

**STUDENT  
COURSE  
SELECTION  
GUIDE**



**2019-2020**

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 following pages 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 eager 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

### Regents Diploma

#### Test Requirements

English Regents  
Algebra Regents  
Global History Regents  
US History Regents  
Science Regents  
Foreign Language 8<sup>th</sup> grade examination

### Advanced Regents Diploma

#### Test Requirements

English Regents  
3 - Math Regents  
Global History Regents  
US History Regents  
2 - Science Regents  
Foreign Language level 3 final examination

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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 the AP exam which will be paid by the student. Failure to take the AP exam will result in an automatic 50% final grade for the course. If financial assistance is needed, please see your teacher or guidance counselor for more information.

### COURSES OFFERED FOR COLLEGE CREDIT AT AHS

The courses listed below are offered at AHS during the school day in conjunction with DCC. Students may have to purchase their own textbooks and will earn AHS credit, and college credit concurrently.

#### English Courses:

English 101; ½ year, Factor 9

English 102; ½ year, Factor 9

#### Social Studies:

American National Experience; ½ year, Factor 9; GOV 121

Economic Issues; ½ year, Factor 9; Eco 105, ½ year, Factor 9. Social Problems in Today's World

#### Business Education Courses:

College Introduction to Business; ½ year; Factor 9; BUS102;

College Marketing; ½ year; Factor 9; BUS107;

College Accounting; full year; Factor 10; ACC101 and ACC102;

Managerial Account; ½ year, Factor 9, ACC204

### HIGH SCHOOL CREDIT FOR COLLEGE COURSES TAKEN OUTSIDE OF AHS

Some students may wish to enroll in selected courses at area colleges prior to high school graduation. Students are responsible for all tuition and fees. 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. All grades for college courses taken outside of Arlington High School, with the exception of any college course taken to meet the Health requirement, will be recorded as the letter grades received from the college and will not be included in GPA and class rank. **Any college course taken to meet the Health requirement will be recorded as a factor 8 and the letter grade will be converted to a numeric grade based on the scale shown below and will be included in GPA and class rank.**

|         |         |         |         |
|---------|---------|---------|---------|
| A+ = 99 | B+ = 89 | C+ = 79 | D+ = 69 |
| A = 95  | B = 85  | C = 75  | D = 67  |
| A- = 91 | B- = 81 | C- = 71 | D- = 65 |

**PRIOR APPROVAL OF THE COURSE BY THE HIGH SCHOOL GUIDANCE COUNSELOR IS REQUIRED FOR COURSES TO BE USED FOR GRADUATION REQUIREMENTS.**

## 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. Students are responsible for all tuition and fees. All courses taken at Marist will not be included in GPA and class rank.

### 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. The formula is  $GPA = \frac{\text{sum of (grade} \times \text{factor} \times \text{credit)}}{\text{total credit (excluding pass/fail courses)}}$ . 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.

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.

## **ALTERNATIVE CREDIT**

A student may earn a maximum of 6 ½ units of credit for either a Regents or local diploma without completing units of study for such units of credit, if:

- (i) Based on the student's past academic performance, the superintendent of a school district or the chief administrative officer of a nonpublic school, or his or her designee, determines that the student will benefit academically by exercising this alternative;
- (ii) the student achieves a score of at least 85 percent, or its equivalent as determined by the commissioner, on a State developed or State-approved assessment pursuant to section 100.2(f);
- (iii) the student passes an oral examination or successfully completes a special project to demonstrate proficiency, in such knowledge, skills and abilities normally
- (iv) developed in the course but not measured by the relevant Regents examination or State-approved examination if used, as determined by the Principal, and;
- (v) the student attends school, or received substantially equivalent instruction elsewhere accordance with section 3204(s) of the Education Law, until the age of 16, pursuant to section 3204 and 3205 of the Education Law.
- (vi) all applications for Alternative Credit are due in the Guidance office no later than June 1<sup>st</sup>.

## **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.

## **NCAA**

NCAA requires students to meet a minimum core eligibility requirement. Not all Arlington High School classes will satisfy this requirement. Courses not meeting eligibility standards will be noted with this statement, ♦ Course does not meet NCAA eligibility standards, at the bottom of the course description. For more information visit [www.ncaa.org](http://www.ncaa.org).



## **ENGLISH**

All students will be responsible for demonstrating English language proficiency on a statewide Comprehensive Regents Examination. The English department will offer curricula that will provide students the opportunity to participate in programs that offer challenging academic experiences.

### **ENGLISH COURSE OF STUDY**

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

Students will become skilled readers and listeners of non – fiction, 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.

### **FOUNDATIONS OF READING & WRITING**

Students with specific educational needs will be assigned to the Foundations of Reading & Writing program. Educational plans will be designed by a certified reading teacher to accommodate students' academic needs and learning styles.

**1) ENL Beginner**

Students who score beginner on the NYSESLAT or the NYSITELL will take this course. Students will learn to write basic paragraphs using various textual styles. Students will also read high context texts that relate to their experiences and will help them access content in their content classes. Students will learn to speak and understand spoken English in order to take part in an English speaking academic environment.

Students will receive 1 English Elective credit for successful completion of this course.

**2) ENL/ELA**

Students who score at the entering (beginner) or emerging (low intermediate) levels on the NYSESLAT or NYSITELL must take this course. Students will study Common Core aligned themes from the mainstream curriculum. Students will read, write, listen and discuss these themes by analyzing literary and non-fiction texts. They will write about what they read using various textual styles including opinion/ argument, narrative and informational.

This course provides students one year English Language Arts credit.

**3) ENL Content Support 9<sup>th</sup> and 10<sup>th</sup> Grades**

Students who score at the entering (beginner), emerging (low intermediate) and expanding (advanced) levels on the NYSESLAT or NYSITELL must enroll in this course. Students will work with various texts that expose students to academic language across the content areas commonly learned in 9<sup>th</sup> and 10<sup>th</sup> grades. Students will develop the “academic language necessary for learning”, i.e. the foundational vocabulary that makes learning in content areas possible. They will utilize texts that capture student interest in addition to textbooks and primary and secondary sources.

This course provides students of all levels 1 Elective English credit.

**4) ENL Content Support 11<sup>th</sup> and 12<sup>th</sup> Grades**

Students who score at the entering (beginner), emerging (low intermediate) and expanding (advanced) levels on the NYSESLAT or NYSITELL must enroll in this course. Students will work with various texts that expose students to academic language across the content areas commonly learned in 11<sup>th</sup> and 12<sup>th</sup> grades. Students will develop the “academic language necessary for learning”, i.e. the foundational vocabulary that makes learning in content areas possible. They will utilize texts that capture student interest in addition to textbooks and primary and secondary sources. This course provides students of all levels 1 Elective English credit.

ENGLISH REGENTS

(Factor 8)

1080 Grade 9-Regents

1130 Grade 10-Regents

1180 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. \*\*An additional year of English will be required in their SENIOR year to satisfy commencement requirements.

Students will be expected to:

- read and listen to an extensive series of complex and challenging literature and expository texts in multiple genres.
- write and speak about literature that reflects a richness of language and analytical complexity.
- develop library skills through a variety of formal extended research projects at all levels of instruction.
- 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.

## ENGLISH HONORS

(Factor 9)

### 1100 Grade 9-Honors

Prerequisite: A final average of 90 or better

### 1150 Grade 10-Honors

Prerequisite: A final average of 80 or better in English 9 Honors or a final average of 90 or better in English 9 Regents.

Students who want to take English Honors or an AP level English course, but do not meet the prerequisite will be reviewed on a case by case basis by the English Department Coordinator and the Executive Principal of Arlington High School.

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 formal extended research projects at all levels of instruction.
- 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.

1220 AP ENGLISH 11 LANGUAGE & COMPOSITION (1 Unit - Full Year) (Factor 10)

Prerequisite: A final average of 80 in 10 Honors or a final average of 90 in English 10 Regents. A teacher recommendation based on previous coursework is highly recommended.

Students who want to take English Honors or an AP level English course, but do not meet the prerequisite will be reviewed on a case by case basis by the English Department Coordinator and the Executive Principal of Arlington High School.

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:

### \*1260 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 literature from around the world. 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.

### \*1270 AP ENGLISH 12 LITERATURE & COMPOSITION (1 Unit - Full Year) (Factor 10)

Prerequisite: A final average of 80 or better in AP English 11 or a final average of 90 or better in English 11 Regents. A teacher recommendation based on previous coursework is highly recommended.

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 to :) *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, McCarthy, Shelley, and free choice books from selected lists are used.

## HALF – YEAR OPTIONS:

(\* = Multi – genre. A student must select one multi-genre course if a student is pursuing two half year courses. A student can select two multi – genre course if desired.)

\*1280 ENGLISH 101: COMPOSITION I (1/2 Unit – 1 Semester) (Factor 9)

Description: English 101 concentrates on expository and argumentative writing, traditional rhetorical modes, and effective composing, revising, and editing strategies. English 101 covers MLA conventions, and research is required. Critical thinking and reading skills are also evaluated. **English 101 is the first credit course in the DCC Writing Program and is required in all DCC degree programs and most certificate programs. The prerequisite for the course is placement through DCC admissions test scores. Students must earn a C or better to advance to English 102 and are granted three college credits from Dutchess Community College.**

Writing Assignments: English 101 assignments consist of a variety of formal and informal writing. The formal writing includes analytical or persuasive writing. Students are required to make references to several texts included in the textbook for the class. Each essay is focused writing with a clear thesis, well-developed paragraphs organized around a topic sentence, and supporting details. Essays start in class and are developed through a process of brainstorming, drafting, revising, and editing.

The final examination is given in class at the end of the semester. Students will make direct references to textual material and include correct citations according of the MLA style and a Works Cited page.

Textbooks: An anthology of expository essays selected by the English 101 Committee at Dutchess Community College will be used. In addition, students will use a writing handbook which is a valuable resource for student writers, offering an overview of essay structure, review of grammar rules, description of the research process, rules of MLA documentation, and glossary of usage principles.

\*1281 ENGLISH 102: COMPOSITION II

(1/2 Unit – 1 Semester)

(Factor 9)

Prerequisite: Successful completion of English 101 with a C grade or better.

Description: This course is a continuation of English 101, which further emphasizes well-constructed and developed written composition, factually supported conclusions, and the use of precise and varied language. It also serves as an introduction to three genres of literature: short fiction, poetry, and drama. Research is required. Students should use MLA documentation. **Upon successful completion of this course with a C grade or better, students are granted three college credits from Dutchess Community College.**

Writing Assignments: The writing assignments in English 102 reinforce the skills students acquire in English 101. Students write formal essays and informal writing, which consists of quizzes, responses, and journal entries. Students write four short expository and analysis essays in response to a variety of literary genres. Within each essay, students analyze and explicate several literary texts and, as in English 101, incorporate these sources correctly according to the MLA style, using both in-text citations and a Works Cited page. Essays start in class and are developed through a process of brainstorming, drafting, revising, and editing. In the process of explicating a literary text, students use the methods of literary analysis appropriate to each genre and become proficient in using and identifying literary terms. Students will work through a careful process of evaluating, summarizing, quoting, paraphrasing, and citing sources correctly according to the MLA style.

The final examination given in class includes several forms of writing written in class analyzing or explicating at least one of the texts discussed in class during the semester.

\*1320 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 the varied, exciting, and frequently complex world of contemporary literature. It will deal with selected short stories, novels, and memoirs from some of the well-known contemporary authors. Oral and written projects will be employed to elicit thought-provoking analyses of the literature we encounter. Students will develop greater sensitivity to literature in terms of its treatment of humanistic values, development of moral perspectives, and respect for individual autonomy. Students will gain a greater awareness of how literature can contribute to forming moral character and to leading passionate, purposeful lives.

