

This Course Selection Guide has been prepared to help students plan for their futures. Planning a high school program is a major task that every student and parent must face. However, it is the responsibility of the guidance counselor to review all aspects of each student's record and to assist in guiding that individual in the development of an appropriate program of study.

Planning next year's course of study is the primary task now at hand. Please use this Guide as an introduction to the courses Arlington High School will offer next year. A review of the course descriptions found on the pages to follow should be the beginning stage of each student's investigation. Department coordinators and teachers should be consulted regarding the requirements and depth of study included within each potential course. All questions related to course selections should be referred to the guidance office.

Please make full use of this Guide in planning a program and rest assured that all Arlington personnel are anxious and willing to be of assistance. Please be advised that the school reserves the right to withdraw any course in which there is an insufficient enrollment.

As the Board of Regents and the State Education Department move forward with efforts to raise standards, changes in course offerings and descriptions may occur.

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**REQUIREMENTS FOR HIGH SCHOOL GRADUATION**  
*(for students entering grade 9 in September 2001 and thereafter)*

**Regents Diploma  
Test Requirements**

English Regents  
Math Regents  
Global History Regents  
US History Regents  
Science Regents

**Advanced Regents Diploma  
Test Requirements**

English Regents  
2 - Math Regents  
Global History Regents  
US History Regents  
2 - Science Regents

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**Course Requirements**

4 credits in English  
4 credits in Social Studies  
3 credits in Math  
3 credits in Science  
2 credits in Physical Education  
1 credit in Art and/or Music  
.5 credit in Health  
1 credit in Foreign Language

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**Course Requirements**

4 credits in English  
4 credits in Social Studies  
3 credits in Math  
3 credits in Science  
2 credits in Physical Education  
1 credit in Art and/or Music  
.5 credit in Health  
3 credits in Foreign Language  
or  
5 units in Occup. Ed or the Arts

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completed 22 credits

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completed 22 credits

The requirements listed above are meant to serve as a guide only and are not inclusive of all the various program options available. Please contact your guidance counselor with questions.

## ADVANCED PLACEMENT COURSES

A course requirement for any Advanced Placement Course is the Advanced Placement examination given in May. A satisfactory score could earn college credit, advanced standing or both. There is a fee for these examinations.

## HIGH SCHOOL CREDIT FOR COLLEGE COURSES

Some students may wish to enroll in selected collegiate courses in area colleges prior to high school graduation. The evaluation of credit for such college course work will be based on the following criteria:

One half unit is acquired by the successful completion of a subject for one semester. One quarter credit is acquired by the successful completion of a Physical Education course for one semester. Any college course taken to meet the Health requirement for graduation will be factor 8. Two credit hour college courses will be factor 8; three credit hour college courses will be factor 9; and four credit hour college courses will be factor 10. .

Prior approval of the course by the high school guidance counselor is necessary.

## THE MARIST/ARLINGTON BRIDGE PROGRAM

This program offers seniors the opportunity to fulfill their high school graduation requirements while simultaneously completing a full year of college work during their senior year at Arlington. Acceptance into the program is contingent upon the successful completion of a student's junior year. Students must also meet the conditions of Arlington course prerequisites.

Seniors are required to take AP English 12 Literature & Composition on the Arlington High School campus taught by a high school faculty member under the supervision of Marist College. Students will be allowed to take up to 15 credits plus lab courses each semester. Four courses will be taught on the Marist College Campus by Marist professors.

### CLASS RANK/FACTOR

Each course is assigned a factor. Weighting factors appear to the right of the course title. Factors are 10=AP, 9=Honors, 8=Regents/College Prep, 7=School. The formula is  $GPA = \frac{\text{sum of (grade} \times \text{factor} \times \text{credit)}}{\text{total credit}}$  for each course divided by total credit (excluding pass/fail courses). The average listed on the transcript is an average based on the GPA divided by 8, the college prep factor.

### CONDITIONS FOR PASS/FAIL OPTION

All students are eligible to select from the available pass/fail electives. The option is restricted to one course per semester and a maximum of one credit per year. Pass/fail electives are compiled on an annual basis through recommendations from each department. Recommendations are subject to the approval of the principal.

Once a student selects a pass/fail option, no numerical grade for the course will appear on report cards or permanent records. Although students must fulfill the requirements of the course, quarterly and final grades are reported merely as P for passing or F for failing. Grades for class work, homework, tests, etc., will be maintained by the instructor as they are for any other student.

Pass/fail option application forms are available in the guidance office. It is the responsibility of the student applicant to file the completed forms in duplicate (one for guidance; one for the course instructor) one week before the last day of the first marking period of that course. All forms must be signed by a parent or guardian of the application, thus authorizing the student to enroll in a course on a pass/fail basis.

If the number of requests for a given course exceeds the maximum enrollment figures, priority will be given to students who are taking the course for numerical grades.

## INDEPENDENT STUDY PROGRAM

### General Guidelines

The purpose of the Independent Study Program is to offer the student an opportunity for program enrichment. It is not to be substitute for regular school offerings and cannot be used to satisfy core and sequence requirements.

Enrollment in Independent Study will be affected by student interest availability of an advisor, and the student's demonstrated ability to complete successfully his or her other subjects while pursuing Independent Study. Independent Study grades are Pass/Fail. No numerical grades are given.

The student must secure the form for Independent Study from the guidance counselor. The student must return the completed form (which includes the written approval of the sponsoring teacher, counselor, department coordinator, parent and principal) to the counselor by the end of the 4th week of the semester in which the program will commence. Following application approval, the student is expected to complete his or her work in accordance with the procedure outlined in the application and within the specified time limits. Independent Study in Physical Education, under certain criteria, is available.

### SCHEDULE CHANGES

Student schedules are planned in consultation with guidance counselors. Changes should be requested only after serious consideration and the approval of a parent or guardian has been given.

Due to class size limitation and/or scheduling conflicts, it may be necessary to alter a student's first choice course selections. Students should be prepared to choose alternative courses.

### **ENGLISH**

All students will be responsible for demonstrating English proficiency on a

statewide Comprehensive Regents Examination. The English department will offer curricula that will provide students with the opportunity to participate in programs that offer challenging academic experiences.

## **ENGLISH COURSE OF STUDY**

The English course of study (Grades 9-12), referred to by the NYS Standards for English Language Arts as the "Commencement Level," will provide the foundation that is essential to the development of analytical thinking, reading, listening, writing, and speaking skills.

Students will become skilled readers and listeners of prose, poetry, and expository text written in a variety of periods, disciplines, and rhetorical contexts, and skilled writers and speakers who communicate for a variety of purposes.

Both their reading/listening and writing/speaking should make students aware of the interactions among a writer's purposes, the audience's expectations, and the subject matter.

Students will write and speak in a variety of forms - narrative, descriptive, expository, argumentative - and on a variety of subjects from personal experiences to public policies, and from imaginative literature to popular culture.

Students will engage in personal and reflective writing and speaking that fosters the development of confidence and voice in any context.

Library skills will be developed through a variety of extended research projects at all levels of instruction.

Performance indicators, assessing student performance throughout all grades levels, will serve as the basis for the development of a "commencement" portfolio to be used as a final assessment for all course offerings.

## **FOUNDATIONS OF READING & WRITING**

Students with specific educational needs will be assigned to the Foundations of Reading & Writing program. A personalized educational plan will be designed by a Certified Reading Specialist to accommodate students' academic needs and learning styles. Additional time on task and instruction will be provided in a small group environment.

- 108 Grade 9-Regents  
 113 Grade 10-Regents  
 118 Grade 11-Regents  
 Senior Electives

With consideration to the aforementioned description of the English Course of Study, students in the REGENTS (three-year) program will have the opportunity to satisfy the NYS requirement in English Language Arts by demonstrating proficiency with the Comprehensive Examination in English in the June of their JUNIOR year.

Students will be expected to:

read and listen to an extensive series of complex and challenging multi-genre literature and expository texts.

write and speak about literature that reflects a richness of language and analytical complexity.

develop library skills through a variety of extended research projects at all levels of instruction.

Formal extended research projects:

- |          |                                 |
|----------|---------------------------------|
| Grade 9  | “A Person Worth Knowing”        |
| Grade 10 | Mythology                       |
| Grade 11 | American Author                 |
| Grade 12 | design based on senior elective |

engage in an independent extended reading experience during the summer session of each year prior to placement in the next level of the REGENTS program.

110 Grade 9-Honors

Recommendations: A final average of 90 or better in Grade 8 English



Teacher recommendation utilizing the AHS English department  
*“Teacher Evaluation Form”*

115 Grade 10-Honors

Recommendations: A final average of 85 or better in English 9 Honors or a final average of 90 or better in English 9 Regents.  
Teacher recommendation utilizing the AHS English department  
*“Teacher Evaluation Form”*

With consideration to the aforementioned description of the English Course of Study, students who seek the challenge of an HONORS program will have the opportunity to satisfy the NYS requirement in English Language Arts by demonstrating proficiency with the Comprehensive Examination in English in January of their JUNIOR year.

Students will be expected to:

read and listen to an extensive series of complex and challenging multi-genre literary and expository texts.

write and speak about literature in a way that reflects a richness of language usage and a complexity of analysis.

develop library skills through a variety of extended research projects at all levels of instruction.

Formal extended research projects:

Grade 9	Short story author
Grade 10	Mythology

engage in an independent extended reading and writing project during the summer session prior to each year of participation in the HONORS program. This will be an integral part of the curriculum which will begin for students with placement in the ninth grade program.

consider the successful completion of the AP English 11 Language and Composition and/or AP English 12 Literature and Composition examination as an ultimate objective.

122 AP ENGLISH 11 LANGUAGE & COMPOSITION (1 Unit - Full Year) (Factor 10)

Recommendation: A final average of 85 or better in English 9 Honors and 10 Honors, or a final average of 95 in English 10 Regents. An evaluation of a portfolio inclusive of on demand tasks relative to the Advanced Placement English Language & Composition assessments. An evaluation of an English department “*Teacher Evaluation Form.*” An evaluation of a “*Self-Statement & Justification*” essay relative to the student’s intent to enter this course of study.

Description: Students in this college-level course will have previously demonstrated strong writing and analytical skills. Students read and carefully analyze a broad and challenging range of prose selections, and develop their awareness of how language works. Through close reading and frequent writing, students develop the ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. The reading assignments will feature expository, analytical, and argumentative essays from a variety of authors and historical contexts, as well as an examination and response to American literature. **The AP exam is required.**

Requirements: Satisfactory completion of written and oral assignments, tests, class participation based on reading assignments, extended research project, a final examination and the AP English Language and Composition Examination.

**STUDENTS WILL HAVE AN OPPORTUNITY TO SELECT COURSES IN THE SENIOR ELECTIVE PROGRAM UPON COMPLETION OF THEIR GRADE 11 ENGLISH REQUIREMENT. COURSES ARE OFFERED AS FULL YEAR OR SEMESTER OPTIONS.**

## SENIOR COURSES

**College Preparatory English 12 and Advanced Placement English 12 Literature & Composition are full year courses. Students who do not elect to take a full year Senior English course must take two single-semester courses. Students are asked to select one course for each semester. At least one selection must be a multi-genre literature course; that is, a course which includes more than one type of literature such as poetry, the essay, the novel, drama, etc. Multi-genre courses are starred.**

### FULL YEAR OPTIONS:

\*126 COLLEGE PREPARATORY ENGLISH 12 (1 Unit - Full Year) (Factor 8)

Description: This course of study is a comprehensive college preparatory curriculum that will include active reading, writing, and discussion of American and English literature. Extensive writing in the form of essays, compositions, and reaction papers will also be emphasized. A research paper will reflect collegiate expectations.

Requirements: Daily reading and discussion, frequent writing tasks, class participation, research project, and a final examination.

\*127 AP ENGLISH 12 LITERATURE & COMPOSITION

(1 Unit - Full Year)

(Factor 10)

Recommendations: A final average of 85 or better in AP English 11 or a final average of 95 or better in English 10 & 11 Regents. An evaluation of a portfolio inclusive of on demand tasks relative to the Advanced Placement English Literature & Composition assessments. An evaluation of an English department “*Teacher Evaluation Form.*” An evaluation of a “*Self-Statement & Justification*” essay relative to the student’s intent to enter this course of study.

Description: Students in this college-level course will have previously demonstrated strong writing and analytical skills. Students read and carefully analyze a broad and challenging range of prose selections, and develop their awareness of how language works. Through close reading and frequent writing, students develop the ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. This course emphasizes a chronological approach to English literature and a concentration on three literary genres: the novel, drama, and poetry. College credit may be earned for this course through the Marist Bridge Program. **The AP examination is required.**

Requirements: Satisfactory completion of written and oral assignments, tests, class participation based on reading assignments, extended research project, a final examination and the AP English Literature and Composition Examination.

Textbooks (teacher selected and not limited too:) *Norton Anthology of English Literature, The English Tradition: Poetry*, selected reading from *Seven Famous Greek Plays, The Canterbury Tales*, selected reading from Shakespeare (*King Lear* and / or *Macbeth*), Shaw, Swift and Dostoevsky. In addition, Faust, *Other Voices-Other Vistas*, Vintage Book of Contemporary World Poetry, readings from Chekhov, Beckett, Ibsen, Sartre, and free choice books from selected lists are used.

### **HALF – YEAR OPTIONS:**

#### **MULTI – GENRE:**

(Must select one if student is pursuing two half year courses. Can select two.)

\*124 PRACTICAL SENIOR ENGLISH 12 (1/2 Unit - Full Year) (Factor 8)

Description: This course of study is a one semester elective course that provides students with a pragmatic English curriculum. Most of the units of study are career oriented. Students will explore career options through a research project, a current event report, a magazine analysis project, and other interesting assignments. The novels and short stories all address real world issues, and class discussions will address these important topics. The class includes creative writing, including an autobiography project.

Requirements: Reading includes five novels, a short story unit and a poetry unit. The course utilizes newspapers, magazines, letters, and other texts. The course includes an extensive Regents and RCT review unit, too. Other assignments include a major library research paper, thesis paper, expository essays, and a host of other formal and creative writings. The course culminates with a major autobiography project. This course includes a strict attendance grade for each quarter.

\*129 READING NONFICTION (1/2 Unit - One Semester) (Factor 8)

Description: This course will focus on real life experiences. Students will be expected to read from a variety of true-life adventures and travel experiences. Readings will be taken from magazines, anthologies, newspapers, books, and essays. Film media will also provide the basis for discussion and critical thinking. This course will be developed in accordance with the NY State Education Department standards for reading/listening and speaking/writing.

Requirements: Daily in-class reading, weekly writings, regular participation in class discussions, and a final examination.

\*132 CONTEMPORARY LITERATURE (1/2 Unit - 1 Semester) (Factor 8)

Description: This course will provide an opportunity for students to interact independently, in small groups, and as a total class, with literature that reflects the varied, exciting, and frequently complex world of adolescence. It will deal with selected short stories and novels from some of the well known contemporary authors of young adult literature. Oral and written projects will elicit a more thought provoking analysis of the literature. Students will develop a degree of sensitivity to young adult literature in terms of its treatment of humanistic values, development of moral perspective, respect for individual autonomy, and the ability to reason. Students will also gain an awareness of how literature can assist in forming a moral character.

Requirements: Journal writing, weekly writing on a variety of topics generated by the reading, class participation through discussions and projects, and a portfolio assessment.

\*133 SPORTS IN LITERATURE (1/2 Unit - 1 Semester) (Factor 8)

Description: This course consists of an examination of sports from several perspectives through interaction with literature presented by sports columnists, the media, and contemporary authors. Reading in this course will be both pleasurable and thought provoking, covering a range of modern fiction, non-fiction, poetry, biographies, and commentaries. Writing assignments will be descriptive and critical in an attempt to provide the student with opportunities to express personal reactions with confidence and clarity. Through the use of sports literature, the student will develop a greater sensitivity to the world of sport and the relationship between that world and contemporary society.

Requirements: Individual reading, weekly writing, writing conferences with the teacher, a library research project, and a portfolio assessment.

\*135 ENGLISH LITERATURE (1/2 Unit - 1 Semester) (Factor 8)

Description: This course includes a general survey of English literature, including the Anglo-Saxon Period, the Medieval Period, the Elizabethan Period, the Seventeenth Century, the Eighteenth Century, the Romantic Period, and the Victorian Period. Emphasis is on the understanding of and appreciation for poetry, especially from the Seventeenth Century, the Romantic Period, and the Victorian Period. There is also in-class emphasis on such works as Chaucer's Canterbury Tales and Shakespeare's Macbeth.

Requirements: Satisfactory completion of assignments, tests, essays, and a final examination.

Textbooks: *Adventures in English Literature*

\*136 WOMEN IN LITERATURE (1/2 Unit - 1 Semester) (Factor 8)

Description: This course of study will examine writings by and about women. Through the use of fiction, poetry, essays, speeches, and newspaper and magazine articles, students will explore the changing role and image of women in literature. Course material will emphasize North American literature, with some time devoted to women's writing from other parts of the world. A historical/literary chronology will be presented. This course will be developed in accordance with the NY State Education Department standards for reading/listening and speaking/writing.

Requirements: Class readings and writings, and individual written and oral presentations.

\*137 WORLD LITERATURE (1/2 Unit - 1 Semester) (Factor 8)

Description: This course of study will focus on reading selections from British, Greek, Russian, and Western European literature. Selections from African, Japanese, Chinese, Indian, and Latin American literature may also be included in this curriculum. The course content is designed to increase the student's range of acquaintance with literary works. Students will engage in collaborative learning experiences, including comprehensive reading, listening, writing, and oral presentations.

Requirements: Satisfactory completion of reading, writing, and performance assignments, tests, and a final project.

\*139 AFRICAN-AMERICAN LITERATURE (1/2 Unit - 1 Semester) (Factor 8)

Description: This course of study will examine fiction, poetry, essays, and speeches by African-American writers. It will analyze the portrayal of this group from Colonial times to the present. Material will be presented chronologically with emphasis on the Harlem Renaissance, the 1960's, and the present. This course was developed in accordance with the NY State Education Department standards for reading/listening and speaking/writing.

Requirements: Class readings and writings, and individual written and oral presentations.

\*140 PLAYWRITING AND PERFORMANCE (1/2 Unit - 1 Semester) (Factor 8)

Description: This semester course will focus on: reading dramatic literature in the forms of plays, poetry and monologue prose (both fiction and non-fiction), writing scenes, and creating each student's "magnum opus" or "great work" in playwriting format. Playwrights and works from Shakespeare's *Comedy of Errors* to O'Neill and Miller will be analyzed along with various poets and prose writers. Acting exercises will be used to elicit the creative writing of scenes and to understand the motivations for characters' actions. Students will build their Writing Portfolio with creative, original work fostered by the study of literary pieces. Each student's final project will be the writing of an original play.

Requirements: Daily reading and analysis of literature, quizzes, tests, individual and group acting, use of the writing process to create written scenes, and professional development of an originally written play as a final project.

\*146 WAR IN LITERATURE (1/2 Unit – 1 Semester) (Factor 8)

Description: This course is an intensive journey through the effects of war on both American and international societies throughout history as portrayed through literature. This one semester course will provide an examination of war from various perspectives through interaction with literature presented by; wartime columnists, classical texts, world renowned masterpieces, contemporary authors, and various other media venues. Readings have been selected to be both pleasurable and thought provoking, covering a range of modern fiction, non-fiction, poetry, biography, interview, commentary, and classical resources.

Requirements: Written responses are designed to be expressive, descriptive, narrative, and critical in an attempt to provide students with the opportunity to share personal reactions with confidence and clarity. Through the use of literature and other media forms, the primary objective of the course is to generate comprehensive reading, writing, listening and speaking skills. A research project and a final portfolio assessment are included.

\*147 SHAKESPEARE (1/2 Unit – 1 Semester) (Factor 8)

Description: This course is ideal for those who have enjoyed reading Shakespeare plays and want to learn more about this classical author. Class work includes the extensive study of plays, sonnets, student performances, and creative writing.

Requirements: Class readings and writings, and individual written and oral presentations focusing on the further study and analysis of Shakespeare's writings.

**SINGLE – GENRE:**

(Can only select one if student is pursuing two half year courses. Can not select two.)

141 CREATIVE WRITING (1/2 Unit - 1 Semester) (Factor 8)

Description: This course is open to students who would like to explore the discipline of creative writing and be willing to share their writing within the classroom. Lessons will include daily writing assignments and/or the development of various literary elements and techniques pertinent to the writing of such genres as: memoirs, short



stories, fairy tale adapted one act dramas, editorials, advertisements, and some poetry techniques and forms.

Requirements: Satisfactory completion of daily assignments, daily writing journal entries, and the major writing projects. Students will share, edit, and revise their writing individually and in peer writing groups. Final exam grade will be the contents of the writing folder: The four major writing assignments.

### 142 DRAMA

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: A willingness to participate actively and to attend community performances are essential. It is recommended that you see the instructor before selecting this course.

Description: This beginning drama course is designed not only to introduce the student to the world of drama, but also to help the student be more comfortable and at ease when in front of others. Students will participate in a variety of activities to gain confidence in their ability to communicate verbally and non-verbally. Techniques include theater games, oral interpretations, pantomime, improvisation, and play reading. Emphasis is on the performing aspect of drama, culminating in performances of short student-written plays.

Requirements: Numerous short writing assignments designed to sharpen perceptual skills, quizzes and tests on theater and stage language, and written reviews of various plays. Attendance at four local plays or musicals is required for review purposes. A final requirement will be memorization of lines for various skits. Students will be evaluated on these activities and especially on their individual performances, their contributions to group projects, their effort, and their growth. Regular attendance is required to pass the course.

