically indicated as one-half ($1/2$), one and one-half ($1\frac{1}{2}$), or two (2) unit courses.

SHAKER HIGH SCHOOL

IMPORTANT INFORMATION FOR PROGRAM PLANNING

INTEGRATED REGENTS PROGRAM (IRP)

In an effort to improve scheduling flexibility, offer more elective choices and better meet the needs of our individual students at Shaker High School, the Integrated Regents Program (IRP) will no longer be offered to incoming freshman.

Importantly, the IRP program option will remain fully intact for students that are currently enrolled in the program. Therefore, these changes will affect only incoming freshman beginning in the Fall of 2012.

In lieu of the IRP course selection, Shaker High School will offer alternatives in Math, Science and CTE. Each of these alternatives are designed to keep all of the extra classroom supports that existed in IRP such as decreased class sizes, extra professional support and stretched (two year) learning in math and science leading to NYS Regents Exams, but the classes are no longer tied to each other for scheduling purposes. Consequently, students may select one, two, or all three of these options as necessary based on their individual circumstances in each content area. In addition, these students will be offered selections of elective possibilities in their junior and senior years in each subject area.

With this new configuration, students enrolling in a two year stretched Intermediate Algebra or Applied Biology course are strongly encouraged to select one of the three introductory courses in Career & Technical Education. These courses are designed to support the grade nine math and science curricula utilizing applied learning activities. These courses will also assist students in developing academic/study skills, career awareness and planning, and personal finance management skills.

Please refer to the Guide to Program Planning for course descriptions.

315 **APPLIED BIOLOGY 1R**

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of 8th grade science.

This course will serve as the first year of a two year program in science. Students will address the same curriculum topics that students in Biology R study with a concentration on the first half of the Biology R curriculum. Content in this program will include increased hands-on activities focused on relevant biological applications in science. Students are supported with smaller class sizes, laboratories completed within the classroom setting, and additional access to extra help through professional tutors. This course, combined with APPLIED BIOLOGY 2R in the following year, culminates in the NYS Living Environment Regents Exam. Students are required to complete a minimum requirement of 600 minutes of laboratory investigation as partial fulfillment of this course. The final examination in this course is a departmental exam and is also required as partial fulfillment of the course.

215 **INTEGRATED ALGEBRA 1A**

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Math 8.

This course will serve as the first year of a two year program covering the NYS Integrated Algebra curriculum. Students will address many of the same curriculum topics that students in Algebra 1 study, with a concentration on the first half of the Algebra 1 curriculum. Students are supported with smaller class sizes, and focus is placed on increasing relevance and applications of math concepts. This course, combined with Integrated Algebra 2B in the following year, culminates in the NYS Integrated Algebra Regents exam. The final examination in this course is a local departmental exam. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through class work and homework. The calculator will be used in math classes throughout high school and into a student's college years.

501 - Planning Your Business Career I

HALF YEAR

1/2 UNIT

Are you interested in the business world? Perhaps you like working with money, following what's happening in the economy, learning about how marketing affects your daily life? Planning Your Business Career 1 will expose you to the many career opportunities you'll want to consider as you plan your successful business future. Based on your interests and aptitude the course will help you identify a general career field and a number of career choices, plan high school and college course selections to get you there and even help you develop the resume needed to enter the career of your choice. As we take a look at career options you will learn the basics of managing your finances for daily independent living and planning for college expenses. In addition, we focus on study skills to help manage your high school courses and exams.

502 - Planning Your Business Career II

HALF YEAR

1/2 UNIT

Now that you are beginning to hone in on your career likes and dislikes, the second portion of this course will reveal the many career options available to you and help you learn more about the careers that you are most interested in pursuing. Most importantly, we will help you gain the information you need to make informed career decisions and select course work that will provide the career portfolio to achieve your career goals.

601 - Planning Your FACS Career I

HALF YEAR

1/2 UNIT

You like working with people, helping others, child care, education, clothing or interior design, or maybe culinary arts and hospitality interest you, and you really hope someday to make a living doing those things you love doing! The problem is, you're not certain what that career is! This course is designed to help you select the Human Services based career that fits YOU best.

Based on your interests and aptitude the course will help you identify a general career field and a number of career choices, plan high school and college course selections to get you there and even help you develop the resume needed to enter

the career of your choice. As we take a look at career options you will learn the basics of managing your finances for daily independent living and planning for college expenses. In addition, we focus on study skills to help manage your high school courses and exams.

602 - Planning Your FACS Career II

HALF YEAR

1/2 UNIT

Now that you are beginning to hone in on your career likes and dislikes, the second portion of this course will reveal the many career options available to you and help you learn more about the careers that you are most interested in pursuing. Most importantly, we will help you gain the information you need to make informed career decisions and select course work that will provide the career portfolio to achieve your career goals. This course will focus on the four core areas of Family and Consumer Sciences; Housing and Interior Design, Culinary Arts and Nutrition, Human Services and Textiles and Design.

819- Planning Your Technical Career I

HALF YEAR

1/2 UNIT

If you like to design, build and create things and you really hope someday to make a living doing those things you love this course is for you! Through a variety technology based activities and projects you will explore your career interests and the possible fields that fit you best. This course is designed to help you select the Technology based career that fits YOU best; ranging from engineering, to product design, to building and repairing vehicles and machines, to construction or other skilled trades.

Based on your interest and aptitudes, the course will help you identify a general career field and a number of career choices, plan high school and college course selections to get you there and even help you develop the resume needed to get the job of your choice. As we take a look at career options, you will learn the basics of managing your money and finances for daily independent living and planning for college expenses. In addition, we focus on study skills to help manage your high school courses and exams.

820 - Planning Your Technical Career II

HALF YEAR

1/2 UNIT

Now that you are beginning to focus in on your career likes and dislikes, this course will focus on the many career options available to you and learn more about the careers that you are most interested in pursuing. Most importantly, we will help you gain the information you need to make informed career decisions and select course work that will give you the transcript to get where you want to go.

Art

It is recommended that courses be taken in the suggested sequences. All students taking an art course will be encouraged to keep a portfolio of their work. Final school marks will be determined by the average of the quarterly marks and any midterm or final project grades. In many half-year electives students with a FSM of 85 or greater may take the art course again on an advanced level. A five-unit sequence must include Studio in Art and Drawing.

711 STUDIO ART E

FULL YEAR **1 UNIT**

Prerequisite: None.

Studio in Art is an introductory course exploring the elements and principles of design and the variety of course offerings available in the art department. The student will be exposed to drawing, painting, sculpture, electronic media and ceramics, among others. Art appreciation, the history of art, art and design careers and the delivery of cultural heritages will be included.

This course is required of all students planning to have a sequence in art, and it meets the art graduation requirement. Homework and sketchbook assignments are part of the course. This course provides a broad, general background in the visual arts.

Two-Dimensional Studies

713 DRAWING E (P)

FULL YEAR **1 UNIT**

Prerequisite: Studio in Art.

This full-year college level course will encourage students to develop visual awareness through the serious study of basic drawing skills. Areas of study will include light and shade, line, perspective, figure drawing, texture, and their various combinations. The course will investigate a variety of techniques and media including pencil, charcoal, ink, pastel, tempera and watercolor.

The observational drawing skills developed in this class are desirable for architecture and art and design portfolios. Students will be expected to complete sketchbook

assignments outside of class. If enrolled in the University in the High School program, students can earn three State University of New York credits upon successful completion of the course.

729 DRAWING FOR CARTOONING AND ANIMATION E (P)

EITHER SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art.

In this one-semester course, students will study the art and history of cartooning and animation. The primary focus is on drawing through storyboarding, cartooning, and idea and character development. Figure drawing and proportion are important aspects of the drawings. Animation projects will include stop-action animation techniques including video editing using current animation software.

739 ADVANCED DRAWING FOR CARTOONING AND ANIMATION E (P)

EITHER SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art and a grade of 85 or higher in Drawing for Cartooning and Animation.

In class with Intro Drawing for Cartooning and Animation students, advanced students will work on a variety of cartoon drawings, developing characters and figure proportions, as well as explore a more in-depth use of animation software programs to create short animated films. Students will build on the skills learned at the introductory level in the areas of cartooning and animation.

727 DRAWING FOR FASHION AND ILLUSTRATION E (P)**EITHER SEMESTER 1/2 UNIT***Prerequisite: Studio in Art.*

In this one-semester course students will develop drawing skills as they relate to illustration in many forms. Figure proportions, fashion styles and costume design will be covered, as well as illustration for books, magazines, product designs, greeting cards, the web, and other applications. Exposure to and handling of various art materials will also be a course objective.

737 ADVANCED DRAWING FOR FASHION AND ILLUSTRATION E (P)**EITHER SEMESTER 1/2 UNIT***Prerequisite: Studio Art and grade of 85 or higher in Drawing for Fashion and Illustration.*

In class with Intro Drawing for Fashion and Illustration students, advanced students will work on a variety of illustrative drawings developing figure proportions and handling of art materials. Students will build on the skills learned at the introductory level in the areas of fashion design and illustration. Exposure to software for illustration work will be introduced.

715 ACRYLIC PAINTING E (P)**EITHER SEMESTER 1/2 UNIT***Prerequisite: Studio in Art.*

This one-semester course will provide students with an opportunity to develop an understanding and appreciation for the acrylic painting medium. The student will be introduced to the work of master painters and the history of painting. The student will develop skills and techniques associated with painting in acrylic paint. Drawing skills are important and will be stressed when planning and developing compositions. Students will work from still life, landscape and the human figure. It is strongly recommended that students take drawing prior to painting.

745 ADVANCED ACRYLIC PAINTING E (P)**EITHER SEMESTER 1/2 UNIT***Prerequisite: Studio in Art and a grade of 85 or higher in Acrylic Painting.*

Students will work with first-time acrylic painters. Students will be encouraged to develop several paintings exploring themes with evidence of independent research of art history, cultures and artists. Advanced techniques will be developed.

716 WATERCOLOR PAINTING E (P)**EITHER SEMESTER 1/2 UNIT***Prerequisite: Studio in Art.*

This one-semester course will provide students an opportunity to develop an understanding and appreciation for watercolor painting. The learner will be introduced to the work of master painters and the history of painting. The student will become acquainted with various skills and techniques associated with painting in watercolor paint. Drawing skills are important and will be stressed when planning and developing composition. Students will work from still life, landscape and the human figure. It is strongly recommended that students take drawing prior to painting.

746 ADVANCED WATERCOLOR PAINTING E (P)**EITHER SEMESTER 1/2 UNIT***Prerequisite: Studio in Art and a grade of 85 or higher in Watercolor Painting.*

Students will work with first-time watercolor painters. Students will be encouraged to develop several paintings exploring themes with evidence of independent research of art history, cultures and artists. Advanced techniques will be explored.

742 ADVANCED STUDIO 1 E (P)

FULL YEAR **1 UNIT**

Prerequisite: Studio Art and a FSM of 93 or higher in Drawing or permission of the Department supervisor. Effort and citizenship grades of 2 or higher.

Department application required.

Advanced Studio is designed to improve artistic skills and facilitate the transition from high school art to college-level study. Students will receive intensive support and direction to develop skills emphasizing drawing, color, design, spatial representation, and expressive content. Students will be introduced to the work of numerous artists and art historical periods. Students are expected to participate in field trips as part of required course curriculum (2 per year on average).

portfolio of between 20-30 works, assembled in part with major works completed in the prerequisite courses. Students will be expected to complete project work during the summer before Advanced Studio 3, and are expected to participate in field trips related to course curriculum. They will also plan, organize and install an end-of-the-year art show. This course carries three Sage College of Albany transcript credits for those choosing this option. A tuition fee is required, payable to Sage College. This course may also be taken for Advanced Placement Credit, and the AP examination/portfolio submission is required of those registered with the College Entrance Examination Board. An AP fee is also required. The award of college credit for either option is ultimately determined by the colleges of admission.

743 ADVANCED STUDIO 2 E (P)

FULL YEAR **1 UNIT**

Prerequisite: A FSM of 85 or higher in Advanced Studio I. Advanced Studio 2 is designed for the highly motivated art student who has demonstrated ability and achievement in Advanced Studio 1, who is interested in advanced study in a variety of art media. Students will be exposed to artist styles and art historical periods through project work. Portfolio presentation, college programs and career guidance will be stressed. Students are expected to participate in field trips as part of required course curriculum and will complete a summer assignment due in September. This course carries three Sage College of Albany transcript credits for students who choose this option. A tuition fee is required for this option.

Three-Dimensional Studies

722 STUDIO IN CERAMICS 1 E (P)

FIRST SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art.

Students will create work in coil and slab methods of clay construction. Students will complete a variety of hands-on projects based on techniques and styles from a number of cultures from around the world. Project examples include a Japanese Tea Bowl, a Greek Amphora, a Native American Coil Pot and an African mask. Traditional and contemporary styles will be covered.

760 ADVANCED STUDIO 3 E (P)

FULL YEAR **1 UNIT**

Prerequisite: A FSM of 85 or higher in Advanced Studio 2 or Advanced Studio 1 with an acceptable portfolio review and permission of department supervisor.

Open to seniors only.

This is the AP level studio course in the department. It may be taken for college and/or AP credit. Students work to produce a

752 ADVANCED STUDIO IN CERAMICS 1 E (P)**FIRST SEMESTER 1/2 UNIT**

Prerequisite: Studio in Art and a grade of 85 or higher in Ceramics 1.

In class with Ceramics 1 students, advanced students will work to further explore coil and slab construction techniques. New methods and techniques for hand building will also be introduced and explored. Students will be introduced to the art of several well-known ceramic artists and sculptors, and may learn how to combine clay with other media such as wood, metal, glass and fibers.

723 STUDIO IN CERAMICS 2 E (P)**SECOND SEMESTER 1/2 UNIT**

Prerequisite: Studio in Art.

This one-semester course allows students the opportunity to work with clay on the potters wheel. In addition students will explore more advanced coil and slab building techniques while learning new sculptural techniques. These projects will be rooted in the styles and techniques of well-known traditional and contemporary ceramic artists and sculptors.

753 ADVANCED STUDIO IN CERAMICS 2 E (P)**SECOND SEMESTER 1/2 UNIT**

Prerequisite: Studio in Art and a grade of 85 or higher in Ceramics 2.

In class with Ceramics 2 students, advanced students will work on a variety of challenging handbuilt and wheel projects. The emphasis of this course will be the potters wheel. Students will learn several techniques for creating a variety of exciting forms on the wheel. Students will be introduced to several well-known potters.

717 STUDIO IN SCULPTURE E (P)**EITHER SEMESTER 1/2 UNIT**

Prerequisite: Studio in Art.

This one-semester course will guide the student toward a better understanding and appreciation of sculpture. The students will explore the three-dimensional relationships of volume, mass, form and light. The students will investigate surface treatment. Sculpture materials such as clay, wood, plaster, and paper will be utilized. Several contemporary sculptors' work will be introduced, in addition to the history of this 3-D art form.

747 ADVANCED STUDIO IN SCULPTURE E (P)**EITHER SEMESTER 1/2 UNIT**

Prerequisite: Studio in Art and a grade of 85 or higher in Sculpture.

In class with first-time Sculpture students, advanced students will continue an in-depth exploration of various materials as they relate to volume, mass, form and light. The student will be expected to research artists and styles for each sculpture completed during the semester.

714 STUDIO IN JEWELRY E (P)**EITHER SEMESTER 1/2 UNIT**

Prerequisite: Studio in Art.

Students will be introduced to the metal medium and will learn skills and techniques necessary to design and create their own works in metal. Metal fabrication, soldering, copper enameling techniques, and cold connections will be taught, and students will consider the aesthetic qualities of their jewelry designs. This detailed work involves drawing and design skills. Students taking this course may earn two college credits at Hudson Valley Community College (HVCC). A tuition fee is required for this option.

744 ADVANCED STUDIO IN JEWELRY E (P)

EITHER SEMESTER 1/2 UNIT

Prerequisite: Studio in Art and a grade of 85 or higher in Studio in Jewelry.

In class with first-time students, advanced students will build on the skills learned in Studio in Jewelry and apply multiple skills in each project. New techniques will be learned as well. There is a heavy emphasis on drawing and design skills, and self-driven research to develop design ideas is expected. Students taking this course may earn two college credits at Hudson Valley Community College (HVCC). A tuition fee is required for this option.

artists of their choosing to use as inspiration for designing their own works. Students will work both two- and three-dimensionally and may need to purchase items if their project idea requires it. Students taking this course may earn two college credits at Hudson Valley Community College (HVCC). A tuition fee is required for this option.

725 STUDIO IN STAINED GLASS E (P)

EITHER SEMESTER 1/2 UNIT

Prerequisite: Studio in Art.

Major emphasis will be focused on the principles of design in the creation of stained glass products. Students will learn the craft of glass cutting, soldering, and the assembly methods of foil and lead came techniques. Students will also learn about various types of glass and styles of various glass artists. Instruction will emphasize the elements of historical and contemporary design as applied to 2-D and 3-D stained glass. Equipment and supplies will be provided, however, students may be expected to purchase some materials for major projects. Students taking this course may earn two college credits at Hudson Valley Community College (HVCC). A tuition fee is required for this option.

755 ADVANCED STUDIO IN STAINED GLASS E (P)

EITHER SEMESTER 1/2 UNIT

Prerequisite: Studio in Art and a grade of 85 or higher in Stained Glass.

In a class with first-time Glass students, advanced students will work more independently, and will explore other materials to combine with glass. They will also research

Digital-Art Studies

719 STUDIO IN ADVERTISING DESIGN E (P)

EITHER SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art.

This one-semester course will introduce the student to skills and design techniques used by commercial artists. In this course, students will learn about typography, fonts and logos. Students will use problem solving, drawing, designing and computer skills to communicate visual messages with text in graphic design compositions for magazine layouts, packaging designs, and poster designs among others. Student projects will also be used by businesses in the community. ***This is one of the possible prerequisite classes for Advanced Studies in Digital Arts.***

749 ADVANCED STUDIO IN ADVERTISING DESIGN E (P)

EITHER SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art and a grade of 85 or higher in Advertising & Design.

In class with first-time Advertising and Design students, advanced students will further develop the graphic design related skills learned in Advertising & Design. Adobe Creative Suite software will be used to create projects for print. Students will continue to develop a portfolio of Advertising and Design work. Also, emphasis will be placed on developing drawing skills related to designs.

724 COMPUTER GRAPHICS 1 E (P)

EITHER SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art.

This one-semester course will introduce students to the study of manipulating and digitally enhancing digital images. Using Adobe Photoshop, students will work with digital photographs on the computer and apply the elements and principles of art to create aesthetically strong art compositions using the software tools.

Access to a digital camera of at least 3.0 mega pixels and a 2GB flash drive is strongly recommended. ***This is one of the possible prerequisite classes for Advanced Studies in Digital Arts.***

726 COMPUTER GRAPHICS 2 E (P)

SECOND SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art.

In this one-semester course, students will work with a digital camera and build on the software skills learned in Computer Graphics 1. Students will compose photographs that solve design problems. They will use photo design software and scanner equipment to create strong art compositions rich in the use of the elements and principles of art/design. Access to a digital camera of at least 3.0 mega pixels and a 2GB flash drive is strongly recommended. It is also strongly recommended that students take Computer Graphics 1 prior to taking this course. ***This is one of the possible prerequisite classes for Advanced Studies in Digital Arts.*** Students taking both Computer Graphics 1 and 2 may earn 3 college credits through Sage College of Albany. A tuition fee is required for this option.

728 CINEMATOGRAPHY E (P)

EITHER SEMESTER **1/2 UNIT**

Prerequisite: Studio in Art. Recommended: Grade of 80 or higher.

Open to juniors and seniors. Interested sophomores should complete an application and will be enrolled as space allows. Cinema is a hands-on, one-semester course designed to introduce students to the creative aspects of film making and video as an art form. Students will learn to use film language both as a viewer and as a creator. Students will become skilled in film and video production, including script writing, designing a story board, camera handling, filming, editing, and utilizing sound. Students will create and show their own films demonstrating original ideas. The history of film and the work of well-known film and video artists will be covered. ***This is a required prerequisite for Advanced Studies in Digital Arts.***

**758 ADVANCED CINEMATOGRAPHY
E (P)**

EITHER SEMESTER 1/2 UNIT

Prerequisite: Studio in Art and a grade of 85 or higher in Cinematography.

Open to juniors and seniors. Interested sophomores should complete an application and will be enrolled as space allows.