Requirements: journal writing, literary discussions, written literary analysis, teacher-selected contemporary literature reading, student-selected contemporary literature reading.



\*1330 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.

◆ **This course does not meet NCAA eligibility standards.**

\*1340 CHILDREN'S LITERATURE

(1/2 Unit – 1 Semester)

(Factor 8)

Description: The focus of this course is on reading and analyzing literature for children, aged birth to 12. Students will learn about the characteristics of good children's literature and read a vast array of primary texts including, but not limited to, short tales, poetry, and novels, in addition to critical essays. Students will be required to complete a substantial amount of reading in order to have a vast knowledge of children's literature and strong understanding of the role it plays in developing deep interests and solid habits in reading.

Requirements: Reading assignments will include textbook reading in addition to children's stories, poetry, novels, and critical essays both independently selected and teacher assigned. Writing assignments will include: analytical essays on selected children's literature and thematically related topics; daily journal writing; and a research project. Class work will include class discussions, and cooperative literature circles, quizzes, and a final exam.

◆ **This course does not meet NCAA eligibility standards.**

\*1361 GENDER IN LITERATURE

(1/2 Unit - 1 Semester)

(Factor 8)

Description: This course of study will examine the role of men and women in writing. Through the use of fiction, poetry, essays, speeches, and newspaper and magazine articles, students will explore the changing roles and images of women and men in literature. Course material will emphasize North American literature, with some time devoted to 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.

\*1390 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.

\*1460 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.

\*1470 SHAKESPEARE (1/2 Unit – 1 Semester) (Factor 8)

Description: This course is perfect for students that enjoy reading/performing Shakespeare plays. Whether you know a lot about Shakespeare or just a little, everyone is welcomed to take this class. This course will include some of his famous plays, as well as some of his more obscure plays. This class will give you the foundation you need to enjoy Shakespeare for the rest of your life.

Requirements: The class includes reading and performing Shakespeare's plays. Students will also watch several plays on video. There is an exam at the end of each play. There are a few essays and projects. There is a final exam at the end of the course.

## **SINGLE – GENRE:**

A student can only select one single genre elective if pursuing two half year courses. Students **CANNOT** select two single-genre electives.

### 1410 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, and poetry.

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 major writing assignments.

### 1440 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.

### 1450 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 speaking in front of a group, as well as for those students who would like to increase their confidence in this domain. Students will increase their skills in delivering effective speeches, as well as their awareness of what goes into preparing successful addresses.

Requirements: Students will be required to write and deliver a variety of speeches for a variety of purposes. Students will learn how to evaluate their own, and others', speeches for effectiveness. Students will view and analyze selected historical, and contemporary, speakers and their speeches.

## SOCIAL STUDIES

All students are responsible for completing 4 years of social studies required course work. All students must successfully demonstrate proficiency in Global History and Geography and United States History and Government on the Regents examinations in these courses. All course work is based on the New York State Social Studies Standards.

### GENERAL EXPLANATION OF LEVELS:

Regents Level

(Factor 8)

These courses, which require reading and writing at grade level, stress concepts and general themes in history through the use of a wide range of materials and media. They further develop and refine reading and writing ability as well as research and analytical skills. All students must pass the Regents examination in Global History and Geography and the Regents examination in United States History and Government to satisfy the Regents Social Studies exam requirement and earn a Regents diploma.

Advance Work

(Factor 9)

Advanced Placement Level

(Factor 10)

Students in Honors or Advanced Placement Social Studies courses 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 enrolled in Honors and AP courses will still be required to take and pass the Regents examinations in Global History and United States History. 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.**

## REQUIRED COURSES

### Grade 9

|      |                           |                      |            |
|------|---------------------------|----------------------|------------|
| 2040 | <u>Global History 1 R</u> | (1 Unit – Full Year) | (Factor 8) |
| 2060 | <u>Global History 1 H</u> | (1 Unit – Full Year) | (Factor 9) |

The course covers a span of time from prehistory to 1750 A.D. Beginning with an introduction to global history, students will investigate historical analysis, elements of geography, theory and practice of different economic systems and forms of government. The chronological study begins with civilizations and religions of the ancient world civilizations in India, the Far East, Middle East, Africa and Europe and continues to the Age of the Enlightenment. Global History 9 is the first year of a two-year sequence.

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

An average of 90 is required for entrance into 9<sup>th</sup> Grade Global History Honors. Students should be prepared for a required summer reading assignment prior to entering 9<sup>th</sup> Grade Global History Honors.

### Grade 10

|      |                           |                      |             |
|------|---------------------------|----------------------|-------------|
| 2140 | <u>Global History 2 R</u> | (1 Unit – Full Year) | (Factor 8)  |
| 2160 | <u>Global History 2 H</u> | (1 Unit – Full Year) | (Factor 9)  |
| 2420 | <u>AP World History</u>   | (1 Unit – Full Year) | (Factor 10) |

A continuation of Global History 9, this course covers a time span from approximately 1750 to current times. The course emphasizes key themes, topics including the first global era that resulted from exploration; “revolutions” in scientific, political, economic and social thought, international conflict, industrialism, political change and technological advancement of the 20<sup>th</sup> century.

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

Students in Honors Global History in 9<sup>th</sup> grade will be eligible for placement in 10<sup>th</sup> grade Global History Honors if they have a final grade of at least 85. Students in Regents Global History in 9<sup>th</sup> grade must have a final grade of at least a 90 to be placed in 10<sup>th</sup> grade Honors.

2420 AP WORLD HISTORY

(1 Unit - Full Year)

(Factor 10)

A final average of 85 in Global History 1 Honors or a final average of 90 in Global History 1 Regents is a prerequisite for taking AP World History.

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. Sophomores who take AP World must also pass the Global Studies Regents in June.

**The AP examination is required.**

Grade 11

2240 United States History and Government R

(1 Unit – Full Year)

(Factor 8)

2260 AP US History & Government

(1 Unit – Full Year)

(Factor 10)

2240 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 year is recognizing basic constitutional principles and applying them to both historical and contemporary events.

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.

## 2260 AP UNITED STATES HISTORY

AP U. S. History focuses on the political, economic, social, and cultural development of the United States from 1607 to today. Major trends and themes in American history are examined in depth over the course of the year and an emphasis is placed on learning to write analytically. This course provides an excellent background for the U. S. History SAT II Test, which is administered in the spring each year. Successful completion of the Regents Examination in U. S. History and Government is required. **The AP exam is also required.**

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 Regents must have a final average of at least 90 to be considered for placement in A. P. United States History, in addition to meeting other criteria. Because of the ambitious nature of this course, extensive readings and research are required. Students should be prepared to allocate a significant amount of time to this course.

### Grade 12

For the 4<sup>th</sup> year of mandated Social Studies, each senior must take **BOTH Economics and Participation in Government**, unless the student has already received credit for the same or a similar course. Only those juniors who are graduating early will be able to take these courses while enrolled in U. S. History and Government. Senior level required courses or electives are not open to freshmen or sophomores.

|      |                                       |                         |             |
|------|---------------------------------------|-------------------------|-------------|
| 2320 | Economics R                           | (1/2 Unit - 1 Semester) | (Factor 8)  |
| 2325 | Eco 105: Economic Issues              | (1/2 Unit - 1 Semester) | (Factor 9)  |
| 2300 | Economics in the Real World           | (1/2 Unit - 1 Semester) | (Factor 8)  |
| 2270 | AP Macroeconomics                     | (1/2 Unit - 1 Semester) | (Factor 10) |
| 2280 | AP Microeconomics                     | (1/2 Unit - 1 Semester) | (Factor 10) |
| 2350 | Participation in Government           | (1/2 Unit - 1 Semester) | (Factor 8)  |
| 2355 | Gov 121: American National Experience | (1/2 Unit - 1 Semester) | (Factor 9)  |
| 2330 | Rights and Responsibilities           | (1/2 Unit - 1 Semester) | (Factor 8)  |
| 2370 | AP United States Government           | (1/2 Unit - 1 Semester) | (Factor 10) |
| 2380 | AP Comparative Government             | (1/2 Unit - 1 Semester) | (Factor 10) |

2320 ECONOMICS R

(1/2 Unit - 1 Semester)

(Factor 8)

Basic economic concepts and themes, which all people need to know in order to function effectively as participants in the U. S. and world economy, are the focus of this course. 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.

2325 ECO 105: ECONOMIC ISSUES

(1/2 Unit – 1 Semester)

(Factor 9)

This course allows students to simultaneously complete NYS requirements for high school and earn DCC (Eco 105) credit. The prerequisite for this class is the successful completion of the Compass test used by Dutchess Community College to determine student placement.

In this class, students will engage in activities to develop their economic literacy. Students will apply economic reasoning to evaluate national policies. Topics of analysis will vary to reflect current economic issues, and will require some independent reading and research on contemporary issues. Students who successfully complete the course will earn three college credits from Dutchess Community College at no additional cost. Students may however be required to purchase a textbook or other materials for the course.

2300 ECONOMICS IN THE REAL WORLD

(1/2 Unit - 1 Semester)

(Factor 8)

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 economic concepts as well as practical skills necessary to be successful in the marketplace. Students will understand how they influence the private enterprise system as a consumer and producer.

◆ **This course does not meet NCAA eligibility standards.**



## AP ECONOMICS

A final average of 90 in United States History and Government Regents or a final average of 80 in AP United States History and Government is required to take these courses.

AP Economics is two distinct, semester-long courses: Macroeconomics and Microeconomics. Each course has a separate AP exam offered in May and provides the opportunity to earn college credit. Students can meet their economics requirement by taking one of the courses, but are not limited to taking only one or the other.

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 these courses.

### 2270 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. The course includes a study of national income; price determination; economics performance measures; economic growth; and international economics. **The AP exam is required.**

### 2280 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 economic systems. The course includes a study of product and factor markets; role of the government; economic efficiency; and economic equity. **The AP exam is required.**

2350 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 of this course is an understanding of political parties, voter behavior, and the election process. Mass media and interest groups are investigated to identify their influences on our government. All students will be assigned a portfolio project designed to open their eyes to the many ways a citizen can be involved in our democratic process.

2355 GOV 121: AMERICAN NATIONAL EXPERIENCE (1/2 Unit – 1 Semester) (Factor 9)

This course allows students to simultaneously complete NYS requirements for high school and earn DCC (Gov 121) credit. The prerequisite for this class is the successful completion of the compass test used by Dutchess Community college to determine student placement.

The purpose of this course is to allow students to go beyond a study of the formal components of our political system in order to analyze political behavior, processes, and policy-making. Connections to relevant current policies at local, state and federal levels will require familiarity with current events. In addition, the importance of civic participation will be addressed. Students who successfully complete the course will earn three college credits from Dutchess Community College at no additional cost. Students will be required to purchase a textbook or other materials for the course.

2330 RIGHTS AND RESPONSIBILITIES OF GOOD CITIZENS (1/2 Unit - 1 Semester) (Factor 8)

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.

Rights and Responsibilities provides students with a basic understanding of their role in a democratic society as well as a better grasp of the fundamental institutions of government at the local, state, and national levels. Students will be encouraged to participate in a variety of in-school and community projects and programs to supplement the course curriculum.

## AP GOVERNMENT

A final average of 90 in United States History and Government Regents or a final average of 80 in AP United States History and Government is required to take these courses.