### 144 POETRY

(1/2 Unit - 1 Semester)

(Factor 8)

Description: This course includes an introduction to major contemporary and classical poets, poetic forms, and techniques, the language and music of poetry, and the exploration of personal preferences in poetry. The course emphasis is on: 1. Reading: Poetry assigned and of choice, poet biographies, and other published work. 2. Analysis and interpretation of poetry presented in writing and orally. 3. Writing personal poetry and completion of other assigned poetry forms and styles. 4. Participation in writing groups and in class activities.

Requirements: Maintaining a daily writing journal, successful completion of daily assignments, and graded projects as the final portfolio assessment/final exam grade.

145 PUBLIC SPEAKING (1/2 Unit - 1 Semester)

(Factor 8)

Description: This beginning course in public speaking is devoted to the study of effective speech making. It is designed for students who already feel confident in front of a group, as well as for students who want to increase their self-confidence. Students will be required to write and to present a variety of speeches. STRONG WRITING SKILLS ARE ESSENTIAL. Students considering careers in communication, law, business, or teaching will find this course beneficial. The final will include a written examination in addition to a speech.

**SOCIAL STUDIES**

All students are responsible to complete 4 years of social studies required course work. All students must successfully demonstrate proficiency in Global History and U. S. History and Government on the Regents examinations in these areas. In addition, all course work offered will utilize and implement the N. Y. S. Social Studies Standards.

EXPLANATION OF LEVELS:

Regents

Factor 8

These courses, requiring reading and writing skills at grade level, stress concepts and understandings through the use of a variety of materials. They further develop and refine reading, writing, research and analytical skills. All students must pass the Regents examination in Global History and the Regents examination in United States History and Government to satisfy the Regents Social Studies exam requirement.

Honors  
A. P. Level

Factor 9  
Factor 10

Prerequisites: Entrance into 9th grade Global History Honors will be determined by an average of 90%. Students in Honors in 9th grade will be considered for placement in the next Honors level if they have a final grade of at least 85%. Students in Regents in 9th grade must have at least a 90 final grade.

Students in Global History 2 Honors will be considered for placement in A. P. United States History if they have a final average of at least 85%. Students in Global History 2 R must have a final average of at least 90% to be considered for placement in A. P. United States History, and meet the other criteria listed for those in Honors sections.

Students in Honors/A. P. Social Studies will have the opportunity to acquire the sophisticated skills required of the social scientist. In the 9th grade, note taking and library research skills required for term papers will be taught. In 10th grade, emphasis will be placed on learning how to utilize a bibliography (first semester), and how to research and write a term paper (second semester). In the 11th grade A. P. U. S. History course, students will write a series of critical analysis papers and be trained to master the writing skills required by the AP Exam. In addition, a summer assignment is required for each of the Honors and AP courses. Students who pass the Regents examinations in Global History and in United States History and Government will satisfy the Regents Social Studies exam requirements. AP courses at 11<sup>th</sup> and 12<sup>th</sup> grade also provide the opportunity to earn college credit(s) in the social sciences. The AP exam is a requirement for all AP courses.

#### PASS/FAIL OPTION:

The following courses may be elected on a pass/fail basis: Developmental Psychology, Psychology of the Individual, Criminal Law, Constitutional & Civil Law, The Civil War, The 20th Century in Film and Music, America at War in the 20th Century, The Sixties, The 21<sup>st</sup> Century: Issues for Discussion, and A Study of Leadership.

## MANDATED COURSE DESCRIPTIONS

### Grade 9

204	<u>Global History 1</u>	(1 Unit – Full Year)	Factor 8
206	<u>Global History 1 H</u>	(1 Unit – Full Year)	Factor 9

Global History 1 is a full year course required of all Freshmen. It is structured to give the student an understanding of world history, geography and culture with a concentration on the following regions: Africa, South and Southeast Asia, China, Japan and Southwest Asia. Chronological/historic approaches as well as multicultural aspects are used.

All students will be prepared to take a school administered final examination after one year of Global History.

### Grade 10

214	<u>Global History 2</u>	(1 Unit – Full Year)	Factor 8
216	<u>Global History 2 H</u>	(1 Unit – Full Year)	Factor 9

Global History 2 is a full year course required of all Sophomores. It examines the geography, history, economics, as well as the social and political development of Western Europe, Russia, Eastern Europe and Latin America. Each unit is developed from a chronological/historic perspective, a multi-cultural perspective that integrates the exchanges and encounters of the regions with each other. In addition, a final unit dealing with global issues is included.

All students will be prepared to take the Global History Regents examination in 10<sup>th</sup> grade after two years of Global History. Successful completion of the Regents examination in Global History is required for a New York State Diploma.

### Grade 11

224	<u>United States History and Government</u>	(1 Unit – Full Year)	Factor 8
226	<u>AP US History &amp; Government</u>	(1 Unit – Full Year)	Factor 10

224 United States History and Government:

United States History and Government is a full year course required of all Juniors. It is a chronological course divided into five units: the Constitution; Industrialization of the U. S.; Prosperity, Depression and War, 1917-1940; the U. S. in the Age of Global Crisis; and a World in Uncertain Times. A major theme throughout the syllabus is that of recognizing and studying basic constitutional issues, and the application of constitutional principles to both historical and contemporary life.

All students will be prepared to take the United States History and Government Regents examination in 11<sup>th</sup> grade. Successful completion of the Regents examination in United States History and Government is required for a New York State Diploma.

226 AP US History:

A fully integrated study of the intellectual, social and economics aspects of United States History from the colonial period to 1975 is the focus of this course. Emphasis is placed on the acquisition of in-depth understanding along with development of the historian's tools, especially those involving source analysis and writing. Interested students can earn possible college credit or advanced placement standing. This course also provides an excellent background for the U. S. History SAT II Test, which is administered in June. Successful completion of the Regents Examination in U. S. History and Government is required. **The AP exam is required.**

Academic Intervention (NO Credit)

Global History 1 Lab is available to provide academic intervention for students to develop skills required for the Regents exam preparation.

- |     |              |   |
|-----|--------------|---|
| 200 | Global 1 Lab | offered on alternate days 1 <sup>st</sup> semester. |
| 201 | Global 1 Lab | offered on alternate days 2 <sup>nd</sup> semester  |

Global History 2 Lab is available to provide academic intervention for students to prepare for the required Regents examination.

- |     |              |  |
|-----|--------------|--|
| 202 | Global 2 Lab | offered on alternate days 1 <sup>st</sup> semester |
| 203 | Global 2 Lab | offered on alternate days 2 <sup>nd</sup> semester |

U. S. History Lab is available for academic intervention for students to prepare for the required Regents examination.

- |     |                |  |
|-----|----------------|--|
| 217 | US History Lab | offered on alternate days 1 <sup>st</sup> semester |
| 218 | US History Lab | offered on alternate days 2 <sup>nd</sup> semester |

219 Global AIS provides direct assistance to students needing to retake and pass the required Regents exam in Global History. Class meets on alternate days.

220 US AIS provides direct assistance to students needing to retake and pass the required Regents exam in US History. Class meets on alternate days.

## Grade 12

For the 4th year of mandated Social Studies, each senior must take *Economics* and *Participation in Government*, or have already received credit for the same or similar course. Only those juniors who are graduating early will be able to take these courses and demonstrate ability to successfully complete these courses while enrolled in U. S. History and Government. Senior level required courses or electives are not open to Freshmen or Sophomores.

### AP ECONOMICS

Prerequisite: A final average of 90 in United States History and Government R, or a

final average of 80 in AP United States History and Government. The permission of the coordinator is required for any junior wishing to enter the course.

AP Economics is two distinct courses: Macroeconomics and Microeconomics. There are two separate AP Exams each offered in May with the opportunity to earn college credit.

AP Economics has three option choices for students:  
Macroeconomics in one semester only;  
Microeconomics in one semester only;  
both courses in both semesters

Either of these courses will fulfill the senior Economics requirement; extensive reading and research is required. In May, two separate AP exams are offered based on each course. Students may earn college credit or advanced placement status for each exam depending on the grade received and the individual college policy.

227 AP MACROECONOMICS (1/2 Unit – 1 Semester) (Factor 10)

The purpose of macroeconomics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole (includes: national income, price determination, economics performance measures, economic growth, and international economics). **The AP exam is required**

228 AP MICROECONOMICS (1/2 Unit – 1 Semester) (Factor 10)

The purpose of microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economics systems (includes: product and factor markets, role of the government, economic efficiency, and economics equity). **The AP exam is required.**

230 ECONOMICS IN THE REAL WORLD (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Selection of students eligible for this course will be made by the Social Studies Department, and will generally include students who have experienced or are experiencing difficulty in meeting the Regents requirement in Global History or U. S. History and Government.

In *Economics In The Real World*, students develop a greater understanding of basic economics concepts as well as practical skills necessary to be successful in the marketplace. Students will understand how they influence the private enterprise market system as a consumer, producer and citizen.

231 U. S. AND THE GLOBAL ECONOMY (1/2 Unit – 1 Semester) (Factor 8)

This course will focus on the impact of the global economy on Americans in the early 21<sup>st</sup> century. The history of economics systems, fundamentals of the market economy, and socio-economic issues such as the impact of economics growth on unemployment, inflation, and poverty will be explored. Special emphasis will be given to global forces that impact the U. S. economy and the evolving skills required by Americans to compete in the global economy.

232 ECONOMICS (1/2 Unit - 1 Semester) (Factor 8)

Basic economic concepts and understandings which all people need to function effectively and intelligently as citizens of the United States and as participants in the economy of the world are the focus of this course. This course is based on the N. Y. S. Learning Standard #4: Economics. It includes three major units of study: Economic Theory, Finance and the Enterprise System, and Entrepreneurship. It identifies key concepts and terms from economics, finance and business.

Course Numbers 230, 231 or 232 meet the NYS Standard for the economic requirement.

233 RIGHTS AND RESPONSIBILITIES OF GOOD CITIZENS  
(1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Selection of students eligible for this course will be made by the Social Studies Department, and will generally include students who have experienced or are experiencing significant difficulty in meeting the Regents requirement in Global History or U. S. History and Government.

*Rights and Responsibilities* provides students with a basic understanding of their role in a democratic society as well as a better understanding of the fundamental institutions of government at the local, state, and national levels. Direct student participation in a variety of in-school and in-community projects and programs is a basic element of the course curriculum.



235 PARTICIPATION IN GOVERNMENT (1/2 Unit - 1 Semester) (Factor 8)

This course emphasizes the interactions between citizens and the government at all levels-local, state and federal. A focus in this course is the understanding of political parties, voter behavior and the election process. To help students grow in the decision making process, mass media and interest groups are investigated to outline their influence. Finally, students will explore New York State and local government to give insight into the workings of these levels of government. Skills will be developed so students will have the best opportunities as citizens in our society. Every attempt will be made to encourage student participation in the process of government through the use of field trips, and involvement in some aspect of school, community or government service.

AP GOVERNMENT

Prerequisite: A final average of 90 in United States History and Government, or a final average of 80 in AP United States History and Government. The permission of the coordinator is required for any junior wishing to enter the course.

Advanced Placement Government is two distinct courses. A student has three options in choosing AP Government:

- US Government in one semester;
- Comparative Government in one semester;
- both courses in both semesters.

Either of these courses will fulfill the senior Participation in Government requirement. Because of the ambitious nature of these courses, extensive readings and research are required. Students should be prepared to allocate a significant amount of time to this course. In May, two separate AP exams are offered based on each course. Students may earn college credit or advanced placement status for each exam depending on the grade received and the individual college policy.

237 AP UNITED STATES GOVERNMENT (1/2 Unit - 1 Semester) (Factor 10)

The course focuses on the Constitution, political beliefs, political parties, interest groups, institutions of government, public policy and civil rights. Emphasis is placed on critical and evaluative thinking skills, essay writing, and interpretation of original documents. **The AP exam is required.**

238 AP COMPARATIVE GOVERNMENT (1/2 Unit - 1 Semester) (Factor 10)

The course focuses on Comparative Government and examines in detail the governments of the United Kingdom, China, Russia, Nigeria, Iran and Mexico. The course is devoted to research and presentations by the students on topics of interest in both American and comparative government. Students interested in careers in political

science, government, law, or international relations may find the course of special interest. **The AP exam is required.**

### ELECTIVE COURSE DESCRIPTIONS

The following electives may be selected by **Seniors and Juniors** only. Juniors must also be enrolled in United States History and Government or have already received credit for the same or a similar course. Juniors must demonstrate ability to successfully complete an elective while enrolled in the mandated U. S. History and Government.

#### PSYCHOLOGY

These courses will introduce the student to the field of psychology, and either will provide a foundation for further study in the field. Those students with a strong interest in psychology will benefit from taking both.

Developmental Psychology is not a prerequisite for Psychology of the Individual.

#### 240 DEVELOPMENTAL PSYCHOLOGY (1/2 Unit - Fall Semester) (Factor 8)

Some topics to be covered will include: careers in psychology; research methods and ethics; life-span development theories; death and dying; sensation and perception; sleep and consciousness; learning; memory; language acquisition; intelligence.

#### 241 PSYCHOLOGY OF THE INDIVIDUAL (1/2 Unit - Spring Semester) (Factor 8)

Some of the topics to be covered will include: motivation; emotions such as loving and liking; personality theory; stress and adjustment; abnormal behavior; social psychology.

#### 242 AP WORLD HISTORY (1 Unit - Full Year) (Factor 10)

Prerequisite: A final average of 90 in United States History and Government, or a final average of 80 in AP United States History and Government. The permission of the coordinator is required for any Junior wishing to enter the course.

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. Focused primarily on the past thousand years of the global experience, the course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage prior to 1000 C.E. Periods of history, explicitly discussed, form the organizing principle for dealing with change and continuity from that point to the present. Specific themes provide further organization to

the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study. **The AP examination is required.**

## LAW RELATED EDUCATION

### 243 CRIMINAL LAW

(1/2 Unit - 1 Semester)

(Factor 8)

This course is designed to give students information on the criminal justice system in N. Y. State. The first part of the course will examine the major components of the system: hierarchy of the courts, role of lawyers and the function of a jury. Students will gain information on the N. Y. penal code, and the steps in the criminal justice process from arrest to trial. Finally, the course will have students participate in a mock trial.

Throughout the course, students will have to become involved actively, since the course work will stress analysis and applications of law. Guest speakers will be used to enrich the curriculum and introduce students to careers related to the law.

### 244 CONSTITUTIONAL AND CIVIL LAW (1/ 2 Unit – 1 Semester) (Factor 8)

This course will examine Supreme Court decisions interpreting parts of the constitution, such as the 1<sup>st</sup> amendment, that safeguard some of our most fundamental rights as citizens. Students will analyze precedents and apply them to real life situations. They will also do research and write briefs on constitutional cases to be presented before a student supreme court, which will vote on the outcome. The course will also focus on tort law and policy, to explore our society's growing interest in such matters as personal injuries and product defects. In addition, students will learn trial techniques to be applied in the performance of a mock trial. Guest speakers will be used to enrich the curriculum and introduce students to careers related to the law.

### 260 THE CIVIL WAR

(1/2 Unit - 1 Semester)

(Factor 8)

The course will explore the causes of the conflict, the major battles of the war, as well as its aftermath. It will take an interdisciplinary approach. Topics will include geography, literature, and music of the time. Recent media contributions to Civil War history such as films and novels will be emphasized.

In addition to the textbook, primary source materials such as letters and diaries of Civil War soldiers will be used. Research into the war will also be explored through various web sites.

261 THE 20TH CENTURY IN FILM AND MUSIC

(1/2 Unit - 1 Semester)

(Factor 8)

This course will examine key events, issues and people that shaped the Twentieth Century. Media: both film and music will be studied to illustrate the evolution of styles and themes in American popular culture. Class discussions will explore the social values reflected and generated by music and film. The course will trace concepts such as racism, political power, sexism, violence, innovation, nationalism in the films and music of such people as Charlie Chaplain, Grace Slick, Elvis, and Spike Lee.

262 AMERICA AT WAR IN THE 20TH CENTURY (1/2 Unit - 1 Semester) (Factor 8)

This course will include an overall view of United States involvement in wars during the 20th century beginning with the First World War through recent global conflicts. The focus topics of the course include the significant battles of each war, the strategies behind them and the effect of technological developments available, expansion of governmental powers, research on major American military leaders, home-front support and a multimedia approach to war as depicted through film.

265 THE SIXTIES- A Decade of Tumult, Turmoil, Change & Crisis in America

(1/2 Unit – 1 Semester)

(Factor 8)

This course will consist of documentary and contemporary films, text and discussion, which would engage students and expand their knowledge on this extraordinary time in American History. Topics such as Vietnam both home and abroad, Civil Rights, the Counterculture, and LBJ's Great Society will be discussed. Other aspects of the sixties – feminism, environmental issues, art, music and fashion will be explored. The presidencies of JFK, LBJ and Nixon will be studied in depth.

266 THE 21<sup>ST</sup> CENTURY: ISSUES FOR DISCUSSION

(1/2 Unit – 1 Semester)

(Factor 8)

This course will address significant issues which face our society and people today. Students will research and present topics for class discussion and debate. Topics will include terrorism, the media in society, freedom of speech, war and politics, nationalism, and more. The focus will be on the United States but will also include international events.

275 A STUDY OF LEADERSHIP

(1/2 Unit-1 Semester)

(Factor 8)

The course will provide students with the opportunity to study how leaders emerge, who are they and why they succeed or fail. The course will study the questions of leadership and the relevant theory on social influence, persuasion, decision making, and group

dynamics. Examples of leadership in organizations, politics, governments, sports, the military, and higher education are considered.

## **MATHEMATICS**

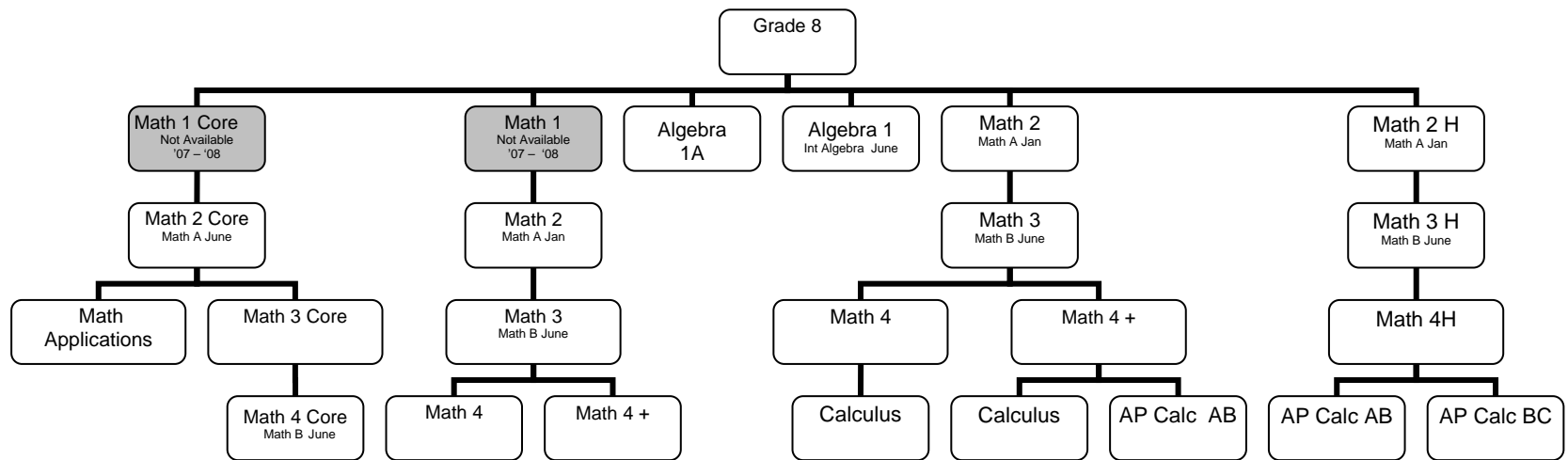
The New York State Mathematics curriculum and graduation requirements are in the midst of a transformation. For the '07 – '08 school year, entering freshman will begin the new state math sequence by taking Algebra. They will be required to pass the Integrated Algebra Regents and to earn 3 math credits for graduation. Upperclassmen will continue their present programs with Math A/Math B which requires passing the Math A Regents and earning 3 math credits to graduate. The Math Department has designed various courses to help students of all abilities reach these goals. While the mathematical concepts and curriculum are the same in several courses, the pace of each course varies.

A Math Learning Center (MLC) has been created as a support service to all

students studying math. The Center is open and staffed with a math teacher all 8 periods of the day.

The Honors level courses are recommended for those students who need to be challenged beyond the Regents level. The Honors math program at Arlington is an accelerated and enriched Regents curriculum with high expectations and a rigorous workload that moves at an increased pace. Students require above average math skills, a willingness to pursue knowledge for the sake of knowledge, a good work ethic and time to devote to additional studies required for factor 9 and 10 courses. It should be noted that maintaining high grades in this program becomes increasingly more difficult each year as a result of a more challenging and demanding workload. The honors program culminates with Advanced Placement courses in Calculus, Statistics and Computer Science. Students wishing to move into an honors level class from a Regents level class will be required to do additional summer work and pass a placement test.

In the math department, any math elective **NOT** to be used as a prerequisite for another math course in high school may be taken on a **pass/fail** basis.



300 REMEDIAL MATH A (NO-credit)

Successful completion of the state Regents Exam in Math A is a graduation requirement for all students. This non-credit bearing course is required for any student who fails the Math A Regents exam and is not concurrently enrolled in a math class preparing for this exam. The course is designed specifically to help students prepare to retake this exam. The student is permitted to drop this course upon successful completion of the exam. The Math A Regents Exam is given in January, June and August of each year.

311 ALGEBRA 1A (1 Unit – Full Year) (Factor 7)

This course covers the first half of the New York State Integrated Algebra curriculum. The following year, upon successful completion of this course, students will take Algebra 1B and take the Integrated Algebra Regents exam in June. Passing this exam is a graduation requirement. Success in this course requires that a student does homework regularly and shows a willingness to work. There will be a school final exam during exam week in June.