In class with first-time Cinematography students, advanced students will work on challenging projects that will further develop their cinematic skills. Students will watch, critique and review classic films and learn how to use movie editing and music composition software in preparation for creating their own individual films.

**741 ADVANCED STUDIES IN
DIGITAL ART E (P)**

FULL YEAR 1 UNIT

Prerequisite: Cinematography AND either Advertising Design OR Computer Graphics (1 or 2) Recommended: Drawing.

This full-year course is designed for students who are highly motivated to work with digital media in a creative, innovative environment. Students work on an advanced level individually and in groups to create dynamic multimedia solutions to conceptual design problems. Additional emphasis through a journal and sketchbook will be placed on drawing and design skills. Students will complete a Digital Arts portfolio. This course carries three Sage College of Albany credits for those students who choose this option. A tuition fee is required for this option.

Art History Classes

759 ADVANCED PLACEMENT ART HISTORY E (P)

FULL YEAR **1 UNIT**

Prerequisite: FSM of 90 or higher in Regents level English, and FSM of 85 or higher in Regents level History.

A college-level survey art history course that begins with the ancient world and covers art historical movements into the twentieth century. Students are provided with slide lectures that trace the development of architecture, sculpture, painting, and the decorative arts. Students learn to critically evaluate works of art and how the works are a product of their culture. Students will be expected to take notes and participate in field trips.

The Advanced Placement Examination is required of all students taking this course. Students who do not take the exam will not receive AP course credit. The examination, which is administered by the College

Entrance Examination Board, is recognized by almost all colleges for advanced placement or college credit. A fee is charged by the College Board and must be paid or the student may be removed from the course. A more detailed explanation of the Advanced Placement Program is available on page 75.

Students may also register with Hudson Valley Community College to earn 6 college credits for successful completion of this course. A tuition fee is required for this option.

The award of college credit is ultimately determined by the college of admission.

ART

Recommended Sequences of Courses by Grade for students preparing for College Study in Visual Art.
All other art electives are strongly encouraged in addition to those listed below to enhance the student's portfolio and may be taken as space in their schedule allows.

	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
FINE ART	Studio Art (Accelerated)	Drawing	Advanced Studio 1 Acrylic/Watercolor Painting Sculpture/Ceramics	Advanced Studio 2 Exploring Art History	Advanced Studio 3 AP Art History
		Studio Art	Drawing	Advanced Studio 1 Acrylic/Watercolor Painting Sculpture/Ceramics Exploring Art History	Advanced Studio 2 Advanced Studio 3* AP Art History
DIGITAL	Studio Art (Accelerated)	Drawing	Computer Graphics 1 & 2 Advertising Design Drawing for Cartooning & Animation	Cinematography Advanced Cinema Adv. Advertising 1 & 2	Advanced Digital Arts
		Studio Art	Computer Graphics 1 & 2 Advertising Design Drawing for Cartooning	Cinematography Advanced Cinema Adv. Advertising 1 & 2	Advanced Digital Arts

* Advanced Studio 3 may be taken after a portfolio review and permission of the department supervisor.

In today's global economy, it is important that all students have a knowledge of the economic and financial world in which they live. Business Education provides students with the foundation to pursue programs such as business administration, accounting, marketing/management, law and finance. Many business courses provide students with the opportunity to develop computer skills necessary to be competitive in both college and the workplace. The following course clusters group the various electives that would apply to specific areas of interest. Students may elect to take courses from a variety of course clusters if they wish to explore various fields or remain within a cluster if they prefer a strong preparation for specific post high school study. It is recommended that all students pursuing a business major in college complete Accounting and/or College Accounting and Business Computer Applications (BCA).

COURSE CLUSTERS

INFORMATION TECHNOLOGY

Introduction to Business I & II
Keyboarding I
Business Computer Applications
Career Exploration Internship Program

ACCOUNTING/FINANCE

Accounting
College Accounting
Financial Decision Making
Math and Finance
Business Statistics
Career Exploration Internship Program

MARKETING

Introduction to Business I & II
Sports & Entertainment Marketing
E-Commerce
American Entrepreneur
Career Exploration Internship Program
Principles of Marketing

BUSINESS ADMINISTRATION

Introduction to Business I & II
Keyboarding I
Business Computer Applications
Business and Personal Law
Organization & Management
American Entrepreneur
Accounting and/or College Accounting
Career Exploration Internship Program
Principles of Marketing

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course is designed to develop alphabetic and numeric touch-typing keyboarding skills needed by anyone who uses a computer. Students will also develop basic proficiency in word processing and in formatting various business documents.

This course is open to students in grades 9-12. The final examination is departmental.

510 KEYBOARDING II

SECOND SEMESTER 1/2 UNIT

Prerequisite: Keyboarding I.

This course continues to build students' proficiencies with document formatting, word processing, and touch-typing speed and accuracy. Desktop publishing and business communication skills are emphasized. Business simulation packets are used to help develop students' skills in time management and working cooperatively.

This course is open to students in grades 9-12 who have successfully completed KEYBOARDING I. The final examination is departmental.

511 INTRODUCTION TO BUSINESS I

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course acquaints the student with the process of running a corporation. The class will establish a corporation; create, produce, and market a product. At the conclusion of the project, the class will go through the process of liquidating their assets. Students learn basic economic principles such as supply and demand, forms of business ownership, and economic indicators. Emphasis is placed on the importance of effective human relations skills, making decisions, and solving problems. Computer skills incorporated are word processing, desktop publishing, financial analysis through the use of spreadsheets, and database management.

This course is open to students in grades 9-12. The final examination is departmental.

512 INTRODUCTION TO BUSINESS II**SECOND SEMESTER 1/2 UNIT**

Prerequisite: None.

This course includes an overview of topics such as career exploration, job preparation skills, budgeting, tax preparation, credit, consumer rights, checking and insurance.

This course is open to students in grades 9-12. The final examination is departmental.

513 MATH AND FINANCE**FIRST SEMESTER 1/2 UNIT**

Prerequisite: Passing grade on Integrated Algebra Regents Exam.

This half-year college level Mathematics of Finance course includes algebra-based calculations and analysis of business investment situations. Included are simple compound interest, annuities (ordinary due, deferred, complex, perpetuity and forborne), applications of present value and future value and conceptual discussions of business investments. Students will learn how to use a financial calculator to complete classroom and homework assignments.

This course is open to students in grades 10-12. The final examination is departmental. Students taking this course may receive three college credits at Hudson Valley Community College (HVCC). A tuition fee is required for this option.

516 ACCOUNTING**FULL YEAR****1 UNIT**

Prerequisite: Passing grade in Algebra 1.

This course is intended to give students the knowledge of the accounting cycle for a service-oriented business and a merchandising business. Students will understand how debits and credits are used in the journalizing process. Current concepts include posting, assets, liabilities, owner's equity, revenue, expenses, financial statements, payroll, and worksheets. Students will use accounting records to complete the accounting cycle both manually and using accounting software.

This course is open to students in grades 10-12. The midterm and final examinations are departmental.

518 BUSINESS AND PERSONAL LAW**FULL YEAR****1 UNIT**

Prerequisite: None.

Students in Business and Personal Law should gain a genuine respect for and an understanding of that segment of the law that affects them in personal and business applications. The curriculum in law includes careful consideration of the broad basis of law, a brief analysis of civil wrongs and crimes, and the sources and methods of enforcing the law. Other topics include special laws pertaining to minors and automobile insurance.

This course is open to students in grades 11-12. The midterm and final examinations are departmental.

519 SPORTS AND ENTERTAINMENT MARKETING**FULL YEAR****1 UNIT***Prerequisite: None.*

This course will take the student on a step-by-step journey through the world of marketing. Students will learn the basic functions of marketing and how those functions are applied to sports and entertainment. The basic functions of marketing that will be included in the course are: marketing information management, financing, pricing, promotion, product/service management, distribution, and selling. Marketing is the tool that has allowed the United States economy to be one of the most successful in the world. Sports and entertainment are important parts of our modern economy. Students will learn how to determine the target markets for sports and entertainment products and how to develop strategies that appeal to the target markets.

This course is open to all students in grades 10-12. The midyear and final examinations are departmental.

520 AMERICAN ENTREPRENEUR**FIRST & SECOND SEMESTER****1/2 UNIT***Prerequisite: None.*

In this course students should gain an understanding of how to start and successfully run a small business. Topics covered include entrepreneurship, management, merchandising, communications, financial planning and the legal aspects of starting a small business. Students will learn to utilize the many resources that are available through the Internet and other government agencies to help them start a small business. Students will choose a business of interest to them and complete a business plan for that business. **This course is open to all students in grades 10-12.**

556 BUSINESS COMPUTER APPLICATIONS**SECOND SEMESTER****1/2 UNIT***Prerequisite: Keyboarding or College Keyboarding or Pretesting Out.*

This course is designed to give students an overview of the many different ways businesses use computers. Students will explore the operation of various software programs that are widely used by many businesses (Microsoft Office, Turbo Tax, Quicken, Power Point). Word processing, database management, spreadsheet applications, desktop publishing, multimedia presentation, financial packages and more will be surveyed. This course examines how the business environment is altered by changes in technology. Teamwork and cooperative learning is emphasized throughout this class.

This course is open to students in grades 9-12 as an elective. The final examination is a departmentally-developed computer project.

525 COLLEGE KEYBOARDING**FIRST & SECOND SEMESTER****1/2 UNIT***Prerequisite: None.*

This course gives students a suitable background in the fundamentals of keyboarding techniques and develops alphabetic as well as numeric keyboarding skills needed for both occupational and personal use. In addition to the development of touch-typing techniques, the students will receive the necessary instruction for the preparation of typed personal correspondence, some business communication reports and for the completion of a term paper. A term paper, typed during the regularly-scheduled class period, is required for the successful completion of College Keyboarding.

This course is available either semester to students in grades 11 or 12 who have not completed the Keyboarding I course.

527 E-COMMERCE

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course teaches students fundamental business concepts that apply to the world of E-Commerce. Students will learn what it takes to set up and operate an E-commerce (Internet) business. They will develop their own web page concentrating on what needs to be included to be a successful business. Topics include types of Internet businesses, Internet marketing, Internet security and fraud, and participating in a global E-commerce environment.

This course is open to students in grades 10-12.

This course carries three Schenectady County Community College (SCCC) credits for those students who choose this option. A tuition fee is required for this option.

554 BUSINESS STATISTICS E

SECOND SEMESTER 1/2 UNIT

Prerequisite: Passing grade on the Integrated Algebra Regents examination.

This course provides students with the knowledge to gather, process, and present statistical data. They will learn to construct frequency charts, compute measures of central tendency and calculate standard and quartile deviations. The knowledge will then be applied to solving business problems and sampling, hypothesis testing, regression and correlation and trend analysis.

This course is open to students in grades 10-12 grade as an elective.

This course carries four Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

531 FINANCIAL DECISION MAKING

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course is designed for students interested in exploring the world of personal finance. Major topics will include budgeting your paycheck, basic checking and savings accounts, the importance of insurance, the appropriate use of credit, bank services, and short term and long term savings investing. The topics covered in this course are useful in planning for college, careers and lifelong financial stability.

This course is open to students in grades 10-12.

553 COLLEGE ACCOUNTING

FULL YEAR 1 UNIT

Prerequisite: Passing grade on Algebra 1 Regents Exam.

This course provides a complete, modern course in accounting and satisfies the requirements of both accounting majors and nonmajors. During the first semester students will receive instruction in the fundamental theory and practice of accounting with application in sole proprietorship. Units of study have been designed to present the principles of double entry; design and use of books of account; control accounts and subsidiary ledgers; preparation of worksheet; payroll and payroll taxes; valuation reserves; closing books and preparation of simple forms of profit and loss statements and balance sheets.

In the second semester, this course is designed to provide treatment of concepts and principles, plant assets, partnerships, corporations, cash flow and financial statement analysis, and to provide opportunity for enrichment through elementary data processing and its application to accounting systems. This course carries three University of Albany credits for those students who choose this option. A tuition fee is required for this option. (See page 78 for a detailed description of the University in the High School program.)

555 ORGANIZATION & MANAGEMENT**FIRST SEMESTER 1/2 UNIT**

Prerequisite: None.

This course will cover organizational theory, principles and practices. Topics will include the management functions of organizing, planning, staffing, directing and controlling social responsibility; the effect of multicultural diversity in the workplace; leadership styles and motivational theories.

This course is open to students in grades 11-12.

This course carries three Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

522 PRINCIPLES OF MARKETING**SECOND SEMESTER 1/2 UNIT**

Prerequisite: None.

This course provides students an introduction to Business Marketing. The marketing planning process and the market environment will be discussed. Students will learn about consumer behavior and gain an understanding of targeting and positioning. Additionally, the elements of the marketing mix including new product development, promotion, pricing, and distribution will be covered.

This course carries three Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

528 FUNDAMENTALS OF BUSINESS**FIRST SEMESTER 1/2 CREDIT**

Prerequisite: None.

This elective is designed to provide an introduction to entry-level business skills. Topics will include finding, applying for, and holding a job in the business field, an introduction to keyboarding, addressing and decoding mail, and filing practices.

In addition, personal skills including budgeting, banking and job benefits will be discussed.

558 CAREER EXPLORATION INTERNSHIP PROGRAM (CEIP)**FIRST & SECOND SEMESTER 1/2 UNIT**

Prerequisite: None.

This course allows students to complete a nonpaid internship experience in one or two different careers that are of interest to them. Students will need to complete 54 hours in their internship experience and 27 hours of classroom instruction. In the past, students have explored such careers as: accounting, biology, criminal justice, child care, engineering, health care, journalism, law, medicine, teaching, and many other occupations that are available to us. This program gives students a firsthand opportunity to learn about a particular career. Students should gain insight into the skills and educational requirements of that career prior to college.

Students planning to enroll in CEIP need to provide their own transportation to and from their placements. They will also need to make a commitment of one afternoon a week for three or four hours to meet their internship hours obligation. In addition, students will also have one class meeting a week for the 27 hours of classroom instruction.

CEIP is a 1/2 unit elective course open to ALL students in grade 12. Students who choose to enroll in this elective course are expected to demonstrate a level of responsibility and commitment appropriate for the work place. Characteristics such as honesty, integrity, ethics, teamwork, and a positive attitude are expected. Applications to enroll in this program may be obtained from the guidance counselors. Student will then be interviewed by members of the Business Education Department.

English

010 ENGLISH 9H ADVANCED PLACEMENT PREPARATION (P)

FULL YEAR **1 UNIT**

Prerequisite: Recommendation of the 8th grade English teacher.

This course further develops the skills taught in English 8E by providing students with a comprehensive experience in literature, writing, vocabulary, grammar, listening, and speaking. The curriculum contains a wide variety of classic and modern literature, including plays, short stories, poetry, and novels. Close reading of these texts provides a foundation to achieve excellence in the Advanced Placement course offered in the senior year. Success in this course requires that the student read significantly above grade level, write at the mastery level, and have the ability to complete long-range independent inquiries. The final examination is departmental and includes literary interpretation and a written response.

011 ENGLISH 9H (P)

FULL YEAR **1 UNIT**

Prerequisite: Recommendation of the 8th grade English teacher.

Students in this course emphasize analysis of various literary types (novels, plays, poems, and short stories). The reading selections are chosen from world literature. Emphasis is placed on effective writing and a knowledge of language development. Formal instruction is provided in grammar. Students who elect this course should be motivated to study literature at interpretive and critical levels, to increase their vocabularies substantially, and to write at a competent level. The final examination is departmental and focuses on reading comprehension and written analysis of literature.

012 ENGLISH 9R

FULL YEAR **1 UNIT**

Prerequisite: None.

This course is designed to teach skills in reading comprehension, interpretation of literature, composition, grammar, usage, mechanics of language, and vocabulary. The curriculum includes analysis of classical and contemporary literature. In addition to full-length novels and dramatic works, students will study poetry, short stories, and essays. Vocabulary development is achieved through the study of literature-based words and Greek roots. Writing focuses on all forms of exposition and includes a research experience. Speaking and listening skills are emphasized in classroom discussion and oral presentations. The final examination is departmental and focuses on reading and writing skills.

014 ENGLISH 9R BASIC (P)

FULL YEAR **1 UNIT**

Prerequisite: Recommendation of the 8th grade English teacher (based on results of standardized testing and class performance).

This course is for selected students who are reading significantly below grade level. The focus is on basic reading and writing skills. Hands-on activities and small group instruction is provided as well as preparation for the Comprehensive English Regents to be taken in the junior year.

020 ENGLISH 10H ADVANCED PLACEMENT PREPARATION (P)

FULL YEAR **1 UNIT**

Prerequisite: English 9H Advanced Placement Preparation with a Final School Mark of 90 or above or English 9H with a Final School Mark of 93 or above.

A survey of English literature and language from Anglo-Saxon to modern times, this course emphasizes a close reading of fiction, drama, poetry, and the essay. Vocabulary is studied in the context of the literature. Students conduct independent research, participate in high-level class discussions, respond to literature through various writing activities, give oral presentations, create portfolios that exhibit a variety of writing activities, and receive formal instruction in grammar. The final examination is departmental and focuses on critical reading and writing.

021 ENGLISH 10H (P)

FULL YEAR **1 UNIT**

Prerequisite: English 9H with a Final School Mark within the expected range of achievement; a Final School Mark of 93 or above in English 9R.

This course is a survey of British Literature. The literature studied includes representative poems, short stories, plays, and novels. Students are given a variety of writing assignments including literary analysis, a research paper, and a reader response journal. Formal instruction is provided in vocabulary and grammar. The final examination stresses reading comprehension and literary analysis.

022 ENGLISH 10R (P)

FULL YEAR **1 UNIT**

Prerequisite: English 9.

This course is a study of global literature. The literature includes reading short stories, poems, essays, dramas, biographies, and novels; learning the main characteristics of each type; and analyzing theme, setting, mood, plot, and characterization. Reading skills are emphasized. Vocabulary development is stressed through the use of vocabulary in the context of the literature and the study of Latin roots. Composition includes review of the ninth grade skills. Students again complete a research paper. Speaking opportunities include class discussions and oral reports. Grammar and usage are taught formally. The final examination is departmental and focuses on reading and writing skills.

024 ENGLISH 10R BASIC (P)

FULL YEAR **1 UNIT**

Prerequisite: English 9.

This course is a continuation of the ninth grade basic program. Students work to improve reading comprehension and oral and written communication skills. A variety of hands-on and project activities are provided as well as individual help. Students are given preparation for the Comprehensive Regents which will be taken in the junior year.

030 ENGLISH 11H ADVANCED PLACEMENT PREPARATION (P)

FULL YEAR **1 UNIT**

Prerequisite: English 10H Advanced Placement Preparation with a Final School Mark of 90 or above or English 10H with a Final School Mark of 93 or above.

A survey of American literature from Puritan to modern times provides the literature for this course. The student's background knowledge of British literature allows a synthesis of information through the study of such writers as Emerson, Thoreau, and various contemporary authors. Students are expected to read extensively and to undertake close readings of poetry and philosophical prose. An understanding of literary terms is essential as is a knowledge of major pieces of world and English literature.

The final examination in this course is the Comprehensive English Regents. This exam is required for graduation.

031 ENGLISH 11H (P)

FULL YEAR **1 UNIT**

Prerequisite: English 10H within the expected range of achievement; a Final School Mark of 93 or above in English 10R.

This course combines a survey of American literature with instruction in advanced writing skills. The study of literature from the Puritans to the present day includes short stories, poems, essays, plays and novels. Writing focuses on all forms of exposition by emphasizing literary analysis. Students are required to write a research paper analyzing the work of an individual author. The final examination in this course is the Comprehensive Regents. This exam is required for graduation.

032 ENGLISH 11R (P)

FULL YEAR **1 UNIT**

Prerequisite: English 10R.

American literature is studied through novels, drama, short stories, essays and poetry. Students should become more critical in analyzing how well the author has used theme, characterization, plot, mood or setting in creating the literary form under discussion.

Sustained effort is given to enriching the student's vocabulary through study of words in context. Attention is paid to the development of critical reading skills.

Composition includes essays about literature as well as other types of expository writing themes. In addition, students complete a research paper and practice for the SAT writing activity. Formal instruction is provided in grammar. The final examination in this course is the English Comprehensive Regents. This exam is required for graduation.

034 ENGLISH 11B (P)

FULL YEAR

1 UNIT

Prerequisite: English 10.