AP Government is two distinct, semester-long courses: United States Government and Comparative Government. Each course has a separate AP exam offered in May and provides the opportunity to earn college credit. Students can meet their government requirement by taking one of the courses, but are not limited to taking only one or the other.

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 these courses.

### 2370 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.**

### 2380 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 coursework focuses on 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.**

## REMEDIATION COURSES

### Social Studies Labs

(No Credit - Half or Full Year)

#### 2000 GLOBAL 1 LAB

offered on alternate days 1<sup>st</sup> semester

#### 2010 GLOBAL 1 LAB

offered on alternate days 2<sup>nd</sup> semester

Global History 1 Lab is for 9<sup>th</sup> grade students who have been identified with weaknesses as a result of their performance on the 8<sup>th</sup> grade social studies final assessment or upon the recommendation of a student's Global History 1 teacher. The class provides skill development and remediation. With regular attendance and a strong work ethic, it is expected that the lab will enable students to experience success and help them attain a passing grade in Global History 1.

#### 2020 GLOBAL 2 LAB

offered on alternate days 1<sup>st</sup> semester

#### 2030 GLOBAL 2 LAB

offered on alternate days 2<sup>nd</sup> semester

Global History 2 Lab is for Global History 2 students who have been identified with weaknesses as a result of their performance in Global History 1 or have been recommended by their Global History 2 teacher. The class provides skill development and remediation. With regular attendance and a strong work ethic, it is expected that the lab will enable students to experience success and help them attain a passing grade in Global History 2.

#### 2170 US HISTORY LAB

offered on alternate days 1<sup>st</sup> semester

#### 2180 US HISTORY LAB

offered on alternate days 2<sup>nd</sup> semester

United States History Lab is for United States History students who have been identified with weaknesses as a result of their performance in Global History 2 or have been recommended by their United States History teacher. The class provides skill development and remediation. With regular attendance and a strong work ethic, it is expected that the lab will enable students to experience success and help them attain a passing grade in United States History.

### ACADEMIC INTERVENTION

(No Credit – One Quarter)

#### 2190 GLOBAL AIS

#### 2200 U. S. HISTORY AIS

This program is offered to students who have passed the Global History 2/United States History course but have failed to pass the Regents exam required at the end of each class. This class is offered every other day for 20 weeks prior to the January and June Regents exams. It provides direct assistance to students needing to retake and pass the Regents.

## **ELECTIVE COURSES**

The following electives may be taken by **Seniors and Juniors** only unless otherwise specified. The following elective courses may NOT be taken on a pass/fail basis: AP World History, Social Problems in Today's World, and AP Art History.

**2420 AP WORLD HISTORY** (1 Unit - Full Year) (Factor 10)

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.**

### **PSYCHOLOGY**

These courses will introduce the student to the field of psychology, and either class 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.

**2400 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; sleep and consciousness; learning; memory; language acquisition; intelligence.

**2410 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; therapy.

## LAW

### 2430 CRIMINAL LAW

(1/2 Unit - 1 Semester)

(Factor 8)

This course is designed to give students an overview of the criminal justice system in New York 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, students enrolled in the course will participate in a mock trial. The class will also incorporate current events and social justice issues related to the criminal justice system into the class curriculum throughout the duration of the course.

### 2440 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. **This course is open to sophomores, juniors and seniors.**

## LEADERSHIP

### 2630 CIVIC ENGAGEMENT AND LEADERSHIP

(1/2 Unit-1 Semester)

(Factor 9)

This course seeks to empower students to be active citizens in their community. Through the use of project-based learning, students will not only learn about the strengths and weaknesses of their community but also become aware of the different ways one can work to address community issues as an “average citizen.” This course takes a hands-on, lab-oriented approach to civic engagement and leadership through the planning and implementation of a project plan designed to address a local concern. Towards the conclusion of the course, students will discuss not only the characteristics of exemplary leaders but also different points in history where average people have worked to bring about change in their communities. Students enrolled in the course will be evaluated using a portfolio system of grading as well as various assessments measuring student progress and personal reflection. **This course is open to sophomores, juniors and seniors.**

## HISTORY

### 2620 AMERICA AT WAR IN THE 20<sup>TH</sup> 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 from 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, the role of major American military leaders, home-front support, and the depiction of war in popular culture.

### 2660 THE 21<sup>st</sup> CENTURY: ISSUES FOR DISCUSSION (1/2 Unit- 1 Semester) (Factor 8)

This course will address local, national, and international concerns that currently impact our society, such as gun control, social justice issues, and technological improvements. Students will research and present topics for class discussion and debate. The class will also focus on media literacy, educating students on the skills and resources one needs in order to be an informed citizen. **This course is open to sophomores, juniors and seniors.**

### 2760 BLACK AMERICA- A 400 YEAR HISTORY OF AFRICAN CONTRIBUTIONS IN AMERICA (1/2 Unit- 1 Semester) (Factor 8)

From the 1600's to 1600 Pennsylvania Avenue and the election of America's first African American President, this class will take a look at the histories and contributions of Black people in America. Students will explore the rich cultures and heritages across the centuries of different immigrant groups as well as their notable experiences that were filled with hope, struggled against adversity, and have had lasting impacts on our nation today.

### 2781 – INTRO TO PHILOSOPHY (1/2 Unit – Semester) (Factor 8)

This course will provide students with a general overview of thinkers and ideas that have shaped world history. Students will have the opportunity to discuss and evaluate the ‘big’ questions that shape our understanding of what it means to be human. While the thinkers and ideas we will examine are from the past we will provide a contemporary context in which to make connections between people, ideas and events over time. **This course is open to sophomores, juniors and seniors.**

2415 SOCIAL PROBLEMS IN TODAY’S WORLD (1/2 Unit – 1 Semester) (Factor 9)

This course allows students to take an elective class while simultaneously earning DCC (BHS 103) credit. The prerequisite for this class is the successful completion of the compass test used by Dutchess Community college to determine student placement.

Sociologists ask the kinds of tough questions that most people in American society won’t ask. Why is there racism? How much inequality is too much? This class is an examination of current social problems that confront the individual, the United States, and the international community. Concepts of behavioral sciences are introduced. Students are presented with the current research data that explains both the causes and possible resolutions to important social issues. Students who successfully complete the course will earn three college credits from Dutchess Community College with no additional cost. They may, however, be required to purchase a textbook or other materials for the course.

6260 ADVANCED PLACEMENT ART HISTORY (1 Unit – Full Year) (Factor 10)

Prerequisites: None

Recommendations: Good academic standing, and successful completion of Global Studies.

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 European conventions.

Students will analyze artworks from daily slide presentations in class. Students will improve their visual skills and their ability to write succinctly through regular practice on tests and through one substantial research project. While students learn to analyze individual artworks, they also arrive at meaningful conclusions on larger themes and cultural developments through time.

Students are encouraged to take the class as a junior while many students enjoy the class during their senior year.

**The AP Exam, in mid-May, is required.**



## MATHEMATICS

A solid background in high school mathematics is becoming increasingly important for both college and career readiness. Over the past decade, graduation standards for mathematics have increased to reflect this importance. The New York State Board of Regents requires all students entering 9<sup>th</sup> grade in 2014 or later to pass the Common Core Algebra Regents exam and earn 3 math credits for graduation. The Math Department has designed various courses and course sequences 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. Starting in the 2013 to 2014 academic year, the course selections in mathematics will begin to reflect changes due to the new Common Core State Learning Standards. These standards unify the mathematics curriculum across much of the nation. As of June of 2016, the Regents exams in Algebra 1, Geometry and Algebra 2 will be aligned to the more rigorous Common Core Learning Standards.

Due to changes in the math curriculum, most math classes require a student to have a graphing calculator for use at home as well as in class. Students/parents are asked to purchase graphing calculators for those courses that require them but may see their guidance counselor prior to October 11, 2019 if they cannot afford one. Each course description lists the type of calculator necessary for the class.

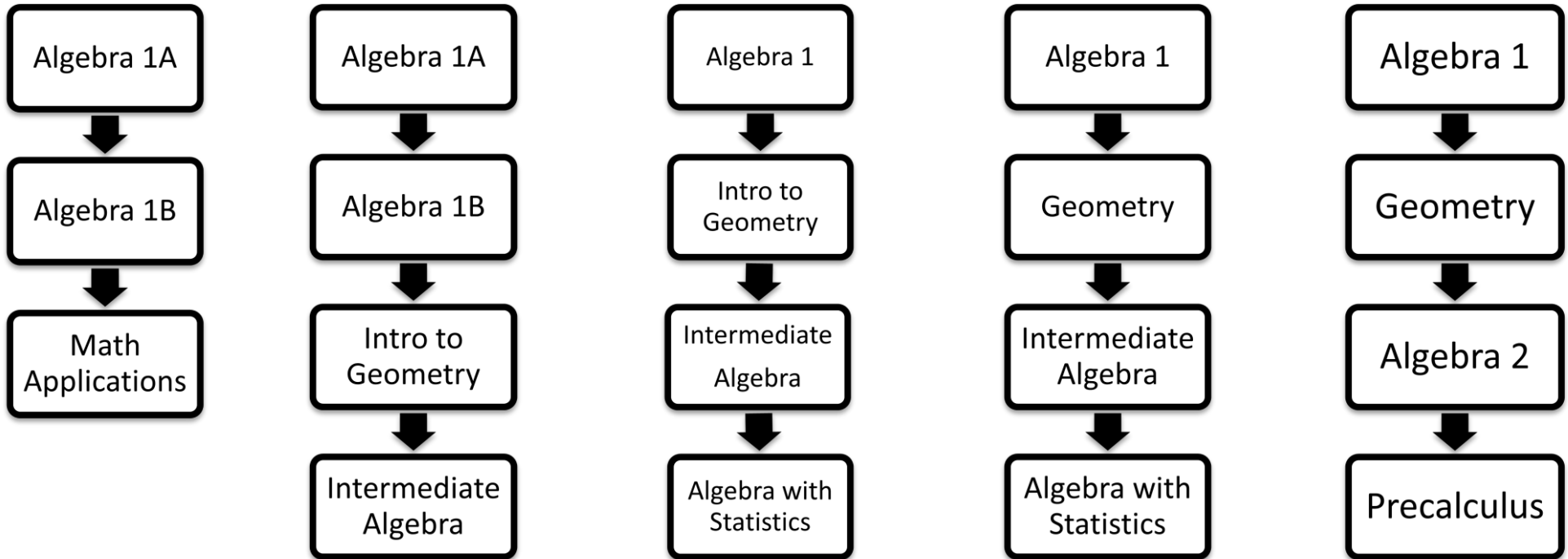
A Math Learning Center (MLC) has been created as a support service to all students studying math. The Center is open and staffed with a math teacher Periods 1 through 8. Students may attend the MLC if they have lunch, study hall, or other free period and need help in their math studies.