315 ALGEBRA 1 (1 Unit – Full Year) (Factor 8)

Prerequisite: Passing average in Math 8, Level 4

This course is the first course of the new NYS math curriculum. It will cover traditional topics in elementary algebra such as, linear, quadratic and rational functions, solving equations and inequalities while touching on topics in probability and statistics and geometry. Success in this course requires that a student do homework regularly and show a willingness to work. The final exam is the NYS Integrated Algebra Regents given in June. The following year students will take the second course in the new sequence which concentrates on geometry.

320 MATH 2 CORE (1 Unit - Full Year) (Factor 7)

Prerequisite: Math 1 Core, Math 1

This successive course to Math 1 Core finishes the remaining topics from the NYS Math A core curriculum. The final exam is the Math A Regents exam given in June. The Math A Regents exam is a state graduation requirement. The use of a scientific calculator is required. Success in this course requires that a student do homework regularly. The successive course is Math 3 Core or Mathematical Applications.

324 MATH 2 (1 Unit- Full Year) (Factor 8)



Prerequisite: Math 1

Recommendation: A passing grade on the Math 1 final exam.

This is the successive course to Math 1 and will complete the NYS Math A core curriculum. Additionally, it begins the study of some topics from the NYS Math B core curriculum. The course continues with the topics introduced in Math 1 while developing material in Euclidean geometry including extensive study of formal proofs. Algebra skills and concepts are studied extensively, including the quadratic function. Completing homework assignments is essential for success. Students will take the Math A Regents exam in January and a school final in June. Successive courses include Math 3 or Math 3 Core.

326 MATH 2 H

(1 Unit - Full Year)

(Factor 9)

Prerequisite: Math 1 8<sup>th</sup> Accelerated including a passing grade on the district-wide final exam. Recommended: Final course grade of 80 or above.

Math 1, a final course grade of 90, including a passing grade on the district-wide final exam, and successful completion of summer work; including a placement test.

This course enriches Math 2 and begins to increase demands in student performance necessary for success in future honors level math courses. Students will be prepared to take the Math A Regents exam in January. The graphing calculator will be introduced and its use required during the second semester. There will be a three-hour school final exam in June. Successive courses include Math 3 H or Math 3.

The Honors level courses are recommended for those students who need to be challenged beyond the Regents level. The Honors math program at Arlington is an accelerated and enriched Regents curriculum with high expectations and a rigorous workload that moves at an increased pace. Students require above average math skills, a willingness to pursue knowledge for the sake of knowledge, a good work ethic and time to devote to additional studies required for factor 9 and 10 courses. It should be noted that maintaining high grades in this program becomes increasingly more difficult each year as a result of a more challenging and demanding workload.

330 MATHEMATICAL APPLICATIONS (1 Unit - Full Year)

(Factor 7)

Prerequisite: Math 2 Core, Math 2  
Corequisite: Seniors Only: Math 2 Core

This course can only be used as a possible 3<sup>rd</sup> credit in math. This course is designed to apply Math A and Math B topics in many areas of life, such as, probability and statistics, technical areas, finance, etc. There will be a school final or final project in June.

332 MATH 3 CORE (1 Unit - Full Year) (Factor 7)

Prerequisite: Math 2, Math 2 Core

This course covers the first half of the New York State core curriculum required for the Math B exam. There is continued exposure to the topics of algebra and geometry. Homework is essential and a final exam is given during exam week in June. The successive course is Math 4 Core where the remaining Math B Regents topics are covered.

334 MATH 3 (1 Unit - Full Year) (Factor 8)

Prerequisite: Math 2, including a passing grade on the Math A Regents exam.

Recommendation: A passing grade on the Math 2 final exam.

This course finishes the necessary topics required for the New York State Math B examination. A New York State requirement for this course is the use of a graphing calculator. Instruction will be given in class on the graphing calculator and it will be needed for both classwork and homework assignments. Students will benefit from exposure to such topics as the quadratic function, relations and functions, and probability. Completion of daily homework assignments is essential. The final exam for this course is the three hour New York State Regents Math B examination. Students wishing to graduate with distinction must also pass the Math B Regents examination. Successive courses include Math 4 + or Math 4.

336 MATH 3 H (1 Unit - Full Year) (Factor 9)

Prerequisite: A final course grade of 80 or better in Math 2 H, including passing

the Math A examination.

OR

A final course grade of 95 or better in Math 2, a passing grade on the Math A examination, and successful completion of summer work; including a placement test.

This course enriches the Regents Math 3 curriculum and incorporates topics from advanced algebra. The topics from advanced algebra include: complex numbers, DeMoivre's theorem, polynomial functions, mathematical induction, synthetic division, progressions and binomial expansions. Students will take a school final exam in the advanced algebra topics, which will serve as 20% of the 4<sup>th</sup> quarter grade. The final exam for this course is the three hour New York State Regents Math B examination. Students wishing to graduate with distinction must pass the Math B Regents examination. Successive courses include Math 4 H, Math 4+ or Math 4.

342 MATH 4 CORE (1 Unit - Full Year) (Factor 8)

Prerequisite: Math 3 Core

Note: Students who have received a credit for Math 3 **may not** receive credit for this course.

This successive course to Math 3 Core finishes the remaining topics from the New York State Math B core curriculum. Some of the more specific topics include: the binomial theorem, exponential functions, logarithmic functions, graphing of trigonometric functions, trigonometric applications, statistics, linear, quadratic and power regressions, and conic sections. Graphing calculators are required throughout the course. Homework is required. Students will take the Math B Regents examination in June as the final exam.

344 MATH 4 (1 Unit - Full Year) (Factor 8)

Prerequisite: Math 3

The Math 4 program is a college level pre-calculus course, providing the foundation necessary for the study of college calculus. The principle theme of the course is functions as models of change, and this theme is reinforced through the study of the following functions: quadratic, exponential, logarithmic, trigonometric, polynomial and rational. In addition, the course includes an introduction to vectors and to inferential statistics. Homework is required and a three hour school exam is given in June. The successive course is Calculus. The use of a graphing calculator is required in this course.

345 MATH 4+ (1 Unit - Full Year) (Factor 9)

Prerequisite: A final course grade of 80 or better in Math 3; passing grade on the Math B Regents exam  
OR  
Math 3 H; passing grade on the Math B Regents exam

This course contains all of the topics in Math 4 and explores them to a greater depth. Since this is an honors level course the pace is faster than that of Math 4 and additional topics are covered: Sequences and Series, Parametric Equations and Conic Sections. The use of a graphing calculator is required in this course. A three hour school exam is given in June. Successive courses are AP Calculus AB or Calculus.

346 MATH 4 H (1 Unit - Full Year) (Factor 9)

Prerequisite: A final course grade of 80 or better in Math 3 H; with a minimum grade of 80 on the Math B Regents exam  
OR  
A final course grade of 95 or better in Math 3; with a minimum grade of 80 on the Math B Regents, and successful completion of summer work; including a placement test.

This course is a combination of the pre-calculus from Math 4+ and a semester of differential calculus. The graphing calculator is fully integrated into the course. A three hour school exam is given in June. Successive courses include AP Calculus BC, AP Calculus AB or Calculus.

354 CALCULUS (1 Unit - Full Year) (Factor 9)

Prerequisite: Math 4, Math 4+ or Math 4 H

Corequisite for SENIORS only: Math 4+ or Math 4

This is a first year college level course in calculus (equivalent to Calculus I and II in many colleges and universities). It stresses the basics of calculus such as limits, continuity, differentiation, and integration of algebraic and transcendental functions, along with basic applications of each. Graphing calculators will be used throughout the course. The purpose of this course is to give the college bound student a good, solid foundation in calculus enabling further study in college easier. Since no AP exam will be taken in this course in the spring, the pace is less rigorous than in AP Calculus AB. A three hour school final exam will be given in June.

355 AP CALCULUS AB (1 Unit - Full Year) (Factor 10)

Prerequisite: Final grade of 80 or better in Math 4+  
OR

## Math 4 H

This course may NOT be taken concurrently with Math 4+ or Math 4.

This course has the same course description as Calculus (Course #354); however, the purpose of this course is to prepare students to take the Advanced Placement Examination (level AB) in May with the intention of the student securing advanced standing at the college or university of the student's choice. The pace of this course is quicker than Calculus (Course #354) since the AP exam is given in May. Graphing calculators will be used throughout the course as well as on the AP exam. In addition, there is a school final in June. **The AP exam is required.**

356 AP CALCULUS BC (1 Unit - Full Year) (Factor 10)

Prerequisite: Final grade of 80 or better in Math 4 H

This course is a continuation of Math 4 H. It includes all topics in our AP Calculus AB course along with additional topics in series, sequences, differential equations, and calculus of vector functions. Graphing calculators will be used throughout the course as well as on the AP exam. Upon successful completion of the AP Exam, a student could receive college credit for two full semesters of calculus (Calculus I and II). A three hour school final exam will be given in June. **The AP exam is required.**

365 AP STATISTICS (1 Unit - Full Year) (Factor 10)

Prerequisite: Math 4 H or Math 4+ or Math 4  
OR

A final course grade of 80 or better in Math 3 **and** must be concurrently enrolled in Math 4 or Math 4+ or Math 4 H

This course offers students an opportunity to complete studies in secondary school equivalent to a one-semester, introductory, non-calculus based, college course in statistics. In college, at least one statistics course is typically required for majors such as economics, engineering, psychology, sociology, health science, and business. The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. Students who successfully complete the course and the AP examination may receive credit and/or advanced placement for a one-semester introductory college statistics course. There will be a final exam and/or final project in June. **The AP exam is required.**

376 COMPUTER PROGRAMMING WITH JAVA (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Grade of 65 or better on the Math A exam.  
Recommended: Keyboarding

This is an introductory programming course for anyone considering learning how to program using a high level powerful language. No previous programming experience is necessary, but computer literacy working with files in the Windows environment is expected. Topics covered include designing algorithms and writing programs to solve problems, variables and constants, conditional control statements, loops, strings, methods, arrays, classes and applets for simple gaming. This course cannot be used to satisfy a math or sequence requirement. There will be a final examination or project.

### 377 INTERMEDIATE COMPUTER PROGRAMMING WITH JAVA

(1/2 Unit - 1 Semester)

(Factor 9)

Prerequisite: Introductory Computer Programming with JAVA  
OR  
Successful completion of the written proficiency exam administered in June '07. **(Students must register for this proficiency exam with their counselor when signing up for this course.)**

This is an intermediate level programming course for anyone wishing to continue with programming at a higher level. This course is a MUST for anyone considering computer science as a career choice. Due to the nature of the course, it is imperative that the student have prior programming experience. The focus of the course will be Object-Oriented Programming. This course cannot be used to satisfy a math or sequence requirement. There will be a final examination or project.

### 378 AP COMPUTER SCIENCE AB (1 Unit - Full Year)

(Factor 10)

Prerequisite: Intermediate Computer Programming with JAVA  
OR  
Successful completion of the written proficiency exam administered in June '07. **(Students must register for this proficiency exam with their counselor when signing up for this course.)**

In addition to the material covered in Intermediate Computer Programming with JAVA, files and streams, loops, data structures, sorting and searching algorithms, trees, hashing and data structures will be covered. The course will be taught in Object-Oriented JAVA. A major case study involving a team oriented approach will be studied. Students will be prepared for the Advanced Placement AB examination in May but will be able to choose either the A or AB examination at that time. There will be a final examination or project. **The AP exam is required.**

### 381 ADVANCED MATHEMATICS SEMINAR 1

(1/2 Unit – Fall Semester **Only**)

(Factor 10)

Note: Independent Study  
Pass/Fail Only

Prerequisite: AP Calculus BC

This course is designed for students who have completed AP Calculus BC and wish to experience rich mathematical explorations into upper level college mathematics. Topics in multivariable calculus will be explored, including partial derivatives, gradient vectors and directional derivatives, tangent planes and normal lines, multiple integrals, and applications.

This course is offered on an independent study basis only, under the guidance of math faculty advisors. Students will be expected to meet as a group with the faculty advisors after school twice a month, while completing assignments in between meetings. Web-based work, graphing calculators, and mathematics software may be used to complement text study. Students and math faculty advisors will work together as a team in dialogue, explorations, and presentations.

### 382 ADVANCED MATHEMATICS SEMINAR 2

(1/2 Unit–Spring Semester **Only**) (Factor 10)

Note: Independent Study  
Pass/Fail Only

Prerequisite: Advanced Mathematics Seminar 1

This course is designed as a follow up to multivariable calculus. Vector analysis, including line integrals and surface integrals, topics in linear algebra, and topics in differential equations will be explored. In addition, emphasis will be placed upon mathematical proof in a variety of contexts.

This course is offered on an independent study basis only, under the guidance of math faculty advisors. Students will be expected to meet as a group with the faculty advisors after school twice a month, while completing assignments inbetween meetings. Web-based work, graphing calculators, and mathematics software may be used to complement text study. Students and math faculty advisors will work together as a team in dialogue, explorations, and presentations.

## **SCIENCE**

All students are required to earn three credits in science and to pass one Regents science examination to graduate. Additionally, the three science credits must include at least one course in the Living Environment and one in the Physical Setting.

All Regents science examinations keyed to the MST Standards will test students' scientific literacy. Students, **writing in their own words**, will be expected to demonstrate their understanding of important relationships, processes, mechanisms, and applications of concepts in science. They will be expected to explain, analyze and interpret scientific processes and phenomena.

The Science Department has designed various courses to help students of all abilities to fulfill the graduation requirements. Each core curriculum course covers the same core concepts, but at different paces.

Entering freshmen are encouraged to choose their first high school science course based upon their individual strengths, interests, and goals. It is recommended that students consult with their parents, eighth grade science teacher, and guidance counselor as they make this choice.

Students planning to take Regents Chemistry or Physics are strongly urged to arrange their schedules so that they complete Math 2 before enrolling in either course. Both the experiences in problem solving and the analytical thinking developed in Math 2 are of considerable benefit in Physics or Chemistry. (See Recommendations for Regents Physics and for Regents Chemistry.)



IN ORDER TO BE ELIGIBLE TO TAKE THE REGENTS EXAMINATION IN A SCIENCE, A STUDENT MUST SUBMIT SATISFACTORY REPORTS REPRESENTING A MINIMUM OF 1200 MINUTES OF LABORATORY WORK. PAST DUE REPORTS MUST BE SUBMITTED NOT LATER THAN TWO WEEKS BEFORE THE REGENTS EXAMINATION. A STUDENT WHO FAILS TO COMPLETE THE LABORATORY REQUIREMENT CAN NOT BE ADMITTED TO THE COURSE IN SUMMER SCHOOL.

The New York State Education Department states, “The State Education Department highly recommends that if a student fails a Regents science course the laboratory requirement must be completed again when the course is retaken.” In courses that address the entire Core to be tested in a single year, all of the lab minutes used to qualify for the Regents exam must be met each year. Lab time can not be carried over from previous years. This means that:

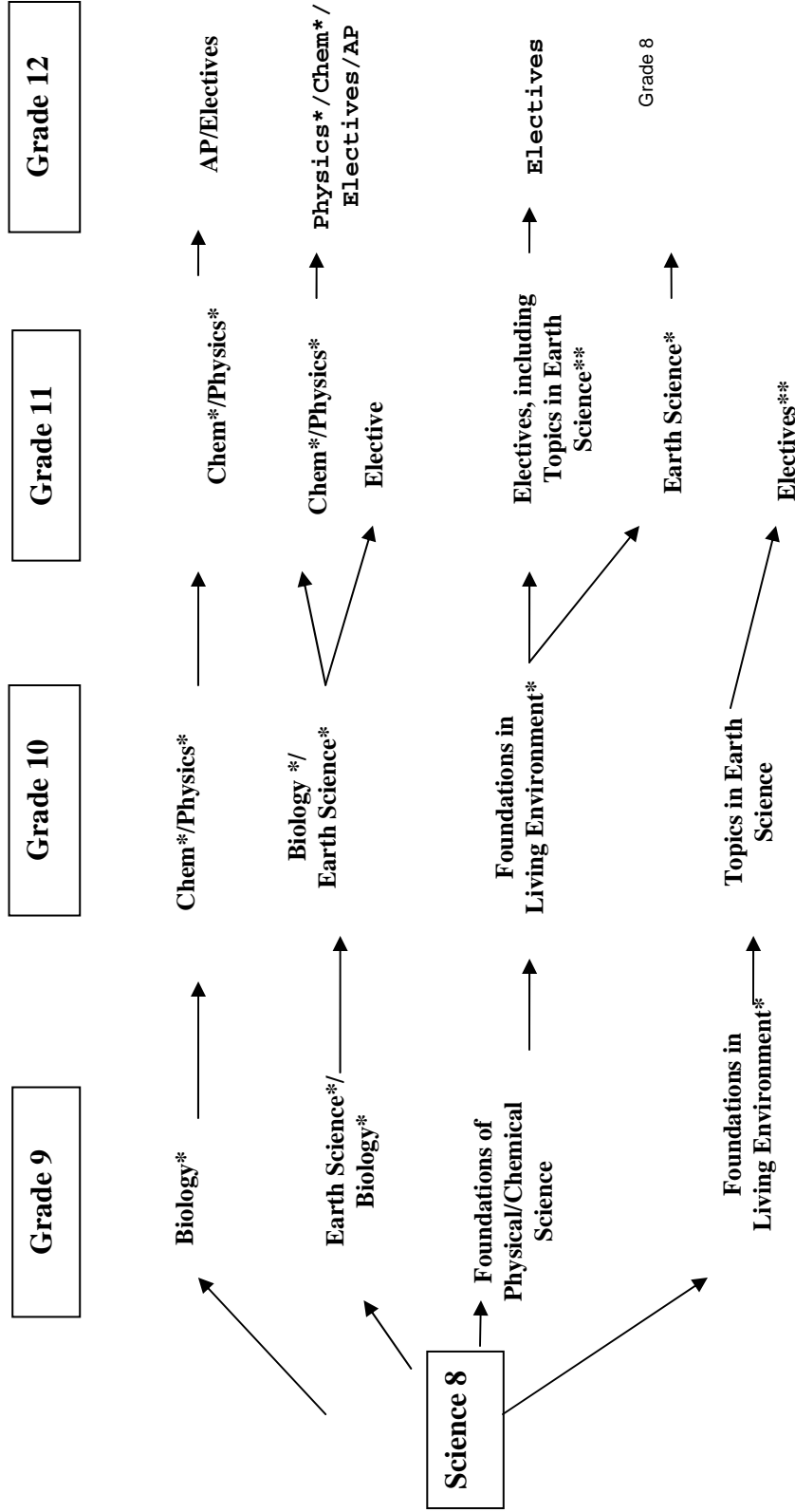
If a student fails the course, but passes the Regents exam, the student must re-qualify to take the Regents exam the next time the course is taken per the recommendation stated above. This does not apply to students taking the course in summer school.

If a student passes the course, but fails the Regents exam, the lab requirement does not have to be met again the next time the student takes the Regents exam. Likewise if a student opts to retake the Regents exam for the purpose of raising their score, the student need not re-qualify.

No science course may be taken on an independent study or audit basis.

No science course may be taken on a pass/fail basis unless specifically permitted in the description of a particular course.

# Science Pathways



\* Course ends in a Regents Exam  
 \*\* Students who choose the path: Foundations (Phys/Chem) > Foundations(LE) > Topics in Earth Science or Foundations LE > Topics IN Earth Science > Electives cannot earn an Advanced Regents Diploma. They will be eligible for only one Science Regents exam (LE/Biology) which they must pass to earn a Regents Diploma.

#### 401 ACADEMIC INTERVENTION SERVICE

2-5 periods per week

No Credit

- Placement Criteria:
- Students who fall below the NYS standard on the Intermediate Examination for science
  - Students who fail a Regents examination in science
  - Students whose teachers recommend them

In an effort to assist students in passing a New York State Regents Exam in science that is required for graduation from high school, additional instruction is offered in the Science Department Academic Intervention Service. Students receive teacher assistance either one-on-one or in a small group (not to exceed ten students with one teacher).

The emphasis is on skills needed for science as well as on science content. Typically students need help with reading, simple math, and with construction and interpretation of graphs.

#### 410 FOUNDATIONS IN CHEMICAL SCIENCE (1/2 Physical Setting Credit)

5 periods per week

(1/2 Unit – 1 Semester)

(Factor 7)

- Criteria for Placement: This course is recommended for students who feel that they will benefit from a course that does not involve a high stakes exam prior to taking a course that ends in a Regents Examination.

This course covers some of the material outlined in the New York State Core Curriculum for the Physical Setting/Chemistry. Lab work is an important part of this course and will be scheduled within the confines of meeting five periods each week. Lab work will concentrate on laboratory, inquiry, and study skills that will be necessary for the success in preparing for a Regents Exam. Topics such as pollution, common home chemicals and common garden chemicals will be introduced as a means of exercising those skills mention above.

Final Examination: Portfolio of student work in addition to written exam.

Textbook: CPO Science – Foundations of Physical Science

#### 411 FOUNDATIONS IN PHYSICAL SCIENCE (1/2 Physical Setting Credit)

5 periods per week

(1/2 Unit – 1 Semester)

(Factor 7)

Criteria for Placement: This course is recommended for students who feel that they will benefit from a course that does not involve a high stakes exam prior to taking a course that ends in a Regents Examination.

This course covers some of the material outlined in the New York State Core Curriculum for the Physical Setting/Physics. Lab work is an important part of this course and will be scheduled within the confines of meeting five periods each week. Lab work will concentrate on laboratory, inquiry, and study skills that will be necessary for the success in preparing for a Regents Exam. Topics such as simple mechanics, magnetism, and electricity will be introduced as a means of exercising those skills mentioned above.

Final Examination: Portfolio of student work in addition to a written exam.