Literature is studied through novels, drama, short stories, essays, poetry and nonfiction. Students learn to become more critical in analyzing how well the author has used elements and techniques in the literary form under discussion. Composition work includes written work on precisely worded problems related to literature and answers to essay questions on expository themes emphasizing a controlling purpose. The final examination in this course is the English Comprehensive Regents. This exam is required for graduation.

941R ENGLISH AIS LAB 941A

NO CREDIT

Academic intervention services in English are offered through this remedial lab. Students who have failed the Comprehensive English Regents exam are required to take the lab until they achieve success on the Regents exam. Students who are in danger of failing the Comprehensive English Regents exam are also scheduled for this lab in order to better prepare for this test.

English 12 Electives

It is the philosophy of the English Department that the senior year is a unique one for the students: most of them will soon be embarking for college and will face the challenge of selecting their own courses after many years of simply selecting the level they wished. The senior year offers the opportunity for students to focus on specific areas in English that interest or intrigue them. (Students can explore a genre or area in greater depth than might have been possible in previous years.) All of the electives are designed to send students off with superior preparation for the university/college experience.

The students are grouped heterogeneously in most of the elective courses. It is the belief of the English faculty that students benefit from interaction with a variety of their peers and that the courses are enriched because of the range of ability levels that may be represented.

While each course focuses primarily on one specialty area, every course contains reading, writing, and speaking requirements. Seniors may take one or more additional semester courses to earn elective credit or complete a five-year sequence in English. Juniors may enroll in English electives to earn credit where class size will permit. The selection of English electives in the junior year is not intended as a substitute for English 11 or enrollment in the senior year. But, juniors who have completed senior electives and are unable to enroll in English electives in the senior year because of scheduling conflict or a full program of studies should consult their guidance counselors and the department supervisor.

Finally, Journalism is offered as a senior elective but is also open to juniors enrolled in English 11H or English 11APP.

SPORTS IN LITERATURE (P)

044 First Semester

064 Second Semester

1/2 UNIT

Prerequisite: Successful completion of 11R, 11H, or 11APP.

This first- or second-semester course has a serious purpose: to use literature—fiction, poetry, essays, journalism, and films—to illuminate and refine our understanding of the impact of sports on our personal and social lives. Some of the issues to be examined are: the nature of sport itself,

the role of sports in defining values, the effects of competition, and racism/sexism in sports. Many of the topics covered are of universal concern, although they are presented in sports-centered contexts. Novels and shorter pieces are read, and this course requires a number of short papers.

041 COLLEGE COMPOSITION (P)

FIRST SEMESTER 1/2 UNIT

Prerequisite: English 11HAPP, 11H, or a grade of 80 in 11R.

This first-semester course provides instruction in the types of writing usually required of college freshmen such as analysis, persuasion, and research. Diction, style, and rhetoric are also stressed throughout the course. Writing activities compliment the work on longer themes. Emphasis is on process writing and sharing papers with members of the class for discussion and criticism.

042 WRITERS' WORKSHOP (P)

FIRST SEMESTER 1/2 UNIT

Prerequisite: English 11HAPP, 11H, or a grade of 85 in English 11R.

This first-semester course combines elements of College Composition and Creative Writing since the students write in a variety of poetic and prose genres. The course encourages students to express themselves in creative yet disciplined tasks that emphasize self-discovery and clear expression to an audience. Students should be willing to write creatively and analytically and to share their writing with class members.

046 SCIENCE FICTION AND FANTASY (P)

FIRST SEMESTER 1/2 UNIT

Prerequisite: English 11HAPP, 11H, or 11R.

This first-semester course studies science fiction and fantastic literature using an historical approach. Several novels and many short stories trace the evolution of these genres. Several short papers are required.

049 MODERN MEDIA (P)

FIRST SEMESTER 1/2 UNIT

Prerequisite: English 11R or 11B.

This first-semester course is an introduction to the styles and techniques of modern mass media including graphic novels, social media, advertising, television, and other online and nonprint texts. Students will gain a stronger understanding of the framework involved in reading words and images and examine how media influences American society. Coursework includes the creation of a personal blog, participation in online class discussion, essay writing for a public audience, presentations, and critical analysis of various forms of media. Students should enroll in this course with the understanding that online and in-class participation are key components.

CREATIVE WRITING (P)

040 First Semester

060 Second Semester

1/2 UNIT

Prerequisite: English 11HAPP, 11H, or 11R.

The aim of this first- or second-semester course is to assist students in writing personal narratives, short stories, drama, and (or) poetry. The craft of writing is practiced and studied. Students choosing this course should be prepared to submit frequent pieces for discussion and criticism and to write for Visions, the school literary magazine.

FUNDAMENTALS OF WRITING (P)

043 First Semester

063 Second Semester

1/2 UNIT

Prerequisite: English 11B.

This course is intended to focus on the continued development of the essential skills necessary for effective written communication. Elements of English grammar and all phases of the writing process will be reinforced throughout this composition course. Students will write frequently and for a variety of purposes and audiences.

Such writing may include commentary, interpretation, explanation, fiction, poetry and/or personal narrative.

READERS' WORKSHOP (P)

045 First Semester

065 Second Semester

1/2 UNIT

Prerequisite: English 11HAPP, 11H, 11R.

This first- or second-semester course allows students to pursue their own reading interests. The class may also read works of fiction/nonfiction and engage in a communal discussion. Students are expected to read books of their own choosing and maintain a reading-response journal. Oral reports also allow students to express their views about what they read. Students should enroll in this course only if they have a serious interest in pursuing reading.

062 FILM CRITICISM E (P)

SECOND SEMESTER 1/2 UNIT

Prerequisite: English 11HAPP, 11H, or 11R.

This second-semester course is an introduction to the art of film. Significant American films are used to study the techniques of film making and film genre. Students are expected to read some film criticism and react to it in class discussion and through their writing. Several short papers are required.

069 PUBLIC SPEAKING (P)

SECOND SEMESTER 1/2 UNIT

Prerequisite: English 11HAPP, 11H, 11R, or 11B.

This second-semester course is designed to help students develop introductory level mastery of major modes of speech and communication. Students learn to conduct themselves in one-to-one communication, during an interview, and informal group presentations. They prepare speeches taking into account topic, purpose, audience, organization, and outlining. Practical research and critical thinking skills are emphasized throughout this course. Students are required to give several speeches.

070 LITERATURE AND FILM (P)

SECOND SEMESTER 1/2 UNIT

Prerequisite: English 11B.

This second-semester course focuses on the reading of short pieces of literature (short stories and plays) which are thematically related to certain contemporary films. Students make connections between written pieces and popular movies. Several short papers are required, and basic writing and grammar will be emphasized.

JOURNALISM

048 First Semester

068 Second Semester

1/2 UNIT

This first- or second-semester writing course is designed to introduce students to the terminology and writing technique employed by professional journalists. Students will study the characteristics of news, feature, and in-depth articles, as well as opinion pieces. Most student articles will be written, shared, revised, and published in *The Bison*. This course is an elective open to juniors enrolled in English 11H or English 11APP. Seniors may choose this course to fulfill one semester of the twelfth grade English requirement.

EXPLORING CULTURES THROUGH LITERATURE

052 First Semester

054 Second Semester

1/2 UNIT

Prerequisite: English 11APP, 11H, 11R.

This first- or second-semester course is a survey of non-Western literature. Areas of emphasis will be Africa, Asia, the Middle East, and Latin America. The class will also look at the United States from a multicultural perspective, examining Native American literature and the immigrant experience. The class will study various fiction, nonfiction, and cinematic works as cultural products reflective of embedded cultural values. The study of these works will also allow the class to explore issues arising from the experience of living in a multicultural nation and an increasingly global world.

053 AP ENGLISH LITERATURE AND COMPOSITION (P)

FULL YEAR 1 UNIT

Prerequisite: English 11 Advanced Placement Preparation with a final school mark of 90 or above or English 11 Honors with a final school mark of 93 or above, and teacher recommendation (based on critical reading and writing skills, class participation, and work habits).

Enrollment in this full-year course is restricted to students who have demonstrated extraordinary ability and achievement in their high school English courses. Extensive reading, intensive study of literary works, and concentration on critical and analytical writing skills should prepare the serious English student for the Advanced Placement Examination. The Advanced Placement Examination is required of all students taking this course. Students who do not take the exam will not receive AP course credit. A fee is charged by the College Board and must be paid or the student may be removed from the course. A more detailed explanation of the Advanced Placement Program is available on page 75.

051 READING LITERATURE

FULL YEAR 1 UNIT

Prerequisite: Final school mark of 80 or above in English 11APP or English 11H or final school mark of 85 or above in English 11R.

This full-year, college-level course is designed to introduce students to major genres of western literature, including Greek satire, Shakespearean tragedy, and the twentieth-century novel. The course investigates how modern literature, including popular fiction, echoes and develops ideas, techniques and themes that appear in the works of Aristophanes, Shakespeare and Dickens. As a full-year course, two high school semesters, Reading Literature will link the modern with the literary tradition of the western canon.

Students can earn three State University of New York credits upon successful completion of this course.

See page 78 for a detailed description.

Family and Consumer Sciences

Our Family and Consumer Sciences department offers courses that provide students with real-world learning opportunities. The purpose of our program is to prepare our students to be competent, confident and caring in managing their personal, family and work lives.

It should be noted that courses marked with asterisks (*) may be used toward the fulfillment of the required one unit of Art/Music credit.*

If students are interested in Education, Social Work and Psychology they should consider taking the following courses:

Introduction to Early Childhood	1/2 Unit
Child Development	1/2 Unit
Adolescent Development	1/2 Unit
Careers in Human Services	1/2 Unit
Families in a Diverse World	1/2 Unit

If students are interested in Nutrition, Dietetics, Sports Medicine, or a Medical Field (Nursing, Physical and Occupational Therapy, etc.) they should consider taking the following courses:

Food and Nutrition	1/2 Unit
Fitness and Nutrition	1/2 Unit
Adolescent Development	1/2 Unit
Introduction to Early Childhood	1/2 Unit
Careers in Human Services	1/2 Unit

If students are interested in the Culinary Arts they should consider taking the following courses:

Food and Nutrition	1/2 Unit
Fitness and Nutrition	1/2 Unit
International Foods	1/2 Unit

If students are interested in a career as an Interior Designer, Clothing Designer, Fashion Merchandiser or Clothing Stylist, they should consider taking the following courses:

Textile and Design	1/2 Unit
Housing and Interior Design	1/2 Unit
Clothing Productions	1/2 Unit

Students planning to enter the work force upon graduation should consider taking the following courses:

Introduction to Family and Consumer Sciences	1/2 Unit
Independent Living	1/2 Unit
Food and Nutrition	1/2 Unit
Introduction to Early Childhood	1/2 Unit
Families in a Diverse World	1/2 Unit

609 INTRODUCTION TO FAMILY AND CONSUMER SCIENCES

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course consists of two 10-week modules entitled “The Working Citizen” and “Personal Resource Management.” Both modules are required for any student wishing to obtain a sequence in Family and Consumer Sciences, Technology, or Business. “The Working Citizen” focuses on assessing personal skills and talents, acquiring and keeping a job, and understanding the laws and regulations that affect employment. “Personal Resource Management” teaches students how to effectively manage their time, money, and human resources. A special area of focus deals with principles of money management, such as budgeting, banking, and establishing a good credit rating.

Classroom projects include: class discussion, exploring career possibilities, conducting mock interviews and writing resumés.

This course is recommended for ninth graders.

617 FOOD AND NUTRITION

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

Food can taste good and be good for you. First, we cover the basics of healthful eating and then apply that knowledge working in the kitchen. You will get a chance to make breads, vegetable (pumpkin) and fruit pies, meat and tofu dishes and dairy products. We discuss genetically engineered foods, vegetarianism and other food topics of concern. Be prepared to become “chef-for-a-day” and demonstrate a family favorite dish. Come meet your cooking partners for a nutritious journey into the FACS kitchen.

620 ADOLESCENT DEVELOPMENT

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

In this course, stages of the life cycle will be explored as well as how the adolescent interacts with others in these stages. Several theorists will be introduced to students. Students will be reading a novel of their choice that will allow them to explore current adolescent issues. This course will be helpful for students interested in a career that requires them to work with people of all ages. Students will investigate and engage in several community service activities. Past activities include working with local nursing homes and the Ronald McDonald House.

621 FAMILIES IN A DIVERSE WORLD

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

Families all over the world have similarities and unique cultural differences. Courtships, weddings, communicating effectively, raising children and coping with change are some of the challenges facing families. Find out more about the ways families manage in today's ever-changing society. If you like thinking about relationships and are considering a career in Sociology or any job working with people, this class will provide a worldwide view.

622 INDEPENDENT LIVING

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

The ability to manage on your own is desirable but difficult to achieve. Here is a chance to practice the consumer skills necessary to pay bills and stay out of debt. We explore healthy relationships, run a community project, investigate training and colleges, prepare resumés, balancing a checkbook, research used car buying and auto insurance, locate apartments within a budget and use advertisements to furnish it. Clothing care is discussed and after considering the nutrients in food, your team will prepare part of a sit-down meal. Join us and prepare for being on your own.

Seniors only.

623 INTRODUCTION TO EARLY CHILDHOOD

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

In this course, students will gain an awareness of the skills necessary to work effectively with children. Topics include: parenting skills, pregnancy and disease prevention, fetal development and childbirth and the physical, cognitive, social and emotional development of the child from infancy to preschool.

This course consists of class discussion, projects and guest speakers. It is suggested for students considering a career in education, psychology, daycare, nursing or parenthood. This course is recommended as the foundation for the Child Development course offered for Hudson Valley Community College Credit.

624 FITNESS AND NUTRITION

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

Personal fitness plans and healthy selection and preparation of foods to establish lifelong wellness are addressed in this class. First, students will assess their wellness. Then, students will apply food preparation techniques related to the Food Pyramid and Dietary Guidelines. Food will be sampled. Further, students will analyze special diets and new forms of exercise.

625 TEXTILE AND DESIGN

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

** May be used toward the fulfillment of the one unit Art/Music requirement**

If clothes, fashion and personal appearance are what interest you, this is a course for you. You will have the opportunity to explore fashion and design and investigate various aspects of clothing from historical styles to current fashion fan facts. Further, you will understand the art of clothing design and construction by creating your own garments. Join students who are interested in a career in fashion design and merchandising/promotion, fashion styling and selection for other people, or just learning how to construct garments.

626 HOUSING AND INTERIOR DESIGN

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

** May be used toward the fulfillment of the one unit Art/Music requirement**

Buying and owning a home is a dream for all people. In this course you will have the opportunity to create a 3-D of your dream home, applying concepts of your future life-style and relating to crucial decision-making factors such as money and your housing wants and needs. Investigate the variety of housing styles and historical architectural styles when selecting a home. Further, apply interior design concepts (elements and principles of design) when selecting wall and floor coverings for interiors that you have created using the computer to design a variety of rooms. Creative young men and women interested in careers such as design, interior decorating, structural engineering, and real estate will find this course especially enjoyable and worthwhile.

627 INTERNATIONAL FOODS

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

Food is prepared here in America with ethnic roots from all over the world. First, we will investigate the ethnic foods and heritage common to regions of the U.S. Then we look overseas to find out what and how foods are prepared abroad. Be prepared to work in a team to cook, clean and sample ethnic dishes. Join us and you will brush up on your geography skills, social studies, and cultural awareness while getting skilled at dinner preparations.

628 CAREERS IN HUMAN SERVICES

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

If you have an interest in better understanding how to help or work effectively with people across the life cycle, this course is for you. The Human Services Field has an increasing number of job opportunities available helping all ages in time of need or crisis. Study and

examine the ways in which community agencies help address them. Join students seriously interested in investigating a career in the human services field and take part in an opportunity to job shadow a professional working in a career that interests you.

Recommended for students in grades 11 and 12.

629 CHILD DEVELOPMENT (P)

SECOND SEMESTER 1/2 UNIT

Prerequisite: Completion of Introduction to Early Childhood recommended but not required.

Child development from conception through preadolescence is explored and related to current research and theories. This course broadens the student's knowledge of the many systems which influence development. The interdependence among all aspects of growth and development is emphasized. The needs of infants and children at each stage are related to their daily care and educational programs. Join other students who are interested in information that can be applied to careers in teaching, counseling/psychiatry, or social work or for the role as a future parent. **First choice given to students in 12th grade (11th graders considered with approval from CTE Department Supervisor and guidance counselor.)**

This course carries three Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

630 CLOTHING PRODUCTIONS

SECOND SEMESTER 1/2 UNIT

Prerequisite: Textile and Design.

In this course students will have the opportunity to be their own clothing designer and expand sewing skills by creating a two-piece garment. Students will create a pattern based on appropriate body measurements. Students will further create the garment using an appropriate fabric. Student designers will use the pattern and fabric to sew the garment by using appropriate sewing techniques. This course is designed for students interested in fashion design, clothing construction or furthering their sewing skills.

Foreign Languages

All students are required to have at least two years of instruction in a second language before graduation. In order to achieve a basic Regents diploma, students must also pass an exam for Checkpoint A Proficiency by the end of 8th grade or they must pass a high school Language Other Than English course. Students pursuing an Advanced Regents diploma must complete three years of study in a foreign language with passage of an examination for Checkpoint B Proficiency. Students pursuing five-unit extended sequences in technology, art and/or music may substitute such sequences for the foreign language requirement to receive an Advanced Regents diploma. Students wishing to enter foreign language study at an advanced level because of background or special circumstances must obtain the permission of the Department Supervisor.

MODERN LANGUAGES 1R

- 411 French**
- 421 German**
- 431 Russian**
- 441 Spanish**

FULL YEAR 1 UNIT

The beginning of language study involves the learning of fundamental language patterns. Listening comprehension, speaking, reading and writing skills are developed. Culture and civilization are studied within the framework of these skills. Communicative materials are used as text of instruction.

MODERN LANGUAGE 2R (P)

- 412 French**
- 422 German**
- 432 Russian**
- 442 Spanish**

FULL YEAR 1 UNIT

Prerequisite: Modern Language 1R.

This course emphasizes oral and written proficiency while building on the basic concepts learned in Modern Language 1R. Cultural content is integrated with course materials.

448 SPANISH 2A REGENTS (P)

FULL YEAR 1 UNIT

Prerequisite: Spanish 1R or 1G.

This course is for students who have completed Spanish 1R and are interested in building skills to prepare for the comprehensive examination for Checkpoint B proficiency. Students in this course should plan to stay in the high school Foreign Language Regents program for 3 years. They will take the comprehensive examination for Checkpoint B proficiency upon completing 3 years of Spanish: Spanish 2A, 2B, and 3R.

449 SPANISH 2B REGENTS (P)

FULL YEAR 1 UNIT

Prerequisite: Spanish 2A Regents.

This course is a continuation of Spanish 2A Regents. The course continues to provide a solid foundation of Spanish study including conversation, structure, writing, and culture. Students in this course plan to take the comprehensive examination for Checkpoint B proficiency upon completing 3 years of Spanish: Spanish 2A, 2B, and 3R. Students are awarded one unit of credit each year.

MODERN LANGUAGES 3R (P)

- 413 French**
- 423 German**
- 433 Russian**
- 443 Spanish**

FULL YEAR 1 UNIT

Prerequisite: Modern Language 2R.

This course focuses on improving communication skills, including listening, speaking, reading, and writing. In addition, more complex grammatical structures will be introduced. Students will be exposed to a variety of cultural topics from different authentic sources. The comprehensive examination for Checkpoint B proficiency is the final examination for this course.

MODERN LANGUAGE 4R (P)

- 414 French**
424 German
434 Russian
444 Spanish

FULL YEAR**1 UNIT**

Prerequisite: A Final School Mark of 80 or above in Modern Language 3R, or the approval of the Department Supervisor.

This full-year, college-level course is designed to strengthen students' knowledge of the language through review and practice of previously-learned structures as well as through the study of advanced grammatical concepts.

If enrolled in the University in the High School Program, students can earn 3 to 5 credit hours of college credit in French, Spanish, Russian and German through SUNY-ALBANY or SUNY-Oswego University by enrolling in this course for the full year and paying the required tuition fee to the respective institution. The college credit phase of this course requires the student to have passed the comprehensive examination for Checkpoint B proficiency. See pages 78-79 for a detailed description of the University in the High School Program.

MODERN LANGUAGE 5R (P)

- 415 French**
425 German
435 Russian
445 Spanish

FULL YEAR**1 UNIT**

Prerequisite: A Final School Mark of 80 or above in Modern Language 4R, or the approval of the Department Supervisor.