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 the more challenging and demanding workload. The honors program culminates with Advanced Placement courses in Calculus, Statistics and Computer Science. **We encourage all students to challenge themselves throughout their time here at Arlington by taking honors level classes. Students wishing to move into an honors level class from a Regents level class will be asked to solidify their knowledge base. As well, students who do not meet the prerequisites for an honors or AP math course will have the possibility to enroll in a course by applying with a prerequisite waiver through their guidance counselor by August 16, 2019. We encourage students to do so. After reviewing the waiver, the department coordinator will let the student know if it has been granted or not. Students enrolled in an honors math course that have not met the prerequisites or been granted a waiver, shall be placed into the equivalent Regents level math course.**

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, with the exception of any Advanced Placement Course. **Please note that no college course can serve as a prerequisite for an AP course within the mathematics department. Any student who wishes to skip a prerequisite course must take a proficiency test in August.**

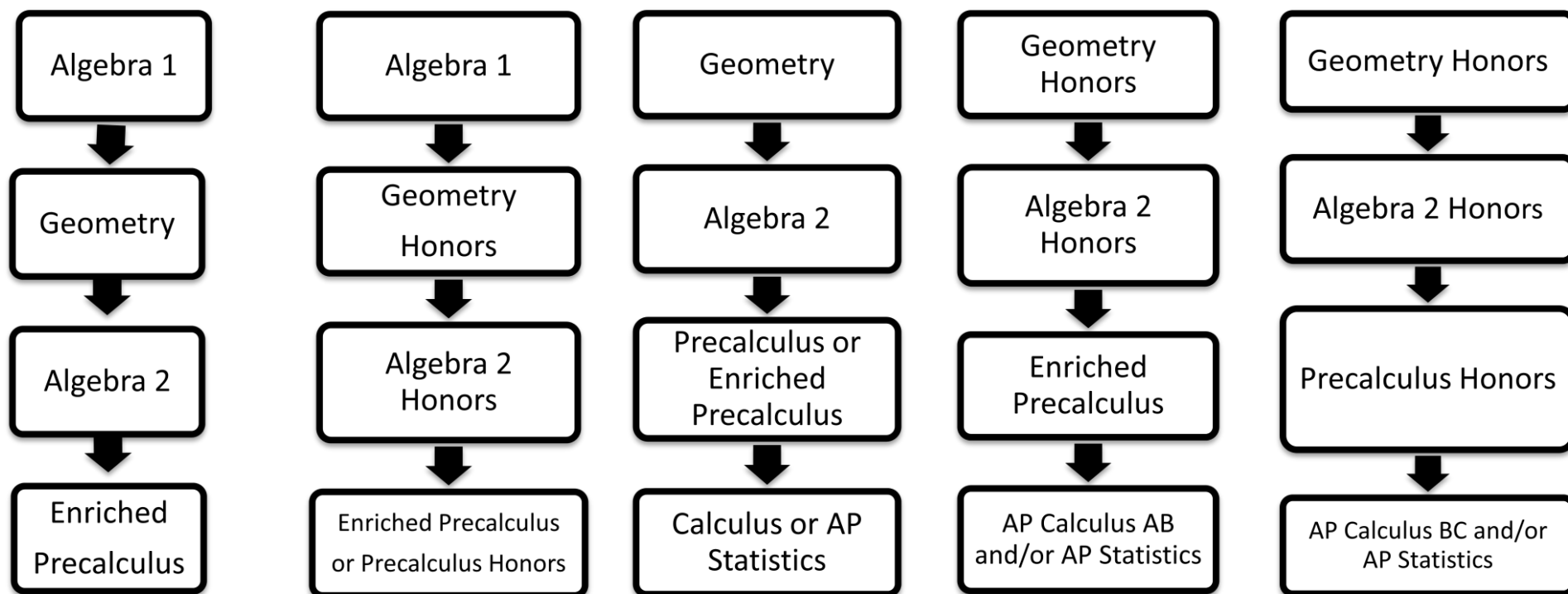
## SUGGESTED MATH COURSE PATHWAYS

Every student must pass the Algebra Regents examination and each must also pass three years of high school math. After considering these requirements, each student should pick a course sequence that fits their ability level, motivation level, and future career or college plans. Each of the following sequences satisfies the graduation requirements and each is an example of a different pathway to college or career readiness.



## HONORS PATHWAYS

Honors and Advanced Placement Mathematics at Arlington is an especially good choice for students who have an elevated interest and ability level in math and/or who are planning on attending a competitive four-year college. The timing of when a student chooses to enter or exit the honors path is a function of many variables, including their complete class load as well as the rigors of the particular math course. **Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver through their guidance counselor by August 16, 2019.** After reviewing the waiver, the department coordinator will either grant or deny it. **Students who do not meet the prerequisites and who have not been granted a waiver shall be placed in the equivalent Regents level math course.**



3050 REMEDIAL INTEGRATED ALGEBRA

(NO credit)

Successful completion of the state Regents Exam in Integrated Algebra is a graduation requirement for all students. This non-credit bearing course is required for any student who fails the Common Core Algebra I Regents exam and is not currently 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 Common Core Algebra I Regents Exam will be given in January, June, and August of each year.

3111 ALGEBRA 1A

(1 Unit – Full Year)

(Factor 8)

This course covers the first half of the Common Core Algebra 1 curriculum. With successful completion of this course, the following year students will take Algebra 1B and take the Algebra 1 Regents exam in June. Passing this exam is a graduation requirement. Success in this course requires that a student does homework regularly and has a **scientific calculator** for class and home use. There will be a school final exam during exam week in June.

**\*\*NCAA eligibility accepts .50 credits**

3116 ALGEBRA 1B

(1 Unit – Full Year)

(Factor 8)

This successive course to Algebra 1A finishes the remaining topics in the Common Core Algebra 1 curriculum. This course, along with Algebra 1A, covers the algebra of common functions, including linear, quadratic, and exponential, as well as others. The final exam for this course is the Common Core Algebra 1 Regents exam. Passing this exam is a graduation requirement. Success in this course requires that a student does homework regularly and has a **scientific calculator** for home and class use.

**\*\*NCAA eligibility accepts .50 credits**

3150 ALGEBRA 1

(1 Unit – Full Year)

(Factor 8)

Prerequisite: Passing average in Math 8

This course is the first course of the High School Common Core math curriculum. It will cover topics in elementary algebra such as linear, quadratic, exponential, and piecewise functions and their associated algebra. Success in this course requires that a student does homework regularly and has a **graphing calculator** for home and school use. The final exam is the Common Core Algebra 1 Regents given in June.

3160 INTERMEDIATE ALGEBRA (1 Unit – Full Year) (Factor 8)

Prerequisite: Intro to Geometry or Geometry  
and a passing grade on the Integrated Algebra Regents

Recommendation: An 85 or better in Introduction to Geometry

This course will cover topics in the first half of the Common Core Algebra 2 curriculum, while allowing more time for mastery of higher level algebraic skills and concepts. Students will study a variety of functions and their algebra, including linear, quadratic, exponential, logarithmic, and rational. Success in this course requires that a student does homework regularly and has a **graphing calculator** for home and school use. There will be a departmental final exam given during Regents week.

**\*\*NCAA eligibility accepts .50 credits**

3230 INTRODUCTION TO GEOMETRY (1 Unit – Full Year) (Factor 8)

Prerequisite: Algebra 1 or Algebra 1B

This course is for students who wish to be exposed to the major concepts of geometry, without the rigor of proof. The course will reinforce algebra skills through geometric applications, and more emphasis will be on hands on learning. A foundation in most major topics of Regents Geometry will be laid by applying concepts to solving numeric problems rather than studying geometric proofs. This course does **not** prepare students for the Common Core Geometry Regents exam. There will be a departmental final exam given during Regents week. For this course, students will need to have a **scientific calculator** for home and school use.

**♦ This course does not meet NCAA eligibility standards.**

3250 GEOMETRY (1 Unit – Full Year) (Factor 8)

Prerequisite: Algebra 1 or Introduction to Geometry, including a passing grade on the Common Core Algebra 1 Regents

Recommendation: 70 on the Common Core Algebra 1 Regents

This course fulfills the Common Core Learning Standards in Geometry. Students will study geometric relationships formally and informally. Students will be required to demonstrate mathematical reasoning through formal proofs and problem solving. Students will also study the trigonometry of right triangles. To be successful in this course, students will need to regularly do homework and have a **graphing calculator** for home and school use. The final exam in this course is the Common Core Geometry Regents exam.

3270 GEOMETRY H

(1 Unit – Full Year)

(Factor 9)

Prerequisite: A final course grade of at least an 85 in Algebra 1  
AND 80 or better on the Common Core Algebra 1 Regents Exam

This course enriches Geometry with much more emphasis placed on Euclidean proofs and begins to increase demands in student performance necessary for success in future honors level math courses. The final exam in this course is the Geometry Regents exam. For this course, students will need a **graphing calculator** for home and school use. **Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver by August 16, 2019 through their guidance counselor. After reviewing the waiver, the department coordinator will either grant or deny it.**

3301 MATHEMATICAL APPLICATIONS (1 Unit - Full Year) (Factor 8)

Prerequisite: Algebra 1B, or Introduction to Geometry  
Corequisite: Seniors Only: Algebra 1B

**This course can only be used as a possible 3<sup>rd</sup> credit in math.** This course is designed to apply previously learned and new math concepts in many areas of life, such as probability and statistics, technical areas, finance, etc. There will be a school final in June. For this course, students will need a **scientific calculator** for home and school use.

◆ **This course does not meet NCAA eligibility standards.**

3351 ALGEBRA 2 (1 Unit – Full Year) (Factor 8)

Prerequisite: Geometry

Recommendation: At least a 75 on the Common Core Geometry Regents exam.

This course will cover the material in the new Common Core Algebra II curriculum. The course will concentrate on the study of higher-level functions and algebraic manipulations, including the study of polynomials, rational functions, and trigonometric functions. Students will also study concepts of probability and statistics useful for later college work in statistics. The final exam for this course is the Common Core Algebra II exam given in June. Students wishing to graduate with the Advanced Regents diploma must pass this Regents exam as well as both previous Regents exams in Common Core Algebra 1 and Common Core Geometry. For this course, students will need a **graphing calculator** for home and school use.

3371 ALGEBRA 2 H

(1 Unit – Full Year)

(Factor 9)

Prerequisite: An 80 final average in Geometry H with a Regents exam grade of at least 80 on the Common Core Geometry Regents exam.

Or

A 90 final average in Geometry with an exam grade of at least 80 of the Common Core Geometry Regents exam.

This course enriches the Algebra 2 curriculum and incorporates topics from advanced algebra and advanced coordinate geometry. The final exam for this course is the three hour New York State Regents examination in Common Core Algebra II. Students wishing to graduate with the Advanced Regents diploma must pass this Regents exam as well as both previous Regents exams in Common Core Algebra 1 and Common Core Geometry. For this course, students will need a **graphing calculator** for home and school use. **Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver through their guidance counselor by August 16, 2019. After reviewing the waiver, the department coordinator will either grant or deny it.**

3411 ALGEBRA WITH STATISTICS

(1 Unit – Full Year)

(Factor 8)

Prerequisite: Intermediate Algebra

This course will finish the topics not covered in Intermediate Algebra for the Common Core Algebra II curriculum. Some topics covered: trigonometric functions, rational algebra, conditional probability, and statistics. Students will take the Common Core Algebra II Regents as their final exam in June. For this course, students will need a **graphing calculator** for home and school use.

**\*\*NCAA eligibility accepts .50 credits**

3441 PRECALCULUS

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Algebra with Statistics, Algebra 2, or Algebra 2 H

The Precalculus program is a college level pre-calculus course, providing the foundation necessary for the study of college calculus. The principal 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. Homework is required and a three hour school exam is given in June. For this course, students will need a **graphing calculator** for home and school use.

3451 ENRICHED PRECALCULUS (1 Unit - Full Year) (Factor 9)  
Dutchess Community College – MAT 185

Prerequisite: A final course grade of 85 or better in Algebra 2 with an exam grade of a 75 or better on the Common Core Algebra 2 exam.  
OR  
Algebra 2 H with an exam grade of 75 or better on the Common Core Algebra 2 exam.