Textbook: CPO Science – Foundations of Physical Science

424 FOUNDATIONS IN THE LIVING ENVIRONMENT(1 Living Environment Credit)

7 ½ periods per week

(1 Unit – Full Year)

(Factor 7)

Recommendation: This course is most appropriate for students who have passed the Foundations in Physical Science and Foundations in Chemical Science courses.

This course deals with the study of life processes in cells, and multicellular organisms, and with evolution, genetics, and ecology as a means of reinforcing skills in inquiry and scientific thinking. This course covers only those understandings and ideas specified in the Core Curriculum Guide for the Living Environment. It provides a solid foundation for success in the New York State Living Environment Regents Examination. This course does not contain some of the supplementary information nor go into the same depth that Regents Biology does. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for the final exam. Regular outside-of-class preparation is essential.

Final Examination: NYS Regents Examination:  
**Living Environment**

Textbook: Glencoe – Biology: A Community Context

425 REGENTS BIOLOGY

(1 Living Environment Credit)

7 1/2 periods per week

(1 Unit - Full Year)

(Factor 8)

This course deals with the study of life processes in cells, and multicellular organisms and with evolution, genetics, and ecology. It provides a solid framework for college level biology courses. Great emphasis is placed on language usage, reading comprehension, and writing. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for the final exam. Regular outside-of-class preparation is essential.

Final examination: NYS Regents Examination:  
**Living Environment**

Textbook: Schraer and Stoltze, Biology: The Study of Life.

426 BIOLOGY HONORS (1 Living Environment Credit)  
7 1/2 periods per week (1 Unit - Full Year) (Factor 9)

Recommendation: Regents Earth Science with a class average of 85 or a grade of 85 on the Regents Examination in Earth Science

The course is similar to Regents Biology but with heavier emphasis on the experimental basis of biology and more extensive treatment of some topics. Emphasis will be placed on understanding and application of major principles of biology; understanding and application of simple algebraic concepts to solving word problems; and organizing, interpreting, and drawing conclusions from lab data. This course will prepare students for the SAT II (Achievement Test) in Biology E/M. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for the NYS Regents portion of the final examination. Extensive outside-of-class preparation is required.

Final examination: NYS Regents Examination:  
**Living Environment** plus a locally generated Part II correlated to the SAT II exam

Textbook: Schraer and Stoltze, Biology: The Study of Life

435 REGENTS EARTH SCIENCE (1 Physical Setting Credit)

7 1/2 periods per week

(1 Unit - Full Year)

(Factor 8)

This course includes the following topics: Measurement, Astronomy, Time & Global Location, Weather, Climate, Rocks & Minerals, Weathering & Erosional forces, Plate tectonics, and Geological History. Graphing and mathematical skills are needed for success in Earth Science. Success in this subject requires that a student write extensively and do homework regularly. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for the final exam.

Final examination: NYS Regents Examination:  
**Physical Setting/Earth Science**

Textbook: Namowitz & Spaulding, Earth Science

To take any of the following three courses, a student must first complete a minimum of two regents science credits.

**445 REGENTS CHEMISTRY**

7 1/2 periods per week

(1 Physical Setting Credit)

(1 Unit - Full Year)

(Factor 8)

Recommendation: •Successful completion of Math 2 including a passing

grade on the Math A Regents exam and an average of 70 or better in a Regents science course.

- Students wishing to take chemistry concurrently with Math 2 should have achieved a final average of 85 or better in a Regents science course.
- A student who has achieved less than 85 in Math 1 may expect to have considerable difficulty.

This is a comprehensive chemistry course dealing with the substances of the physical world and their interactions at the particle level. Topics include: atomic structure, bonding, the periodic table, stoichiometry, kinetics and equilibrium, acid-base theories, and organic chemistry. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for the final exam. Considerable outside-of-class preparation is required.

Final examination: NYS Regents Examination:  
**Physical Setting/Chemistry**

Textbook: Wilbraham, Staley, Matta, Waterman  
Chemistry New York State Edition 2005

**446 CHEMISTRY HONORS** (1 Physical Setting Credit)  
7 1/2 periods per week (1 Unit - Full Year) (Factor 9)

Recommendation: Regents Physics with a class average of 85 or higher in Regents Physics.

The course is similar to Regents Chemistry but with heavier emphasis on the experimental basis of chemistry, problem solving skills and more extensive treatment of some topics. This course will prepare students for the SAT II (Achievement Test) in Chemistry. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for New York State Regents portion of the final examination. Extensive outside-of-class preparation is required.

Final examination: NYS Regents Examination:  
**Physical Setting/Chemistry** plus a locally generated Part II correlated to the SAT II Exam.

Textbook: Wilbraham, Staley, Matta & Waterman, Chemistry

**455 REGENTS PHYSICS** (1 Physical Setting Credit)  
7 1/2 periods per week (1 Unit - Full Year) (Factor 9)

- Recommendation:
- Math 2 including a passing grade on the Math A Regents examination OR have passed Math 3 Core.
  - Sophomores must have passed either Regents Biology or Regents Earth Science or both.
  - All physics students must be enrolled in a math course, e.g. Math 3 OR Math 4 Core.

This course considers our ideas about the nature of the physical world. Major topics are mechanics (motion: kinematics and dynamics), energy, wave phenomena, electricity and magnetism, and modern physics. The analysis of problems using the methods of mathematics is emphasized throughout the course. Laboratory work is an integral part of the course. Successful completion and documentation of a minimum of 1200 minutes of laboratory work is required for the final exam. Considerable outside-of-class preparation is required.

The content and methods of this course are indispensable components of all four-year college programs in engineering and the physical sciences and many two-year technical programs. The student for whom this course is especially important is urged to enroll in the course as early as his or her mathematical preparation will permit.

Final examination: NYS Regents Examination:  
**Physical Setting/Physics**

Textbook: Zitzewitz & Neff, Physics-Principles and Problems

460 TOPICS IN EARTH SCIENCE (1 Physical Setting Credit)  
5 periods per week (1 Unit – Full Year) (Factor 7)

Prerequisite: Regents Biology A and B or Foundations in the Living Environment



Topics in Earth Science covers all of the material outlined in the New York State Core Curriculum for the Physical Setting/Earth Science. Lab work is an important part of this course and will be scheduled within the confines of meeting five periods each week.

The student will **not** be eligible to take the NYS Regents Examination in the Physical Setting/Earth Science because the class will meet for only five periods per week.

Final examination: Portfolio of students' work in addition to written exam.

Textbook: Namowitz & Spaulding, Earth Science

The following five courses meet for one semester and are worth one-half unit in science. Successful completion of any two half-unit courses will complete the requirement for the third credit in science.

461 MARINE BIOLOGY (1/2 Living Environment Credit)  
5 periods per week (1/2 Unit – 1 Semester) (Factor 8)

Prerequisite: Successful completion of Regents Biology and one Physical Setting credit (including a passing grade on the Regents Living Environment exam) and an interest in marine biology.

In this course students will explore the many strange and wonderful creatures of the vast oceans that cover our planet. Students will study mammals, birds, fish, invertebrates, plants and algae. The course will also survey the many marine habitats including rocky shore, estuaries, salt marshes, mangroves, and coral reefs. Oil spills and other sources of marine pollution will be studied. Throughout the semester students will conduct lab activities, watch slide shows and videos, and go on a marine biology expedition to a beach, rocky shore and go on a marine biology research vessel.

Final Examination: Will include Community Science Night presentation

Textbook: Marine Science, Amsco, 1998

462 OCEANOGRAPHY (1/2 Physical Setting Credit)  
5 periods per week (1/2 Unit – 1 Semester) (Factor 8)

Prerequisites: Successful completion of Regents Biology, Earth Science (including a passing grade on the Regents Earth Science exam), and an interest in oceanography.

In this course students will discover the central role the oceans play in our world. It complements the Marine Biology elective. Students will study the origin and geography of the oceans, plate tectonics, ocean diving and exploration, properties of ocean water, tides, waves, beaches, marine resources and pollution. Oceanography focuses on the chemical, physical and geological processes of the oceans. Throughout the semester, students will conduct lab activities, go on an oceanographic research vessel and learn about this exciting field of science whose subject covers over 70% of our planet.

Final Examination: A final project including participation in Community Science Night

Textbook: Marine Science, Amsco, 1998

#### 463 FORENSIC SCIENCE

5 periods per week

(1/2 Physical Setting Credit)

(1/2 Unit – 1 Semester)

(Factor 8)

Prerequisite: Two science credits, one must be in Regents Biology/Living Environment and a passing grade on a NYS Regents science examination.

Forensic Science is the study of physical evidence left at the scene of a crime. Students will be involved in the collection of physical evidence from simulated crime scenes. Students will use standard scientific procedures and current techniques to analyze collected evidence. Local law enforcement experts will be invited to speak to students on various topics. A field trip to an appropriate forensic facility will be scheduled. Students will be able to participate as expert forensic witness at a mock trial.

Final Examination: Final crime scene evaluation

Textbook: Criminalistics, 7<sup>th</sup> Edition by Saperstein  
Casebook of Forensics Detection, Evans, Colin; John Wiley & Sons, Inc. 1996

464 SRC: NATURAL DISASTERS (1/2 Physical Setting Credit)  
5 periods per week (1/2 Unit – 1 Semester) (Factor 8)

Prerequisites: Successful completion of Regents Biology, Regents Earth Science (including a passing grade on the Regents Earth Science exam) and an interest in natural disasters.

Scientific Research and Communications (SRC): Natural Disasters is a course that explores all types of natural disasters that can occur on Earth. The topics range from short-term catastrophes such as hurricanes and earthquakes to long-term disasters such as global warming and asteroid impacts. The role of human beings and science in studying, predicting, and dealing with these disasters will be a repeated theme throughout the course. Students will be expected to do extensive research projects that involve the investigation of different natural disasters. The class is set in a computer lab and all students will be expected to do a final public presentation in the form of a web site or PowerPoint presentation during semester-ending Community Science Night.

Final Examination: Community Science Night presentation

Textbook: Into Thin Air, Jon Krakauer

465 CHEMISTRY IN THE COMMUNITY (ChemCom®) (1 Physical Setting Credit)  
5 periods per week (1 Unit – Full Year) (Factor 8)

Prerequisite: Regents Biology and one other Regents science course.  
Pass one NYS Regents science examination.

Chemistry in the Community is a chemistry course that focuses on the impact of chemistry on everyday life. Based on the ChemCom ® curriculum developed by the American Chemical Society, its goals are to enhance scientific literacy and to promote an appreciation for the nature of scientific knowledge. It is based on the belief that, as future community members, workers, and voters, students need a foundation of scientific knowledge in order to meaningfully participate in the discussion of current events such as pollution, global warming, energy sources, and risk assessment. To this end, the course combines a thorough study of chemistry fundamentals with a discussion of the positive - and negative - roles that chemistry and technology play in our world. As part of the course, students complete an independent project exploring the role of chemistry in a topic of their choice.

Lab work is an important part of this course and will be scheduled within the confines of meeting five periods per week

Final Examination: School Exam

Textbook: Chemistry in the Community, W. H. Freeman

466 SRC: EVOLUTION AND ANIMAL BEHAVIOR(1/2 Living Environment Credit)

5 periods per week

(1/2 Unit – 1 Semester)

(Factor 9)

Prerequisites: Successful completion of Regents Biology (including a passing grade on the Regents Living Environment exam), Regents Earth Science and an interest in evolution.

Recommendation: 85 or better on the Living Environment exam

Scientific Research and Communication (SRC): Evolution and Animal Behavior is a course that looks into the forces of nature that rule over the survival of all species on Planet Earth. The topics range from the studies of Charles Darwin and his theory of evolution to the survival and reproduction of a variety of species alive today (plants, animals and microorganisms). The effects of evolution on human beings (and of human beings on evolution) will be a primary theme of the course. Students will be expected to read, write and discuss early in the semester, after which they will work on research projects that involve a topic of interest in evolution. The class is set in a computer lab and all students will be expected to do presentations in the form of web sites and PowerPoints. Students will also have an opportunity to create and teach lessons related to the theory of evolution to elementary school children. Students will be required to complete some work in the summer preceding the course.

Final Examination: Community Science Night presentation

#### 467 CONTEMPORARY ISSUES IN BIOLOGY – Biomedical focus

(1 Living Environment Credit)

5 periods per week

(1 Unit - Full Year)

(Factor 9)

Recommendation: This course requires extensive reading and writing. It is strongly recommended that the student meet the following criteria:  
Completion of the following with final averages of 80 or better or its equivalent in Honors Level:

- (1) Any two Regents science courses
- (2) English 10
- (3) Global History 2

Extensive changes are taking place in our society as a result of the use of technology. As changes occur individuals are faced with challenges to their attitudes and values with respect to such issues as genetic screening, gene splicing, population growth, organ transplantation, and ethics of scientific research. These issues, as well as many more, are discussed in this course. The class is set in a computer lab and all students will be expected to do presentations in the form of PowerPoints. Students will be expected to do research using a variety of sources and to actively engage in class discussion. The principle objectives of the course are to develop an understanding of how to approach the study of issues and to expose students to issues that they may face in their lifetimes.

Final Examination: Local examination

468 CONTEMPORARY ISSUES IN BIOLOGY – Environmental focus

(1 Living Environment Credit)

5 periods per week

(1 Unit – Full Year)

(Factor 9)

Recommendation: This course requires extensive reading and writing. It is strongly recommended that the student meet the following criteria:  
Completion of the following with final averages of 80 or better or its equivalent in Honors Level:

- (1) Any two Regents science courses
- (2) English 10
- (3) Global History 2

Extensive changes are taking place in our environment as a result of the use of technology. As changes occur individuals are faced with challenges to their attitudes and values with respect to such issues as land use, global warming, loss of biodiversity, population growth, natural resources, and ethics of scientific research. These issues, as well as many more, are discussed in this course. The class is set in a computer lab and all students will be expected to do presentations in the form of PowerPoints. Students will be expected to do research using a variety of sources and to actively engage in class discussion. The principle objectives of the course are to develop an understanding of how to approach the study of issues and to expose students to issues that they may face in their lifetimes.

Final Examination: Local examination, Participation in Community Science Night

469 ASTRONOMY

(1/2 Physical Setting Credit)

5 periods per week

(1/2 Unit-1 semester)

(Factor 8)

Prerequisite: Successful completion of Regents Earth Science (including a passing grade on the Earth Science exam) and an interest in astronomy

Astronomy is the study of objects and phenomena that lie beyond the Earth's atmosphere. In this course, students will study the Earth-Moon-Sun system, planets and our Solar System, stars, galaxies, the universe, and space exploration. The course will focus on the Earth-Moon-Sun system and cycles of motion, as well as the purposes of space exploration within our Solar System. The course will include one evening field trip to the Vassar Observatory.

Final Examination: Portfolio of student work and presentation of a final project at Community Science Night

Textbook: Discovering the Universe Kaufmann and Comins.

### 471 AP BIOLOGY

7 1/2 periods per week

(1 Living Environment Credit)

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Regents Biology and Regents Chemistry with a class average of 85 or better OR  
Regents Physics and Regents Chemistry with a class average of 85 or better

This is equivalent to a two-semester college level course in the principles of biology. Evolution is the fundamental theme, and biochemistry, genetics, physiology, ethology, and ecology are treated in depth from the point of view of evolution. There is a significant amount of laboratory work with a heavy emphasis on the analysis and interpretation of data. Extensive outside-of-class preparation including readings and a project or paper on a topic of the student's choice are required. Students will be required to complete some work in the summer preceding the course. **The AP exam is required.**

Final examination: Local exam

Textbook: Biology, 5<sup>th</sup> Edition by Campbell

### 473 AP ENVIRONMENTAL SCIENCE

7 1/2 periods per week

(1 Living Environment or Physical Setting Credit)

(1 Unit – Full Year)

(Factor 10)

Prerequisites: Both Regents Biology and Chemistry with a class average of 85 or better.

This is equivalent to a two-semester college level course in environmental science. Unlike most other college introductory-level courses, environmental science is offered from a wide variety of departments, including biology, geology, environmental studies, environmental science, chemistry and geography. This is a rigorous science course that stresses scientific principles and analysis, and that will include a laboratory component. This course will enable students to undertake, as first year college students, a more advanced study of topics in environmental science. In both breadth and level of detail, the content of the course reflects what is found in many introductory college courses in environmental science. Students may be required to complete some work in the summer preceding the course. **The AP exam is required.**

Final Examination: Local examination

Textbook: Wright, Nebel Environmental Science 9<sup>th</sup> edition

475 AP CHEMISTRY

(1 Physical Setting Credit)

7 1/2 periods per week

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Regents Chemistry with a class average of 85 or a grade of 85 on the Regents examination.

Recommendation: It is strongly recommended that the student have completed Regents Physics and be enrolled in (or have completed) Math 4.

This is equivalent to a two-semester college level course in theoretical chemistry. There will be extensive problem solving in stoichiometry. Topics include atomic structure, bonding, kinetics, electrochemistry and descriptive chemistry (equation writing). Laboratory work is an essential part of this course. Students will be required to write extensive reports on lab work performed in class. Extensive time outside of class is required to read and comprehend assignments. Students may be required to complete some work in the summer preceding the course. **The AP exam is required.**

Final examination: School exam

Textbook: Brown, LeMay & Bursten, Chemistry, The Central Science

476 AP PHYSICS C Mechanics plus Electricity and Magnetism

(1 Physical Setting Credit)

7 1/2 periods per week

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Regents Physics with a class average of 85 or a grade of 85 on the Regents examination.

Corequisite: Any Calculus course

Recommendation: Calculus BC

This is a calculus based course in mechanics and electricity & magnetism equivalent to a two-semester college physics course. Students will be prepared to take the AP examination (level C) in mechanics as well as in electricity and magnetism. The topics of study include kinematics, dynamics, momentum, energy, rotational motion, oscillations, gravitation, electrostatics, electric currents, and electromagnetism. Students should expect to do extensive outside-of-class preparation. **The AP exam is required.**

Final examination: School exam

Textbook: Serway: Physics for Scientists and Engineers

480 SCIENCE RESEARCH

(1/2 Physical Setting or Living Environment Credit)



5 periods per week

(1/2 Unit – 1 Semester)

(Factor 10)

This course may be taken more than one time.

This course is offered ONLY to Juniors and Seniors and ONLY on a pass/fail basis.

Prerequisites: Passed two Regents Examinations and recommendation of the instructor based on a research proposal.

Students will plan and conduct their own original research project. Students will be introduced to research design and will critically analyze experimental research. Student research projects will be carried out in the school laboratories or in the community. The research may be presented at scientific meeting, written up for possible publication, or entered into various science scholarship competitions. The course is intended for the student who is highly motivated, has an interest in scientific questions and is able to carry out independent research.

## FOREIGN LANGUAGE

The goal of the Foreign Language Department is to expand the limits of the student's world to include an understanding of other cultures and people. To achieve this end, students will develop auditory, speaking, reading, and writing proficiencies in order to actively communicate with other people of other cultures.

The following is an explanation of courses and requirements for success.

There will be **NO Pass/Fail** option or Independent Study for Foreign Language courses.

A student **must pass** the level 3 Regents examination (or equivalent exam) before entering level 4 of that language. If an AP exam is offered in the level 5 language, it is a requirement of the Level 5 course.

No student may earn more than 1 year of Foreign Language credit via "Alternative Credit".

502 FRENCH 2 (1 Unit - Full Year) (Factor 8)

Prerequisite: Successful completion of French 1.

A continuation of the development of the four skills introduced during Level 1 at a somewhat faster pace. Success is achieved through student use of the French phrases taught, through active participation in class learning, and also through oral and written test grades. Classes are designed to give students an opportunity to show that they are able to use the language. There is a school final exam at the end of the year.

503 FRENCH 3 R (1 Unit - Full Year) (Factor 8)

Prerequisite: Successful completion of French 2.

Further development of the four skills with special emphasis on oral communication in class. Frequent testing of listening, speaking, and reading comprehension skills. More detailed cultural study with its implications as found in the reading assignments. Students will take the Regents Comprehensive Examination.

504 FRENCH 4 (1 Unit - Full Year) (Factor 9)

Prerequisite: Successful completion French 3 R including the level 3 Regents examination.

This course is designed to develop student proficiency in French through the integration of the four skills with the emphasis on the ability to express oneself in speaking and writing. The course is conducted entirely in French. Review of grammar, vocabulary, and usage as well as continued studies of culture, art, and literature will be presented through a wide variety of materials including music, films, short stories, newspapers, magazines and texts.

Successful completion of this course requires active daily oral participation, satisfactory completion of all class work, mastery of grammatical themes and a school final examination.

505 AP FRENCH 5

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Successful completion of French 4.

The Advanced Placement French course covers the equivalent of a third year college course in Advanced French Composition and Conversation. The course stresses oral skills, composition and grammar, and involves regular practice of all four communication skills (listening, speaking, reading and writing). There is also a strong cultural component. The course is conducted entirely in French and emphasizes the use of French for active communication. The objectives for the course are as follows:

Students will comprehend formal and informal spoken French.

Students will acquire sufficient vocabulary and knowledge of structure to allow easy, accurate reading of newspaper and magazine articles as well as literary excerpts.

Students will compose expository passages.

Students will express ideas orally with reasonable accuracy and fluency.

The AP French course is intended for those students who are seriously interested in continuing to develop their language skills and are willing to devote the time necessary to succeed. Successful completion of this course requires active daily oral participation, satisfactory completion of all class work, mastery of grammatical themes and a school final examination based on the Advanced Placement French Language Exam. **The AP exam is required.**

512 GERMAN 2

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of German 1.

Following the New York State syllabus for the study of foreign languages at the high school level, this course offers students the opportunity to develop their German language speaking, reading, writing and listening skills. Students are encouraged to practice speaking with partners groups by writing and rehearsing dialogues and role-plays. Students write stories, letters, and essays and read articles and stories relating to German culture and life. Through vocabulary and grammar practice, they expand their competence in using the language to express more complex thoughts and ideas. Students will take a school final exam.