This full-year, college-level course integrates and extends the skills acquired in previous language study by broadening the students' knowledge of literature, culture and civilization. Speaking in the foreign language is practiced by the pupil through the medium of reports and projects. Critical thinking through individual, as well as group research projects is encouraged. Controlled and free composition is practiced and related to materials under study. Summarizing, paraphrasing and note taking in the foreign language is stressed; quality of work is emphasized.

Readings are of a classical and contemporary nature. Supplementary reading is extended through use of newspapers, periodicals, magazines and the foreign language collection in the school library.

If enrolled in the University in the High School Program, students can earn 3 to 5 credit hours of college credit in French, German, Russian and Spanish through SUNY-ALBANY or SUNY-Oswego University In High School by enrolling in this course for the full year and paying the required tuition fee to the respective institutions. The college credit phase of this course requires the student to have passed the comprehensive examination for Checkpoint B proficiency. See page 79 for a detailed description of the University in the High School Program.

MODERN LANGUAGE ADVANCED PLACEMENT

- 415 AP French Language**
445 AP Spanish Language

FULL YEAR**1 UNIT**

Prerequisite: A grade of 95 or better in Modern Language 4R and teacher recommendation (based on students' listening, speaking, reading and writing skills, class participation, and work habits).

This is a college-level course for highly motivated foreign language students who have demonstrated extraordinary ability and achievement in their high school foreign language courses. In this course, students will be exposed to advanced vocabulary and grammar. They will master complex language structures, through composition and conversation practice, while becoming more adept at summarizing, examining and analyzing main ideas and details. Colloquial and cultural aspects of the foreign language will be presented through music, video, newspapers, magazines, and the Internet. The Advanced Placement Examination is required of all students taking this course. Students who do not take the exam will not receive AP course credit. This examination, which is administered by the College Board, is recognized by almost all colleges for advanced placement or college credit. The fee is charged by the College Board and must

be paid or the student may be removed from the course. A more detailed explanation of the Advanced Placement Program is available on page 75. Students in this course may also take advantage of the University in the High School program.

ing in this course for the full year and paying the required tuition fee to the respective institutions. The college credit phase of this course requires the student to have passed the comprehensive examination for Checkpoint B proficiency. See page 79 for a detailed description of the University in the High School Program.

461 LATIN 1R

FULL YEAR **1 UNIT**

There are three primary aims of Latin 1: first, to train the student in the structure and fundamentals of the language that are basic to the reading of Latin; to introduce the student to the cultural and historical contribution of the Roman world to the development of Western civilization; and third, to develop the student's basic English vocabulary skills through the understanding of Latin as the root and origin for much of the English language.

462 LATIN 2R

FULL YEAR **1 UNIT**

Prerequisite: Latin 1R.

Work on structure, civilization and vocabulary continues and intensifies as students prepare for the comprehensive examination for Checkpoint B proficiency in Latin. A major emphasis is placed on analyzing tests according to grammar and contents. The comprehensive examination for Checkpoint B proficiency is the final examination for this course.

463 LATIN 3R (P)

FULL YEAR **1 UNIT**

Prerequisite: A Final School Mark of 80 or above in Latin 2R, or the approval of the Department Supervisor.

Latin III will broaden and deepen students' knowledge of syntax, vocabulary, and Roman civilization through the use of primary Latin sources. Reading will be from such authors as Caesar, Cicero, Pliny and Martial. If enrolled in the University in the High School Program, students can earn 4 credit hours of college credit in Latin through SUNY-ALBANY University in High School, by enroll-

558FL TEACHING WORLD LANGUAGES IN ELEMENTARY SCHOOLS INTERNSHIP PROGRAM

FIRST & SECOND SEMESTER **1/2 UNIT**

Prerequisite: None.

This course allows students to complete a nonpaid internship in teaching foreign language at the elementary level. Students will have classroom instruction on methods of teaching foreign language for five weeks. They will then teach two afternoons a week at one of the elementary schools in the district and meet with their course instructors the other three days to prepare lesson plans and teaching materials.

The program gives students a first-hand opportunity to learn about a teaching career. This elective course is open to seniors enrolled in a foreign language course. Students planning to enroll in this course need to provide their own transportation to and from their placements.

Students are expected to demonstrate a level of responsibility and commitment appropriate to the work place. Applications to enroll in the program may be obtained from the guidance counselors. Students will then be interviewed by members of the Foreign Language Department.

Health Education

Health is a condition of well-being that is required for the development of each individual and for society as a whole. Optimal health is dependent upon knowledge, attitude and behavior. The health courses offered are based upon New York State and North Colonie Curricula and have been approved by the Board of Education. The curriculum focuses on seven skill areas: Planning and Goal Setting, Decision Making, Communication, Stress Management, Self Management, Relationship Management and Advocacy. Topics are presented in connection to a specific skill area. The instructional focus is on promoting abstinence and to provide accurate, age-appropriate information to support a student's ability to make informed decisions, to problem solve, to be safe and to achieve a high level of wellness.

Health is offered during the sophomore year and students are required to pass this course in order to graduate. Students entering Shaker High School in grade 12 will be required to take Health unless the requirement was fulfilled in a previous school.

an assurance that the pupil will receive such instruction at home. Such exempt pupils, however, are still required to receive instruction concerning the nature of the disease and methods of transmission.

Contact the Supervisor of Health Education and Health Services for "opt out" information for lessons concerning the methods of prevention of AIDS and contraception use.

901 HEALTH

EITHER SEMESTER 1/2 UNIT

Prerequisite: None.

In this course topics will include physical activity and nutrition, disordered eating, addiction, alcohol, tobacco and other drugs, personal safety, characteristics of healthy and unhealthy relationships, abstinence, *contraception use and rates of effectiveness/ineffectiveness, sexually transmitted diseases and the HIV/AIDS curriculum which includes *prevention lessons.

*According to Commissioner's Regulation 135.3, AIDS education should, at a minimum, provide accurate information concerning the nature of the disease, methods of transmission, and methods of prevention. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if the parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a written request that the pupil not participate in such instruction with

Mathematics

212 ALGEBRA 1

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Math 8. This course is required for entrance into most colleges and is a prerequisite for further study in mathematics and science at the Regents level. While much of the curriculum is developed around algebra, topics such as geometry, probability, statistics, and trigonometry are studied. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is the New York State Algebra 1 Regents exam.

291- INTEGRATED REGENTS 298 PROGRAM-MATH

This is a four-year alternative program available to students. A more detailed explanation of the program is available on page 74 of Guide to Program Planning.

291 INTEGRATED REGENTS PROGRAM 1R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Math 8. Students will address many of the same curriculum topics that students in Algebra 1 study, with a concentration on the first half of the Algebra 1 curriculum. There is a considerable integration of math, science, technology, and family and consumer science. This course includes hands-on lab style activities and applications of math topics. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is a departmental exam. Refer to page 74 for additional information.

292 INTEGRATED REGENTS PROGRAM 2R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of IRP 1. Students will complete the Algebra 1 curriculum with some integration of science, technology, and business. This course includes some hands-on style lab activities and applications of math topics. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is the New York State Algebra 1 Regents exam. Refer to page 74 for additional information on the Integrated Regents Program.

293- INTEGRATED REGENTS 295 PROGRAM 3R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of IRP 2. Students will study selected Geometry and Algebra 2/Trigonometry topics that support the work in the specific area of concentration in which they are enrolled (Business, Family & Consumer Science, or Technology). The final examination is a departmental exam.

296- INTEGRATED REGENTS 298 PROGRAM 4R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of IRP 3. Students in this program will be eligible to enroll in the Hudson Valley Community College University in the high school program. Students in the technology component have the opportunity to enroll in Elementary Technical Math 1 #105 for the fall semester and Elementary Technical Math 2 #106 for the spring semester, earning up to six HVCC credits. Students in the Business or FACS components have the opportunity to enroll in Math 150 College Algebra, earning four HVCC credits. Topics in the Technology courses include proportions, rules of measurement, direct and inverse variation, graphing and the Laws of Sine and Cosine. Topics in the Business and FACS courses include review of algebra and numerical trigonometry. The topics include factoring, rational expressions, solving linear and quadratic equations, exponentials, logarithms, numerical trigonometry, and solving triangles.

Students wishing to enroll in the University Program at HVCC will be responsible for paying the reduced course credit fee.

213 UNIFIED 1 ALGEBRA

FULL YEAR 1 UNIT

Prerequisite: Successful completion of Math 8. This is the first year of a four-year program that is designed for students with weak math skills. This program will allow students to satisfy the math requirements necessary for graduation. Students take the New York State Algebra 1 Regents exam at the end of the second year. In this course, topics include equations and inequalities, polynomials, geometry, introduction to trigonometry, and graphing of lines. Problem solving and the use of math in real-life situations are integrated throughout the course. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final exam in this course is departmental. Students who have credit for a previous high school mathematics course are not eligible for enrollment in this course.

221 GEOMETRY HONORS

FULL YEAR 1 UNIT

Prerequisite: Minimum final average of 93 in Algebra 1 and acceptable performance on honors problem solving test.

In addition to an enriched version of the standard Geometry curriculum, honors students will be afforded the opportunity to more extensively study selected mathematical topics. Increased emphasis will be placed on explanations and justifications of procedures and thought processes. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. Students will complete honors assignments that will include nonroutine problem sets. The final examination in this course is the New York State Geometry Regents exam.

222 GEOMETRY

FULL YEAR 1 UNIT

Prerequisite: Minimum average of 65 in Algebra 1 or 80 in IRP 2.

This course includes an extensive study of geometric relationships, informal and formal geometry proofs, coordinate geometry, transformational geometry, constructions, locus, and circles. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final exam in this course is the New York State Geometry Regents exam.

223 UNIFIED 2 ALGEBRA

FULL YEAR 1 UNIT

Prerequisite: Successful completion of Unified 1 Algebra.

This is the second year of a four-year program that is designed for students with weak math skills. This program will allow students to satisfy the math requirements necessary for graduation. In this course, topics include equation solving, statistics, probability, polynomials, geometry, and graphing. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is the New York State Algebra 1 Regents exam.

231 ALGEBRA 2/TRIGONOMETRY HONORS

FULL YEAR 1 UNIT

Prerequisites: Minimum final average of 93 in Geometry and acceptable performance on honors problem solving test or 85 in Geometry Honors.

In addition to the material offered in Algebra 2/Trigonometry, the student will study selected enrichment topics such as cubic equations, even/odd functions, symmetry tests, natural logarithms, and the graphs of six trigonometric functions. Increased emphasis will be placed on explanations and justifications of procedures and thought processes. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is the New York State Algebra 2/Trigonometry Regents exam.

232 ALGEBRA 2/TRIGONOMETRY

FULL YEAR **1 UNIT**

Prerequisite: Minimum final average of 75 in Geometry or Geometry Honors.

This course includes an in-depth study of the real and complex number systems, a review and extension of functions and transformations, work with exponents, logarithms, trigonometric relationships, and probability, and an extensive unit on statistics. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is the New York State Algebra 2/Trigonometry Regents exam.

233 UNIFIED 3 INTERMEDIATE ALGEBRA

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Unified 2 Algebra.

This is the third course of a four-year program that is designed for students with weak math skills. This course will allow students to satisfy their math requirements necessary for graduation. In this class, students will extend their algebra skills beyond those included in the New York State Integrated Algebra curriculum. Topics covered will include factoring, quadratics, rational expressions, complex numbers, and a variety of consumer topics. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The final examination in this course is a departmental exam.

243 UNIFIED 4 INTERMEDIATE ALGEBRA

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Unified 3 Intermediate Algebra.

This is the final course of a four-year program that is designed for students with weak math skills. In this class, students will continue to focus primarily on intermediate algebra skills, along with selected geometry and trigonometry topics. The objective of this course is to strengthen a student's math foundation and provide readiness for future math courses at the post-secondary education level. The

final examination in this course is a departmental exam.

234 ALGEBRA 2/TRIGONOMETRY 1A

FULL YEAR **1 UNIT**

Prerequisite: Minimum final average of 65 in Geometry and teacher recommendation.

This is the first year of a two-year extended Algebra 2/Trigonometry Regents program designed for the math student who has had academic difficulty in previous math courses and needs to satisfy the third year math requirement and/or meet the eligibility requirements for an Advanced Regents diploma. Students will study the same curriculum as that in Algebra 2/Trigonometry Regents course, but with less emphasis on the theory of trigonometry. This course will cover approximately two-thirds of the Algebra 2/Trigonometry Regents material, with the remainder covered in the second year, Algebra 2/Trigonometry 2B, of the program. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is a departmental exam.

235 ALGEBRA 2/TRIGONOMETRY 2B (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Algebra 2/Trigonometry 1A.

This is the second year of a two-year extended Algebra 2/Trigonometry 1A program. The course will cover the final one-third of the Algebra 2/Trigonometry Regents curriculum, including basic trigonometric functions, graphs, identities, and equations. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The New York State Algebra 2/Trigonometry exam will be given in June. During second semester, students will investigate several precalculus topics and will prepare for the Algebra 2/Trigonometry Regents exam.

245 PRECALCULUS (P)

FULL YEAR **1 UNIT**

Prerequisite: Minimum final average of 75 in Algebra 2/Trigonometry.

This college-level course is designed for the student who desires a strong background in math in preparation for calculus at the college level or Advanced Placement Calculus AB. Topics in this course include advanced algebra, polynomial, trigonometric, exponential, and logarithmic functions; polar graphing, conic sections, matrices, limits and differential calculus. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is a departmental exam. If enrolled in the University in the High School program, students can earn three State University of New York credits upon successful completion of this course. See pages 78-79 for a detailed description of the University in the High School program. Juniors enrolled in Precalculus must earn a grade of 90 to be eligible for AP Calculus AB.

244 PRECALCULUS HONORS (P)

FULL YEAR **1 UNIT**

Prerequisites: Minimum final average of 90 in Algebra 2/Trigonometry and acceptable performance on honors problem solving test or 85 in Algebra 2/Trigonometry Honors.

In addition to an enriched version of the standard Precalculus curriculum, students in this course will be afforded the opportunity to more extensively study selected precalculus and calculus topics. Increased emphasis will be placed on explanations and justifications of procedures and thought processes. Topics included in this course include advanced algebra; exponential and logarithmic functions; advanced graphing techniques; limits; and extensive differential calculus. This course is not part of the University in the High School program. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination in this course is departmental.

246 TOPICS IN ADVANCED MATH E (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Algebra 2/Trigonometry.

This is a fourth-year math course designed for the student who wishes to prepare for a noncalculus, college-level course. Topics studied in this course include quadratic inequalities; polynomial, exponential, and logarithmic functions; sequences and series; probability and statistics; matrices and determinants, vectors; set theory and logic. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. The calculator will be used in math classes throughout high school and into a student's college years. The final examination is departmental. If enrolled in the University in the High School program, students can earn three State University of New York credits upon successful completion of this course. See pages 78-79 for a detailed description of the University in the High School program.

**ADVANCED PLACEMENT
CALCULUS H (P)**

Enrollment in this course is restricted to students who have displayed special effort and exceptional ability in mathematics and who are seeking advanced placement in college. The Advanced Placement Examination is required of all students taking this course.

Students who do not take the exam will not receive AP credit. A fee is charged by the College Board and must be paid or the student may be removed from the course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76.

241 AP CALCULUS AB (P)

FULL YEAR **1 UNIT**

Students electing this course are required to take the AP examination (AB) covering topics in differential and integral calculus. This course is equivalent to one semester of college calculus.

Enrollment in Advanced Placement Calculus AB is based upon the student's:

1. Achievement of minimum final average of 90 in Algebra 2/Trigonometry and Precalculus or 85 in Algebra 2/Trigonometry Honors and Precalculus Honors.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Math teachers' recommendations.

242 AP CALCULUS BC

FULL YEAR **1 UNIT**

Students electing this course are required to take the AP examination (BC) covering topics in differential and integral calculus, as well as topics in infinite series, advanced techniques of integration, polar and parametric equations, and vector functions. This course is equivalent to two semesters of college calculus.

Enrollment in Advanced Placement Calculus BC is based upon the student's:

1. Achievement of minimum final average of 93 in Algebra 2/Trigonometry Honors and Precalculus Honors.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Math teachers' recommendations.

ADVANCED PLACEMENT STATISTICS-PROBABILITY R

The Advanced Placement examination is required of all students taking this course. Students who do not take the exam will not receive AP credit. A fee is charged by the College Board and must be paid or the student may be removed from the course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76.

247 AP STATISTICS-PROBABILITY

FULL YEAR **1 UNIT**

Prerequisite: Minimum average of 80 in Precalculus.

Students electing this course are required to take the AP examination in Statistics. This full-year, college-level course will provide background and practice in the presentation and analysis of statistical data involving frequency distributions, measures of center and spread normal distribution, hypothesis testing, design of experiments and simulation, and linear regression. Students who are considering a major in psychology, sociology, education, medicine, as well as science and mathematical fields should consider electing this course. Although a graphing calculator is not required for this course, it is highly recommended that students become familiar with its operation through classwork and homework. A fee is charged by the College Board and must be paid or the student may be removed from the course. Students in this course will have the opportunity to enroll in the University in the High School Program, and can earn three State University of New York credits upon successful completion of this course. See pages 78-79 for a detailed description of the University in the High School program.

248 CALCULUS (NON AP)

FULL YEAR **1 UNIT**

Prerequisite: Minimum average of 80 in Precalculus or 75 in Precalculus Honors.

This full-year, college-level course will provide background and practice in basic level calculus concepts. Topics in this course include limits and derivatives, differentiation rules, applications of differentiation, and integration. Although a graphing calculator is not required for this course, it is recommended that students become familiar with its operation through classwork and homework. Students in this course will have the opportunity to enroll in the University in the High School Program and can earn three State University of New York credits upon successful completion of this course. See pages 78-79 for a detailed description of the University in the High School program.

948 COMPUTER APPLICATIONS FOR COLLEGE MATHEMATICS (P)

EITHER SEMESTER 1/2 UNIT

Prerequisite: Successful completion of Algebra 2/Trigonometry Regents.

In this half-year course, students will be presented an overview of important computer applications that are likely to be used at the college level. Students will become familiar with Excel spreadsheets to help solve mathematical problems and manipulate data. Applications of computers in the science/math field, such as Study Works, will be explored and the creation of Power Point presentations will be introduced. Students will also learn a brief summation on computer programming in the Java language.

949 COMPUTER SCIENCE 1E (P)

FIRST SEMESTER 1/2 UNIT

Prerequisite: Successful completion of Geometry.

This course will serve as an introduction to programming techniques using the Java language. Selecting algorithms will be stressed as students learn and apply computer commands dealing with variable and formula representation, formatting text, branching and looping techniques, one-dimensional arrays, and nested loop structures. The final examination in this course is departmental.

951 COMPUTER SCIENCE 2 E (P)

SECOND SEMESTER 1/2 UNIT

Prerequisite: Computer Science 1 or, following a placement evaluation, permission of the Department Supervisor.

This course will extend Java programming skills previously learned in Computer Science 1. Topics that will be covered using the Java language include two-dimensional arrays, sorting and searching techniques, user-defined functions, subroutines, strings, graphics, gaming techniques, animation, and graphical user interfaces. The final examination in this course will be departmental.

952 ADVANCED PLACEMENT COMPUTER SCIENCE H (P)

FULL YEAR 1 UNIT

Prerequisite: Computer Science 2 or, following a placement evaluation, permission by the Department Supervisor.

This full-year course will concentrate on advanced programming techniques and topics using the Java language. Such topics as data structures, classes, use of algorithms, and programming methodology will be explored. Enrollment in this course is restricted to students who have displayed special effort and exceptional ability in computer science and who are seeking advanced placement in college. The Advanced Placement Examination is required of all students taking this course. Students who do not take the exam will not receive AP course credit. A fee is charged by the College Board and must be paid or the student may be removed from the course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76.

943R MATH AIS LAB

943A

NON-CREDIT BEARING

This lab will offer academic intervention services to two groups of students who will meet on separate rotations. The first group (Course #943R) are those students who have not yet taken or have not yet passed the New York State Integrated Algebra Regents examination and who will take the exam in January. The second group (Course #943A) are those students whose scores on the Eighth Grade state math assessment and/or teacher recommendation have indicated that they may require additional support in mastering the material in Algebra. Ninth graders enrolled in Algebra who are new to the district may also be scheduled for this lab. Students in this lab will prepare for the June Integrated Algebra Regents exam. Students in either lab will meet every other rotation.