This course contains all of the topics in Precalculus and explores them to a greater depth. This course is offered in conjunction with Dutchess County Community College. Since this is an honors level course the pace is faster than that of Precalculus and additional topics are covered: Sequences and Series, Parametric Equations and Conic Sections. For this course, students will need a **graphing calculator** for home and school use. A three hour school exam is given in June. This course allows students to earn DCC (MAT 185) credit. **Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver through their guidance counselor by August 16, 2019. After reviewing the waiver, the department coordinator will either grant or deny it.**

3461 PRECALCULUS HONORS (1 Unit - Full Year) (Factor 9)

Prerequisite: A final course grade of 80 or better in Algebra 2H with a minimum grade of 80 on the Common Core Algebra 2 exam  
OR  
A final course grade of 95 or better in Algebra 2 with grade of 80 on the Common Core Algebra 2 exam

This course is a combination of the pre-calculus from Enriched Precalculus and a semester of differential calculus. For this course, students will need a **graphing calculator** for home and school use. A three hour school exam is given in June. **Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver through their guidance counselor by August 16, 2019. After reviewing the waiver, the department coordinator will either grant or deny it.**



3540 CALCULUS

(1 Unit - Full Year)

(Factor 9)

Prerequisite: Precalculus, Enriched Precalculus or Precalculus Honors

Corequisite for Seniors only: Enriched Precalculus or Precalculus

Recommendation: At least an 80 final average in Precalculus.

This is a first year college level course in calculus (equivalent to Calculus I and part of Calculus 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. For this course, students will need a **graphing calculator** for home and school use. 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.

3550 AP CALCULUS AB

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Final grade of 90 or better in Precalculus  
OR  
Final grade of 80 or better in Enriched Precalculus  
OR  
A passing grade in Precalculus Honors

This course may NOT be taken concurrently with Enriched Precalculus or Precalculus.

This course has the same course description as Calculus (Course #3540); 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 #3540) 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. Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver through their guidance counselor by August 16, 2019. After reviewing the waiver, the department coordinator will either grant or deny it.**

3560 AP CALCULUS BC

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Final grade of 80 or better in Precalculus Honors or an 85% or better on the Precalculus Honors proficiency exam. Note that AP Calculus AB does not serve as a prerequisite for AP Calculus BC.

This course is a continuation of Precalculus Honors. It includes all topics in our AP Calculus AB course along with additional topics in series, sequences, differential equations, multidimensional motion, polar coordinates, 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. Students who do not meet the prerequisites for an honors or AP math course must apply for a prerequisite waiver through their guidance counselor by August 16, 2019. After reviewing the waiver, the department coordinator will either grant or deny it.**

3601 INTRODUCTION TO STATISTICS

(1/2 Unit – 1 Semester)

(Factor 9)

Prerequisite: Precalculus or Enriched Precalculus or Precalculus Honors

Corequisite for Seniors Only: Enriched Precalculus or Precalculus or Precalculus Honors

This course will serve as an introductory statistics course designed to introduce students to some of the topics that would be studied in a college level introductory statistics course. The first of the two marking periods will focus on gathering and organizing data, examining distributions through graphs and numbers, normal distributions, and modeling linear and non-linear data. The second marking period will focus on statistical inference. This will include construction/interpreting confidence intervals and significance tests for means or proportions. If time permits, Chi-square will be introduced. There will be an in-class final exam over 2 days covering all topics of the course.

### 3650 AP STATISTICS

(1 Unit - Full Year)

(Factor 10)

Prerequisite: An 85 or better final average in Algebra 2 or passing Algebra 2 Honors  
Corequisite: Concurrent registration in Precalculus, Enriched Precalculus or  
Precalculus Honors (If not already taken)

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.**

### 3761 INTRODUCTORY COMPUTER PROGRAMMING

(1/2 Unit - 1Semester)

(Factor 9)

Prerequisite: Intermediate Algebra or Geometry

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. This course cannot be used to satisfy a math or sequence requirement. There will be a final examination or project.

◆ **This course does not meet NCAA eligibility standards.**

3770 INTERMEDIATE COMPUTER PROGRAMMING WITH JAVA

Dutchess Community College – CPS 141

(1/2 Unit - 1 Semester)

(Factor 9)

Prerequisite:           Introductory Computer Programming  
  OR  
  Space permitting, proficiency in C++ or JAVA equivalent to  
  Introductory Computer Programming

This course is offered in conjunction with Dutchess County Community College and encompasses CPS 141 - Intro Computer Science and Programming. Students earn 4 college credits through this one-semester class. The course is tuition-free, however, **students are required to purchase the online textbook** (approximately \$30). This course cannot be used to satisfy a math or sequence requirement. There will be a final examination or project.

◆ **This course does not meet NCAA eligibility standards.**

3780 AP COMPUTER SCIENCE A

(1 Unit - Full Year)

(Factor 10)

Prerequisite:           Intermediate Computer Programming with JAVA  
  OR  
  Space permitting, proficiency in JAVA (covered in textbook:  
  JAVA Methods, Litvin, Skylight Publishing,  
  Chapters 2-10)

In addition to the material covered in Intermediate Computer Programming with JAVA, files and streams, loops, data structures, sorting and searching algorithms, and linked lists 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 Computer Science A examination in May. There will be a final examination or project.

**The AP exam is required.**

◆ **This course does not meet NCAA eligibility standards.**

### 3810 ADVANCED MATHEMATICS SEMINAR I

(1/2 Credit Fall Semester **Only**) (Factor 10)

Note: 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 multivariable functions and their limits, partial derivatives, gradient vectors and directional derivatives, tangent planes and normal lines, second derivatives, maxima, minima, and saddle points, and LaGrange multipliers.

This course is offered on an independent study basis only under the guidance of a math faculty advisor. Students will be expected to meet as a group with the faculty advisor after school twice a month, while completing assignments in between meetings.

### 3820 ADVANCED MATHEMATICS SEMINAR II

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

Note: Pass/Fail Only

Prerequisite: Advanced Mathematics Seminar I

This course is designed as a follow up to Advanced Mathematics Seminar I, exploring additional topics in multivariable calculus. Topics include double integrals, triple integrals, alternate coordinate systems, and applications. Time permitting; topics in vector calculus may be explored as well.

This course is offered on an independent study basis only under the guidance of a math faculty advisor. Students will be expected to meet as a group with the faculty advisor after school twice a month, while completing assignments in between meetings.

### 3830 ADVANCED COMPUTER SCIENCE SEMINAR I

(1/2 Credit - Fall Semester **Only**) (Factor 10)

Note: Pass/Fail Only

Prerequisite: AP Computer Science A

This course is designed for students who have completed AP Computer Science A and wish to continue their study of computer science. A large collaborative project will be utilized to further student skills in algorithm design, database management, lists, arraylists, queues, priorityqueues, trees, sets, maps, hashmaps and lookup tables.

This course is offered on an independent study basis only under the guidance of a math faculty advisor. Students will be expected to meet as a group with the faculty advisor after school twice a month, while completing assignments and collaborating electronically in between meetings.

### 3840 ADVANCED COMPUTER SCIENCE SEMINAR II

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

Note: Pass/Fail Only

Prerequisite: Advanced Computer Science Seminar I

This course is designed as a follow up to Advanced Computer Science Seminar I, exploring additional topics in computer science that are relevant in the world today. Topics include database management and safety, hacking and cyber security.

This course is offered on an independent study basis only under the guidance of a math faculty advisor. Students will be expected to meet as a group with the faculty advisor after school twice a month, while completing assignments and collaborating electronically in between meetings.

## 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. The Science Department has designed various courses to help students of all abilities to fulfill the graduation requirements. The suggested science course pathways flowchart describes the typical sequences for high school science courses. It is not a comprehensive list of all options. Each student should pick a course sequence that fits their ability level, motivation level, and future career or college plans.

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.

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 2 Regents Math courses before enrolling in either course. Both the experiences in problem solving and the analytical thinking developed in Algebra and Geometry are of considerable benefit in Physics or Chemistry. (See Recommendations for Regents Physics and for Regents Chemistry.)

Students who do not meet the prerequisites for an AP or elective course can apply for a prerequisite waiver through their guidance counselor by the end of June. Waiver forms will be reviewed by the department coordinator.

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.

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.

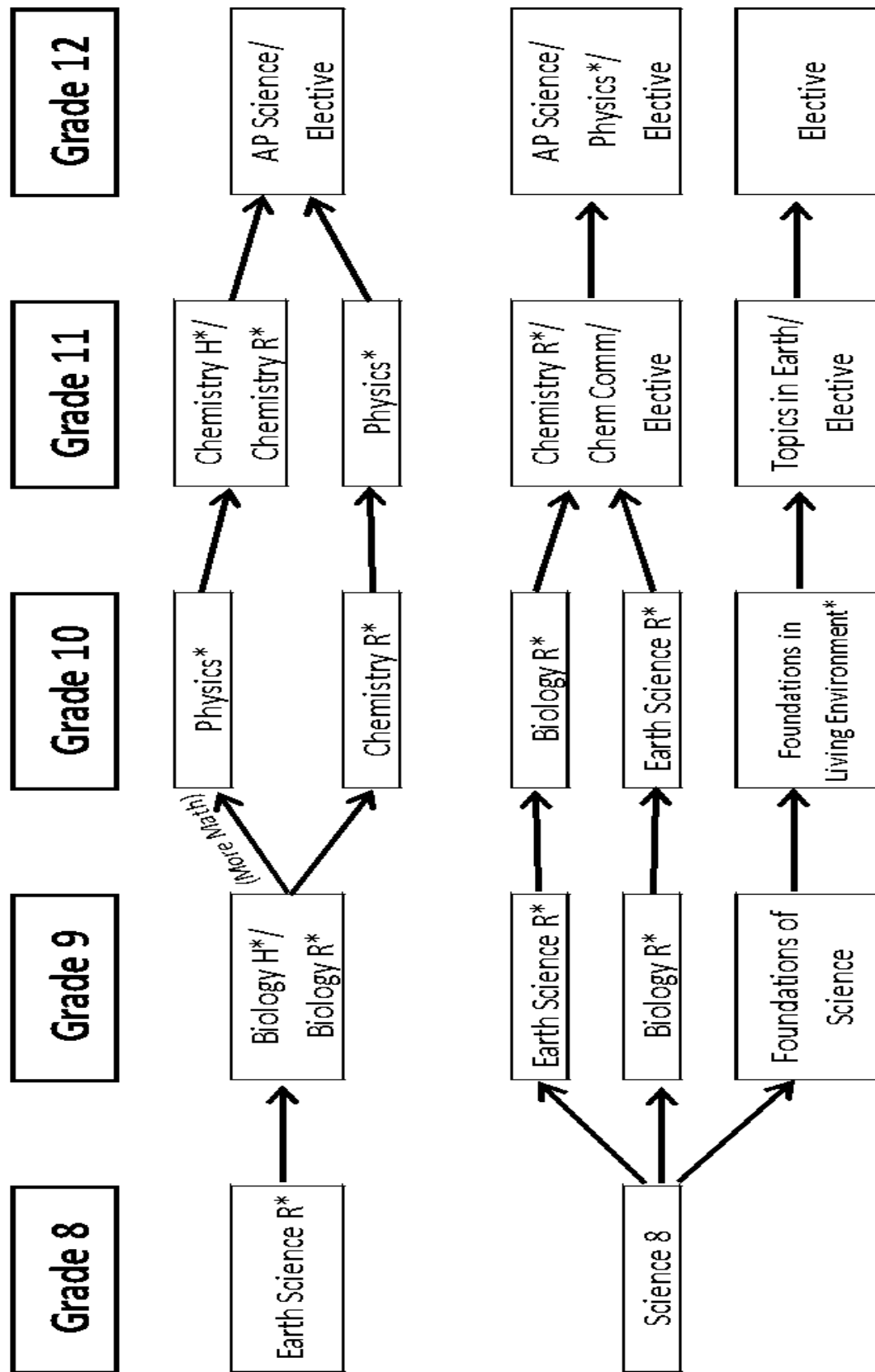
The New York State Education Department states, “The State Education Department highly recommends that if a student fails a Regents science course the laboratory requirement must be completed again when the course is retaken.” In courses that address the entire Core to be tested in a single year, all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



## SUGGESTED SCIENCE COURSE PATHWAYS



\* Course ends in a Regents Exam.