513 GERMAN 3 R

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of German 2.

German 3 builds on the skills developed in Level 2. The curriculum for German 3 is focused on providing the students learning opportunities to develop confidence in reading, writing, listening and speaking German. Students will take the Regents Comprehensive Examination.

514 GERMAN 4

(1 Unit - Full Year)

(Factor 9)

Prerequisite: Successful completion of German 3 R including the level 3 Regents

examination.

Level 4 German is a transition year. Students develop their reading, writing, speaking and listening in preparation for Advanced Placement German, Level 5. While students in level 3 German are developing their German skills to Checkpoint B Proficiency, that is, the proficiency required to pass the German Regents, level 4 and level 5 students work toward Checkpoint C proficiency, which correlates to the proficiency expected by the Advanced Placement Examination. This examination requires students to be able to speak, read, write, and understand spoken German at an advanced level. In order for students to become adequately fluent, a firm grounding in the grammatical structure of the language as well as its vocabulary is required. Just as in German 2 and 3, grammar is taught in the context of communication, which allows students to understand how grammar impacts meaning.

By the end of the school year, participants will demonstrate their proficiency in the following manner: by presenting a five minute oral presentation fluently and expressively; by writing an expanded piece in German clearly and concisely expressing their thoughts in two hundred words or more; by listening to expanded conversations and other discourse spoken by native German speakers with comprehension; as well as by reading extended texts independently with comprehension. Students will take a school final examination.

515 AP GERMAN 5

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Successful completion of German 4.

Thematic units form the foundation of the learning in Advanced Placement German 5. Grammar instruction in the context of these themes is focused on ensuring that students develop understanding in all skill areas at an advanced level. While most advanced grammar has been learned in Level 4, Level 5 focuses on further practicing this grammar and further learning the nuances of the German language structure. Vocabulary and idiomatic expressions are also taught in context. Students will routinely be expected to make oral presentations, both spontaneous and planned, and write lengthy pieces of two hundred words or more responding to the themes covered. Students will take a school final exam. **The AP Exam is required.**

522 ITALIAN 2

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of Italian 1.

The four basic skills will be further developed and a greater emphasis will be placed on speaking and writing skills. The first part of the textbook "Oggi in Italia" will be completed. Students will take a school final examination.

523 ITALIAN 3 R (1 Unit - Full Year) (Factor 8)

Prerequisite: Successful completion of Italian 2.

Further development of the four skills with special emphasis on oral communication in class. Frequent testing of listening, speaking, and reading comprehension skills. The second part of the textbook "Oggi in Italia" will be completed. More detailed cultural study with its implications as found in the reading assignments. Students will take the Regents Comprehensive Examination.

524 ITALIAN 4 (1 Unit - Full Year) (Factor 9)

Prerequisite: Successful completion of Italian 3 R including the level 3 Regents examination.

Emphasis will be on the perfection of previously acquired listening, reading, writing and speaking skills. Review of grammar, vocabulary, and usage as well as continued studies of culture, art, and literature will be presented through various sources and materials. Students will take a school final exam.

In addition, student will have the opportunity to receive four college credits through the SUNY Albany program by meeting the course requirements.

525 AP ITALIAN 5 (1 Unit - Full Year) (Factor 10)

Prerequisite: Successful completion of Italian 4.

The course will use thematic units for students interested in further developing their Italian language skills. Students will be expected to make oral presentations, write long essays and practice their grammar. Students will take a final examination. **The AP exam is required.**

In addition, student will have the opportunity to receive four college credits through the SUNY Albany program by meeting the course requirements.

540 EXPLORING SPANISH (1 Unit - Full Year) (Factor 7)

This course is designed to assist students in meeting the unit of study of a second language, which is required for graduation. The focus will be on culture and basic Spanish expressions. Students will be involved in oral practice, reading and writing

activities, and cultural studies. Passing this course will satisfy the foreign language graduation requirement. Students will take a school final exam.

541 SPANISH 1 (1 Unit - Full Year) (Factor 8)

This course is an introduction to Spanish as a spoken and written language. The course work includes regular, repetitive practice where students are expected to read, write, and speak about their immediate world which would include their interests, school life, family, friends and self. They will be able to ask and understand basic information to be able to effectively communicate in the language. In addition, this course will seek to enhance an understanding of the diverse cultures of the Spanish speaking world through authentic Spanish materials such as newspaper clippings, headlines, and advertisements. Students will take a school final exam.

542 SPANISH 2 (1 Unit - Full Year) (Factor 8)

Prerequisite: Successful completion of Spanish 1.

A continuation of the development of the four skills started in Level 1 through the use of the same materials listed above but on a slightly advanced scale. Students will take a school final.

543 SPANISH 3 R (1 Unit - Full Year) (Factor 8)

Prerequisite: Successful completion of Spanish 2.

Further development of the four skills with special emphasis on speaking and writing. Frequent testing of listening, speaking and reading comprehension skills. More detailed cultural studies as found in reading assignments. Students will take the Regents Comprehensive Examination.

544 SPANISH 4 (1 Unit - Full Year) (Factor 9)

Prerequisite: Successful completion of Spanish 3 R including the level 3 Regents examination.

Review of grammar with emphasis on the ability to express oneself in speaking and writing. Classes conducted in Spanish. Selected readings of Spanish authors, history, geography, art, music, life and people taken from a variety of texts, magazines and newspapers. Tapes, films, slides, CD's and videos are used in conjunction with the above.

Requirements: Satisfactory completion of written reports, oral participation in class work based on reading assignments and completion of oral reports in Spanish. Student will take a school final exam.

545 AP SPANISH 5

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Successful completion of Spanish 4.

The Advanced Placement Spanish course covers the equivalent of a third year college course in Advanced Spanish Composition and Conversation. The course stresses oral skills, composition and grammar, and involves regular practice of all four communication skills (listening, speaking, reading and writing). There is also a strong cultural component. The course is conducted entirely in Spanish and emphasizes the use of Spanish for active communication. The objectives for the course are as follows:

Students will comprehend formal and informal spoken Spanish.

Students will acquire sufficient vocabulary and knowledge of structure to allow easy, accurate reading of newspaper and magazine articles as well as literary excerpts.

Students will compose expository passages.

Students will express ideas orally with reasonable accuracy and fluency.

The AP Spanish course is intended for those students who are seriously interested in continuing to develop their language skills and are willing to devote the time necessary to succeed. Successful completion of this course requires active daily oral participation, satisfactory completion of all class work, mastery of grammatical themes and a school final examination based on the Advanced Placement Spanish Language Exam. **The AP exam is required.**

## ART





The Art Department embraces the four New York Learning Standards for the Arts in all of its programs of study. The standards are:

*Creating, Performing, and Participating in the Arts*

*Knowing and Using Arts Materials and Resources*

*Responding to and Analyzing Works of Art*

*Understanding Cultural Dimensions and Contributions of the Arts*

Students enrolled in art courses may be required to provide a pencil, glue stick and other basic materials.

For the Advanced Regents Diploma, a student may substitute a 5 unit sequence in Art for the 3 unit Foreign Language Requirement.

600 STUDIO IN ART ACCELERATED (1/2 Unit – Fall Semester) (Factor 8)

Prerequisite: Successful completion of 8<sup>th</sup> grade Art Enrichment Course.

The emphasis of this course is to build on and continue studying the Elements and Principles of Art, started in the 8<sup>th</sup> grade, while working on several new pieces in four core areas. The studio projects involve: Art History and Criticism, Landscape Drawing, Sculpture and Design, and Art as Communication. Students will produce art in a variety of media, participate in critiques of their work, maintain a notebook and complete assessments including a practical exam.

Students may be required to purchase some basic materials.

601 STUDIO IN ART (1 Unit - Full Year) (Factor 8)

Prerequisite: None

Studio in Art is the traditional, comprehensive foundation course in New York State. It provides students with a wide range of art experiences through the exploration of a variety of media and techniques. Students will gain an understanding and appreciation of visual art by learning about the art of the past and the present. The Elements of Art and the Principles of Design are examined in the course as students complete projects in two and three-dimensional media. Written assignments, a portfolio and a final exam are also requirements. Studio in Art is the prerequisite for most art electives and students interested in an art sequence should take this foundation course first. This course fulfills the diploma requirement for 1 unit of art and/or music for graduation.

Students may be required to purchase some basic materials

604 STUDIO IN CRAFTS (1 Unit - Full Year) (Factor 8)

Prerequisite: None

Studio in Crafts is a full year foundation course in art which can lead to advanced study in Ceramics and Sculpture. The course involves the student in a wide range of two and three-dimensional media. The study of the Elements of Art and the Principles of Design form the basis of the course through their application in a number of projects utilizing craft materials. Clay, stitchery, printmaking, basketry, copper tooling, mask making, book binding, and calligraphy are a few examples. Students will gain an appreciation and understanding of crafts as an area of art. Written assessments, a portfolio and a final exam are requirements. This course fulfills the diploma requirement for 1 unit of art and/or music for graduation.

Students may be required to purchase some basic materials

### 606 DYNAMICS OF VISUAL COMMUNICATION (1/2 Unit – 1 Semester)(Factor 8)

Prerequisite: Studio in Art or Studio in Crafts

This art elective is a studio course that emphasizes the communication of ideas in visual terms so that a message is conveyed. Instruction is provided in the areas of commercial art and graphic design. Studio work will explore a variety of media in the production of visual books, pictorial alphabets, posters, billboards and a self-portrait resume. Developing original works of art which express personal meaning are attributes of this studio course.

Student requirements include successful completion of studio projects, development of a portfolio, quizzes, tests and a final exam on completion of the course.

The student enrolling in this course may be required to purchase some basic materials.

### 607 IMAGINATIVE SOLUTIONS AND DESIGN (1/2 Unit – 1 Semester)(Factor 8)

Prerequisite: Studio in Art or Studio in Crafts

Students will explore creative problem solving through composition using a variety of art materials and resources. This course investigates the combination of two dimensional and three dimensional components in the development of strong design and composition. This class is a studio course and includes the creation of works such as

textural collages, relief prints, book arts and assemblages. Students will enjoy a range of solutions in their individual works of art.

Student requirements included successful completion of studio projects, development of a portfolio, quizzes, tests and a final exam on completion of the course.

The student enrolling in this course may be required to purchase some basic materials.

608 STUDIO IN DRAWING AND PAINTING (1 Unit - Full Year) (Factor 8)

Prerequisite: Studio in Art

A course concentrating on the development of drawing and painting skills through a thorough introduction to various two dimensional techniques including pencil, charcoal, pastels, pen and ink, scratch board, watercolor, tempera, and acrylic. Emphasis is on skills development and studio work. Students should realize that drawing skills are emphasized and expect to work seriously to develop these skills.

Student requirements include completion of studio assignments, development of a portfolio, sketchbooks, tests and a final exam.

Students may be required to purchase some basic materials

609 STUDIO IN COMPUTER GRAPHICS (1 Unit - Full Year) (Factor 8)

Prerequisite: Studio in Art

Recommended: Studio in Drawing and Painting

Studio in Computer Graphics is an advanced art elective designed to involve the student in the use of the computer as a tool for image making. Students will explore a variety of software packages that will enable them to move through units of study in the exploration of technique and creative problem solving. The creation of original graphic art utilizing illustration software and the skillful use of hardware will be studied in the course. Students are expected to have a basic understanding of the computer before attempting this program of study.

610 STUDIO IN ADVANCED COMPUTER GRAPHICS (1 Unit – Full Year)(Factor 8)

Prerequisite: Studio in Computer Graphics

This course is offered on a Pass/Fail basis. In order to receive a numeric grade, it will be the responsibility of the student to file a form, provided by the Art Department. The form must be signed by his or her parents authorizing the student to receive a numeric grade by the Pass/Fail deadline date.

This is an advanced art elective for the serious computer art student that has successfully completed the full year course Studio in Computer Graphics. Students will be required to learn additional software programs in the areas of animation, web-page design and web-site development. This course is structured for the independent worker who is able to make design applications of practical knowledge in a creative and dynamic way.

Student requirements include completion of all studio assignments and a portfolio.

611 DIGITAL IMAGING (1/2 Unit – 1 Semester) (Factor 8)

Prerequisites include Studio in Computer Graphics and Advanced Computer Graphics unless waived upon approval from the instructor. This course is offered either in the fall or spring and may be repeated for additional credit as the nature of the coursework will change.

Digital Imaging is a course designed for students who desire the complete advanced, independent projects in digital media. Typical projects include DVD Portfolios of the student's work, interactive Shockwave Flash movies, 3-D animated movies and large format digital images. In addition to the Macromedia suite of software, the course will also utilize the I-series of software in the Mac Lab. These will include I-Movie, I-DVD, I-Tunes, I-Photo and Garage Band.

Digital Imaging is a Pass/Fail course. In order to receive a numeric grade, it will be the responsibility of the student to file a form, provided by the art department. The form must be signed by his or her parents authorizing the student to receive a numeric grade by the Pass/Fail deadline date.

612 ADVANCED STUDIO IN PAINTING (1 Unit - Full Year) (Factor 8)

Prerequisites: Studio in Art AND Studio in Drawing and Painting

This course is offered on a Pass/Fail basis. In order to receive a numeric grade, it will be the responsibility of the student to file a form, provided by the Art Department. The form must be signed by his or her parents authorizing the student to receive a numeric grade by the Pass/Fail deadline date.

A course for students who have successfully completed the requirements for Studio In Art and Drawing and Painting. Styles and techniques are studied and practiced leading to the development of the students own painting skills. Appreciation of painters in history is an integral part of the course. Although emphasis is placed on oil painting, other media such as watercolors, pastels, and acrylics may be explored.

Student requirements include development of a professional portfolio and completion of a final exam, besides successful completion of studio assignments.

The student enrolling in this course is also required to purchase some materials for this course.

613 ADVANCED STUDIO IN DRAWING (1/2 Unit - 1 Semester) (Factor 8)

Prerequisites: Studio in Art AND Studio in Drawing and Painting

This course is offered on a Pass/Fail basis. In order to receive a numeric grade, it will be the responsibility of the student to file a form, provided by the Art Department. The form must be signed by his or her parents authorizing the student to receive a numeric grade by the Pass/Fail deadline date.

This course is designed to involve the student in advanced problems in drawing techniques. Figure and portrait drawing, as well as other advanced assignments will be covered, while encouraging more independent and creative approaches to drawing.

Student requirements include successful completion of studio assignments, development of a portfolio, quizzes and a final exam at the conclusion of the course.

The student enrolling in this course may be required to purchase some basic materials.

615 SCULPTURE AS PUBLIC ART (1/2 Unit - 1 Semester) (Factor 8)

This course is open to all students who have completed a foundation course through the art department. Sculpture as Public Art is a half credit course which can be taken in either the fall or spring semesters or for two semesters for full credit, since the sculptures will change for each semester.

In this exciting course, students will be engaged in creating large scale sculptures to be placed around the high school property. The students in the course will work together to initiate the designs, themes and materials for their chosen projects. They will

create the sculptures and install them near entrances to the school building, the main lobby, and other lobby areas. As well, installations will be placed in the Sculpture Garden courtyard. Materials will vary according to what the students have chosen to create.

618 STUDIO IN CERAMICS 1 (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Studio In Art or Studio In Crafts

Studio in Ceramics 1 is a comprehensive study of the creative possibilities of clays and glazes. Emphasis is on hand building with the student being introduced to the techniques of hand building methods such as modeling, slab building, coil construction with an introduction to wheel thrown pottery. Projects may range from functional objects to objects that are purely aesthetic.

Student requirements include successful completion of studio assignments, quizzes, tests and a final exam.

619 STUDIO IN CERAMICS 2 (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Studio In Ceramics 1

Studio in Ceramics 2 is a continuation of Studio in Ceramics 1. Students will explore a variety of hand building techniques used to create ceramic art. In this course students will be expected to develop their own ideas within project guidelines while increasing the scale and complexity of their pieces. The students will also study contemporary ceramics and look at examples of clay work in an historical context. Studio in Ceramics 2 is an exciting course for the independent crafts person that enjoys the clay medium.

620 POTTERY (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Studio in Ceramics 1 AND Studio in Ceramics 2

Pottery is a course devoted to the construction and decoration of ceramic vessels. Students will have an opportunity to experience hand building and the pottery wheel in



the creation of a variety of pottery forms. Students will be encouraged to make functional pieces as well as those that are purely aesthetic in nature. Pottery provides students with an opportunity to work on ware sets, slip casting and wheel thrown pieces.

621 STUDIO IN PHOTOGRAPHY (1 Unit - Full Year) (Factor 8)

Prerequisite: Studio in Art or Studio in Crafts

Studio in Photography is a full year advanced art elective that has been designed for a young photographer who would like to explore the expressive potentials of black and white photography. In this course students will learn a variety of different shooting and darkroom techniques currently used in the commercial art photography market. Each student will be encouraged to develop their own unique style of representation and to exhibit their work in a yearly art show. Some of the topics to be explored will include: portraits, landscape and the photo documentary process. Students will also be encouraged to explore topics and themes of personal interest. Each student needs to have a 35mm manual camera.

The student enrolling in this course may be required to purchase some basic materials.

622 ADVANCED CRAFTS (1 Unit - Full Year) (Factor 8)

Prerequisite: Studio in Crafts or Studio in Art

This course is offered on a Pass/Fail basis. In order to receive a numeric grade, it will be the responsibility of the student to file a form, provided by the Art Department. The form must be signed by his or her parents authorizing the student to receive a numeric grade by the Pass/Fail deadline date.

This course will build on the foundation of studio program and will allow the student to have an in-depth exploration in a variety of craft related techniques. Students

will have the opportunity to create craft works which include basket making, paper making, mosaics, metal enameling, wearable arts and fibers, stained glass, bookmaking, games, toys and instruments. The units of study will give students an opportunity to advance their skills while focusing on a personal approach to the subject matter. Attention will be given to careers in craft fields with visits to craft studios, stores and craft museums.

Student requirements include successful completion of studio assignments, the development of a portfolio, tests and a final exam.

The student enrolling in this course may be required to purchase some basic materials.

623 STUDIO IN GLASSWORKING (1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: Studio in Crafts OR Studio in Art

Glassworking builds on the foundation course Studio in Crafts providing the student with an in depth exploration of the techniques and applications associated with the glass medium. Glassworking techniques will be applied in units of study that include enameling, fusing and slumping, lampworking and etched and stained glass. Historical influences ranging from antiquity to the contemporary will be studied. Students are required to maintain a notebook and complete assessments including a final exam.

The student enrolling in this course may be required to purchase some materials.

625 ADVANCED PLACEMENT IN STUDIO ART

5 periods per cycle

(1 Unit – Full Year)

(Factor 10)

Prerequisites: Studio in Art, Studio in Drawing and Painting **and on recommendation from an Art Teacher**. Student should be a senior.

Additional suggested prerequisites: Advanced Studio in Drawing and/or Advanced Studio in Painting

This is an advanced elective for the serious student of art who is planning to pursue art in college. Students will be required to complete three portfolios in Drawing or 2-D Design. These are the Breadth Portfolio, the Concentration Portfolio and the Quality Portfolio, all of which are submitted for adjudication in early May. The coursework demands a high level of commitment and requires a considerable amount of outside work. The AP program in Studio Art is structured for the independent worker who is able to be motivated out of a strong desire to succeed in the visual arts.

The student will receive guidance and instructions in all aspects of the course while learning to make visual solutions in a creative and thoughtful manner. Other aspects of the course include preparing and photographing portfolios, the development of an artist's statement, art criticism and extensive work in a variety of media. Student requirements include completion of all studio assignments as per the curriculum and AP guidelines. A one period per week lab period is required and will be part of the student's schedule, or, it will have to be completed after school. Class participants may be required to purchase some materials.

This course should not be confused with Studio in Art, the foundation art course in NY State.

### 626 ADVANCED PLACEMENT ART HISTORY (1 Unit – Full Year) (Factor 10)

This is a college-level introduction to Art History. The course is a chronological survey of architecture, painting, sculpture, and photography of the western tradition and selected works from a variety of cultures beyond the European tradition. Students will do extensive reading, and will build their visual skills by working daily with representations of important artworks. They will also improve their writing through rigorous regular practice on tests, and through one substantial research paper.

In comparing artworks from various periods and cultures, students will hone their analytical abilities and they will develop an understanding of works of art within cultural contexts. They will also learn how to apply their visual vocabulary towards a wide

variety of work, while arriving at meaningful conclusions on larger themes and cultural developments.

Students must be juniors or seniors, in good academic standing. In April of 2007, all students should take the AP Art History Examination, administered by the College Board. Successful completion of this examination may earn students credit for Art 101 (or similar introductory courses) in their universities.

The following courses in the Technology and the Family & Consumer Science Departments may also be used to meet the art requirement needed for graduation. Please refer to the Technology and Family & Consumer Science sections for specific course descriptions and requirements. Students interested in developing a portfolio as part of a college admissions requirement should plan a sequence in art through the Art Department.

<u>717 BUSINESS OF MUSIC</u> (1/2 Unit – 1 Semester)	(Factor 8)
<u>807 DESIGN AND DRAWING 1</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>808 DESIGN AND DRAWING 2</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>812 ENGINEERING DRAWING &amp; DESIGN/CAD</u> (1 Unit - Full Year)	(Factor 9)
<u>813 ARCHITECTURE/STRUCTURAL</u> (1 Unit - Full Year)	(Factor 9)
<u>815 BLACK &amp; WHITE PHOTO TECH (Photo 1)</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>816 COLOR PHOTO TECHNOLOGY (Photo 2)</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>820 FILM TECHNOLOGY</u> (1/2 Unit – 1 Semester)	(Factor 8)
<u>822 JEWELRY</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>864 WORLD OF FASHION</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>865 FASHION FOR YOUR FUTURE</u> (1/2 Unit - 1 Semester)	(Factor 8)
<u>866 PAPER TO PINS</u> (1/2 Unit - 1 Semester)	(Factor 8)

## MUSIC

Group lessons are an integral part of the music program at Arlington High School. Each student must attend a music lesson once a week on a rotating basis. The only reasons accepted for missing a lesson are:

1. Full period test or a quiz for part of the period – after completing the quiz, the student is expected to report to the lesson.
2. Science labs
3. Borderline or failing a class
4. Field trip

If a student has lunch the same period as their lesson they are to go to lunch first and eat their lunch and then come down to the lesson (packing a bag lunch will guarantee that the student will have plenty of time to eat).