943T MATH GEOMETRY LAB

NON-CREDIT BEARING

EITHER SEMESTER

This half-year lab meets on alternate rotations (AC or BD) and offers structured support and extra practice in geometry topics. Students are recommended by their Algebra teacher or, for students new to the district, by the guidance counselor or Math Supervisor.

Music

MUSIC SEQUENCE REQUIREMENTS

FIVE UNIT SEQUENCE IN MUSIC

Three units in a performance course and two units in music knowledge courses. Band, chorus and orchestra grades WILL be included in computing class rank. Band chorus and orchestra grades must be 90 or above for honor roll and 85 or above for merit roll.

671 SYMPHONIC BAND E (P)

FULL YEAR 1 UNIT

Prerequisite: Successful completion of Band in the preceding year or permission of the Department Supervisor.

Symphonic Band enables students to further develop musicianship and skills on their instruments and to experience live performance. Each band member is expected to participate in all assigned performances.

Lessons are required of all students in band. Students are excused from regular classes to attend lessons. Students taking private music lessons will have the option of whether or not to participate in school lessons. A rotating schedule of lesson times is planned so no student should be excused from the same class more than once in each 4 weeks of school.

674 WIND ENSEMBLE E (P)

FULL YEAR 1 UNIT

Prerequisite:

1. *Required audition in Spring of previous year.*
2. *Requirements for Wind Ensemble instrumentation will be followed as set forth by the New York State School Music Association (NYSSMA).*

Students in grades 9 through 12 may audition for Wind Ensemble. Each band member is expected to participate in all assigned band performances.

Lessons are required of all students. Students taking private music lessons have the option of whether or not to participate in school lessons. Students are excused from

regular classes to attend lessons. A rotating schedule of lesson times is planned so no student should be excused from the same class more than once in each four weeks of school.

More advanced wind and percussion players may be assigned to participate in orchestra to provide symphony orchestra experience.

672 MIXED CHORUS E

FULL YEAR 1 UNIT

Students in Mixed Chorus will learn proper vocal techniques, breath control, and overall poise and confidence in their singing ability, while performing music from many time periods and cultures.

Each chorus member is expected to participate in all scheduled concerts for school and community audiences. Lessons are required of all students in Chorus. Students are excused from study hall and regular classes to attend lessons. A rotating schedule of lesson times is planned so no student should be excused from the same class more than once in each 5 weeks of school.

673 ORCHESTRA E (P)

FULL YEAR 1 UNIT

Prerequisite: Successful completion of Orchestra in the preceding year or permission of the Department Supervisor.

The Orchestra is composed of students in grades 9 through 12 who play orchestral string instruments (violin, viola, cello, string bass) and is augmented by students from band who play wind and percussion instruments, to perform larger symphonic literature. Each orchestra member is expected to participate in all performances scheduled for school and community audiences. Lessons are required of all students in Orchestra. Students are excused from regular classes to attend lessons. A rotating schedule of lesson times is planned so no student should be excused from the same class more than once in each 4 weeks of school.

685 WORLD PERCUSSION E (P)**FULL YEAR 1 UNIT**

Prerequisite: Successful completion of band in the preceding year or permission of the Department Supervisor.

Students who take this full-year performance course will learn various styles of drumming used throughout the world. Included in the curriculum are African, Brazilian, and Caribbean drumming and mallet techniques. Students will learn how drumming styles and percussion music are used in the various countries. Students who participate in this group have the opportunity to become well-rounded percussionists. Each World Percussion member is expected to participate in all scheduled concerts for school and community audiences.

661 MUSIC THEORY 1 E**FIRST SEMESTER 1/2 UNIT**

The study of *Music Theory 1* will include fundamentals of notation, rudiments of music, melodic and rhythmic dictation and ear training. As preparation for further study in Music Theory, emphasis will be placed on developing skills in aural analysis and on developing the ability to distinguish melodic and harmonic elements by visual observation.

This course is recommended for music sequence or performance students.

662 MUSIC THEORY 2 E (P)**SECOND SEMESTER 1/2 UNIT**

Prerequisite: Music Theory 1 or permission of the Department Supervisor.

Music Theory 2 will continue the study of rudiments of music, melodic and rhythmic dictation, ear training and include four-part harmony in the classical tradition.

This course is recommended for music sequence or performance students.

663 MUSIC THEORY 3 E (P)**FIRST SEMESTER 1/2 UNIT**

Prerequisite: Music Theory 2 or permission of the Department Supervisor.

Students will continue the study of dictation, ear training and four-part harmony including inversions and seventh chords.

This course is recommended for music sequence or performance students.

664 MUSIC THEORY 4 E (P)**SECOND SEMESTER 1/2 UNIT**

Prerequisite: Music Theory 3 or permission of the Department Supervisor.

Students in this course will continue the study of classical harmonic practices.

This course is recommended for music sequence or performance students.

667 MUSIC TECHNOLOGY E (P)**EITHER SEMESTER 1/2 UNIT**

Prerequisite: Successful completion of one year in a SHS performing group or of Music Theory 2.

This course will serve as an introduction to the technology used in music recording, editing and production. Students will learn about the history of music technology and about careers in related fields. They will create podcasts and electronic compositions, edit and arrange electronic music, and record live performance in a simulated studio environment. Class size is limited and, if necessary, preferential scheduling will be given to upperclassmen.

683 MUSIC IN OUR LIVES 1 E**FIRST SEMESTER 1/2 UNIT**

This course, combined with Music in Our Lives 2, is designed to satisfy the Regents requirement in art or music and is open to all students.

Through guided listening and discussion the student will be confronted with the role that music plays in his or her life and with the ways it has affected the lives of others throughout history. Besides factual knowledge exploring the evolution of music, the student will learn basic music notation, analysis and performance skills. Each student will experience music directly by using these basic skills to perform and create music. Special interest music projects will be assigned.

684 MUSIC IN OUR LIVES 2 E (P)

SECOND SEMESTER 1/2 UNIT

This course is a complement to Music In Our Lives 1. This course, combined with Music in Our Lives 1, is designed to satisfy the Regents requirements in art or music and is open to all students.

Similar activities to those in the first semester course will be used to explore different topics and aspects of music.

SELECT CHORUS

NO CREDIT

The Select Chorus is an extracurricular ensemble which rehearses regularly after school hours and performs in school concerts and at various community events. Any high school student may audition for this organization. Regular auditions are held in the fall of the school year and other auditions may be held at the discretion of the director.

JAZZ ENSEMBLE AND JAZZ BAND

NO CREDIT

The Jazz Ensemble and Jazz Band are extracurricular ensembles which rehearse regularly after school hours and perform in school concerts and at various community events. Students are exposed to music within the swing, blues, Latin funk, rock and related styles. Any high school student may audition for these organizations. Regular auditions are held in the fall of the school year and other auditions may be held at the discretion of the director.

MARCHING BAND

NO CREDIT

The marching band is an extracurricular ensemble which rehearses on an as needed basis after school hours and performs in various school events, local parades and civic functions. Students not already enrolled in the high school band program may participate in marching band at the discretion of the director.

SSAA CHORUS

NO CREDIT

The SSAA Chorus is an all-female, extracurricular ensemble which rehearses regularly after school hours and performs in school concerts and at various community events.

Any female high school student may audition for this organization. Regular auditions are held in the fall of the school year and other auditions may be held at the discretion of the director.

CHAMBER PLAYERS

NO CREDIT

The SHS Chamber Players is an extracurricular string ensemble which rehearses regularly after school hours and performs in school concerts and at various community events. Any high school string student may audition for this organization. Regular auditions are held in the fall of the school year and other auditions may be held at the discretion of the director.

FLUTE CHOIR

NO CREDIT

The Flute Choir is an extracurricular flute ensemble which rehearses regularly after school hours and performs in school concert and at various community events. Any high school flute student may audition for this organization. Regular auditions are held in the fall of the school year and other auditions may be held

APPLIED MUSIC (PRIVATE MUSIC STUDY)

Students may earn one-half credit for private study outside the school by meeting the following requirements:

1. The student must have completed one year of private study without credit.
2. The student must receive 1/2 hour of instruction each week for 36 weeks and must practice a minimum of 5 hours per week.
3. The student must perform an examination for the District Music Supervisor before credit will be allowed.
4. Quarterly reports must be filled out and have a grade issued by the private music teacher. Private study should focus on solos, methods, and technique development, at a level that is beyond that which the student would receive in the regular music program.

Application will be made available by the District Music Supervisor at the beginning of each school year, and must be submitted to the Supervisor no later than September 30. A total of two credits may be earned over a period of four years. Applied Music will not meet the graduation requirements for one credit of art/music study, and it may not be used as a part of a five credit fine arts sequence.

Physical Education

900s PHYSICAL EDUCATION

EACH SEMESTER 1/4 UNIT

Physical education is an instruction program contributing to the physical, mental and social development of all students. The broad instructional phase of the program provides for a vigorous experience in the development of skills, techniques and knowledge of individual, team and lifetime athletic activities.

A wide variety of activities are offered for our students. The school year is divided into two semesters and the activities offered in each semester range in duration of three-to-ten weeks, depending on the activity.

Tenth, eleventh and twelfth grade students are encouraged to select activities which are personally vital, interesting and will contribute to their individual development. The ninth grade students follow a prescribed program.

Adapted physical education is provided for pupils with chronic handicapping conditions, those recuperating from injuries and accidents as well as those convalescing from long- and short-term illnesses. Students under doctor's written authorization for a period of three weeks or longer will be assigned to Adapted Physical Education. All students are required to be in the regular or the adapted program.

An American Red Cross Level 3 Swimming achievement or Basic Water Safety Course is required of all students.

Four years (two credits) of physical education are required for graduation. One-quarter unit of credit is earned each semester. Students must successfully pass eight semesters.

Freshman Level Curriculum includes:

Aerobic Activity, Base Games, Competitive Games, Cross-Country/Track and Field, Fitness/Wellness, Net Games, Project Adventure, REC Sports, Swimming, Team Sports, Weight Training.

10th - 12th ELECTIVE OFFERINGS

TSF PE 10-12 TEAM SPORTS & FITNESS

This semester course is designed to accommodate and challenge highly motivated physical education students. While active participation is essential in all P.E. classes, Team Sports & Fitness puts emphasis on team play, game strategy and the cooperative nature of team sports. Students will be exposed to the skills, rules, scoring and strategies to engage in team play in a variety of sports. Activities will include soccer, flag football, Cavotta ball, basketball, base games, dodgeball, pickleball and many other games of student interest.

RSF PE 10-12 RECREATIONAL SPORTS & FITNESS

This semester course requires great energy and enthusiasm with the emphasis on active participation and the concept of competition is secondary. Both team and individual sports will be covered. Students will learn skills, strategies, rules and scoring for the following sports: ultimate Frisbee, archery, 4-square, Frisbee golf, dodgeball, Cavotta ball, pickleball, bocce and other recreational games of student interest.

NSF PE 10-12 NET SPORTS & FITNESS

This semester course will focus on the traditional net sports. Students will learn the skills, rules, scoring and strategies necessary to play the net sports. Students in this course should be interested in skill work, individual and small group team play and learning about the opportunities for net sports in our community. Activities will include tennis, badminton, volleyball, pickleball, beach volleyball (outside), and any other sports of student interest.

BGF PE 10-12 BOWLING/GOLF & FITNESS

This semester course is for students with a deep desire and commitment to bowling and golf. These two activities will comprise 90% of the course curriculum. Students should also be of good character and willing to accept the responsibilities and demands of an off-campus program. Skills, rules, strategies and scoring will be covered for both, bowling and golf. *Additional expense to participate. Approximately \$50.00-\$60.00 per semester to be paid on a per/class basis directly to the vendor. (Spare Time Bowling Center and Latham Greens Golf Course).

PAF PE 10-12 PROJECT ADVENTURE & FITNESS

This semester course is for the adventurous student who likes a challenge. Cooperative games and team-building activities at ground level are the focus of the first half of this course. After students complete these ground level activities and develop a trust with their classmates they will learn rope skills and belaying techniques. The course will culminate with students testing their limits as they climb to new heights on our ropes course. The course is the perfect opportunity for students to challenge themselves to try something new.

LSF PE 10-12 LIFETIME SPORTS & FITNESS

This semester class will focus on getting the individual more fit physically and educated on different exercise routines and activities. This class will spend time in the fitness center working on cardio, weight training, and different agility exercises to increase the fitness level of the students. There will be other activities such as yoga, and any additional fitness related activities based on student interest.

LIFEGUARDING – FULL-YEAR COURSE

Looking for a great paying job for the summer? Lifeguards are in high demand. This is a full-year course in which you will become American Red Cross certified in CPR, AED, First Aid and Waterfront Lifeguarding. There is a prerequisite physical test that must be passed in order to participate in the course. Students must swim 550 yards (22 laps) in the pool without stopping using the front crawl and breast strokes. Students must also pass the written assessments with a grade of 80 or better. *Additional Fee to participate – Approximately \$75.00. The Lifeguarding curriculum will take up ³/₄ of the course; the remaining ¹/₄ will be practical work such as lifeguarding for swim classes.

All Offerings will consist of a Physical Fitness Component, including Fitness Level Assessments, exposure and introductory instruction to our Fitness/Center/Weight Room.

Activities will be short in duration (2-3 weeks) to expose students to a wide variety of activities. Popular activities may be repeated throughout the semester.

Science

INTEGRATED REGENTS PROGRAM

This is a four-year alternative program available to students. A detailed explanation is available on page 76.

291 INTEGRATED REGENTS PROGRAM 1R

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of 8th grade science.

Students will address the same curriculum topics that students in Biology R study with a concentration on the first half of the Biology R curriculum. Math, technology and family and consumer sciences will be integrated into the curriculum. This course, combined with Integrated Regents Program 2R in the following year, culminates in the Living Environment Regents Exam. Students are required to complete a minimum equivalent of 600 minutes of laboratory investigation.

292 INTEGRATED REGENTS PROGRAM 2R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of IRP 1R. Students will address the same curriculum topics that students in Biology R study with a concentration on the second half of the Biology R curriculum. Math, technology and family and consumer sciences will be integrated into the curriculum. This course, combined with Integrated Regents Program 1R in the previous year, culminates in the Living Environment Regents Exam. Students are required to complete a minimum equivalent of 600 minutes of laboratory investigation.

293-295 INTEGRATED REGENTS PROGRAM 3R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of IRP 2R. Students will study selected science topics that support the work in the specific area of concentration in which they are enrolled.

296-298 INTEGRATED REGENTS PROGRAM 4R (P)

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of IRP 3R. Students will study selected science topics that support the work in the specific area of concentration in which they are enrolled.

322 BIOLOGY R

FULL YEAR **1 UNIT**

Prerequisite: Students enrolled in this course must be enrolled in Algebra 1 or have completed Algebra 1.

The major emphasis of the course is the understanding of concepts such as Enzyme Action, the Role of DNA, Heredity, Biochemistry, Homeostasis, Evolution, Ecology, Cytology and variations in organisms with respect to life functions. Students are required to complete a minimum equivalent of 1200 minutes of laboratory investigations and to take the Living Environment Regents Examination as partial fulfillment of the course.

321 BIOLOGY H

FULL YEAR **1 UNIT**

Prerequisite: Achievement of a FSM of 90% in Algebra 1 or equivalent and a FSM of 90% in Earth Science R.

This course has been designed to parallel the basic content of Comprehensive Biology and provide further exploration into the science of living things. The course encourages a thorough investigation of biology by stressing a deeper study of the chemical and physical implications that underlie observable biological phenomena. Students are required to complete a minimum equivalent of 1200 minutes of laboratory investigation and to take the New York State Regents Examination as partial fulfillment of the course. Students are also required to complete written reports based on scientific articles and complete various projects throughout the year.

314 SCIENCE IN OUR LIVES I**FULL YEAR** **1 UNIT***Prerequisite: None.*

The Science In Our Lives I program focuses predominantly on Physical setting topics. Late in the year, the course transitions into topics from the Living Environment curriculum. Students in this program will take the Living Environment Regents Examination in Science In Our Lives III. Assessment is designed to measure instructional objectives and to allow for the special needs of each student.

325 SCIENCE IN OUR LIVES II**FULL YEAR** **1 UNIT***Prerequisite: None.*

This curriculum is designed to follow the completion of Science in Our Lives I, and focuses entirely on topics from our Living Environment curriculum. Assessment is designed to measure instructional objectives and to allow for the special needs of each student.

336 SCIENCE IN OUR LIVES III**FULL YEAR** **1 UNIT***Prerequisite: None.*

This is the final course in this program. It follows Science In Our Lives II and culminates in the Living Environment Regents Examination.

337 PLANT SCIENCE E**FULL YEAR** **1 UNIT***Prerequisite: This course is open to 11th and 12th graders only.*

This course is designed to introduce students to the history, economics, and scientific practices used in world food production. The course is lab/field study oriented making use of local landscapes, farms, and agribusinesses. Topics include botany/physiology, plant identification and uses, landscape and garden design, plant care and maintenance, and the economics of local and world agriculture. Students interested in attending college will receive an excellent background in botany and ecology and be given the op-

portunity for in-depth investigations and lab techniques. Those looking for a career in agribusiness, or who would like to work in a greenhouse, lab, landscaping, or a farming situation, will receive the knowledge and skills needed to find success in the workplace.

334 EARTH SCIENCE**FULL YEAR** **1 UNIT***Prerequisite: Students enrolled in this course have successfully completed Biology R and Algebra 1.*

The Earth Science course presents a study designed to encourage students to find out about their world by experiencing it firsthand. Earth Science is one of the most relevant sciences students can study. It is through this study that students begin to understand the world around them and the forces responsible for the changes they experience. It is also through the study of Earth Science that the delicate balance on our planet can be understood and appreciated. Students will learn that the Earth is a home with limited resources and limited ability to recover from abuse.

The course contains ten core units: Science Skills; Earth in Space; Astronomy; Weather; Climate; Erosion; Deposition and Landscapes; Minerals and Rocks; Dynamic Crust; and Geologic History.

Students are required to complete a Laboratory Practical Exam; a minimum equivalent of 1200 minutes of laboratory investigation with satisfactory reports submitted; and to take the New York State Regents Examination as partial fulfillment of the course.

342 CHEMISTRY R**FULL YEAR** **1 UNIT***Prerequisite: Achievement of a FSM of 75% in Geometry or equivalent. Achievement of a FSM of 75% in Earth Science R.*

This course content includes the study of Energy and Matter, Atomic Structure, Nuclear Chemistry, Chemical Bonding, generalities of the Periodic Table, Kinetics, Equilibrium, Acid-Base Theories, Redox reactions, Electrochemistry, Organic chemistry and applications of Chemical Principles. Mathematical problems are integrated in each unit as it applies. Students are required to complete a minimum equivalent of 1200 minutes of

laboratory investigation, a departmental midyear examination, and the New York State Regents Examination as partial fulfillment of the course.

341 CHEMISTRY H

FULL YEAR **1 UNIT**

Prerequisite: Achievement of a FSM of 90 in Earth Science R and Biology R. Achievement of a FSM of 90 in Geometry or equivalent. Teacher recommendation.

In addition to an enriched version of the standard Chemistry R curriculum, honors students will be afforded the opportunity to more extensively study selected topics. Increased emphasis will be placed on explanations, justifications of procedures and thought processes, as well as advanced mathematical applications. Students will complete honors assignments that will include nonroutine applications of concepts involving explanations that encourage abstract thinking. Students are required to complete a minimum equivalent of 1200 minutes of laboratory investigation, a departmental midyear examination, and the New York State Regents Examination as partial fulfillment of the course.

343 CHEMISTRY E

FULL YEAR **1 UNIT**

Prerequisite: Successful completion of Algebra 1 or equivalent. Open to 11th and 12th grades only.

This course of study presents the student with a background in chemistry and develops an appreciation for the process of scientific investigation and the role of the chemist. Topics are derived from the Regents level chemistry course, however, depth and pace have been adjusted to accommodate a wide variety of learners. A significant portion of class time will be devoted to laboratory work. Laboratory reports will be required.

332 PHYSICS R

FULL YEAR **1 UNIT**

Prerequisite: Achievement of a FSM of 75 in Chemistry R. Achievement of a FSM of 75 in Algebra 2/Trigonometry or equivalent, or permission of Department Supervisor.