#### 4011 ACADEMIC INTERVENTION SERVICE: BIOLOGY

2-3 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. This section is designed for students needing assistance with Biology. Typically students need help with reading, simple math, and with construction and interpretation of graphs.

#### 4012 ACADEMIC INTERVENTION SERVICE: EARTH SCIENCE

2-3 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. This section is designed for students needing assistance with Earth Science. Typically students need help with reading, simple math, and with construction and interpretation of graphs.

4113 FOUNDATIONS OF SCIENCE

(1 Physical Setting Credit)

5 periods per week

(1 Unit – Full Year)

(Factor 8)

Recommendation: This course is recommended for students who need to build scientific literacy skills prior to enrolling in a Regents science course.

This interdisciplinary course includes beginning concepts from biology, earth science, chemistry and physics. Content is structured around interesting science concepts with an overarching emphasis on critical thinking, analyzing and graphing data, scientific method, organization, study skills, and scientific literacy. This course is meant to provide the foundation of skills necessary prior to taking a Regents-level science course.

Final Examination: Written Exam.

4241 FOUNDATIONS IN THE LIVING ENVIRONMENT

(1 Living Environment Credit)

6.25 periods per week

(1 Unit – Full Year)

(Factor 8)

Recommendation: This course is most appropriate for students who have passed the Foundations of Science course and is designed for sophomores, juniors and seniors.

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: Miller and Levine, Biology

4250 REGENTS BIOLOGY  
7 1/2 periods per week

(1 Living Environment Credit)  
(1 Unit - Full Year)

(Factor 8)

Recommendation: Passing average in Science 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: Miller and Levine, Biology

4260 BIOLOGY HONORS  
7 1/2 periods per week

(1 Living Environment Credit)  
(1 Unit - Full Year)

(Factor 9)

Recommendation: Regents Earth Science exam score of 85 or higher

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. 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 local exam

Textbook: Miller and Levine, Biology

4350 REGENTS EARTH SCIENCE (1 Physical Setting Credit)  
7 1/2 periods per week (1 Unit - Full Year) (Factor 8)

Recommendation: Passing average in Science 8

This course includes the following topics: Measurement & Density, Mapping, Astronomy, Weather, Rocks & Minerals, Weathering & Erosion, 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  
Glencoe NY Earth Science

4450 REGENTS CHEMISTRY (1 Physical Setting Credit) 7 1/2  
periods per week (1 Unit - Full Year) (Factor 8)

Recommendation:

- Successful completion of two Regents math courses, including a passing grade on the Algebra Regents Exam. Students wishing to take chemistry concurrently with their second Regents math course should have achieved a Regents science exam score of 85 or higher.
- Regents science exam score of 70 or higher
- A student who has achieved less than 85 in Algebra 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. Students should be proficient in the following mathematical skills: rearranging algebraic equations; using scientific notation; and converting fraction, decimal, and percent equivalents. 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

4460 CHEMISTRY HONORS

(1 Physical Setting Credit)

7 1/2 periods per week

(1 Unit - Full Year)

(Factor 9)

Recommendation:

- Regents physics exam score of 75 or higher
- Students should have passed Algebra 2 OR be concurrently enrolled. Students with an Algebra 2 exam score less than 75 should expect to find honors chemistry difficult.

The course is similar to Regents Chemistry but with heavier emphasis on the mathematical aspects of chemistry, along with a greater use of problem solving skills and more extensive treatment of some topics. This course will prepare students for the SAT Subject 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 the 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 local exam

Textbook:

Wilbraham, Staley, Matta & Waterman, Chemistry

4550 REGENTS PHYSICS

(1 Physical Setting Credit)

7 1/2 periods per week

(1 Unit - Full Year)

(Factor 9)

Recommendation:

- Successful completion of two Regents math courses including a minimum score of 75 on the Geometry Common Core Regents exam.
- Regents science exam score of 75 or higher

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. Students will regularly use math skills from algebra and geometry to understand physics concepts and equations. 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/Physics

Textbook:

Zitzewitz, Physics-Principles and Problems

4601 TOPICS IN EARTH SCIENCE (1 Physical Setting Credit)  
5 periods per week (1 Unit – Full Year) (Factor 8)

Prerequisite: Completion of one year of high school science

Recommendation: Foundations in the Living Environment

Topics in Earth Science covers most 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: Written exam.

Textbook: Namowitz & Spaulding, Earth Science

4605 TEACHING SCIENCE THEORY AND PRACTICE (1 Physical Setting Credit)  
5 periods per week (1 Unit – Full Year) (Factor 8)

Prerequisite: Successful completion of 3 Regents science classes

This course is designed to help students improve their science knowledge and understanding by learning effective methods of teaching science. Students will be given an introduction to educational theory and practice, as well as methods of teaching science. Students will be actively engaged in designing and creating lessons and activities in different scientific disciplines and then teach these lessons to elementary level students in the Arlington district. Once lessons have been developed, elementary classes will come to the high school several times per week, to go through the lessons and programs that the students in this course have developed.

Final Examination: Portfolio

◆ **This course does not meet NCAA eligibility standards.**

**The following four 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.**

4611 MARINE BIOLOGY: FROM TENTACLES TO CLAWS

5 periods per week (1/2 Living Environment Credit)  
(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 various Marine environments, including coral reefs, mangroves, the everglades, rocky coasts and the Hudson River. We will travel to the river to experience an estuary up close and to participate in hands-on investigations. Our studies in this course will focus on organisms ranging from microscopic plankton to sponges, corals, sea jellies, marine worms, mollusks, crabs, shrimp, lobster, and sea stars. In addition to studying the marine organisms, we will also discuss marine exploration and the chemical and physical environment that affects the organisms.

Final Examination: Project

Textbook: Marine Science, 2nd edition, Amsco

4612 MARINE BIOLOGY: FROM FINS TO FLUKES

5 periods per week (1/2 Living Environment Credit)  
(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 ocean that cover our planet. Students will study animals including dolphins, whales, manatees, penguins, fish, sea turtles, sea snakes, and iguanas. We will explore SCUBA diving physiology and the principles of buoyancy in comparison to other marine animals. During the semester we will increase student awareness of the environmental issues, such as global climate change and marine pollution, which impact marine animals.

Final Examination: Project

Textbook: Marine Science, 2nd edition, Amsco



4630 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 and analysis of physical evidence from simulated crime scenes using standard scientific procedures and techniques. Topics covered in the course include processing a crime scene, fingerprinting, hair and fiber analysis, document analysis, DNA analysis, and psychological profiling. The course may also include local law enforcement guest speakers, a field trip to an appropriate forensic facility and student involvement as a forensic witness at a mock trial.

Final Examination: Local Exam / Evaluation

Textbook: Forensic Science for High School, Funkhouser-Delisch; Kendall Hunt, 2005  
Casebook of Forensics Detection, Evans, Colin; John Wiley & Sons, Inc. 1996

4640 NATURAL DISASTERS

5 periods per week

(1/2 Physical Setting Credit)

(1/2 Unit – 1 Semester)

(Factor 8)

Prerequisites: Successful completion of Regents Earth Science course or a minimum grade of 75 in Topics in Earth Science.

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 students will create group projects that they will present in class.

Final Examination: Final project presented in class

4650 CHEMISTRY IN THE COMMUNITY (ChemCom ® ) (1 Physical Setting Credit)  
5 periods per week (1 Unit – Full Year) (Factor 8)

Prerequisite: Regents Biology and Regents Earth Science courses.  
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: Local Exam

4660 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

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.

Final Examination: Final project presented in class

4670 CONTEMPORARY ISSUES IN BIOLOGY – Biomedical focus

(1 Living Environment Credit)

5 periods per week

(1 Unit - Full Year)

(Factor 9)

Prerequisite: Regents Biology

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 or 11

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 stem cell research, assisted reproductive technologies, genetic screening, gene therapy, gene engineering, 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

4690 ASTRONOMY

(1/2 Physical Setting Credit)

5 periods per week

(1/2 Unit-1 semester)

(Factor 8)

Prerequisite: Successful completion of Regents Earth Science

Astronomy is the study of objects and phenomena that lie beyond the Earth's atmosphere. In this course, students will study the night sky, planets in our solar system, stars, galaxies, and space exploration. The course will focus on understanding what we see in the night sky and the physical characteristics of stars and planets. The class is set in a computer lab and students will have the opportunity to use an interactive astronomy software program.

Final Examination: Local exam

Textbook: Discovering the Universe, Kaufmann and Comins.

4710 AP BIOLOGY (1 Living Environment Credit) (Factor 10)  
7 1/2 periods per week (1 Unit - Full Year)

Prerequisites: (1) Regents Biology exam score of 85 or higher  
(2) Regents Chemistry exam score of 75 or higher

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 work in the summer preceding the course and should obtain summer work from the AHS science website.

**The AP exam is required.**

Final examination: Local exam

Textbook: Biology, 11<sup>th</sup> Edition by Campbell

4730 AP ENVIRONMENTAL SCIENCE (1 Liv Env or Physical Setting Credit) (Factor 10)  
7 1/2 periods per week (1 Unit – Full Year)

Prerequisites: (1) Regents Biology exam score of 85 or higher  
(2) Regents Chemistry exam score of 75 or higher

Recommendation: Regents Earth Science

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.

**The AP exam is required.**

Final Examination: Local examination

Textbook: Miller and Spoolman, Living in the Environment, AP 18th edition

4750 AP CHEMISTRY (1 Physical Setting Credit)  
7 1/2 periods per week (1 Unit - Full Year) (Factor 10)

Prerequisites: (1) Regents Chemistry exam score of 85 or higher  
(2) Regents Physics exam score of 85 or higher  
(3) Successful completion or concurrent enrollment in precalculus (honors-level preferred)

This is equivalent to a two-semester college level course in theoretical chemistry, designed for students who plan to major in science or medicine. Advanced chemical reasoning and extensive mathematical problem solving permeate the entirety of the course. Topics include advanced stoichiometric analysis, atomic and molecular structure, periodic trends, solution chemistry, gaseous chemistry, descriptive chemistry, and electrochemistry. The course heavily emphasizes the topics of equilibrium, kinetics and thermodynamics. Laboratory work is an essential part of this course. Students will be required to write detailed reports on lab work performed in class. Extensive time outside of class is required to develop conceptual understanding and improve problem solving abilities. Students will be required to complete work in the summer preceding the course and should obtain summer work from the AHS science website.

**The AP Exam is required.**

Final examination: School exam  
Textbook: Zumdahl & Zumdahl, Chemistry 9th Edition

4760 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 exam score of 85 or higher

Corequisite: Any Calculus course. Note that Calculus BC course is recommended.

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, AP 9th edition

4800 SCIENCE RESEARCH  
2 ½ periods per week

(1/2 Physical Setting or Living Environment Credit)  
(1/2 Unit – Full Year) (Factor 10)

Prerequisites: (1) Passed two science Regents Examinations  
(2) Applications are required. Due March 1.