The following procedures should be followed for an excused absence:

1. Sign in on the Lesson Excuse sheet in the book at the front of the class
2. Take a "Music Lesson Excuse" pass which is located next to the sign-out sheet and get the completed pass back to the music teacher by the end of the day or at the latest the next day.

Lessons missed must be made up in a timely manner. The student is responsible for setting an appointment with the music teacher for this purpose.

All courses in the Music Department, with the exception of Comprehensive Music, are offered on a Pass/Fail basis. Comprehensive Music can be taken on a Pass/Fail basis only if it is not taken in a sequence. In order to receive a numeric grade, it will be the responsibility of the student to file a form, provided by the music department, signed by his or her parents authorizing the student to receive a numeric grade by the Pass/Fail deadline date.

651 RUDIMENTS OF MUSIC (1/2 Unit - 1 Semester)

(Factor 8)

This course will introduce the fundamentals of music, including music reading, ear training, and elementary music theory. The course serves as a strong foundation for Comprehensive Music.

652 PIANO 1

(1/2 Unit - 1 Semester)

(Factor 8)

This course is for the student who would like to learn how to play piano. Development of basic skills of music reading and piano technique will be emphasized. No previous skills are required.

653 PIANO 2

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: Piano 1

This course will take over from where Piano 1 left off and cover more involved reading and piano technique.

654 COMPREHENSIVE MUSIC (1 Unit - Full Year)

(Factor 8)

Prerequisite: Rudiments of Music

This is a required course for students who plan to receive a sequence in music. Comprehensive Music is a college preparatory course concerned with the theoretical concepts of music writing, ear training, conducting and their relation to music history and literature. Either the approval of the instructor or the successful completion of Rudiments of Music (651) is required to enter the course.

660 NINTH GRADE BAND

(1 Unit - Full Year)

(Factor 8)

The Ninth Grade Band is open to all qualified winds and percussion in grade 9. The objective of the Ninth Grade Band is to continue the development of performance skills and to develop an appreciation of music. The band performs in various school concerts throughout the year. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons and performances.

ACCEPTANCE INTO CONCERT BAND, SYMPHONIC BAND AND WIND ENSEMBLE IS CONTINGENT UPON THE ABILITY LEVEL OF THE STUDENT AND THE RECOMMENDATION OF THE DIRECTORS.

662 CONCERT BAND

(1 Unit - Full Year)

(Factor 8)

The Concert Band is open to all qualified winds and percussion in grades 10 and 11. The objective of Concert Band is to develop an appreciation of music through performance. The band performs in various school concerts throughout the year. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons and performances.

663 SYMPHONIC BAND

(1 Unit - Full Year)

(Factor 8)

The Symphonic Band is open to all winds and percussion in grade 12 and to the more advanced winds and percussion in grades 10 and 11. The objective of Symphonic Band is to develop an appreciation of music through performance. The band performs in various school concerts throughout the year. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons and performances.

664 WIND ENSEMBLE

(1 Unit- Full Year)

(Factor 8)

The Wind Ensemble is comprised of the most advanced winds and percussion in grades 10 through 12. The Wind Ensemble performs literature written for advanced high school and college bands. The band performs in various school concerts throughout the year. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons and performances.

670 CHORUS

(1/2 Unit - Fall Semester)

(Factor 8)

For the beginning level vocalist who wishes the opportunity to participate in a choral experience. Meets every day for 1 semester, with an additional small group voice lesson, receiving 1/2 unit of credit which fulfills half of the Board of Regents requirement in music for graduation from high school. Credit is contingent upon satisfactory participation in all required rehearsals, voice lessons and performances.

672 MIXED CHORUS

(1 Unit - Full Year)

(Factor 8)

For the intermediate level vocalist who has successfully completed chorus at the middle school level. Meets every day with an additional small group voice lesson offering the opportunity to develop skills in vocal production and the reading of music. Placement in this course is by recommendation from the middle school or high school choral director. Credit is contingent upon satisfactory participation in all required rehearsals, voice lessons, and performances.

674 CONCERT CHOIR

(1 Unit - Full Year)

(Factor 8)

Concert Choir is for the advanced level vocalist. It meets every day with an additional small group music lesson. In addition to performing various styles of literature, students will be required to develop skills in vocal techniques and music reading. Placement in this course is by recommendation of high school choral director. Credit is contingent upon satisfactory participation in all required rehearsals, voice lessons, and performances.

680 SYMPHONETTE

(1 Unit - Full Year)

(Factor 8)

Symphonette is open to all qualified ninth grade string players. The Symphonette performs at both school concerts and in the community. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons, and performances.

682 SINFONIA

(1 Unit - Full Year)

(Factor 8)

Sinfonia is a full orchestra, which is open to all qualified string, wind and percussion players in grades 10-12. The group director is responsible for the selection of all players. Repertoire includes both standard orchestra literature and enjoyable light classical selections. The Sinfonia performs at regularly scheduled school concerts and in



the community. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons, and performances.

684 SYMPHONY ORCHESTRA (1 Unit - Full Year) (Factor 8)

Symphony is a full orchestra that will rehearse and perform the classical and popular standard orchestral repertoire. Symphony is open to all qualified string, wind and percussion players in grades 10 – 12 and placement is decided based on teacher recommendation. Symphony performs at regularly scheduled school concerts and in the community. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons, and performances.

685 PHILHARMONIA (1 Unit – Full Year) (Factor 8)

Philharmonia is comprised of the most advanced string, wind and percussion players in grades 10 – 12. Philharmonia will extensively rehearse and perform original works from the standard orchestral and popular repertoire. Placement is decided based on teacher recommendation. This orchestra will perform at numerous school functions throughout the school year, including (but not limited to) the Bone-anza, Winter, Pops and Spring Concerts. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons, and performances.

### **BUSINESS EDUCATION**

The Business Education program is comprehensive and designed to meet personal, college and career needs of the Arlington High School students.

Our purpose is to prepare students for entry-level employment in the business office and marketing occupations and for post-secondary studies in business. It also provides opportunities for students to learn about business as it relates to their personal lives. To enhance this purpose, we also encourage participation in the Cooperative School-to-Work Program, the school store, and our Future Business Leaders of America (FBLA) club.

We encourage all students to take a business course to learn about the world of business. Each of our labs uses the most updated computer equipment available. We

have two Smartboards now installed in two of our rooms. In addition, the Business Department issues more awards at graduation than any other department.

Please note the following:

All Keyboarding Classes are fully computerized.

All courses are open to any student for elective credit.

21<sup>st</sup> Century Communications may be taken to satisfy part of the fourth unit of English for any Occupational Sequence student. The Business of Music course fulfills 1/2 credit towards the Art/Music elective graduation requirement.

Any business course taken on a pass/fail basis may not be used as a unit for a business sequence.

For the Advanced Regents Diploma, a student may substitute a 5 unit sequence in Business Education for the 3 unit Foreign Language Requirement.

#### Five Unit Sequence

Required: Career and Financial Management (1/2 Unit)

Plus 4 1/2 units from the following:

Accounting 1	(1 Unit)	Keyboarding 1	(1/2 Unit)
Advanced Accounting	(1 Unit)	Keyboarding 2	(1/2 Unit)
Accelerated Accounting	(1 Unit)	21 <sup>st</sup> Cntry Communications	(1/2 Unit)
BA/Microsoft Office Suite	(1 Unit)	Business Ownership	(1 Unit)
Business Law	(1 Unit)	Business of Music	(1/2 Unit)
Co-op Work Experience	(1 Unit)	E-Commerce	(1/2 Unit)
Sports and Ent. Marketing	(1 Unit)		

The following Business Education courses may be taken for personal use, but may NOT BE USED AS PART OF A BUSINESS SEQUENCE:

Integrated Computer Skills/Applications	(1/2 Unit)
Microsoft Office for Business	(1/2 Unit)
Personal Money Management	(1 Unit)
College Prep/Microsoft Office	(1/2 Unit)

700 KEYBOARDING 1 (1/2 Unit - 1 Semester) (Factor 8)

Strongly recommended for all students

With the increase in technology in the home as well as in the business world, alphabetic and numeric keypads have become commonplace communicative devices. This keyboarding course is designed to develop touch keyboarding skills so that students may use the skill in their personal lives or as a supportive skill in their jobs. The course will further develop the techniques, concepts and skills of keyboarding while applying these skills to relevant occupational situations. Students will also be given an introduction to computer operations.

701 KEYBOARDING 2 (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Keyboarding 1

This course emphasizes the further development of keyboarding competency needed for entry level employment. Office correspondence and advanced keyboarding applications are emphasized.

702 COLLEGE PREP/MICROSOFT OFFICE (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Student must be able to demonstrate the ability to type a minimum of 20 words per minute with three or fewer errors. The student may be self taught.

This course is not open to students who have taken Keyboarding 1.

This course is designed for students who already know how to type. This course will prepare them for college and career typing.

The first quarter will focus on the typing of term papers. In addition, the student will learn how to do Business and Personal Letter, Memorandums, Resumes, Outlines, Tabulations, and typing of Rough Draft Copy. The second quarter will focus on the other applications in the Microsoft Office Suite: Excel, PowerPoint, and Publisher. If time permits, an introduction to database management in Access will be included.

703 E-COMMERCE (1/2 Unit – 1 Semester) (Factor 8)

This course is designed to teach business principles with an emphasis on the way business models must be adapted to successfully capitalize on the potential of the Internet. Brick and mortar businesses will be discussed, as well as click and mortar companies. Topics will include digital advertising, Internet marketing, global e-commerce, Internet security and privacy, and website design.

In E-commerce, the emphasis is on the differences between traditional corporate organizational structures and streamlined organizations that encourage quick decision making processes in order to take advantages of technology-driven markets.

704 21<sup>st</sup> CENTURY COMMUNICATIONS (1/2 Unit - 1 Semester) (Factor 8)

This course may be used to meet sequence requirements for Business AND as part of the fourth unit English sequence by any occupational education sequence student.

The purpose of the Communications course is to provide students an opportunity to develop considerable proficiency in communicating. The course will emphasize the expansion and application of concepts in nonverbal communication, listening, writing, reading, and oral communication skills.

A reinforcement of English grammar and vocabulary building are also included.

707 CAREER AND FINANCIAL MANAGEMENT (1/2 Unit – 1 Semester)

(Factor 8)

Required course for all BUSINESS EDUCATION SEQUENCES

This course is designed to introduce students to the realities of the working world. The course examines the considerations involved in choosing a career and its relationship to lifestyle choices. It also focuses on the interrelationships among human needs, wants, values, and goals as they apply to management of personal and financial resources.

710 ACCOUNTING

(1 Unit - Full Year)

(Factor 8)

A course designed to develop occupational competency in bookkeeping. Course content encompasses the complete accounting cycle. This course is also recommended for students going on to post-secondary accounting training.

Historically, accounting at this level has benefited those students who plan on majoring in accounting in college.

711 ADVANCED ACCOUNTING

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Accounting

This course deals with the recording of partnership and corporate records. The interpretation of financial information is compared and internal controls studies. Emphasis is given to the accounting procedures completed at the end of the accounting cycle.

This second-year accounting course is recommended for students planning a career in business. This course along with Accounting One is equal to a college level accounting one course.

712 ACCELERATED ACCOUNTING (1 Unit - Full Year) (Factor 9)

A course for sophomores, juniors, and seniors

A full year course designed to develop occupational competency in accounting. The course will cover in one year the same materials presented in Accounting and Advanced Accounting. The material covered is what most colleges cover in a one semester Accounting I course.

This is a college level course for students planning careers in accounting or a related career in business. The highly motivated, academically advanced student would most benefit from this course. The student need not be a business sequence student.

713 BUSINESS LAW (1 Unit - Full Year) (Factor 8)

This course may be used to meet sequence requirements for Business.

This course is the study of laws and principles used in carrying out business transactions and dealings. The main topic covered, the Law of Contracts, is constantly used in our daily lives. Also covered: Bailments, Credits, Commercial Paper, Employment, Agency Insurance, Property Rights, Wills and Estates, Income Taxes and Business Organization Law. Field trips and guest speakers will be used to further instruct students on law concepts.

716 SPORTS AND ENTERTAINMENT MARKETING (1 Unit - Full Year)  
(Factor 8)

The purpose of this course is to integrate the basic principles of marketing with the sports and entertainment industries. Topics will include promotions, record deals,

endorsements, public relations and countless other sports and entertainment related topics in marketing.

The course is designed to pique the interest of students who would like to pursue a career in these fields. In addition, it will educate students as to what goes on behind the scenes in the business.

This course is available to all students and is highly recommended, especially to those who would like to pursue a career in business.

### 717 BUSINESS OF MUSIC

(1/2 Unit – 1 Semester)

(Factor 8)

Business of Music is a half-year course designed to familiarize students with the traditional principles of business as these principles apply to the music industry. Course topics include music industry careers, marketing, entrepreneurship in the music industry, and current ethical issues such as downloading music from the Internet.

This course is designed for all students, and will showcase the music industry as a profit-making business. Students will learn basic business concepts such as marketing, economics, and business planning as they relate specifically to the business of music.

The Business of Music is available to all students and is highly recommended, especially to those who would like to pursue a career in business or music.

This course fulfills 1/2 credit toward the art/music elective graduation requirement.

### 718 COOPERATIVE WORK EXPERIENCE (CO-OP)

(Units of Credit Varies - Meets Every Day for Full Year) (Factor 8)

A course for juniors and seniors

The co-op program provides an opportunity for the student to work in a job setting which reinforces knowledge and skills learned in business or occupationally related courses. There is supervision of work experience by the teacher-coordinator who assists in appropriate job placement in local businesses.

Students will receive one credit for working at least 300 hours in a co-op program. Employment may be paid or volunteer. An additional credit will be earned by taking the required co-op academic course.

Requirements for student participants:

1. Must have working papers and a Social Security Number
2. Must have met or be in the process of meeting academic requirements for graduation

3. Must be employed under current state and federal labor laws and regulations
4. Must have completed or currently be taking co-op academic course
5. Must have own transportation to and from work

The co-op academic course will include, but not be limited to, topics such as human relations, interview techniques, resume writing, job search techniques, work ethics, labor laws, career exploration, and job survival skills.

719 BUSINESS COMPUTER APPLICATIONS/MICROSOFT OFFICE SUITE  
 (1 Unit - Full Year) (Factor 8)

Prerequisite: Keyboarding is strongly recommended, but not required.

This is a completely integrated business course which will provide the student with the opportunity to acquire concepts and attitudes essential for understanding and working in the field of business. Students will be able to utilize these concepts through hands on instructional approach. Some of these tools include: word processing, data base, spreadsheet, and graphics. This course is designed to teach students how to use the components of the Microsoft Office Suite, including Word, Excel, PowerPoint, and Internet Explorer

This course will prepare students for the MOUS Certification Test. The test may be taken at Dutchess Community College with teacher recommendation.

720 PERSONAL MONEY MANAGEMENT (1 Unit – Full Year) (Factor 8)

A course for juniors and seniors

Personal Money Management is a course designed to educate students in the fundamentals of personal finance. Students will learn about both the opportunities and dangers that exist in the world of finance.

Topics include:

- Stocks, Mutual Funds, and other securities
- 401k Plans, Pension Plans, and other retirement funds
- Credit cards, Mortgages, Personal and Auto loans
- Filing and Paying Taxes, Tax Laws
- Investing in Businesses, Real Estate and Stocks



Students will be asked to participate in an online Stock Trading Competition. They will be given a \$1 million dollar account and will be competing against other students in the class. This helps the students to understand both the long-term and short-term trends of stocks and mutual funds.

723 BUSINESS OWNERSHIP

(1 Unit – Full Year)

(Factor 8)

A course for Juniors and Seniors.

Business Ownership is a full year course designed to provide a step-by-step approach to business operations. The main topics covered are the different sections of the business plan. Other topics include entrepreneurial skills, management, marketing, and financial statements for small businesses.

Each student will choose a business they would like to develop and create a business plan for that business. The business plan will include marketing, management and employment strategies.

Business Ownership will benefit students wishing to pursue a career in business and students that wish to own and operate their own business.

726 INTEGRATED COMPUTER SKILLS AND APPLICATIONS

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: Keyboarding is recommended, but not required.

This course is designed to teach students how to use the components of the Microsoft Office Suite, including Word; Excel; PowerPoint, Publisher, and Internet Explorer. These software applications will be taught with an emphasis on the coordinated use of the programs to achieve a specific goal. There will be no emphasis on programming.

Students will learn how to locate the primary source materials necessary to write a research paper. Students will then use the information gathered to write and format a comprehensive outline, showcase their findings in a multi-media presentation, analyze their findings, and complete the process by formatting and writing a research report on the topic in question.

The design of the course will stress daily hands-on experience. Students will become aware of the capabilities of an integrated series of software and will learn to function successfully with such a software series.

This factor 8, half-year course, is recommended for all students grades 9 through 12. The course can be taken for a grade or on a pass/fail basis. It is strongly recommended that a student take this course early in his/her high school career. This will allow the student to use the knowledge and skills learned in the course throughout their entire academic career.

## TECHNOLOGY EDUCATION

We live in a technology-based information age. Students, while exploring the possibilities of future careers, will not be able to escape the vastness and importance of Technology. Simply put, Technology affects us all.

Technology Education courses can serve **you** whether you are an occasional hobbyist, a serious enthusiast or planning a professional career as an architect, technician, or engineer. Let us help you prepare for **your** future. The Guidance Office has Technology Education brochures available to review the many options before you select your courses.

A student enrolled in a Technology Education course, or sequence will be encouraged to draw from a number of personal experiences, from both in and out of school. It is the goal of the Technology Education Department staff to focus your

experiences and merge them with a real-world-applications approach via hands on learning and problem solving.

Students who wish to obtain a 3, 4 or 5 unit Technology Education sequence may select courses from the following choices:

- All Technology courses will work toward a 3 unit Technology Ed. sequence.
- A 4 unit sequence may be obtained in Technical Drawing as outlined in the Technical Drawing section.
- A 5 unit sequence may be obtained by taking additional technology electives.

Any student is welcome to enroll in a Technology course of interest to them provided that any prerequisites for those courses are met.

### **Technology Credit Substitutions for Art, Science and Language**

Design and Drawing, Engineering Drawing and Design/CAD, Architecture, Photography and Jewelry may be used to fulfill the New York State Art/Music graduation requirement. Credit toward the third year of Science may be earned by completing any 2 of the following Technology Education courses: Electricity, Digital Electronics, Transportation, Materials Processing, or Photography.

For the Advanced Regents Diploma, a student may substitute a 5 unit Technology sequence for the 3 unit Foreign Language requirement.

Any Technology Education course taken on a Pass/Fail basis may **NOT** be used for a technology sequence. Principles of Engineering may **NOT** be taken on a Pass/Fail basis.

## **TECHNOLOGY EDUCATION SEQUENCE**

**SYSTEMS COURSES**

*TAKE 1 OF THESE FOR 1/2 UNIT*

**COMMUNICATIONS**

**PRODUCTION**

**TRANSPORTATION**

**FOUNDATION COURSES**

*TAKE 2 OF THESE FOR 1 UNIT*

DESIGN & DRAWING 1 AND 2

MATERIAL PROCESSING

ELECTRICITY

*ELECTIVES TAKE ANY OF THE ELECTIVES LISTED ON THE FOLLOWING PAGES, OR ANY OTHER OF THE SYSTEMS OR FOUNDATION COURSES ON THIS PAGE FOR 1 UNIT.*

**CAREER AND FINANCIAL MANAGEMENT-A**      *FOR 1/2 UNIT*

TOTAL OF 3 UNITS

### **Technical Drawing**

This is a 4 year sequence that works toward the New York State diploma requirements for graduation. Technical Drawing courses are also available as individual electives. As previously stated, credit for the art/music course required for graduation may be received by completing a course in Design and Drawing or Architecture.

#### TECHNICAL DRAWING SEQUENCE

Design and Drawing 1 & 2	1 Unit
Engineering Drawing and Design/CAD	1 Unit
Architecture/Structural	1 Unit
Career and Financial Management-A	1/2 Unit
Any Technology Elective	1/2 Unit

### **Systems Courses**

All 1 Semester Courses  
1/2 Unit

Factor 8  
No Prerequisites

Take one of the three for the sequence requirements.

#### **800 COMMUNICATIONS**

Prerequisite: None

This course offers students an exciting opportunity to explore the world of communications. Students will learn the history of technology as well as the impact in our society. They will gain knowledge in variety of areas such as graphics, advertising, screenprinting, photography, telecommunications and broadcasting. They will, by the end of this course, have produced multiple projects in those areas.

The aim of this course is to introduce students to the world of communications and to build an interest to develop skills in these areas.

The following is a list of a few types of equipment which students could use during the course:

Video Editing  
Video Cameras  
Microphones  
Multi-Track Recorders  
Presentation Software

DVD/CD Players  
Computers  
Musical Instruments  
Photography Equip. (Tone & Digital)

### 801 PRODUCTION - WOOD

Prerequisite: None

Students experience how products are made in the wood industry. They become involved in the fabrication of individual items and participate in the mass production of a useful product simulating the production in industry of objects we use every day. The course also includes experiences in the field of construction involving residential and commercial structures. Through the activities in manufacturing and construction, experience is gained in the proper use of tools and power equipment with emphasis on safety and economy with minimal environmental disruption.