Physics is essentially a consideration of energy as the unifying factor in the study areas of Mechanics, both Static and Dynamic, Thermodynamics, Wave Mechanics, Electricity, Magnetism and Modern Physics. The treatment is a quantitative one with an emphasis on the conceptual aspects of physics common to the areas under study. Students are required to complete a minimum of 1200 minutes of laboratory investigation and to take the New York State Regents Examination as partial fulfillment of the course. Students should be enrolled in Precalculus or equivalent.

331 PHYSICS H

FULL YEAR **1 UNIT**

Prerequisite: Achievement of a FSM of 90 in Algebra 2/Trigonometry or equivalent with teacher recommendation. Achievement of a FSM of 90 in Chemistry R or equivalent, or permission of Department Supervisor.

This course is designed to allow for more in-depth study of the curriculum in Comprehensive Physics R. This course will mirror the majority of topics taught in the AP Physics (B level) curriculum but will be delivered in a more traditional classroom lecture methodology. Students are required to complete a minimum of 1200 minutes of laboratory investigation and to take the New York State Regents Examination as a partial fulfillment of the course.

333 PHYSICS E**FULL YEAR 1 UNIT**

Prerequisite: Successful completion of Algebra 1 or equivalent.

This course is divided into three major topic areas: (1) Mechanics, (2) Waves, (3) Electricity and Magnetism. The introduction of the course includes a comprehensive review of such basic science skills as understanding and using the scientific method, measuring techniques, laboratory procedures, writing lab reports, reading science literature and mastering the basic math skills which will be needed in General Physics. The most notable characteristics of the course include problem solving and the “hands-on” process approach that is employed during the laboratory exercises which are incorporated within the regular class period.

335 ENVIRONMENTAL SCIENCE**FULL YEAR 1 UNIT**

Prerequisite: Enrollment in Environmental Science is based upon the student's:

1. *Achievement of a FSM of 75% in Regents Biology and a FSM of 75% in Regents Chemistry.*
2. *Work habits and career plans.*
3. *Successful completion of the Regents exam in Biology, and either Physics or Chemistry.*
4. *Science teachers' recommendations.*

In this senior-level course special attention will be given to the basic concepts needed to understand the many environmental and technical concerns facing humankind today. Such topics as the study of ecosystem cycles and population, energy, and pollution will be discussed. It will be necessary for students to have acquired fundamental mathematical skills in order to understand and appreciate various topics under investigation. Also it will be necessary for students to have acquired a certain proficiency in reading, writing and interpreting newspaper and or magazine articles/papers in order to be able to evaluate the latest environmental issues. After the basic concepts and theories have been presented and learned, they will be applied in the study of such issues as

alternative energy sources, nuclear energy, air/water pollution and solid waste disposal. Laboratory sessions will be incorporated into regular class periods.

340 FORENSICS**FULL YEAR 1 UNIT**

Prerequisite: Students enrolled in this course must be in 12th grade and have successfully completed at least 3 years of science as well as passed at least 1 Regents Exam in science. Successful completion of Chemistry R is recommended.

Description: Forensics is designed to be an overview of various concepts relating to forensic science and crime scene investigation. Topics include Fingerprint Analysis, Fiber Analysis, Blood/DNA Analysis. Forensic Pathology, Forensic Anthropology and Soil and Impression Analysis. Class size is limited.

344 ADVANCED PLACEMENT BIOLOGY**FULL YEAR 1 1/2 UNITS**

Prerequisite: Enrollment in Advanced Placement Biology is based upon the student's:

1. *Achievement of a FSM of 90% in Regents Biology, Regents Chemistry and Regents Physics.*
2. *Problem solving and analytical abilities.*
3. *Work habits and career plans.*
4. *Writing ability.*
5. *Science teachers' recommendations or by permission of the Department Supervisor.*

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. The AP Biology course is designed to be taken by students after the successful completion of Biology R, Chemistry R and Physics R. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

The course consists of three major areas: Molecules and Cells; Heredity and Evolution; and Organisms and Populations.

Students are required to complete the labo-

ratory portion of the course which will address the twelve labs required by the College Board. The Advanced Placement Examination is required of all students enrolled in the course. A fee is charged by the College Board and must be paid or the student may be placed in another science course. A more detailed explanation of the Advanced Placement program is available on pages 75-76.

345 **ADVANCED PLACEMENT CHEMISTRY**

FULL YEAR 1 1/2 UNITS

Prerequisite: Enrollment in Advanced Placement Chemistry is based upon the student's:

1. *Achievement of a FSM of 90% in Regents Chemistry, an FSM of 90 in Regents Physics, and enrolled in Precalculus Honors.*
2. *Problem solving and analytical abilities.*
3. *Work habits and career plans.*
4. *Writing ability.*
5. *Science teacher's recommendation or by permission of the Department Supervisor.*

This course is designed to be equivalent of college introductory General Chemistry I and II taken by Biology and Chemistry majors during their first year. This course follows Regents chemistry and differs from it in depth of presentation as evidenced by the kind of textbook used, the amount and kind of laboratory work required, the amount of time demanded by the course, and its emphasis on the mathematical formulation of principles and the solution of problems as described under the headings: Structure of Matter, States of Matter, Descriptive Chemistry and Reactions which include the topics of Kinetics, Equilibrium, and Basic Thermodynamics. The Advanced Placement Examination is required of all students taking this course. A fee is charged by the College Board and must be paid or the student may be placed in another course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76.

346 **ADVANCED PLACEMENT PHYSICS (B LEVEL)**

FULL YEAR 1 UNIT

Prerequisite: Enrollment in Advanced Placement Physics (B level) is based upon the student's:

1. *Achievement of a FSM of 90% in Chemistry H or a 93 in Chemistry R and an FSM of 93% in Math Algebra 2/Trigonometry or equivalent.*
2. *Problem solving and analytical abilities.*
3. *Work habits and career plans.*
4. *Writing ability.*
5. *Science teacher's recommendation or by permission of the Department Supervisor.*

The Advanced Placement Physics B course includes topics in both classical and modern physics. Knowledge of algebra and basic trigonometry is required for the course; the basic ideas of calculus may be introduced in connection with physical concepts, such as acceleration and work. Understanding of the basic principles involved and the ability to apply these principles in the solution of problems are major goals of the course. Laboratory work will be an integral part of the course as discovery learning is the major methodology employed throughout the year. The Advanced Placement Examination and the NYS Regents Examination are required of all students taking this course. A fee is charged by the College Board and must be paid or the student may be placed in another course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76. The laboratory requirement for the Regents examination will be fulfilled through laboratory activities embedded throughout the one and one-half period during the year.

348 **ADVANCED PLACEMENT PHYSICS (C LEVEL - MECHANICS & ELECTRICITY AND MAGNETISM)**

FULL YEAR **1 1/2 UNITS**

Prerequisite: Enrollment in Advanced Placement Physics (C level) is based upon the student's:

1. Achievement of a FSM of 90% in Advanced Placement Physics B, Physics H, or Physics R.
2. Enrollment in or completion of Calculus.
3. Problem solving and analytical abilities.
4. Work habits and career plans.
5. Science teacher's recommendation or by permission of the Department Supervisor.

The course in Advanced Placement Physics (C level) is intended to be representative of courses commonly offered in colleges and universities. It is designed to provide a more rigorous calculus investigation of topics previously studied in Physics. The subject matter of the course is principally Mechanics, Electricity, and Magnetism with approximately equal emphasis on these two areas. Laboratory work will be an integral part of the course since certain areas of physics are much more meaningful when presented through the laboratory. This course is designed for any student continuing in a math/engineering field and is seeking college physics credit in that field. The Advanced Placement Examination is required of all students taking this course. A fee is charged by the College Board and must be paid or the student may be placed in another course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76.

347 **ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

FULL YEAR **1 UNIT**

Prerequisite: Enrollment in Advanced Placement Environmental Science is based upon the student's:

1. Achievement of a FSM of 85% in Regents Biology and an 85% in Regents Chemistry.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Science teacher's recommendation or by permission of the Department Supervisor.

The Advanced Placement Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. This course is intended to enable students to undertake, as first-year college students, a more advanced study of topics in environmental science, or alternatively, to fulfill a basic requirement for a laboratory science and thus, free time for taking other courses. The course will address the following themes: Science is a process; Energy conversions underlie all ecological processes, the Earth itself is one interconnected system, Humans alter natural systems, Environmental problems have a cultural and social context, and Human survival depends on developing practices that will achieve sustainable systems. The course includes a strong laboratory and field investigation component. The goal of this component is to complement the classroom portion of the course by allowing students to learn about the environment through first-hand observation. The Advanced Placement Examination is required of all students taking this course. A fee is charged by the College Board and must be paid or the student may be placed in another course. A more detailed explanation of the Advanced Placement Program is available on pages 75-76.

ACADEMIC INTERVENTION SERVICES

NO CREDIT

This remediation period is provided to assist students in meeting the graduation requirements in science. The State Education Department mandates this remediation for students who score below the state performance level on the 8th grade science assessment or the Living Environment Regents Exam.

FULL YEAR 1 UNIT

Prerequisite: Enrollment in the Science Research Program is by application only. Students will be considered based upon:

1. *Completion of grade 9 and desire to supplement their science education through Science Research.*
2. *Willingness to commit to the three year program.*
3. *Problem solving and analytical abilities.*
4. *Work habits and career plans.*
5. *Science teachers' recommendations or by permission of the Department Supervisor.*

This program extends over a three-year period (10th, 11th, and 12th grade) and affords students the opportunity to participate in the community of scientific research and scholarship as part of their high school experience. The course meets for 1 period every day for each year in 10th, 11th, and 12th grade. Students will also have the opportunity to meet with the instructor during an additional advisement period on an as needed basis by appointment.

NOTE: Students need reliable transportation with their parents permission to travel to local laboratories. Students may register for University at Albany credit (UHS) and have the potential to earn 12 undergraduate credits by the end of their senior year.

Please see page 79 for details. Students participating in this program (three years) accomplish the following:

Students choose and explore a topic of interest. The topic may come from the natural sciences or the social sciences. They develop skills using electronic mail and the Internet. They learn to conduct on-line bibliography searches of a wide range of databases. Students find and study several journal articles, eventually choosing one, which they will present to the class. Their presentation to the class emphasizes how research described in the article was conducted. Thus, it makes the scientific method, which is the essence of the program, explicit for the student and the class. Students prepare a statement of

what they intend to study based on their bibliographic research. Students contact the authors of journal articles they have studied. They ask for suggestions for future research that they might undertake. As their relationship with the scientist develops, they ask the scientist to serve as a mentor or to help them find an appropriate scientist mentor to assist them in carrying out a research project. Students then engage in an original piece of research under the guidance of their scientist mentor and their classroom research teacher. Students make presentations of their findings to their class, their school district, and a regional and statewide symposia. Their presentations are based on scientific protocol. Each step in the student's progress over the three years is carefully and systematically monitored to assure that the student engages in each phase of scientific research and attains desired capabilities.

Social Studies

110 AP WORLD HISTORY (P)

FULL YEAR **1 UNIT**

Prerequisite:

1. Recommendation of the 8th grade social studies teacher; and
2. Achievement of consistent grades of A+ in grade 8 social studies; and
3. Demonstration of superior critical reading and writing skills based upon departmental, district, and national standardized assessments, or
4. Permission of the department supervisor.

The purpose of AP World History is to develop greater understanding of the evolution of global resources 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 historical changes and their causes and consequences, as well as comparisons among major societies. Focused primarily on the past thousand years of the global experience, the course builds on an understanding of cultural, institutional, and technological events that, along with geography, set the human stage prior to 1000 C.E. Chronology and the study of historical themes form the organizing principles for dealing with change and continuity from that point to the 19th century. Equal emphasis is placed on historical analysis of the Western and non-Western world.

This program option is particularly designed for those students whose records indicate superior achievement in the area of social studies, who evidence a serious academic interest in academic challenge in the social science field, and who display a readiness to begin a program sequence that can include the earning of Advanced Placement credit in grades 10, 11, and/or 12, as well as New York State Regents credit. The final examination in this course will be a test developed at Shaker High School.

Expected range of achievement for this course will be 90-100.

111 GLOBAL HISTORY 9H (P)

FULL YEAR **1 UNIT**

Prerequisite:

1. Recommendation of the 8th grade social studies teacher; and
2. Maintenance of an overall average of A in social studies; and
3. Demonstration of critical reading and writing skills based upon departmental, district, and national standardized assessments, or
4. Permission of the department supervisor.

Study is focused on developing historical perspectives on world history from prehistoric times to the early 19th century. Relationships and links are explored in order to learn how the past influences the present. Political, social, and economic themes such as nationalism, ideology, economic systems, modernization and human rights are introduced within a geographic and cultural context. Preparation of a research paper is a requirement of the course. Students electing this course should be prepared to deal with subjects in an analytical and interpretive manner. Expected range of achievement is 85-100.

112 GLOBAL HISTORY 9R

FULL YEAR **1 UNIT**

In studying world history from prehistoric times to the early 19th century, unit work will center on political, social and economic topics studied within a historical context. Students will be required to make connections among concepts and themes in Global History and link them across time and place. Instruction will also emphasize the application of social studies skills in multiple historical settings. Specific time will be devoted to preparing a paper on some topic related to the course of study.

114 GLOBAL HISTORY 9B

FULL YEAR **1 UNIT**

Prerequisite: Recommendation of 8th grade social studies teacher (based on results of standardized testing and class performance).

This course is designed for students requiring special attention in social studies skills. By examining the geography, history, and political, social, and economic life of peoples in different world historical eras from prehistoric times to the early 19th century, students are helped to develop the understanding and skill required in an increasingly complex global society. Emphasis is placed on helping student's social studies skills such as locating and analyzing data from different sources.

120 AP WORLD HISTORY (P)

FULL YEAR **1 UNIT**

Prerequisite:

1. *Recommendation of the 9th grade social studies teacher; and*
2. *Completion of Advanced Placement World History 9th grade within expected range; and*
3. *Demonstration of superior critical reading and writing skills based upon departmental, district, and national standardized assessments, or*
4. *Permission of the department supervisor.*

The purpose of AP World History is to develop a greater understanding of the evolution of global resources and contacts, and 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 historical changes and their causes and consequences, as well as comparisons among major societies. Focused primarily on the 19th and 20th century global experience, the course builds on an understanding of cultural, institutional, and technological events that, along with geography, set the human stage from the 19th century to contemporary times. Chronology and the study of histori-

cal themes form the organizing principles for dealing with change and continuity. Equal emphasis is placed on historical analysis of the Western and non-Western world. This program is particularly designed for those students whose records indicate superior achievement in the area of social studies, who evidence a serious academic interest in the social science field.

The Advanced Placement Examination is required of all students taking this course. A fee is charged by the College Entrance Examination Board and must be paid to the Department Supervisors. A more detailed explanation of the Advanced Placement Program is available on pages 75-77.

121 GLOBAL STUDIES 10H (P)

FULL YEAR **1 UNIT**

Prerequisites:

1. *Recommendation of the 9th grade social studies teacher; and*
2. *Completion of Global History 9H within expected range of achievement*
3. *A final school mark of 90 or above in English 9R and Global History 9R; and*
4. *Demonstration of critical reading and writing skills based upon departmental, district, and national standardized assessments, or*
5. *Permission of the department supervisor.*

Study is focused on developing historical perspectives on world history from the early 19th century to contemporary times. Relationships and links are explored in order to learn how the past influences the present. Political, social, and economic themes such as nationalism, ideology, economic systems, modernization and human rights are introduced within a geographic and cultural context. Completion of a research paper is a requirement of the course. Students electing the course should be prepared to deal with subjects in an analytical and interpretive manner with demonstration of such ability in present course work as one criteria for recommendation. Expected range of achievement is 85-100.

122 GLOBAL STUDIES 10R (P)**FULL YEAR 1 UNIT***Prerequisite: Global Studies 9.*

In studying world history from the early 19th century through contemporary times, unit work will center on political, social and economic topics studied within a historical context. Students will continue to be required to make connections among concepts and themes in Global History and link them across time and place. Preparation will also emphasize the teaching and application of social studies skills in multiple historical settings. Specific time will be devoted to preparing a research paper on some topic related to the course of study.

125 GLOBAL STUDIES 10B (P)**FULL YEAR 1 UNIT***Prerequisite: Global Studies 9.*

This course is designed for students requiring special attention in social studies skills. By examining the geography, history, and political, social, and economic life of peoples in different world historical eras from the early 19th century to contemporary times, students are helped to develop the understanding and skills required in an increasingly complex global society. Emphasis is placed on helping student's social studies skills, such as locating and analyzing data from different sources.

130 AP UNITED STATES HISTORY (P)**FULL YEAR 1 UNIT***Prerequisites:*

1. *Recommendation of the 10th grade teacher; and*
2. *Completion of AP World History 10th grade within expected range of achievement*
3. *A final school mark of 93 or above in English H and Social Studies H; and*
4. *Demonstration of critical reading and writing skills based upon departmental, district, New York State, and national standardized assessments, or*
5. *Permission of the department supervisor.*

Major periods in United States history such as the colonial period, American Revolution, Jacksonian Era, Civil War and Reconstruction, Populist-Progressive period, the New Deal, and post-World War II United States are studied in order to develop understanding and appreciation of political, economic and social development of the United States. Students are given the opportunity to develop skill proficiency in reading and critically analyzing historical material, weighing and interpreting historical evidence, and making conclusions based on such evidence. This course is intended to substitute for United States History and Government H for selected students who have successfully completed the H level social studies program in grades 9 and 10, and who wish to earn advanced college placement or credit in United States History. Award of such credit is ultimately determined by the college based on the student's test grade in Advanced Placement United States History as developed and scored by the Educational Testing Service. Students will also earn Regents credit by taking the New York State Regents Examination in United States History and Government which will serve as the final test grade. The Advanced Placement Examination is required of all students taking this course. A fee is charged by the College Board and must be paid to the Department Supervisors. A more detailed explanation of the Advanced Placement Program is available on pages 75-77.

131 UNITED STATES HISTORY AND GOVERNMENT 11H (P)

FULL YEAR **1 UNIT**

Prerequisites:

1. *Global Studies 10H within the expected range of achievement;*
2. *A Final School Mark of 90 in Global Studies 10R; and*
3. *Demonstration of critical reading and writing skills based upon departmental and New York State Regents standardized assessments, or*
4. *Permission of the department supervisor.*

This course treats the evolution of the political system, economic organization, civilization, and foreign policy of the United States in a chronological framework. Constitutional and governmental issues receive special emphasis. Students are challenged to explore and evaluate such references as will contribute to a critical analysis of major issues. Use is made of supplementary outside readings, source materials and documents, and interpretive studies. The final examination in this course is the New York State Regents Examination in U.S. History and Government. Students are required to prepare at least one research paper on a topic of their choice relative to their program.

132 UNITED STATES HISTORY AND GOVERNMENT 11R (P)

FULL YEAR **1 UNIT**

Prerequisite: Global Studies 10.

This course will include a chronological survey of United States history in general, but the emphasis will be on the U.S. as a developing industrial and postindustrial nation. Constitutional and legal issues will be explored in-depth, as well as the problems of a dynamic industrial society in an increasingly complex and technology-oriented world. Classwork and homework is supplemented by use of various source materials and readings. Students are required to research and prepare at least one research paper on some aspect of the course. The final examination in the course is the New York State Regents Examination in U.S. History and Government.

135 UNITED STATES HISTORY AND GOVERNMENT 11B (P)

FULL YEAR **1 UNIT**

Prerequisite: Global Studies 10.

This course is offered for those who have evidenced particular need for improving their social studies skills as well as their ability to read and write well. The final examination is the Regents Examination in United States History and Government.

**942GR GLOBAL HISTORY AIS LAB
942G
942A**

NO CREDIT

This remedial lab offers academic intervention services to students who have not yet passed the New York State Regents examination in Global History. Also, students who may require additional development of social studies skills may be placed in this lab as preparation for the state assessment. Course content and test taking skills are emphasized.

**942HR UNITED STATES HISTORY AIS LAB
942H**

NO CREDIT

This remedial lab offers academic intervention services to students who have not yet passed the New York State Regents examination in United States History. Also, students who may require additional development of social studies skills may be placed in this lab as preparation for the state assessment. Course content and test taking skills are emphasized.

Social Studies 12

In fulfilling the requirements of one unit of credit in Social Studies 12, a student must take a one-semester course in Economics and Economic Decision Making and a one-semester course in Participation in Government. In order to be eligible for graduation, a student is required to achieve a passing grade in each semester course. Grades for semester courses are determined by averaging two quarterly grades with a final examination grade or its equivalent such as a term paper or course project.