Students must apply for entrance into this course. Applications are available on the AHS science department website and must be submitted by March 1. This course may be taken more than once. This course is offered only on a pass/fail basis.

For the best experience, students are encouraged to apply as sophomores to gain entrance to a 2-year research course for their 11-12<sup>th</sup> grade schedules. It is also possible to apply for a condensed version of this course taken only in 12<sup>th</sup> grade.

Students will plan and conduct their own original research project, usually focused on biological or environmental sciences. Students will be introduced to research design, critically analyze experimental research, and connect with a scientific mentor. Research projects will be carried out in the school laboratories or in the community. Students will communicate their findings either through displays, presentations at meetings, publication, or competitions. This course is intended for students that are highly motivated, want to pursue scientific questions, and are able to carry out independent research.

A separate section focusing on AHS's energy usage is also available to 10, 11, 12<sup>th</sup> grade students. See the separate application on the science department website.

◆ **This course does not meet NCAA eligibility standards.**

The following courses in Technology Education can be used to meet 1 Unit of the Science requirement needed for graduation. Please refer to the Technology Education section for specific course descriptions and requirements.

|  |            |
|--|------------|
| 8030 TRANSPORTATION SYSTEMS (½ Unit – 1 Semester)      | (Factor 8) |
| 8040 MATERIALS PROCESSING (½ Unit – 1 Semester)        | (Factor 8) |
| 8050 ELECTRICITY (½ Unit – 1 Semester)                 | (Factor 8) |
| 8111 DIGITAL ELECTRONICS (1 Unit – Full Year)          | (Factor 9) |
| 8152 BASIC PHOTOGRAPHY (½ Unit – 1 Semester)           | (Factor 8) |
| 8170 DIGITAL PHOTOGRAPHY (½ Unit – 1 Semester)         | (Factor 8) |
| 8162 ADVANCED PHOTOGRAPHY (½ Unit – 1 Semester)        | (Factor 8) |
| 8064 ENERGY AND POWER TECHNOLOGY (½ Unit – 1 Semester) | (Factor 8) |

## **Languages Other than English (LOTE)**

The goal of the LOTE 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) and the course before entering level 4 of that language. If an AP exam or college credit is offered in the level 4 or 5 language, it is a requirement of the Level 4 or 5 course.

No student may earn more than 1 year of Foreign Language credit via "Alternative Credit". Alternative credit is granted for special circumstances at the discretion and recommendation of the teacher and/or the LOTE coordinator.



5010 FRENCH 1

(1 Unit - Full Year)

(Factor 8)

This course is an introduction to French as a spoken and written language. The coursework 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 enhance their understanding of the diverse cultures of the French speaking world through authentic French materials. Students will take a school final exam.

5020 FRENCH 2

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of French 1.

The basic vocabulary, grammar, and culture introduced in French 1 will be reviewed and brought to a higher level of proficiency. Students should be prepared for the course to move at a faster pace than level 1.

Each topic will be explored more in depth and focus on further development of the basic communication skills previously acquired. Vocabulary, idiomatic expressions, as well as detailed cultural studies, are also taught in context. Particular emphasis will be placed on speaking and writing skills and there will be regular assessment of listening and reading comprehension. Students will routinely be expected to present orally in class, both spontaneously and planned, complete a variety of writing tasks and create projects on certain major themes or topics covered.

Successful completion of this course will require active daily participation, satisfactory completion of all classwork, and a continual development of overall skills in the French language. Students will take a locally developed final examination.

5030 FRENCH 3 R

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of French 2.

The basic vocabulary, grammar, and culture introduced in French 1 and 2 will be reviewed and brought to a higher level of proficiency. Students should be prepared for the course to move at a brisk pace.

In level 3 students will focus on further learning the nuances of the French language structure, idiomatic expressions, detailed cultural studies and more advanced technical vocabulary. Each topic will be explored more in depth and focus on further development of the basic communication skills previously acquired. Continued emphasis will be placed on improving speaking and writing skills and there will be regular assessment of listening and reading comprehension skills. Students will routinely be expected to present orally in class, both spontaneously and planned, complete a variety of writing tasks and create projects for certain major themes or topics covered. We will use a variety of sources including, but not limited to, textbooks, workbooks, literary works, magazines, newspapers, films, music, videos, slideshows and websites.

Successful completion of this course will require active daily participation, satisfactory completion of all classwork, and a continual development of overall skills in the French language. Students will take a regionally developed comprehensive final examination.

5040 FRENCH 4

(1 Unit - Full Year)

(Factor 9)

Prerequisite: Successful completion of French 3 R including the level 3 final 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. 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 classwork, mastery of grammatical themes and a school final examination.

In addition, students will have the opportunity to receive three college credits through the Dutchess Community College program by meeting the course requirements.

5050 AP FRENCH 5

(1 Unit - Full Year)

(Factor 10)

Prerequisite: Successful completion of French 4.

The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of products, both tangible (e.g., tools, books, music) and intangible (e.g., laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions that underlie both practices and products).

There are six groups of learning objectives at the core of the AP French Language and Culture course that identify what students should know and be able to do across three modes of communication. These objectives outline expectations of student abilities in the following areas:

- Spoken Interpersonal Communication
- Written Interpersonal Communication
- Audio, Visual, and Audiovisual Interpretive Communication
- Written and Print Interpretive Communication
- Spoken Presentational Communication
- Written Presentational Communication

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 classwork, mastery of grammatical themes and a school final examination based on the Advanced Placement French Language and Culture Exam.

**The AP exam is required.**

In addition, students will have the opportunity to receive three college credits through the Dutchess Community College program by meeting the course requirements.

5210 ITALIAN 1

(1 Unit - Full Year)

(Factor 8)

This course is an introduction to the Italian spoken and written language and its cultures. The coursework involves practice in reading, writing, listening and speaking about everyday situations in Italian. Students 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 the understanding of the Italian speaking world through authentic Italian materials and cultural experiences. Students will take a school final exam.

5220 ITALIAN 2

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of Italian 1.

The basic vocabulary, grammar, and culture introduced in Italian 1 will be reviewed and brought to a higher level of proficiency. Students should be prepared for the course to move at a faster pace than level 1.

Each topic will be explored more in depth and focus on further development of the basic communication skills previously acquired. Vocabulary, idiomatic expressions, as well as detailed cultural studies, are also taught in context. Particular emphasis will be placed on speaking and writing skills and there will be regular assessment of listening and reading comprehension. Students will routinely be expected to present orally in class, both spontaneously and planned, complete a variety of writing tasks and create projects on each major theme or topic covered.

Successful completion of this course will require active daily participation, satisfactory completion of all classwork, and a continual development of overall skills in the Italian language. Students will take a locally developed final examination.

5230 ITALIAN 3 R

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of Italian 2.

The basic vocabulary, grammar, and culture introduced in Italian 1 and 2 will be reviewed and brought to a higher level of proficiency. Students should be prepared for the course to move at a brisk pace.

In level 3 students will focus on further learning the nuances of the Italian language structure, idiomatic expressions, detailed cultural studies and more advanced technical vocabulary. Each topic will be explored more in depth and focus on further development of the basic communication skills previously acquired. Continued emphasis will be placed on improving speaking and writing skills and there will be regular assessment of listening and reading comprehension skills. Students will routinely be expected to present orally in class, both spontaneously and planned, complete a variety of writing tasks and create projects on each major theme or topic covered. We will use a variety of sources including but not limited to textbooks, workbooks, literary works, magazines, newspapers, films, music, videos, slideshows and websites.

Successful completion of this course will require active daily participation, satisfactory completion of all classwork, and a continual development of overall skills in the Italian language. Students will take a regionally developed comprehensive final examination.

5240 ITALIAN 4

(1 Unit - Full Year)

(Factor 9)

Prerequisite: Successful completion of Italian 3 R including the level 3 final 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, students will have the opportunity to receive three college credits through the Dutchess Community College program by meeting the course requirements.

5250 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 and the Advanced Placement Examination, which is required.

In addition, students will have the opportunity to receive three college credits through the Dutchess Community College program by meeting the course requirements.

5410 SPANISH 1

(1 Unit - Full Year)

(Factor 8)

This course is an introduction to Spanish as a spoken and written language. The coursework 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.

5420 SPANISH 2

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of Spanish 1.

The basic vocabulary, grammar, and culture introduced in Spanish 1 will be reviewed and brought to a higher level of proficiency. Students should be prepared for the course to move at a faster pace than level 1.

Each topic will be explored more in depth and focus on further development of the basic communication skills previously acquired. Vocabulary, idiomatic expressions, as well as detailed cultural studies, are also taught in context. Particular emphasis will be placed on speaking and writing skills and there will be regular assessment of listening and reading comprehension. Students will routinely be expected to present orally in class, both spontaneously and planned, complete a variety of writing tasks and create projects on certain major themes or topics covered.

Successful completion of this course will require active daily participation, satisfactory completion of all classwork, and a continual development of overall skills in the Spanish language. Students will take a locally developed final examination.

5430 SPANISH 3 R

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Successful completion of Spanish 2.

The basic vocabulary, grammar, and culture introduced in Spanish 1 and 2 will be reviewed and brought to a higher level of proficiency. Students should be prepared for the course to move at a brisk pace.

In level 3 students will focus on further learning the nuances of the Spanish language structure, idiomatic expressions, detailed cultural studies and more advanced technical vocabulary. Each topic will be explored more in depth and focus on further development of the basic communication skills previously acquired. Continued emphasis will be placed on improving speaking and writing skills and there will be regular assessment of listening and reading comprehension skills. Students will routinely be expected to present orally in class, both spontaneously and planned, complete a variety of writing tasks and create projects on certain major themes or topics covered. We will use a variety of sources including but not limited to textbooks, workbooks, literary works, magazines, newspapers, films, music, videos, slideshows and websites.

Successful completion of this course will require active daily participation, satisfactory completion of all classwork, and a continual development of overall skills in the Spanish language. Students will take a regionally developed comprehensive final examination.

5440 SPANISH 4

(1 Unit - Full Year)

(Factor 9)

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

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

Requirements: Satisfactory completion of written reports, oral presentations, participation in class, and classwork based on reading and homework assignments. Students will take a school final exam.

College credit: Students will have the opportunity to receive three college credits through the Dutchess Community College program by meeting the course requirements.

5450 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 classwork, mastery of grammatical themes and a school final examination based on the Advanced Placement Spanish Language Exam.

**The AP exam is required.**

Additionally, students will have the opportunity to receive three college credits through the Dutchess Community College program by meeting the course requirements.

# Art Department Electives

ADVANCED  
PLACEMENT  
IN  
STUDIO ART  
1 UNIT

ADVANCED  
PLACEMENT  
IN  
ART HISTORY  
1 UNIT

ADVANCED  
GLASSWORKING  
1/2 UNIT

ADVANCED  
DRAWING  
1/2 UNIT

PORTFOLIO  
DEVELOPMENT  
1/2 UNIT

POTTERY  
1/2  
UNIT

ADVANCED  
PAINTING  
1 UNIT

ADVANCED  
COMPUTER  
GRAPHICS  
1 UNIT

SCULPTURE  
SEM 1 OR 2  
1/2 UNIT

CHOICE-  
BASED  
ART  
1/2 UNIT

ADVERTISING  
DESIGN  
1 UNIT

GLASSWORKING  
SEM 1 OR 2  
1/2 UNIT

CERAMICS  
1 & 2  
1/2  
UNIT

DRAWING  
AND  
PAINTING  
1 UNIT

STUDIO  
IN  
PHOTOGRAPHY  
1 UNIT

COMPUTER  
GRAPHICS  
1 UNIT

STUDIO IN ART, STUDIO IN CRAFTS, SIA ACCELERATED  
FOUNDATION COURSES IN 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: Conceiving and developing new artistic ideas and work*
- Presenting: Interpreting and sharing artistic work*
- Responding: Understanding and evaluating how the arts convey meaning*
- Connecting: Relating artistic ideas and work with personal meaning and external context*

For the Advanced Regents Diploma, a student may substitute a 5 unit sequence in Art for the 3 unit Foreign Language Requirement. Students interested in developing a portfolio as part of a college admissions requirement should plan a sequence in art through the Art Department.