### 802 PRODUCTION - METAL

Prerequisite: None

Students experience how industries produce everyday items from several types of metal. They become involved in the fabrication of individual items and participate in the mass production of a useful product, simulating the production of items by using division of labor. A variety of skills looked for in local industries are emphasized covering a broad range of hand and power equipment related to the field. Safety, organization of time and labor with minimum disruption to the environment is stressed. This course will be held in the Metal Shop.

### 803 TRANSPORTATION

Prerequisite: None

Can you imagine what life would be like without transportation? There would be no way to move people and products from place to place. In this course, you will experience an overview of aerospace, marine and land transportation using the systems model of technology.

Students will spend approximately half the course learning the fundamental operations of the internal combustion engine and experience actual disassembly, inspection, reconditioning, assembly and testing of their own small engine. The remainder of this semester course will cover the various types of transportation and operations of land, air and marine vessels in use today.

Many students successfully completing this course will choose to enroll in Land Transportation, Course 809.

### **Foundation Courses**

All 1 Semester Courses  
1/2 Unit

Factor 8  
No Prerequisites Except as Shown

Take 2 of these three to meet sequence requirements.

### **804 MATERIALS PROCESSING**

Prerequisite: None

A student in this course will experience the general techniques by which both natural and synthetic materials are developed, used and manipulated. Woods, metals and plastics are a few of the materials that will be investigated in the course. Machining, casting, forging, and fastening are some of the techniques that will be studied. Students will experience first hand how ideas develop from concept to product. This course will be taught in either the wood or metal shop.

## 805 ELECTRICITY

Prerequisite: None

This is an introductory level, hands on, course to electricity. Basic electrical theory is covered using residential wiring as the major course content and theme. The student will learn how to safely wire residential circuits and will design a workable wiring plan using the National Electrical Code guidelines. The student will also learn DC motor theory by designing, building and testing a working model.

## 807 DESIGN AND DRAWING 1

Prerequisite: None

## 808 DESIGN AND DRAWING 2

Prerequisite: Design and Drawing 1  
Course 807

Design and Drawing 1 and 2 are technical drawing courses designed for the student with little or no drawing experience. They provide basic instruction in technical drawing techniques on the drafting board and utilizing the Computer Aided Drafting software program CADKEY.

Principles of mechanical drawing, techniques in measurement and scaling, freehand sketching, lettering, two-dimensional and three-dimensional drawings are the general course content.

Students will develop and design original projects and create models of their designs to see the design process from start to finish. Science and math students will find useful applications to concepts taught in those subjects.

Other course activities include geometric construction, dimensioning of drawings, pattern design and development, cross sectional drawing and auxiliary view drawing.



CADKEY is a major part of this course. Students need not have prior knowledge of this program, but general computer experience is useful. **This course is a must for students wishing to study engineering, architecture or any of the building and construction trades as well as careers in design.** Accuracy, neatness and precise measurements are necessary to complete every assignment.

This course can be used to satisfy the art/music requirement for high school graduation. Students may take courses 807 and 808 for the full year to earn and apply 1 credit or for a single semester to earn 1/2 credit.

### **Technology Education Sequence Electives** (toward a 3 unit or 5 unit sequence)

All Factor 8 except Principles of Engineering, Architecture/Structural and Engineering Drawing and Design/CAD

Take 2 one semester or one full year course from these electives to meet sequence requirements.

#### 809 LAND TRANSPORTATION/POWER (1 Unit - Full Year)

Prerequisite: Transportation – Course 803

This course is designed to give the students the opportunity to learn the basic skills needed to work on today's complex automobiles. Students will learn the operation of modern internal combustion engines, electric engine controls, chassis maintenance, automotive cooling systems, performance technology and vehicle restoration as well as other aspects related to modern automobiles. Projects in this course have included work on classics, street rod and race vehicles. Students are encouraged to work on their own, a friend's or relative's vehicle. Those without personal projects will be working with the instructor supplied restoration projects.

The aim of the course is not to develop fully trained automotive technicians but to develop interest in the field and produce technologically alert automotive consumers.

810 CONSTRUCTION (1/2 Unit - 1 Semester)

Prerequisite: None

Students will be provided with an opportunity to become familiar with basic modern building methods and materials. The course will deal with typical house construction, from specifications through building an actual structure. This will reinforce planning theory, problem solving and math as well as provide new knowledge and a wide variety of skills. These skills, such as blueprint reading, estimating costs, framing procedures, etc. are needed by most homeowners to repair and maintain their homes.

811 DIGITAL ELECTRONICS (1/2 Unit - 1 Semester)

Prerequisite: Electricity - Course 805

Digital Electronics is a course which focuses on solid state circuits and devices. By combining hands on construction projects with background theory, students learn about the functions and inter-relationships of various solid state components.

Additional lessons cover magnetism and its relationship to electricity, and electric motors.

A modest lab fee is charged to cover the cost of three (3) student selected project kits to be built during class.

812 ENGINEERING DRAWING AND DESIGN/CAD (1 Unit - Full Year) (Factor 9)

Prerequisite: Design and Drawing 2 – Course 808

Engineering as a graphic language is the focus of this course. This is a one unit course that explores components, applications, design functions and career opportunities within various engineering and design areas. We will cover the latest developments and current practices of many areas of graphic communications, CAD, functional design and drawing, material representation, shop processes, geometric construction and understanding industry standards. The areas of mechanical, architectural and structural, electrical and civil engineering will be covered.

CAD systems will be used to generate hard copy. Emphasis is placed on the use of computer technology and the understanding of the changing role of CAD and its effects on the design and manufacturing process. Students, working in teams, will follow the design process to create accurate and complete drawings and hand build scale models and mock-ups of their designs.

**This course is a MUST for students considering further study in the areas of engineering, architecture, the building trades or any field of design.**

813 ARCHITECTURE/STRUCTURAL (1 Unit - Full Year)

(Factor 9)

Prerequisite: Design and Drawing 2 - Course 808  
Open to Juniors and Seniors Only

Recommended: Construction - Course 810

The centerpiece of this course is the development of a custom designed building by each student. This effort combines the student's individual creativity with specific knowledge of building techniques, appropriate room design and floor plan layout presented through skillful drafting techniques. Material on historical architectural styles, surveying, environmental planning consideration, energy efficiency and solar design are other topics which are explored during the course. Each student will produce a complete set of working drawings and a scale model of his/her design. Students are encouraged to enter and compete in annual college level architecture contests. See instructor for details.

The majority of the drawings done in this class will be created on a Computer Aided Drawing (CAD) system using CADKEY v. 21.5 and DataCAD v. 10.05.02, with the remainder done using traditional techniques.

This course may be used to satisfy the one unit of credit in art/music required for graduation.

814 PRINCIPLES OF ENGINEERING (1 Unit - Full Year)

(Factor 9)

Prerequisite: Regents Physics and Math 3 R.

Recommended: Design and Drawing 1 & 2, Programming C & C++ and current enrollment in Math 4 or Calculus

Open to Seniors only. Juniors will be admitted if space is available and by permission of instructor.

Anyone interested in any form of engineering or engineering technology at the college level should consider this course experience. The course itself is an integration of hands on laboratory design problems and techniques with principles of the mathematics and physics courses students have experienced elsewhere in their high school career.

Areas will involve production in wood, metal, basic chemical and electronics engineering modeling. Computers will be incorporated throughout the course to aid in the simulation of problem solving and control.

Students involved in the course will gain major insights to engineering concepts for now and in the future. In addition, the course will prepare them for the type of curriculum they will experience at the college level as well as allow them to experience the engineering career itself on a small scale.

By the end of the course students will be competent enough to: (a) model a problem; (b) set up a system to solve that problem; (c) optimize that system to maximize

efficiency and minimize cost; (d) interface that system with present sociological conditions; (e) design that problem with appropriate materials and (f) know the ethical and professional responsibilities associated with that design.

815 BLACK AND WHITE PHOTO TECHNOLOGY (Photo 1) (1/2 Unit - 1 Semester)

Prerequisite: None

Open to sophomores, juniors and seniors only.

Photo Technology is intended to acquaint students with the basic concepts of black and white photography. Students will be instructed in camera operation, composition, lighting, black and white film and paper development, portrait photography, stop action photography and the proper use of flash. Students will have ample time to enlarge and print their personal film for their own enjoyment. Students may use their own cameras or use those of the school for course work.

1/2 credit may be earned and applied to the one unit of credit in art/music required for graduation.

816 COLOR PHOTO TECHNOLOGY (Photo 2) (1/2 Unit - 1 Semester)

Prerequisite: Photo Technology 1 - Course 815

This course is offered ONLY to students that have passed Photo Technology 1. Since the number of classes will be limited, preference will be given to Seniors first. Students will be able to work with color film development, color prints & slides as well as some black and white photography. The primary emphasis will be on color photography. Students will be given photographic assignments to complete and will have ample time to print photographs of their choice while developing a color portfolio. Students may use their own cameras or use those of the school for course work upon assuming responsibility for same.

1/2 credit may be earned and applied to the one unit of credit in art/music required for graduation.

### 817 DIGITAL PHOTO TECHNOLOGY (Photo 3)

(1/2 Unit - 1 Semester)

Prerequisite: Photo Technology 1 – Course 815  
Photo Technology 2 – Course 816

Once students have studied the basic concepts of photography in Photo Tech 1 and the principals of color in Photo Tech 2, they may continue their pursuit of photography with Digital Photo. The course will continue the concepts of photo technology with the digital format. This would involve assignments with would include Black & White, Solarization, Sepia tone photography, color photography and other variations which are consistent with digital photography. A large part of the course would be student involvement in photographing school and community events on a regular basis. Students should have access to a digital camera to take this course.

### 818 AUDIO COMMUNICATIONS

(1/2 Unit - 1 Semester)

Prerequisite: COMMUNICATIONS - Course 800

Students enrolled in Audio will experience what it is like to write and produce in present day radio and studios. Students will learn fundamental principles of sound waves and broadcasting related to radio. Studio production will develop a student's ability to interact with various recording equipment. Students will create, write, produce and engineer student work.

### 819 VIDEO PRODUCTIONS

(1/2 Unit - 1 Semester)

Prerequisite: COMMUNICATIONS - Course 800

In Video Production students will learn about the three main stages of video; pre-production, production and post-production. Students will explore various recording formats, camera uses and parts and care, camera shots and film techniques. Students will perform tasks of news anchors, videographer, talk show host and documentary filmmaker through creative video taping various projects.

Video Production does not require ownership of a video camera, however, having access to one for usage is helpful.

## 820 FILM TECHNOLOGY

(1/2 Unit – 1 Semester)

Prerequisite: Video Production – Course 819

This class will take a look at the technological history of film making, from the late 1870's up to today. We will discuss the early inventions and how technology has brought us into the 21<sup>st</sup> century. It will also give students a hands-on opportunity to work through the technical challenges of filmmaking.

Through the screening of such films as *Metropolis*, *The Matrix* and others, we will analyze and discuss the technology needed for how the directing techniques and special effects are achieved. Students will be required to complete various activities which would familiarize them with the various film equipment, film language, storyboarding, and film critiques. Types of hands-on projects may include shooting movie scenes and making a film short. Students should possess a willingness to work hard and cultivate creative ideas and thoughts.

1/2 credit may be earned and applied to the one unit of credit in art/music required for graduation.

## 821 CREATIVITY IN FURNITURE AND CABINETMAKING (1 Unit - Full Year)

Prerequisite: Wood Production – Course 801 OR Permission of Dept. Coordinator

An advanced woodworking course structured to fulfill the needs and desires of those students who want to go beyond the fundamentals of woodworking. This is the course to build that grandfather clock, roll top desk, chest on chest, china hutch, stereo unit or whatever project that will fulfill your needs and goals in the area of woodworking. In this exciting area you will use a large variety of hand and machine tools to create your valuable heirloom. Emphasis will be placed on good design, use of fine hardwoods, advanced joinery, finishing techniques and an appreciation of excellent craftsmanship. Here's your chance to develop your special skills, gain confidence in your abilities and enjoy woodworking as a valuable asset in your life.

## 822 JEWELRY

(1/2 Unit - 1 Semester)

Prerequisite: None

Jewelry making is one of the oldest technologies. Every culture decorates itself in some fashion. Arlington jewelry students will be introduced to a wide range of techniques, skills and concepts of jewelry fabrication and design. Students will work with a variety of materials including copper, brass, nickel, silver, gold and fiber to create pendants, bracelets, necklaces, rings, etc. Topics include, but aren't limited to, wire wrapping and weaving, piercing, silver soldering, forming and sheet work, casting, and

more. This course may be used to satisfy a 1/2 unit of the required one credit in art/music.

823 CONSUMER AUTOMOTIVES (1/2 Unit - 1 Semester)

Prerequisite: None

Recommended for students of driving age

This course is designed to target only those students who would not normally enroll in any Technology Education transportation course (Courses 803, 809).

As one of your most valuable possessions, your car needs care and understanding. This course will acquaint you with how it works and how to keep it going. With hands on activities you will explore engine, transmission, pollution control, suspension, braking and other automotive systems.

*PLEASE NOTE THAT THE FOLLOWING COURSE IS REQUIRED FOR ALL OCCUPATIONAL EDUCATION SEQUENCES.*

824 CAREER AND FINANCIAL MANAGEMENT-A (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: None

This course is *required* for all students enrolled in a Technology sequence as well as Occupational Education sequences.

A course for sophomores, juniors and seniors

A series of two modules: Personal Resource Management and Career/Working Citizen. These modules include performance objectives designed to develop competencies which are critical or highly desirable to all students. This course will fulfill the two modules required for all occupational education students.



**FAMILY & CONSUMER SCIENCE**

The Family & Consumer Science Department is offering a variety of courses which include topics in food preparation, fashion design, parenting and human development. All courses may be selected either as individual electives or in specific sequences. The following Family & Consumer Science courses may also be used to satisfy:

Art Requirement

864 World of Fashion	1/2 Unit
865 Fashion for Your Future	1/2 Unit
866 Paper to Pins	1/2 Unit

Science Requirement (fulfills second year requirement)

859 Chemistry/Human Body	1 Unit
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*It is important to note that every Family & Consumer Science major must take FOOD AND HUMAN SERVICES in order to satisfy the state mandate for Occupational Education requirements.*

The 5 unit Family & Consumer Science sequence may be substituted for the 3 unit language requirement necessary for an Advanced Regents diploma.

Any Family & Consumer Science course which is taken on a Pass/Fail basis may NOT be used as a unit for the Family & Consumer Science sequence.

Description of courses:

850 FOOD AND HUMAN SERVICES      (1 Unit - Full Year)      (Factor 8)

This full year course provides an introduction to the Family and Consumer Science sequence. The course provides four different modules, including Career Management, Financial Management, Human Service, and Food Service. Students will gain an understanding of the working world as well as an introduction to finance. The Human Service module focuses on an introduction to Human Development and Early Childhood, while the Food Services module introduces the Culinary Arts program.

CORE COURSES ARE THE FIRST SPECIALIZATION COURSES WITHIN THE FAMILY & CONSUMER SCIENCE CONTINUUM. EACH CORE COURSE PROVIDES BASIC CONTENT. IT IS RECOMMENDED THAT STUDENTS TAKE THE CORE COURSE FIRST IN THE SEQUENCE THEY ARE PURSUING.

852 FOOD CORE      (1/2 Unit - 1 Semester)      (Factor 8)

This course gives students the opportunity to learn about the culinary world. Students learn about and create foods from different areas, such as breads and grains, eggs, cheeses, vegetables, fruits, meats, and baking. Students are given hands on cooking labs in which they work with a kitchen group to create food items corresponding to the given unit of study.

Related Occupations: Baker, Butcher, Fast Food Worker, Dietitian

853 HUMAN DEVELOPMENT CORE (1/2 Unit - 1 Semester) (Factor 8)

Content of this course focuses on the adolescent and how he/she relates to others. Getting along with parents, peers and young children will be covered in a variety of ways. Students will observe a nursery school, use role playing and develop class presentations. This course includes an assortment of group activities.

Related Occupations: Social Worker, Counselor, Psychologist, Therapist

856 CHEF PREP (1 Unit - 2 Periods Daily - Fall Semester) (Factor 8)

A course for sophomores, juniors and seniors

**It is strongly recommended that students enrolling in this course have already completed Food Core. Also, students enrolling in this course should be seriously interested in attending a culinary school and pursuing a career in the food service industry.**

This is the most advanced foods course offered, therefore, students are expected to be proficient in math skills, basic cooking techniques, use of commercial kitchen equipment and efficient time management. Proper culinary knife skills will be stressed with an emphasis on sanitation and food safety. Pastries, sauces, soups, quick breads, pies, yeast breads, vegetables, and cookies are a few of the foods that students will prepare.

This is a production course, therefore, students will prepare quantity foods for various functions in the school like the outstanding Admiral luncheons. The *Admiral Café* at Open House is a favorite of this course. College essays will be written, followed by field trips to various culinary schools. The day trip to *The Culinary Institute of America*, and the overnight trip to *Johnson & Wales University* are the most popular trips.

**Grades in this class are predominantly performance based, so attendance is crucial.**

Related Occupations: Chef, Pastry Chef, Catering, Cake Decorator, Food Stylist

857 CULTURAL FOOD (1 Unit - 2 Periods Daily - Spring Semester) (Factor 8)

A course for sophomores, juniors and seniors

**It is strongly recommended that students enrolling in this course have already completed Food Core and/or Chef Prep.**

In this course students will explore a variety of culture specific foods and preparation techniques. They will gain an understanding of cultural differences and interdependence of regions and countries around the world. The class will have the opportunity to interact with visiting foreign exchange students and conduct joint projects with various social studies and foreign language classes. Students prepare and eat a different ethnic meal each week.

A field trip to Chinatown and Little Italy (NYC), to observe the different cultures and sample ethnic cuisine, will be included in this course.

**Grades in this class are predominantly performance based, so attendance is crucial.**

Related Occupations: Chef, Food Service Manager, Food Editor, Hospital Food Service

858 BAKING & PASTRY (1 Unit – 2 Periods Daily – Fall & Spring Semester)(Factor 8)

A course for juniors and seniors.

**It is strongly recommended that students enrolling in this course have already completed Chef Prep or Cultural Foods.**

In this course students will explore a variety of baking topics including:

quickbreads	muffins, biscuits, scones, and loaf quickbread
yeast bread	yeast loaf rolls, raised rolls, fermentation and gluten
pastry	custard, fruit filled, cream filled, and double crust pies
cakes	filled, shortened, and high ratio cakes, decorations and pan preparation
cookies	types of cookies, preparation, equipment used, consistency, and ingredients
milk based foods	pudding and custard
foam based	egg foam, meringue, and folding
specialty desserts	torte, tart, ice cream, and sorbet

**Grades in this class are predominately performance based so attendance is crucial.**

859 CHEMISTRY/HUMAN BODY (1 Unit - Full Year) (Factor 8)  
(1 Unit Science Requirement)

**Students who wish to complete a three-year sequence in science can use this science course.**

This full year course covers two modules. The first looks at how food works in the human body. Students will learn about the various body systems and diseases associated with the human body, such as eating disorders, Anemia, Diabetes, and immune system disorders. The second module focuses on how food works in the body by investigating different topics in Food Science. Topics include carbohydrates, lipids, proteins, elements, and mixtures. Students will also be engaging in kitchen laboratory experiments.

Related Occupations: Food Technologist, Food Designer, Food Chemist

860 EARLY CHILDHOOD EDUCATION (1 Unit - Full Year) (Factor 8)

10th, 11th & 12th graders only

"The Children are our Future." With this quote in mind the students study the development of children two to five years old and incorporate their learning into a three month long nursery school. This class is very much an experiential class. Oral presentations are a must since the students are teachers. Students learn how children learn, the difference between discipline and punishment, ways to foster self respect and confidence in our little ones. This is a great class for anyone who is entering into early childhood education or elementary education.

**Grades in this class are predominantly performance based, so attendance is crucial.**

Related Occupations: Social Worker, Counselor, Psychologist, Therapist

## 863 PARENTING

(1/2 Unit - 1 Semester)

(Factor 8)

The majority of people in our society today become parents. It is quite possible that this will be the most challenging work you will ever have to face in your lifetime... and yet most people go into this very important job with no training. This course intends to change that. A few of the areas covered are: the vast number of choices individuals must make in relation to parenting, effective techniques for the guidance and discipline of children, the importance of the development of self control, and ways to enhance our children's self esteem. At all times emphasis will be placed upon the importance of both mother and father knowing the skills needed to be a good parent. Taking home **THE BABY THINK IT OVER** doll will be a weekend experience for everyone.

Related Occupations: Social Worker, Counselor, Psychologist, Therapist

## 864 WORLD OF FASHION

(1/2 Unit - Spring Semester)

(Factor 8)

Are you a fashion addict? Do you like putting together your outfit in the morning? Are you curious about what the Fashion Industry has to offer you? If your answer to any of these questions is yes, this class is for you!

Work on the annual Arlington High School Spring Semester Fashion Expo is a mandatory part of this class. Students will work together to acquire the clothing, design and construct sets, select music, and run model tryouts. Much of the work we do will be done in class, so regular attendance is very important.

Students enrolled in this course will explore historical fashion and its influences on the styles of today. The elements and principles of design and how they are used in clothing and accessories will also be discussed. During the second marking period of this course, our focus will be on fashion design and drawing.

Students will complete many hands on projects in this class, and will be required to purchase some of their own supplies. Estimated cost: \$15.

Related Occupations: Model, Fashion Designer, Retailer, Costume Designer, Fashion Editor

## 865 FASHION FOR YOUR FUTURE

(1/2 Unit - 1 Semester)

(Factor 8)

A career in the fashion field can be very exciting. In this course, students will explore careers such as modeling, fashion design, retailing, buying, and being an

entrepreneur. Students will participate in several group projects during the semester. The largest of the projects is the entrepreneur project during which groups of students design, market, and sell a product to the school community. Part of the profits help raise money for charity. The class will have the opportunity to meet local retailers, and to tour the Coach Outlet Store at Woodbury Commons. The hands-on nature of this course makes good attendance mandatory for a passing grade.