Seniors may take one or more additional semester courses to earn elective credit or complete a five-year sequence in social studies. Juniors may enroll in Social Studies 12 electives to earn credit where class size will permit. The selection of social studies electives in the junior year is not intended as a substitute for Social Studies 12 courses or enrollment in social studies in the senior year. But, juniors who have completed senior electives and are unable to enroll in Social Studies 12 electives in the senior year because of scheduling conflicts or a full program of studies should consult their guidance counselor and the department supervisor.

In the case of Social Studies 12 semester course electives, students may be expected to purchase paperback books as part of the course.

160 ECO/AP US GOVERNMENT (AP GOVERNMENT AND POLITICS: UNITED STATES) H (P)

FULL YEAR

1 UNIT

Prerequisites:

1. *Recommendation of the grade 11 social studies teacher; and*
2. *A final school mark of 90 or above in English and Social Studies 11H; and*
3. *A grade of 90 or above on the New York State Regents in U.S. History and Government; and*
4. *Demonstration of critical reading and writing skills based upon departmental, district, New York State, and national standardized assessments, or*
5. *Permission of the department supervisor.*

This full-year course integrates curriculum and instruction in Economics and U.S. Gov-

ernment and Politics. Students who elect this course fulfill New York State fourth year social studies requirements in Economics and Participation in Government. The first half of the course emphasizes the major concepts and themes of economics integrated into the broader context of United States government and politics. Focus is on microeconomics (the various components of the United States' economy—business, consumers, laborers, capitalists and government) and macroeconomics (the overall operation of the economy in terms of production and prosperity). In the second half of the course, students study the Constitutional underpinnings of the United States government, political beliefs, and behavior of citizens in order to develop understanding and appreciation of the institutions and policy processes of the national government. Major topics include: the Congress, the Presidency, Federal Courts, the Bureaucracy, political parties and interest groups, and public policy. Students will be expected to weave economic principles and practices into their analysis of the U.S. political system. The Advanced Placement Examination is required of all students taking this course. A fee is charged by the College Board and must be paid to the Department Supervisors. A more detailed explanation of the Advanced Placement Program is available on pages 75-77.

161 PARTICIPATION IN GOVERNMENT 12H

SECOND SEMESTER 1/2 UNIT

In this semester course an opportunity is provided for a more thorough inquiry into the nature of political behavior and how political conflicts are resolved. Examination is made of how popular participation occurs within the American political system today. Leadership and decision making in a democratic system are also topics for discussion, using the various national, state, local and political institutions as vehicles for building understanding. In addition, the unofficial role of interest groups and the mass media is also taken into consideration.

The course is recommended for any student who is considering political science in college, who may be majoring in the social sciences, who seeks a broad background in the social studies for later study in college, and who has achieved grades of 90 or above in 11R level courses or 85 or above in H level courses. A final school mark is earned by averaging two quarterly grades and a final examination.

PARTICIPATION IN GOVERNMENT 12E

**150 FIRST SEMESTER
170 SECOND SEMESTER**

1/2 UNIT

This one-semester course emphasizes the interaction between citizens and government at all levels: local, state, and federal. Students are asked to draw on concepts developed in United States History and Government (grade 11) in studying the political process as it relates to both private and governmental situations. The nature of popular participation and public policy is emphasized.

155 PARTICIPATION IN GOVERNMENT 12B

SECOND SEMESTER 1/2 UNIT

This one-semester course emphasizes the role of the citizen in a participatory system. The enhancement of self-government through the ability of citizens to make reasoned and effective decisions serves as the central theme of the course. It is offered specifically for students requiring special attention in improving their social studies skills as well as their ability to read and write well.

143 ECONOMICS AND ECONOMIC DECISION MAKING 12H

FIRST SEMESTER 1/2 UNIT

This semester course begins with a study of the basic ideas and concepts of economics as a part of the social studies. Study is made of micro economics (the various components of the American economy—businesses, consumers, laborers, capitalists and government) and macroeconomics (the overall operation of the economy in terms of production and prosperity). The success of the United States economy relative to other systems in meeting the universal economical goals and problems is analyzed as part of the course.

The course is recommended for any student who is considering economics in college, who may be majoring in the social sciences, or who seeks a broad background in the social studies for later study in college, and who has achieved a grade of 90 or above in 11R level courses or 85 or above in 11H level courses. A final school mark is earned by two quarterly grades and a final examination.

144 ECONOMICS AND ECONOMIC DECISION MAKING 12B

FIRST SEMESTER 1/2 UNIT

This semester course (offered first semester) focuses on basic economic concepts relating to the functioning of the economic system of the United States. It is offered specifically for those who require special attention in improving their social studies skills as well as their ability to read and write well.

**ECONOMICS AND ECONOMIC
DECISION MAKING 12E**
147 FIRST SEMESTER
167 SECOND SEMESTER

1/2 UNIT

In this semester course, students are exposed to such economic concepts as scarcity, supply and demand, productivity, opportunity cost, and interdependence as they relate to the economic system of the United States. The roles of various components of the American economic system will be studied as they relate to individual roles of consumer, worker, investor, and voting citizen, and the political and social impact of economic decisions.

Social Studies Electives

137 MAJORITY-MINORITY RELATIONS (AN INTRODUCTION TO SOCIOLOGY)

FIRST SEMESTER 1/2 UNIT

The emphasis of this elective is an introduction to sociology, with a focus on the trends and interpretations of racial attitudes in America. Groups to be examined include, but are not limited to, are: African Americans, Chinese Americans, Irish Americans, and Native Americans. Through historical study, government documents, public policy factors, and socioeconomic status, students will unravel the emerging themes in group relations in America and identify the significant strides being made in the overcoming of barriers. Students will be evaluated on their ability to apply sociological perspectives to case studies.

Case studies to be examined, among others, are: selections from Dee Brown's Bury My Heart at Wounded Knee, The Darden Dilemma by Ellis Cose, and Herbert Asbury's The Gangs of New York. Students will be evaluated through interactive projects, including a final project, requiring both written and performance components.

The final grade in this course will be the average of the two quarterly grades and a third grade earned by completing a required research paper/project that focuses on a specific time period or event within the course curriculum.

The course is open to grade 11 and 12 students.

138 WAR AND CONFLICT A MILITARY HISTORY OF GLOBAL CONFLICT

SECOND SEMESTER 1/2 UNIT

The War and Conflict elective is a course that will offer students an insight into the psychological and philosophical nature of human conflict conducted throughout the ages. The course will investigate the crucial elements such as tactics, weapons and leadership as global conflicts from the Punic Wars to Vietnam unfold. From military strategists like Sun Tzu (The Art of War), and Karl von Clausewitz (Vom Kriege), to field commanders like Hannibal, Robert E. Lee and George S. Patton, to the combat soldiers and civilians caught up in the carnage; the course will show the human face of war.

Within the context of the course are interactive projects, involving both written and performance components, historical screen adaptations of Saving Private Ryan, We Were Young and Soldiers, and Gods and Generals, and a final project. **The course is open to grade 11 and 12 students.**

145 INTRODUCTION TO PSYCHOLOGY 12E

FIRST SEMESTER 1/2 UNIT

This semester course is an introductory college preparatory course incorporating important concepts from the fields of psychology. Emphasis is placed on studying human behavior and understanding human nature. Among the unit topics are: the nature of the behavioral sciences and human behavior, physical and mental ability, cultural and social determinants of behavior, abnormal behavior, and behavior therapy and modification. Within each of these units, study is made from a psychological and/or sociological perspective. Specific topics include human aggression, adolescence, alienation, intelligence, and schizophrenia. Emphasis is placed on psychological research through written projects culminating in a final paper involving the use of multiple research strategies. The final grade for this course is an average of two quarterly grades and final project.

The course is open to grade 11 and 12 students.

154 CRIMINAL LAW**SECOND SEMESTER 1/2 UNIT**

The criminal law elective is designed to offer the student a glimpse into the complex world of 1st degree felony crime. The course is divided into two phases, crime scene investigation, evidence gathering, and pretrial discovery. The second phase introduces the student to trial preparation and trial techniques. Students will present a mock trial at the culmination of the course as a summative evaluation. This presentation requires each student to learn the criminal code and criminal procedure. Students must cooperate on a legal team, work under the pressure of a deadline, and meet a set of standards demanding independent research and investigation.

Students who are interested in advancing their understanding of criminal law or planning to enroll in a prelaw major in college will find this course to be a solid introduction to the principles of criminal responsibility and criminal punishment. The proper use of legal terminology and the ability to demonstrate an ability to grasp legal courtroom maneuvering are key to the student's success. The first quarter grade will be evaluated on two components, crime scene investigation skills and analysis of evidence to be presented at trial. The final exam will consist of written trial preparation and participation in the Mock Trial presentation.

The course is open to grade 11 and 12 students.

Technology Education

Technology Education is the study of the man-made world. Identifying problems, developing solutions, testing those solutions, and redesigning, if necessary, is the core of technology and the engineering sciences. The Technology electives are designed to provide students with an introduction and exposure to the various careers within the engineering and technology fields. All Technology courses emphasize important occupational and life skills taught through the use of "hands-on" project work.

The following course clusters group the various electives that would apply to specific areas of interest. Students may elect to take courses from a variety of course clusters if they wish to explore various fields or remain within a cluster if they prefer a strong preparation for a specific post-high school course of study.

COURSE CLUSTERS

Communications Cluster

Design and Drawing for Production
Graphic Communications/Broadcast Communications
Computer Applications Technology/Computer Aided Drafting
Technical Photography
Architectural Drawing I
Architectural Drawing II
Digital Electronics and Robotics/Intro to Networking & Computer Systems

Computer Electronic Engineering

Design and Drawing for Production
Digital Electronics and Robotics/Intro to Networking & Computer Systems
Computer Applications Technology
Principles of Engineering
Electronics/Home Electricity

Construction

Design and Drawing for Production
Material Processing-Wood/Manufacturing Processes
Residential Construction/Alternative Energy Systems
Home Electricity/Architectural Drawing
Computer Aided Drafting

Engineering

Design and Drawing for Production
Manufacturing Processes/Computer Aided Drafting/
Alternative Energy Systems
Computer Applications Technology/Digital
Electronics and Robotics
Electronics/Plastics, Composites and
Advanced Materials
Principles of Engineering
Digital Electronics and Robotics/Intro to Networking
& Computer Systems
Computer Integrated Manufacturing

Manufacturing

Design and Drawing for Production
Material Processing-Metal/Manufacturing Processes
Material Processing-Wood/Composites and
Advanced Materials
Material Processing-Plastics
Computer Applications Technology/Computer
Aided Drafting
Computer Integrated Manufacturing

Transportation

Design and Drawing for Production
Alternative Energy Systems
Transportation Systems/Land Transportation
Computer Aided Drafting

811 DESIGN AND DRAWING FOR PRODUCTION

FULL YEAR

1 UNIT

Prerequisite: None.

****This course may be used to fulfill the one unit Art/Music requirement.****

This is an introductory course in the area of design and technical drawing. It is a very beneficial course for any student interested in pursuing a sequence in Technology or has an interest in a technical field such as Architecture, Engineering, or C.A.D. Topics include: sketching, multiview, pictorial, and C.A.D. A C.A.D. program (Inventor) will be used to create 3-D models of student drawings. Models include: electric guitar, concept car, and maglev trains. The transferable skills developed by the students are based on the standards of technical drawing.

808 INTRODUCTION TO TECHNOLOGY OCCUPATIONS

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course is required of all students pursuing a sequence in technology. Introduction to Technology Occupations is a half-year course with two required modules; The Working Citizen and Personal Resource Management. The course will help students develop transferable skills in the following areas: The working citizen module will help students explore career interests and outline procedures for obtaining a career goal. Topics include writing a resumé and cover letter, interviewing, human relations, good work habits and expectation of employers.

The personal resource management module will introduce the student to topics that will help them make responsible financial decisions. Topics include balancing a checkbook, preparing a 1040 EZ tax form, insurance and banking.

834 MANUFACTURING PROCESSES

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course will introduce students to working with material used in manufacturing, including both metal and plastic. Processes covered will include welding, casting, hot and cold forming along with advanced machining and fabrication methods. Students will use a combination of hands-on experiences along with lecture and readings to explore the topics covered.

This course carries three Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

824 BROADCAST COMMUNICATIONS

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course is designed to introduce the many methods used in today's media to communicate information. Students will study many types of communication technologies such as: graphic, video, audio and television. Students will be introduced to the many technical aspects of broadcasting and production and then broadcast an activity using the video production studio in the high school. Each student will receive instruction on the proper use of the studio cameras, video and audio mixing boards, microphones, teleprompters and the various computer applications needed to develop and air a professional quality video broadcast. This course also invokes teamwork and replicates the daily pressures and excitement news and radio employees encounter in their work.

This course carries three Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

821 TRANSPORTATION SYSTEMS

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course is a comprehensive study of today's transportation. The course will cover transportation in three different areas: land, aerospace, and marine. Activities include: model boat building and launching, model rocket building and launching, and small engine maintenance and repair.

836 HOME ELECTRICITY

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This introductory-level course will cover basic electrical theory and its relation to house wiring. Students will wire typical household circuits in accordance with the National Electrical Code.

837 ALTERNATIVE ENERGY SYSTEMS

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course explores the many resources of energy and its impact on our society. Energy topics include: renewable vs. non-renewable energy, energy conversion, and energy conscious design. The students will design, construct, and test hands-on projects built to engage them in their experimentation and exploration of energy. Example activities include construction of a steam driven turbine-generator, a hot water solar collector, a solar cell model car, along with photovoltaic and fuel cell activities.

833 DIGITAL ELECTRONICS AND ROBOTICS

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This one-semester course is designed to introduce students to applications of digital electronics and robotics. Students will design circuits and program microcontrollers utilizing BASIC or Java programming languages. Utilizing this base of knowledge students will be able to design, build, and program robots to perform various tasks.

831 INTRODUCTION TO NETWORKING AND COMPUTER SYSTEMS**FIRST & SECOND SEMESTER 1/2 UNIT***Prerequisite: None.*

This one-semester course is designed to introduce students to the subsystems in a computer. Students will learn to identify common computer components, explain their purpose, and troubleshoot problems with computers. Students will also learn networking basics including home networking, WiFi, and network servers. Students will also learn basic HTML code used to create websites, as well as creating websites using composition software.

832 ELECTRONICS**FIRST SEMESTER 1/2 CREDIT***Prerequisite: None.*

Explore how electronics that we use every day are designed and built. This advanced course will explain the areas of analog electronics, audio electronics, system controls, and an introduction to digital electronics. Related theory will be taught using Lab experiments, rapid prototyping, and electronic kit-building project.

816 RESIDENTIAL CONSTRUCTION**SECOND SEMESTER 1/2 UNIT***Prerequisite: None.*

This course will provide students with an overview of the complete construction process from financing to finish. Careers and future opportunities will also be explored. Hands-on lab work will include the building of an in-class model during the first ten weeks. In the second half of the course, a full-size storage building will be constructed. Other activities will include: sweat soldering copper plumbing, electrical wiring, cutting trim, ceramic tile, taping, and building counter tops. This course carries three Hudson Valley Community College (HVCC) credits for those students who choose this option. A tuition fee is required for this option.

825 COMPUTER APPLICATIONS TECHNOLOGY**FIRST & SECOND SEMESTER 1/2 UNIT***Prerequisite: None.*

This course will be presented using a hands-on approach using a variety of computer applications and equipment. Students will trace the history of the computer and analyze the impacts it has on society. Activities will include: database management, desktop publishing & graphics, computer aided design, robotics & computer automated machining, web page design, Quicktime video editing, 3-D object design & manipulation and DVD technology. Projects will be completed using Macintosh and Windows based computers.

813 ARCHITECTURAL DRAWING**FIRST & SECOND SEMESTER 1/2 UNIT***Prerequisite: None.*

This is an entry-level course in Architectural design. Students will be introduced to the topics of architectural history, drafting tools and techniques, area/room planning, floor plan design, architectural dimensioning, sectional drawings, exterior elevations, site plans and career exploration. Students will be introduced to the computer-aided design software called Autodesk Revit, which is used in professional Architectural and Engineering businesses. The student will conclude the course with development of a set of plans for a desired house.

814 ARCHITECTURAL DRAWING II**SECOND SEMESTER 1/2 UNIT***Prerequisite: Architectural Drawing I.*

This is an advanced-level course that covers the design of Architectural and Civil Engineering. The course will focus on the advanced concepts of Architecture and will utilize a professional computer-aided drawing software named Autodesk Revit. Students will be introduced to the various materials, construction concepts and mathematical computations needed to properly design and construct a house to local and state specifications. The students

will conclude the course with the development of a set of plans for a desired house using both hand and computer drawing techniques. Students will then construct a scaled model of the set of plans they created.

822 LAND TRANSPORTATION

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This is a general course in the study of land vehicles with a main emphasis on automobiles. Topics include fuel systems, ignition systems, lubrication systems, brakes, transmissions, consumer awareness, and auto insurance obligations.

823 GRAPHIC COMMUNICATIONS

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course is designed to introduce students to the history of graphic communications and how to plan, produce and print a screen printing project. The students will plan, design, and complete a minimum of two projects. In the production of their projects, students will learn the following: graphic design, desktop publishing, electronic publishing techniques, darkroom procedures, screenmaking, printing operation basics, and project finishing.

812 PRINCIPLES OF ENGINEERING

FULL YEAR 1 UNIT

It is recommended that students complete Algebra 1, two units of science, and Design and Drawing for Production before enrolling in this course.

This course will provide students with the opportunity to learn about the major engineering concepts and fields. The course will involve product research, design, construction, and presentation. Students will study structural forces, structural design, materials, ergonomics, packaging, and specifications. Areas of study may include auto safety, machine automation and control, fuel cells, and structures.

826 TECHNICAL PHOTOGRAPHY

FIRST & SECOND SEMESTER 1/2 UNIT

This one-semester course is designed to introduce the student to the basics of photography through the study of: cameras, film processing, print making and color slide production. All necessary equipment is provided for the student, but the student does need to provide the film and paper that will be used to complete the assigned projects.

This course is only open to juniors and seniors.

827 PLASTICS, COMPOSITES AND ADVANCED MATERIALS

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course will give students a chance to explore new materials and how they are processed. Composite materials such as fiberglass, carbon fiber and graphite are used extensively today in a wide range of applications from skateboards and golf clubs to car bodies. Students will have the opportunity to learn about these and other modern materials through a range of hands-on projects and activities.

815 MATERIAL PROCESSING - WOOD

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course will explore production techniques and careers in the wood industry. The complete production process will be explored from planting a forest for timber to the production of a finished product. Students will work hands-on producing two to three projects. Past projects have included: shelf clocks, checkerboards, personal organizers and wooden table lamps.

818 MATERIAL PROCESSING - METALS

FIRST SEMESTER 1/2 UNIT

Prerequisite: None.

This course will explore the areas of raw material resources, shearing, chip removal, fastening, bonding, casting, forging, heat-treating, machining, welding and fabrication.

Students will complete one main fabrication project along with several smaller projects including using computer numeric control machines.

INTEGRATED REGENTS PROGRAM

Please see the program description provided on page 74.

838 COMPUTER AIDED DRAFTING

FIRST & SECOND SEMESTER 1/2 UNIT

Prerequisite: Design and Drawing for Production

This course is designed to increase a student's experience in the drafting area while introducing the computer into the drawing process. Students will complete a variety of drawings including orthographics, pictorials, perspectives, machine drawings, and architectural drawings.

828 COMPUTER INTEGRATED MANUFACTURING

SECOND SEMESTER 1/2 UNIT

Prerequisite: None.

This course applies principles of robotics and automation, and it builds on the Inventor software skills developed in Design and Drawing for Production. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.

817 ENGINEERING CAPSTONE

FULL YEAR 1 CREDIT

Students enter this course through an application process conducted during the prior spring term. Students propose an engineering concentration and potential problems they would like to research and address. Students may pick up an application form in the Technology Education Office.

Successful applicants will utilize local contact persons, electronic mail, and physical and Internet based resources to research and compile data relevant to their focus problem. Students will utilize laboratory facilities to design and prototype potential technical solutions to their focus problem. Students will document their research and present/defend their designs to a panel of instruction and engineering experts.