Related Occupations: Fashion Designer, Fashion Buyer, Fashion Photographer, Retail Manager

### 866 PAPER TO PINS

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: World of Fashion and Fashion for Your Future

Paper to Pins is a course designed for the fashion-minded person who is looking for a career or further education in the field. This course builds on the information learned in both *World of Fashion* and *Fashion for Your Future*.

Students enrolled in this course will have the chance to review and practice the croquis in order to make more accurate representations of clothing. Students will also learn how to work with and alter existing patterns through the use of 1/4 scale models. Construction techniques will be applied through the use of hand sewing. Draping techniques and properties of fabrics will also be a focus.

Students will apply the knowledge learned in class in the form of a final project. For this project, each student must create and present a professional board that includes sketches of his or her clothing line, a pattern made from his or her sketch, fabric swatches, and a sewn mini-version of one of the outfits.

Much of the work done in this class is hands-on, so daily attendance is mandatory. Some supplies will be required for this course. If you want to create your own prom gown, this course is perfect for you.

Related occupations: Pattern drafter, Fashion designer

### 867 TEEN ISSUES

(1/2 Unit - 1 Semester)

(Factor 8)

Teenagers often have difficulty dealing with many changes that occur in their lives. Adjusting to the demands of a high school schedule, peer pressure, stressful situations at home, time management and a changing body is often overwhelming. This course is designed to help students explore all those frustrating situations and discover ways to effectively cope with them.



Related Occupations: Social Worker, Guidance Counselor, Psychologist,  
Therapist

## **HEALTH EDUCATION**

### **870 HEALTH**

(1/2 Unit - 1 Semester)

(Factor 8)

This course is open only to students in Grades 10, 11, and 12. It is a required course for a high school diploma.

The goal of Health Education in Arlington High School is to help establish patterns of behavior that will assist a person in achieving complete health. This is done by following the NYS health education standards along with updated current facts and events going on around us.

Complete health is accomplished by having a balance of physical, mental, social, and emotional well-being. This course is designed to offer students the opportunity to acquire knowledge, incorporate process and life skills, and develop positive attitudes about life. Building a solid foundation of good decision-making skills can contribute to a variety of healthy choices for themselves and others. Although the knowledge components are addressed through seven different content sections, the development of skills and attitudes has been woven throughout each of the seven areas. Development of a healthy body and a healthy mind will assist young people in living active, productive, and successful lives.

## **PHYSICAL EDUCATION**

### **COURSE REQUIREMENTS**

New York State Education Law requires that all students participate in Physical Education, for which they receive credit each year. Physical Education credit is a requirement for graduation. Additional information is available in the Student Handbook. All students are required to take Physical Education in grades 9 - 12, and will receive 1/4 credit per semester upon successful completion of the course. Doubling in Physical Education is *permitted only* for students in Grade 12.

If there are medical reasons why you cannot participate in a full program, a modified program will be provided. To be eligible for the modified program your physician must fill out the school form, which will inform the Physical Education teacher which activities you may safely participate in. The form may be obtained from the school nurse.

### **PHYSICAL EDUCATION COURSE TITLES**

- 8798 9<sup>th</sup> Grade Physical Education
- 8881 Physical Education First Semester (grades10-12)
- 8891 Physical Education Second Semester (grades10-12)
- 8790 Independent Study
- 8800 Physical Education Intern
- 8910 Introduction to Athletic Training
- 8920 Advanced Athletic Training

## PHYSICAL EDUCATION COURSE DESCRIPTIONS

### 8798 9<sup>TH</sup> GRADE PE

(1/4 Unit – Each Semester)

9<sup>th</sup> grade PE is a full year course from September to June with three units. The units include Orienteering, Project Adventure and Personal Wellness. Upon the completion of a unit, students rotate to a new unit every 16 weeks.

Orienteering is an activity in which students use an accurate, detailed map and a compass to find point in the building or around the perimeter of the school property. It can be enjoyed as a walk in the woods or as a competitive sport. A standard orienteering course consists of a start, a series of control sites that are marked and a finish. The route between “controls” (refers to the flag or the site) is not specified, and is entirely up to the orienteer; this element of route choice and the ability to navigate through the surroundings are the essence of orienteering. During the Orienteering Unit students will work cooperatively within small groups to develop strategies to locate sites using a map. Students will learn how to read a map, properly orientate a map, and compass orienteering. Orienteering progressions begin within a room and culminate to the outdoors with the use of a map and compass.

During the Project Adventure component the students will have the opportunity to attempt potentially difficult challenges in an environment with the support and trust of classmates. All the climbing activities are “challenge by choice”. Students progress from initiatives, trust activities, low elements and when appropriate to high elements. Students determine the degree to which they challenge themselves in climbing activities. Working within small groups, students will create a safe and respectful behavior for group success. Through feedback and reflections the students will expand their learning opportunities.

During the Personal Wellness unit students will understand the benefits of a physical fitness program and develop skills that will enable them to maintain a healthy lifestyle. Students will be able to develop a personal fitness program that is safe, challenging and exciting. Students will be able to identify a variety of resources within the community that will help them stay physically active throughout their lifetime. The use of new

technology allows teachers to organize and assist in the assessment of students in cardiovascular fitness, strength, body composition, flexibility and assist in the development of a wellness program. Tri Fit software will allow Physical Education Teachers the opportunity to give all students better feedback to their fitness program in a timely manner.

#### GRADES 10 – 12 PHYSICAL EDUCATION

8881 PE 1ST SEMESTER

(1/4 Unit - 2nd Semester)

8891 PE 2ND SEMESTER

(1/4 Unit - 2nd Semester)

Students enrolled in Physical Education in grades 10-12 participate in a full semester course from September to January (OR January to June) with five units. The units include racket sports, team sports, life time activities, and wellness activities. Upon the completion of a unit, students rotate to a new unit every 4 to 5 weeks. Students are assigned to one Physical Education teacher per semester. Students will be empowered to make choices, meet challenges and develop positive behaviors in fitness, wellness and movement activity for a lifetime. Emphasis is placed on students developing knowledge, fitness and motor skills for a healthy life-style.

#### INDEPENDENT STUDY

An Independent Study program in Physical Education for students in 10th, 11th, and 12th grades is available with the approval of the Department Coordinator. The Independent Study program must be educational, not recreational, in nature, and not a paid activity. The student (a) should make application through P. E. staff. (b) must have passed Physical Education in prior years. (c) must be in good academic standing. Independent Study can only be taken *one* semester per year.

#### PHYSICAL EDUCATION INTERN PROGRAM

PE intern candidates must have the permission of the instructor and be approved by either the Physical Education Department Coordinator to participate in the internship.

Description: The program is designed to provide students with an opportunity to acquire the following skills:

- Ability to organize work
- Communications skills
- Leadership skills
- Basic knowledge of Physical Education equipment
- Basic knowledge of Physical Education activities
- Ability to set up Physical Education equipment for class
- Knowledge of Freshman Physical Education curriculum
- Ability to work in a team environment

#### Responsibilities:

- Actively participate in and contribute to group activities
- Write weekly reflective journals based on their experience in the Physical Education class
- Assist in the set up of Physical Education equipment for class
- Assist in the collection of equipment at the end of the period
- Assist students with comprehension of Physical Education activities
- Develop a rapport with Physical Education students
- Demonstrate initiative in the education of the Physical Education students
- Dress appropriately for activity

One quarter credit will be awarded for successful completion for each semester. Students have the opportunity to complete a second semester of the Physical Education intern credit if deemed appropriate by Physical Education staff.

8910 INTRODUCTION TO ATHLETIC TRAINING (B/D DAYS)

(1/4 Unit - Fall Semester)

Prerequisite: Completion of 1 credit in Phys Ed

This course is an introduction to the profession of Athletic Training; basic theory and methods associated with prevention and management of athletic injuries and illnesses. Includes 10 hours of clinical observation. Strongly recommended for students seeking admission to athletic training program. This course CAN be substituted for the traditional physical education class.

The course objectives are: to develop an appreciation of the athletic training profession; to develop knowledge and understanding of the responsibilities of an athletic trainer; to obtain knowledge in the prevention, evaluation, care of athletic injuries; to obtain knowledge in the general principles of rehabilitation; to develop and understanding of the function, organization and operation of the athletic training room; to obtain the knowledge and skills necessary to provide First Aid and CPR; to develop knowledge of human anatomy and physiology.

Textbooks: Arnheim, Daniel, Principles of Athletic Training.

8920 ADVANCED ATHLETIC TRAINING (B/D DAYS)

(1/4 Unit – Spring Semester)

Prerequisite: Introduction to Athletic Training

This course is an investigation into advanced cognitive domain of athletic training. Specific topics in various areas of the body to include further recognition, assessment, management, and treatment of athletic injuries. This course CAN be substituted for the traditional physical education class.

The course objectives are: to develop advanced cognitive, affective and psychomotor skill in athletic training; to enhance knowledge and understanding of the responsibilities

of injury recognition; to enhance knowledge in the prevention, evaluation, care of athletic injuries; to obtain knowledge in the advanced principles of rehabilitation; to develop an understanding of an orthopedic assessment and the reason for the various aspects of the assessment; to obtain the skills necessary to provide a comprehensive orthopedic assessment.

## **COMMUNITY VOLUNTEER SERVICE**

The CVS program encourages students to use their free time to benefit the school district and the community. Students participate in practical learning and teaching experiences that capitalize on, or help identify, their own interest and talents, while providing much needed help for other students, teachers, and community organizations.

Credit for CVS is available at the rate of 1/2 unit for 150 hours of documented participation, and 1 unit for 300 hours. One CVS hour equals one clock hour (60 minutes). In order to obtain CVS credit, students must: 1) apply for CVS (permission of parent & counselor required) 2) submit a supervisor approved log of hours spent and services performed.

Students who wish to participate in the CVS program may do so before their school day starts, after their classes are finished, or during the school day when they have unassigned periods. Credit may also be given for approved volunteer work done after school or on weekends from September through June. Credit is awarded only during the academic school year, no credit is given for summer volunteering.

Requirements of CVS volunteers include the maintenance of good academic standing, parental, guidance, and administrative approval for participation, and, once they have committed themselves to volunteer placements, demonstrated responsibility to the commitment.

## **MESSAGE TO STUDENTS**

On the following pages you will find a course selection list. As you go to each class on course selection day, your teachers will advise you regarding the selection of courses for next year. On the list you should circle your tentative course selections that you would be interested in taking next year. Take your Course Selection worksheet (with your tentative course selections circled) with you when you meet with your guidance counselor to plan your schedule for next year during February, March or April. Please review graduation requirements and be prepared with course requests and any questions you may have.

The emphasis of a student's program will be on the required core academic courses, not on selected electives. There are courses where, due to space availability, priority will be given to upperclassmen first.

Sem 1 = First Semester

Sem 2 = Second Semester

Sem 3 = All Year



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<u>ENGLISH</u>	<u>SEM</u>	<u>SOCIAL STUDIES</u> continued	<u>SEM</u>
108	ENGLISH 9 R	238	AP COMPARATIVE GOVT 2
110	ENGLISH 9 H	240	DEVELOPMENTAL PSYCHOLOGY1
113	ENGLISH 10 R	241	PSYCH OF INDIVIDUAL 2
115	ENGLISH 10 H	242	AP WORLD HISTORY 3
118	ENGLISH 11 R	243	CRIMINAL LAW 1&2
122	AP ENGLISH 11 LANG & COMP 3	244	CONSTITUTIONAL/CIVIL LAW 1&2
124	PRACTICAL SNR ENGLISH 12 1&2	260	THE CIVIL WAR 1&2
126	COLLGE PREPRTRY ENGLISH 12 3	261	THE 20 <sup>TH</sup> CEN. FILM & MUSIC 1&2
127	AP ENGLISH 12 LIT & COMP 3	262	AMERICA AT WAR 20 <sup>TH</sup> CEN. 1&2
129	READING NONFICTION 1&2	265	THE SIXTIES 1&2
132	CONTEMPRARY LITERATURE 1&2	266	THE 21 <sup>ST</sup> CEN. ISSUES DISCUSS1&2
133	SPORTS IN LITERATURE 1&2	275	A STUDY IN LEADERSHIP 1&2
135	ENGLISH LITERATURE 1&2		
136	WOMEN IN LITERATURE 1&2		
137	WORLD LITERATURE 1&2		
139	AFRICAN-AMERICAN LIT 1&2		
140	PLAYWRITING&PERFORMNCE1&2		
141	CREATIVE WRITING 1&2		
142	DRAMA 1&2		
144	POETRY 1&2		
145	PUBLIC SPEAKING 1&2		
146	WAR IN LITERATURE 1&2		
147	SHAKESPEARE 1&2		
161	FNDATN READ&WRITE 1		
162	FNDATN READ&WRITE 2		
		<u>MATHEMATICS</u>	<u>SEM</u>
		300	REMEDIAL MATH A 3
		311	ALGEBRA 1 A 3
		314	MATH 1 3
		315	ALGEBRA 1 3
		320	MATH 2 CORE 3
		324	MATH 2 3
		326	MATH 2 H 3
		330	MATHEMATICAL APPLICATIONS 3
		332	MATH 3 CORE 3
		334	MATH 3 3
		336	MATH 3 H 3
		342	MATH 4 CORE 3
		344	MATH 4 3
		345	MATH 4+ 3
		346	MATH 4 H 3
		354	CALCULUS 3
		355	AP CALCULUS AB 3
		356	AP CALCULUS BC 3
		365	AP STATISTICS 3
		376	COMPTER PROGRAM W/JAVA 1&2
		377	INTRM COMP PRGRM W/JAVA 1&2
		378	AP COMPUTER SCIENCE AB 3
		381	ADVANCED MATH SEMINAR 1 1
		382	ADVANCED MATH SEMINAR 2 2
<u>SOCIAL STUDIES</u>	<u>SEM</u>		
200	GLOBAL 1 LAB 1		
201	GLOBAL 1 LAB 2		
202	GLOBAL 2 LAB 1		
203	GLOBAL 2 LAB 2		
204	GLOBAL HISTORY 1 3		
206	GLOBAL HISTORY 1 H 3		
214	GLOBAL HISTORY 2 3		
216	GLOBAL HISTORY 2 H 3		
217	US HIST LAB 1		
218	US HIST LAB 2		
219	GLOBAL HISTORY AIS 1&2		
220	US HISTORY AIS 1&2		
224	US HISTORY & GOV'T 3		
226	AP UNITED STATES HISTORY 3		
227	AP MACROECONOMICS 1		
228	AP MICROECONOMICS 2		
230	ECONOMICS IN REAL WORLD 1&2		
231	US & GLOBAL ECONOMY 1&2		
232	ECONOMICS 1&2		
233	RIGHTS & RESPONSIBILITIES 1&2		
235	PARTICIPATION IN GOV'T 1&2		
237	AP UNITED STATES GOVT 1		

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<u>SCIENCE</u>		<u>SEM</u>	<u>ART</u>		<u>SEM</u>
401	ACADEMIC INTERVENTION	1&2	600	STUDIO IN ART ACCELERATED	1
410	FNDATNS OF CHEMICAL SCI	1&2	601	STUDIO IN ART	3
411	FNDATNS OF PHYSICAL SCI	1&2	604	STUDIO IN CRAFTS	3
424	FNDATNS OF LIVING ENVIRNMT	3	606	DYNMICS OF VISUAL COMMN	1&2
425	REGENTS BIOLOGY	3	607	IMAGINATVE SOLUTNS & DES	1&2
426	BIOLOGY HONORS	3	608	STUDIO IN DRAW & PAINT	3
435	REGENTS EARTH SCIENCE	3	609	STUDIO IN COMPUTER GRPHICS	3
445	REGENTS CHEMISTRY	3	610	STUDIO IN ADV CMPTR GRPHICS	3
446	CHEMISTRY HONORS	3	611	DIGITAL IMAGING	1&2
455	REGENTS PHYSICS	3	612	ADVNC D STUDIO IN PAINTING	3
460	TOPICS IN EARTH SCIENCE	3	613	ADVNC D STUDIO IN DRAWNG	1&2
461	MARINE BIOLOGY	1&2	615	SCULPTURE AS PUBLIC ART	1&2
462	OCEANOGRAPHY	1&2	618	STUDIO IN CERAMICS 1	1&2
463	FORENSIC SCIENCE	1&2	619	STUDIO IN CERAMICS 2	1&2
464	SRC: NATURAL DISASTERS	1&2	620	POTTERY	1&2
465	CHEMISTRY IN COMMUNITY	3	621	STUDIO IN PHOTOGRAPHY	3
466	SRC: EVOLUTION&ANML BHV	1&2	622	ADVANCED CRAFTS	3
467	CONTMPRY ISSUES BIO-BIO MED	3	623	STUDIO IN GLASSWORKING	1&2
468	CONTMPRY ISSUES BIO-ENVIR	3	625	AP STUDIO IN ART	3
469	ASTRONOMY	1&2	626	AP ART HISTORY	3
471	AP BIOLOGY	3			
473	AP ENVIRONMENTAL SCIENCE	3			
475	AP CHEMISTRY	3			
476	AP PHYSICS C	3			
480	SCIENCE RESEARCH	1&2			

<u>FOREIGN LANGUAGE</u>		<u>SEM</u>	<u>MUSIC</u>		<u>SEM</u>
502	FRENCH 2	3	651	RUDIMENTS OF MUSIC	1&2
503	FRENCH 3 R	3	652	PIANO 1	1&2
504	FRENCH 4	3	653	PIANO 2	1&2
505	AP FRENCH 5	3	654	COMPREHENSIVE MUSIC	3
512	GERMAN 2	3	660	NINTH GRADE BAND	3
513	GERMAN 3 R	3	662	CONCERT BAND	3
514	GERMAN 4	3	663	SYMPHONIC BAND	3
515	AP GERMAN 5	3	664	WIND ENSEMBLE	3
522	ITALIAN 2	3	670	CHORUS	1
523	ITALIAN 3 R	3	672	MIXED CHORUS	3
524	ITALIAN 4	3	674	CONCERT CHOIR	3
525	AP ITALIAN 5	3	680	SYMPHONETTE	3
540	EXPLORING SPANISH	3	682	SINFONIA	3
541	SPANISH 1	3	684	SYMPHONY ORCHESTRA	3
542	SPANISH 2	3	685	PHILHARMONIA	3
543	SPANISH 3 R	3			
544	SPANISH 4	3			
545	AP SPANISH 5	3			

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<u>BUSINESS</u>			<u>FAMILY &amp; CONSUMER SCIENCE</u>		
		<u>SEM</u>			<u>SEM</u>
700	KEYBOARDING 1	1&2	850	FOOD & HUMAN SERVICES	3
701	KEYBOARDING 2	1&2	852	FOOD CORE	1&2
702	COLGE PREP/ MICROSOFT OFFC	1&2	853	HUMAN DEVELOPMENT CORE	1&2
703	E-COMMERCE	1&2	856	CHEF PREP	1
704	21 <sup>ST</sup> CENTURY COMMUNCTNS	1&2	857	CULTURAL FOOD	2
707	CAREER AND FINANCIAL MGT	1&2	858	BAKING & PASTRY	1&2
710	ACCOUNTING	3	859	CHEMISTRY/HUMAN BODY	3
711	ADVANCED ACCOUNTING	3	860	EARLY CHILDHOOD EDUCATION	3
712	ACCELERATED ACCOUNTING	3	863	PARENTING	1&2
713	BUSINESS LAW	3	864	WORLD OF FASHION	2
716	SPORTS&ENTRTAINMNT MRKT	3	865	FASHION FOR YOUR FUTURE	1&2
717	BUSINESS OF MUSIC	1&2	866	PAPER TO PINS	1&2
718	COOPERATIVE WORK EXPER	3	867	TEEN ISSUES	1&2
719	BCA/MICROSOFT OFFICE SUITE	3			
720	PRSNL MONEY MGT	3			
723	BUSINESS OWNERSHIP	3			
726	INTGTED CMPTR SKL&APPL	1&2			
			<u>HEALTH</u>		
					<u>SEM</u>
			870	HEALTH	1&2
<u>TECHNOLOGY</u>			<u>PHYSICAL EDUCATION</u>		
		<u>SEM</u>			<u>SEM</u>
800	COMMUNICATIONS	1&2	8798	9 <sup>TH</sup> GRADE PE	3
801	PRODUCTION-WOOD	1&2	8881	PE 1 <sup>ST</sup> SEMESTER	1
802	PRODUCTION-METAL	1&2	8891	PE 2 <sup>ND</sup> SEMESTER	2
803	TRANSPORTATION	1&2	8910	INTRO ATHLETIC TRAINING	1
804	MATERIALS PROCESSING	1&2	8920	ADVCD ATHLETIC TRAINING	2
805	ELECTRICITY	1&2			
807	DESIGN & DRAWING 1	1&2			
808	DESIGN & DRAWING 2	1&2			
809	LAND TRANSPRTATN/POWER	3			
810	CONSTRUCTION	1&2			
811	DIGITAL ELECTRONICS	1&2			
812	ENGINRNG DRWNG&DSGN/CAD	3			
813	ARCHITECTURE/STRUCTURAL	3			
814	PRINCIPLES OF ENGINEERING	3			
815	B&W PHOTO TCHNLGY	1&2			
816	COLOR PHOTO TCHNLGY	1&2			
817	DIGITAL PHOTO TECHNOLOGY	1&2			
818	AUDIO COMMUNICATIONS	1&2			
819	VIDEO PRODUCTIONS	1&2			
820	FILM TECHNOLOGY	1&2			
821	CREATIVE FURN&CBNTMKNG	3			
822	JEWELRY	1&2			
823	CONSUMER AUTOMOTIVES	1&2			
824	CAREER & FINANCL MGT-A	1&2			