Program Options

Academic Intervention Services (AIS)

Shaker High School has developed an AIS plan consistent with New York State regulations. Students are provided Academic Intervention Services based on the following criteria:

- Students who have not yet passed a Regents examination required for graduation. These five exams are English, Living Environment, Integrated Algebra, Global History and Geography, and US History and Government.
- Students who scored at level 1 or 2 on the ELA, math, social studies, or science eighth grade assessments.
- Students who have failed a midterm exam in a course leading to a Regents exam needed for graduation (see above list).

Student placement in AIS will be made with the approval of department supervisors, counselors, principals, and AIS coordinators. ***Participation in AIS is mandatory for students who meet the above criteria.***

INTEGRATED REGENTS PROGRAM

The Integrated Regents Program (IRP) is designed to provide students with the opportunity to earn Regents credit in math and science through an integrated-applied curriculum. It is appropriate for students who learn best by a hands-on approach and a slower pace than available in the traditional Regents program.

During the first two years of the program, students will address the Algebra 1 curriculum. In science, students will address the Living Environment curriculum. After completing the second year of the program, students will be administered the Algebra 1 Regents examination and the Living Environment Regents examination. The math and science curricula are integrated with technology, family and consumer science, and business on a semester basis. IRP is designed to be a four-year program. Students must make a two-year commitment initially and may reevaluate their options at the end of the first two years.

During the last two years of the program, students will address those mathematical concepts, many solicited from the Geometry and Algebra 2/Trigonometry curricula, that will promote the understanding of scientific and applied educational concepts. Science will focus on portions of the earth science, chemistry and physics curricula, which apply to the themes addressed in the program. In addition, one semester will concentrate on current environmental issues. Students will also need to select either business, family and consumer science or technology education as their major Occupational Education concentration.

For further information concerning this program, please contact the guidance department or the department supervisor's office. A more detailed, written description of the program is available.

Students enrolled in the fourth year of the Integrated Regents Program have the option of earning college credit through Hudson Valley Community College for the math portions of the program as follows. ***Students will be responsible for paying the reduced course credit fee of \$135. A certificate of residency is required for enrollment in all HVCC courses.***

296 INTEGRATED REGENTS 297 PROGRAM 4R 298

FULL YEAR

1 UNIT

Prerequisites: Successful completion of IRP 3. Students in this program will be eligible to enroll in one Hudson Valley Community College course each semester — Elementary Technical Math 1 and 2 for IRP 4 Technology and Math 150 College Algebra and Trigonometry for IRP 4 Business or FACS. Topics included in the Technology courses are proportions, rules of measurement, direct and inverse variation, graphing and Laws of Sines and Cosines. Topics included in the Business and FACS courses are set theory, number systems, logic, mathematical systems, matrices, statistics, and probability.

Students will be responsible for paying the reduced course credit fee.

ADVANCED PLACEMENT PROGRAM

Shaker High School offers a variety of Advanced Placement courses for students who wish to earn advanced college placement or college credit in particular subjects. Awarding of this advanced placement or course credit is based on the student's AP exam grade and the specific requirements and expectations of the college or university that the student will be attending.

Please note that the Advanced Placement Examination is required of all students taking an AP course. A fee is charged by the College Board and must be paid or the student may be placed in a different course. Students must complete an AP application for each Advanced Placement course for which they are interested in enrolling. Applications can be obtained from the Supervisors' Office. The specific deadline date will be clearly marked on the applications and also announced by subject area teachers and supervisors. Questions about the Advanced Placement Program should be directed to the Guidance Counselors. Specific AP courses should be discussed with the Department Supervisors or District Directors.

759 AP ART HISTORY (P)

FULL YEAR **1 UNIT**
Prerequisite: FSM of 90 or higher in Regents level English and FSM of 85 or higher in Regents level history.
See page 24 for course description.

053 AP ENGLISH LITERATURE AND COMPOSITION (P)

FULL YEAR **1 UNIT**
Prerequisite: A grade of 90 or better in 11H or 11APP, a grade of 90 or better on the English Comprehensive Regents, and teacher recommendation (based on critical reading and writing skills, class participation, and work habits).
See page 35 for course description.

415 AP FRENCH (P)

FULL YEAR **1 UNIT**
Prerequisite: A grade of 95 or better in Modern Language 4R and teacher recommendation (based on students' listening, speaking, reading and writing skills, class participation and work habits).
See pages 40-41 for course description.

445 AP SPANISH (P)

FULL YEAR **1 UNIT**
Prerequisite: A grade of 95 or better in Modern Language 4R and teacher recommendation (based on students' listening, speaking, reading and writing skills, class participation and work habits).
See pages 40-41 for course description.

241 AP CALCULUS AB (P)

FULL YEAR **1 UNIT**
Prerequisites:

1. Achievement of minimum final average grade of 90 in Algebra 2/Trigonometry and Precalculus or 85 in Algebra 2/Trigonometry Honors and Precalculus Honors.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Math teachers' recommendations.

See pages 46-47 for course description.

242 AP CALCULUS BC (P)

FULL YEAR **1 UNIT**
Prerequisites:

1. Achievement of minimum average of 93 in both Algebra 2/Trigonometry Honors and Precalculus Honors.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Math teachers' recommendations.

See page 47 for course description.

247 AP STATISTICS-PROBABILITY

FULL YEAR **1 UNIT**
Prerequisite: Minimum average of 80 in Math Precalculus Honors or Precalculus.
See page 47 for course description.

952 AP COMPUTER SCIENCE (P)**FULL YEAR 1 UNIT**

Prerequisite: Computer Science 2 or, following a placement evaluation, permission by the Department Supervisor.

See page 48 for course description.

344 AP BIOLOGY (P)**FULL YEAR (DOUBLE PERIOD)
1 1/2 UNITS**

Prerequisite: Enrollment in Advanced Placement Biology is based upon the student's:

1. Achievement of a FSM of 90% in Regents Biology, Regents Chemistry and Regents Physics.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Writing ability.
5. Science teachers' recommendations or by permission of the Department Supervisor.

See pages 56-57 for course description.

345 AP CHEMISTRY (P)**FULL YEAR (DOUBLE PERIOD)
1 1/2 UNITS**

Prerequisite: Enrollment in Advanced Placement Chemistry is based upon the student's:

1. Achievement of a FSM of 90% in Regents Chemistry, an FSM of 90 in Regents Physics, and enrolled in Precalculus Honors.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Writing ability.
5. Science teachers' recommendation or by permission of the Department Supervisor.

See page 57 for course description.

346 AP PHYSICS (B LEVEL) (P)**FULL YEAR (1.5 PERIODS)
1 UNIT**

Prerequisite: Enrollment in Advanced Placement Physics (B level) is based upon the student's:

1. Achievement of a FSM of 90% in Chemistry H, a 93 in Chemistry R and an FSM of 93% in Algebra 2/Trigonometry or equivalent.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Writing ability.
5. Science teachers' recommendation or by permission of the Department Supervisor.

See page 57 for course description.

348 AP PHYSICS (C LEVEL-MECHANICS & ELECTRICITY AND MAGNETISM) (P)**FULL YEAR (DOUBLE PERIOD)
1 1/2 UNITS**

Prerequisite: Enrollment in Advanced Placement Physics (C level) is based upon the student's:

1. Achievement of a FSM of 90% in Advanced Placement Physics B, Physics H, or Physics R.
2. Enrollment in or completion of Calculus.
3. Problem solving and analytical abilities.
4. Work habits and career plans.
5. Science teachers' recommendation or by permission of the Department Supervisor.

See page 58 for course description.

347 AP ENVIRONMENTAL SCIENCE (P)**FULL YEAR 1 UNIT**

Prerequisite: Enrollment in Advanced Placement Environmental Science is based upon the student's:

1. Achievement of a FSM of 85% in Regents Biology and an 85% in Regents Chemistry.
2. Problem solving and analytical abilities.
3. Work habits and career plans.
4. Science teachers' recommendation or by permission of the Department Supervisor.

See page 58 for course description.

120 AP WORLD HISTORY (P)

FULL YEAR **1 UNIT***Prerequisite:*

1. Recommendation of the grade 9 social studies teacher; and
2. Completion of 9th grade Advanced Placement World History within expected range; and
3. Demonstration of superior critical reading and writing skills based upon departmental, district, and national standardized assessments.

See page 61 for course description.**130 AP UNITED STATES HISTORY (P)**

FULL YEAR **1 UNIT***Prerequisites:*

1. Recommendation of the 10th grade teacher; and
2. Completion of AP World History 10th grade with expected range of achievement
3. A final school mark of 93 or above in English H and Social Studies H; and
4. Demonstration of critical reading and writing skills based upon departmental, district, New York State, and national standardized assessments, or
5. Permission of the department supervisor.

See page 62 for course description.**160 ECONOMICS 12H/AP UNITED STATES GOVERNMENT AND POLITICS (P)**

FULL YEAR **1 UNIT***Prerequisites:*

1. Recommendation of the grade 11 social studies teacher; and
2. A final school mark of 90 or above in 11H English and Social Studies; and
3. A grade of 90 or above on the New York State Regents in U.S. History and Government; and
4. Demonstration of critical reading and writing skills based upon departmental, district, New York State, and national standardized assessments.

See page 64 for course description.

THE UNIVERSITY IN THE HIGH SCHOOL PROGRAM

In order to provide qualified Shaker High School students with an opportunity to acquire college credit, the University In The High School Program developed in collaboration with SUNY has been expanded. Courses are offered in the foreign languages, art, English, mathematics and science. Shaker High School Department Supervisors and SUNY Administrators are also evaluating other courses which may be offered in the future.

In order to enroll in a UHS course, students must meet the established prerequisites. College credit will be granted in UHS courses if the student achieves a grade of 75 or higher. A student must earn a minimum grade of 65 in order to receive Shaker High School credit towards graduation. There are no exemptions from final examinations. Course descriptions for each UHS course follow. Questions about the program should be directed to the Guidance Counselors; individual courses should be discussed with Department Supervisors. There are many advantages to students enrolling in the University in the High School Program. For example:

1. They can earn college and high school credit for successfully completing the courses.
2. They can fulfill first-year courses required for college graduation. This would enable the students to enroll in courses of their choice during their freshman year, including those in their major area of concentration.
3. The cost of a college education could be reduced depending upon the college and the student's plans. The student could reduce college attendance from four to three years.
4. Frequent class meetings are in a structured high school environment.
5. They will be instructed by professionals who are knowledgeable, experienced and have been trained to teach.
6. Shaker High school teachers are accessible to students.

7. The transcript is acceptable throughout the SUNY system and many other colleges and universities would also award credit because of the SUNY association.
8. The tuition for each course would vary between \$110-150. However, in cases of special financial need some students may be eligible for a scholarship which would cover up to 75% of their tuition.

**713 DRAWING (P)
FULL YEAR**

**3 COLLEGE CREDITS UALBANY
ART 105 - Beginning Drawing**

Prerequisite: Studio in Art. Intended for Juniors and Seniors.

Select Sophomores will need to have a current academic transcript reviewed by UHS, SUNY Administrators.

See page 17 for course description.

**553 COLLEGE ACCOUNTING (P)
FULL YEAR**

**3 COLLEGE CREDITS UALBANY
BACC 211 - Financial Accounting**

Prerequisite: Passing grade on the Algebra 1 Regents exam.

See page 28 for course description.

**051 READING LITERATURE (P)
FULL YEAR**

**3 COLLEGE CREDITS UALBANY
English 121 - Reading Literature**

Prerequisite: Minimum average of 80 in English 11APP, 11H, or 11R.

See page 35 for course description.

**MODERN LANGUAGE 4R (P)
FULL YEAR**

**414 FRENCH 4R
4 COLLEGE CREDITS UALBANY
AFRE 221Y - Intermediate French I**

**424 GERMAN 4R
3 COLLEGE CREDITS SUNY OSWEGO
SUNY OSWEGO 201 -
Intermediate German I**

- 434 RUSSIAN 4R**
5 COLLEGE CREDITS UALBANY
ARUS 201Y - Intermediate Russian I
- 444 SPANISH 4R**
4 COLLEGE CREDITS UALBANY
ASPN 103 - Intermediate Spanish I
Prerequisite: A final school mark of 80 or above in the previous course or the approval of the Department Supervisor.
 See page 40 for course description.
- MODERN LANGUAGE 5R (P) FULL YEAR**
-
- 415 FRENCH 5R**
4 COLLEGE CREDITS UALBANY
AFRE 222Y - Intermediate French II
- 425 GERMAN 5R**
3 COLLEGE CREDITS SUNY OSWEGO
SUNY OSWEGO 202 -
Intermediate German II
- 435 RUSSIAN 5R**
5 COLLEGE CREDITS UALBANY
ARUS 202Y - Intermediate Russian I
- 445 SPANISH 5R**
3 COLLEGE CREDITS UALBANY
ASPN 104 - Intermediate Spanish II
Prerequisite: A final school mark of 80 or above in the previous course or the approval of the Department Supervisor.
 See page 40 for course description.
- CLASSICAL LANGUAGE (P) FULL YEAR**
-
- 463 LATIN 3R**
4 COLLEGE CREDITS UALBANY
ACLL 102 - Elementary Latin II
Prerequisite: A final school mark of 80 or above in the previous course or the approval of the Department Supervisor.
 See page 41 for course description.
- 246 TOPICS IN ADVANCED MATH (P)**
FULL YEAR
-
- 3 COLLEGE CREDITS UALBANY**
Mat 105 - Finite Mathematics
Prerequisite: Minimum average of 80 in Algebra 2/Trigonometry or Algebra 2/Trigonometry Honors.
 See page 46 for course description.

- 245 PRECALCULUS (P)**
FULL YEAR
-
- 3 COLLEGE CREDITS UALBANY**
Mat 100 - Precalculus Mathematics
Prerequisite: Minimum average of 80 in Algebra 2/Trigonometry or Algebra 2/Trigonometry Honors.
 See page 46 for course description.
- 247 AP STATISTICS-PROBABILITY R (P)**
FULL YEAR
-
- 3 COLLEGE CREDITS UALBANY**
Mat 108 - Elementary Statistics
Prerequisite: Minimum average of 80 in Precalculus or Precalculus Honors.
 See page 47 for course description.
- 248 CALCULUS (NON AP)**
FULL YEAR
-
- 3 COLLEGE CREDITS UALBANY**
Mat 112 - Calculus 1
Prerequisite: Minimum average of 80 in Precalculus or 75 in Precalculus Honors.
 See page 47 for course description.
- SCIENCE RESEARCH (P)**
FULL YEAR
-
- UP TO 12 COLLEGE CREDITS UALBANY**
- 350 SCI RESEARCH 10H**
351 SCI RESEARCH 11H
352 SCI RESEARCH 12H
Prerequisite: Completion of Grade 9 and desire to supplement education through science research, willingness to commit to three-year program, science teachers' recommendations, abilities, work habits, and career plans.
 See page 59 for course description.
- CAS 109 Intermediate Science Research (2 credits) Summer between 10H & 11H**
CAS 110 Intermediate Methods of Research (4 credits) 11H
CAS 209 Advanced Science Research (2 credits) Summer between 11H & 12H
CAS 210 Advanced Methods of Research (4 credits) 12H

ADDITIONAL COLLEGE CREDIT COURSES

Several Shaker High School Departments have established articulation agreements with the State Universities at Albany and Cobleskill, Sage College of Albany, Hudson Valley and Schenectady Community Colleges. These agreements provide opportunities to enhance our course offerings as well as enrich the high school experiences of those students who qualify to enroll in them. It is important to note that students who successfully complete these courses receive college credit. In some cases these courses may be transferred to other institutions. However, it is strongly recommended that students discuss the articulation agreement between Shaker High School and the institution that is granting college credit with either their teacher or the Department Supervisor of the courses in which they plan to enroll.

**760 SAGE COLLEGE OF ALBANY
ADVANCED STUDIO 3:
2 DIMENSIONAL DESIGN
FULL YEAR**

**3 COLLEGE CREDITS SAGE
ART 105 - 2 Dimensional Design
See page 19 for course description
and prerequisites.**

**743 SAGE COLLEGE OF ALBANY
ADVANCED STUDIO 2:
BEGINNING DRAWING
FULL YEAR**

**3 COLLEGE CREDITS SAGE
ART 101 - Beginning Drawing
See page 19 for course description
and prerequisites.**

**724 SAGE COLLEGE OF ALBANY
COMPUTER GRAPHICS 1 AND
726 COMPUTER GRAPHICS 2
DIGITAL IMAGING I
BOTH SEMESTERS**

**3 COLLEGE CREDITS SAGE
GDN 217 - Digital Imaging I
See page 22 for course description
and prerequisites.**

**741 SAGE COLLEGE OF ALBANY
ADVANCED DIGITAL ARTS:
DIGITAL IMAGING II
FULL YEAR**

**3 COLLEGE CREDITS SAGE
GDN 220 - Digital Imaging II
See page 23 for course description
and prerequisites.**

**522 PRINCIPLES OF MARKETING
SECOND SEMESTER**

**3 COLLEGE CREDITS HVCC
MKTG 120 - Principles of Marketing
Prerequisite: None.
See page 29 for course description.**

**554 BUSINESS STATISTICS (P)
SECOND SEMESTER**

**4 COLLEGE CREDITS HVCC
BADM 220 - Business Statistics
Prerequisite: Passing grade on Algebra 1
Regents exam.
See page 28 for course description.**

**527 E-COMMERCE
EITHER SEMESTER**

**3 COLLEGE CREDITS SCCC
BUS 109 - E-Commerce
Prerequisite: None.
See page 28 for course description.**

**513 MATH AND FINANCE (P)
FIRST SEMESTER**

**3 COLLEGE CREDITS HVCC
BADM 221 - Quantitative Business
Applications
Prerequisite: Passing grade on Algebra 1
Regents exam.
See page 26 for course description.**

**555 ORGANIZATION & MANAGEMENT
EITHER SEMESTER**

3 COLLEGE CREDITS HVCC
BADM 207 - Organization & Management
Prerequisite: None.
 See page 29 for course description.

**834 MANUFACTURING PROCESSES
SECOND SEMESTER**

3 COLLEGE CREDITS HVCC
MFTS 211- Manufacturing Processes
Prerequisite: None.
 See page 70 for course description.

**629 CHILD DEVELOPMENT
SECOND SEMESTER**

3 COLLEGE CREDITS HVCC
EDUC 100 - Child Development
Prerequisite: None.
 See page 38 for course description.

**816 RESIDENTIAL CONSTRUCTION
SECOND SEMESTER**

3 COLLEGE CREDITS HVCC
CNST 130 - Principles of Light Construction
Prerequisite: None.
 See page 71 for course description.

**824 BROADCAST COMMUNICATIONS
EITHER SEMESTER**

3 COLLEGE CREDITS HVCC
ARTS 140 - Television Production I
Prerequisite: None.
 See page 70 for course description.

**298 IRP 4 MATH - TECHNOLOGY
FULL YEAR**

6 COLLEGE CREDITS HVCC
Math 105 - Elementary Technical Mathematics I and 106 - Elementary Technical Mathematics II

**296 IRP 4 MATH - BUSINESS
297 IRP 4 MATH - FACS
FULL YEAR COURSE AT SHS
(FIRST SEMESTER FOR HVCC)**

4 COLLEGE CREDITS HVCC
Math 150 - College Algebra/Trigonometry

**714 STUDIO IN JEWELRY
EITHER SEMESTER**

2 COLLEGE CREDITS HVCC
CRFT 141 - Jewelry 1
Prerequisite: Studio in Art.
 See page 20 for course description.

**744 ADVANCED STUDIO IN JEWELRY
EITHER SEMESTER**

2 COLLEGE CREDITS HVCC
CRFT 241 - Jewelry 2
Prerequisite: Studio in Art and a grade of 85 or higher in Studio in Jewelry.
 See page 21 for course description.
 (Pending approval)

**725 STUDIO IN STAINED GLASS
EITHER SEMESTER**

2 COLLEGE CREDITS HVCC
CRFT 151 - Intro to Stained Glass
Prerequisite: Studio in Art.
 See page 21 for course description.

**755 ADVANCED STUDIO IN STAINED
GLASS
EITHER SEMESTER**

2 COLLEGE CREDITS HVCC
CRFT 251 - Stained Glass 2
Prerequisite: Studio in Art and a grade of 85 or higher in Stained Glass.
 See page 21 for course description.
 (Pending approval)

9th GRADE - COURSE NAME & NO.

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10th GRADE - COURSE NAME & NO.

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11th GRADE - COURSE NAME & NO.

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12th GRADE - COURSE NAME & NO.

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