6000 STUDIO IN ART ACCELERATED (1/2 Unit – Fall Semester) (Factor 8)

Prerequisite: Successful completion of 8<sup>th</sup> grade Art Accelerated

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.

Studio in Art Accelerated is a foundation course, and is the pre-requisite for many advanced art electives.

6010 STUDIO IN ART (1 Unit - Full Year) (Factor 8)

Prerequisite: None

Studio in Art provides students with a wide range of art experiences through the exploration of a variety of media and techniques. The Elements of Art and the Principles of Design are examined in the course as students complete projects in two and three-dimensions. For example, the students will complete works in pen and ink, marker, pencil, charcoal and pastel. They will make sculptures in clay, wire and cardboard and create projects in watercolor, tempera, acrylic and graphic arts. This is an exciting and interesting course for the student who wants to try many different art materials. Studio in Art is the prerequisite for art electives and students interested in an art sequence are encouraged to take this course first. It fulfills the diploma requirement for 1 unit of art for graduation. Students may take *either* Studio in Crafts *or* Studio in Art but not both since they are similar courses in Art.

6040 STUDIO IN CRAFTS

(1 Unit - Full Year)

(Factor 8)

Prerequisite: None

Studio in Crafts involves the student in a wide range of two and three-dimensional media studies. Clay, fabric arts, printmaking, copper tooling, mask making, book binding, and calligraphy and graphic arts are a few examples. Studio in Crafts is an introductory course in art which can lead to Ceramics, Sculpture, Glassworking and other elective art courses. The study of the Elements of Art and the Principles of Design forms the basis of the course by creating a number of projects using craft materials. Students who enjoy hands on activities may enjoy this course and will gain an appreciation of crafts as an area of art. Studio in Crafts fulfills the diploma requirement for 1 unit of art for graduation. Students may take *either* Studio in Crafts *or* Studio in Art but not both since they are parallel courses in Art.

6072 CHOICE BASED ART

(1/2 Unit – 1 Semester) (Factor 8)

Prerequisite: Studio in Art, Studio in Art Accelerated, or Studio in Crafts

Students will explore creative problem solving through choice-based art making. This course investigates the development of individual ideas, dynamic designs and compositions. This class is a studio course and includes the creation of works that respond to contemporary visual culture. Students will enjoy a range of solutions in their unique works of art. Developing original works of art which express personal meaning are the core of this studio course. Student requirements include successful completion of studio projects; assessments and a final project at the completion of the course.

6080 STUDIO IN DRAWING AND PAINTING

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Studio in Art or Studio in Crafts

A course concentrating on the development of drawing and painting skills through a complete 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, assessments and a final exam.

6090 STUDIO IN COMPUTER GRAPHICS (1 Unit - Full Year)(Factor 8)

Recommended: Studio in Art or Studio in Crafts or other art credit course

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 learn a variety of software applications 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 the Apple Mac computer will be studied in the course.

6095 ADVERTISING DESIGN (1 Unit - Full Year) (Factor 8)

Prerequisites: Studio in Computer Graphics

Advertising Design is a full year studio course in which students will use computer software to develop works of art for commercial applications. Students will study graphic design principles and apply them in the completion of a range of studio work including retail display advertising, print publication advertising, poster design, packaging design, disc covers and inserts, brochures, book jackets, magazine covers, business cards and logo designs. Students will also practice copywriting and study the concept of visual identity and branding.

6100 STUDIO IN ADVANCED COMPUTER GRAPHICS  
(1 Unit – Full Year) (Factor 8)

Prerequisite: Studio in Computer Graphics A final average of at least an 85 is highly recommended.

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 2-D and 3-D animation, web-page design and motion graphics. Areas of study include Dreamweaver, Motion, iMovie, Garage Band, Flash, Carrara, In-Design, Photoshop and Painter. This course is structured for the independent worker who is able to make design applications of practical knowledge in a creative and dynamic way.

6120 ADVANCED STUDIO IN PAINTING

(1 Unit - Full Year) (Factor 8)

Prerequisites: Studio in Art **AND** Studio in Drawing and Painting **OR**  
Studio in Crafts **AND** Studio in Drawing and Painting

This is a course for students who have successfully completed the requirements for 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 will be explored.

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

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

6130 ADVANCED STUDIO IN DRAWING

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

Prerequisites: Studio in Art **AND** Studio in Drawing and Painting **OR**  
Studio in Crafts **AND** Studio in Drawing and Painting

This course is designed to involve the student in advanced drawing techniques using a variety of media including charcoal, conte crayon, pastel and pencil. Figure and portrait drawing, still life 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 and a final project at the conclusion of the course.

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

## 6150 SCULPTURE

(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 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 a wide range of sculpture projects using a variety of materials. Techniques such as carving, modeling, and working with an armature will be explored. Materials include wood, stone, metal, found objects and assemblage, clay, glass, paper mache, and cardboard among others. Students completing this course of study will be able to include several 3-dimensional works in their portfolio.

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

## 6180 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 methods and techniques of modeling, slab building, and coil construction including an introduction to wheel thrown pottery. Students will make functional objects such as mugs, bowls and containers that can be used at home. As a final project students will be able to create a vessel or sculpture of their own choosing.

Student requirements include successful completion of studio assignments, assessments and a final exam and project.

## 6190 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.

Student requirements include successful completion of studio assignments, assessments and a final exam and project.

6200 POTTERY

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: Studio in Ceramics 1 AND Studio in Ceramics 2

Studio in Pottery is an advanced one semester course that is taken after completing Ceramics I and Ceramics II. The major focus of the class is the construction and decoration of ceramic vessels. In this class students will work with professional grade stoneware clay and glazes. The functional pottery that is made in this class is food and dishwasher safe. Students will be taught how to make pots on the potter's wheel and will also have an opportunity to further develop their hand-building skills. Student will be given an opportunity to work independently designing and creating their own projects. Each student will make a large number of functional objects that they will be able to take home and use in their daily life.

Student requirements include successful completion of studio assignments, assessments and a final exam and project.

6210 STUDIO IN PHOTOGRAPHY

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Studio in Art, Studio in Crafts, Studio in Computer Graphics or Photo Tech I

Studio in Photography is a full year advanced art elective that explores the fundamentals of photography. This course can be taken by students that do not have any experience in taking pictures. In this class students explore digital and film based darkroom photography. Shooting assignments include portraiture, landscape, action photography, double exposure and a variety of other creative projects. After completing these assignments students will be encouraged to explore topics of a personal interest. Students who have already taken photographs using their cell phones may find that their photography skills improve. A 35 mm camera is required for this course. Students enrolling in this course may be required to purchase some basic materials.

6230 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.

6240 STUDIO IN ADVANCED GLASSWORKING  
(1/2 Unit – 1 Semester) (Factor 8)

Prerequisite: Studio in Glassworking

Advanced Glassworking will build on the Studio in Glassworking course and allow students to develop complex and intricate works of art in glass. Specifically, the course will provide students with the opportunity to focus on kiln formed glass and lampworking. Students will be encouraged to develop their own personal style and make artistic statements while completing an in depth exploration for each technique. This advanced course provides the student with an opportunity to create unique three dimensional works of art for inclusion in a college art portfolio. The student enrolling in this course may be required to purchase some materials.

## 6250 ADVANCED PLACEMENT IN 2-D ART and DESIGN or AP DRAWING

5 periods per cycle

(1 Unit – Full Year)

(Factor 10)

Prerequisites: **Studio in Art AND Studio in Drawing and Painting OR Studio in Crafts AND Studio in Drawing and Painting** and any *one* of the following: Advanced Painting, Advanced Drawing, Studio in Photography or Computer Graphics. OR, in lieu of prerequisite classes, students can request a portfolio conference with the department coordinator and the art instructor for acceptance into the program.

This is an advanced elective for the serious student of art. Students will choose either AP 2-D Art and Design or AP Drawing. The portfolio requirements will consist of the following:

1. Sustained Investigation (60% of exam score)  
Students will submit images and writing to document their inquiry-guided investigation through practice, experimentation, and revision:
  - A minimum of 15 digital images that include works of art and design and process documentation.
  - Typed responses to prompts, providing information about the questions that guided their investigation and how they practiced, experimented, and revised, guided by their questions.
2. Selected Works (40% of exam score)  
Students will submit works of art and design and writing to demonstrate skillful synthesis of materials, processes, and ideas:
  - For both portfolios: 5 physical works or high-quality reproductions of physical works with written responses on paper describing the materials, processes, and ideas used.

All portfolio work will be 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 2-D Art and Design or Drawing 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. Student requirements include completion of all studio assignments as per 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 outside of school. Class participants may be required to purchase some materials.

Students completing AP Art and Design or AP Drawing may also complete the opposite course of study the following year. This may result in additional AP credit.



## 6260 ADVANCED PLACEMENT ART HISTORY

(1 Unit – Full Year)

(Factor 10)

Prerequisites: None

Recommendations: Good academic standing, and successful completion of Global Studies.

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 European conventions.

Students will analyze artworks from daily slide presentations in class. Students will improve their visual skills and their ability to write succinctly through regular practice on tests and through one substantial research project. While students learn to analyze individual artworks, they also arrive at meaningful conclusions on larger themes and cultural developments through time.

Students are encouraged to take the class as a junior while many students enjoy the class during their senior year. **The AP Exam, in mid-May, is required.** Students who successfully complete the examination with a 3 or better may possibly earn college credit.

## 6270 STUDIO IN PORTFOLIO DEVELOPMENT (½ Unit – 1 Semester) (Factor 8)

Prerequisites: Two units of Art credit\*

This course is designed for the student who wants to develop an art portfolio but for a variety of reasons has not completed a full complement of art courses through the Art department. The goal of the course is to create 10 – 15 portfolio quality works of art in either the *fall of the senior* year or *spring of the junior* year.

Art Portfolio is aimed at the serious student who has a range of art experience and may have completed prior coursework through the Technology department, Family and Consumer Sciences department or in private lessons. This course should not replace Drawing and Painting, Advanced Painting or AP Studio Art but is structured to provide an opportunity to develop works of art in a variety of media in a relatively short period of time. Extensive outside work is required and a strong desire to succeed is of great importance. Media utilized includes charcoal, pastel, ink, watercolor, tempera paint, acrylic, cardboard and mixed media. An art journal and sketchbook is also required. \*Pre-requisites include at least **two** units of study in another department area for which **art credit** is given. Studio in Art or Studio in Crafts **and another** advanced art elective may also be used.

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

|      |   |            |
|------|---|------------|
| 8060 | DDP/INTRODUCTION TO ENGINEERING DESIGN (1Unit)          | (Factor 9) |
| 8120 | ENGINEERING DRAWING & DESIGN/CAD (1 Unit – Full Year)   | (Factor 9) |
| 8132 | CIVIL ENGINEERING AND ARCHITECTURE (1 Unit – Full Year) | (Factor 9) |
| 8152 | BASIC PHOTOGRAPHY (½ Unit – 1 Semester)                 | (Factor 8) |
| 8170 | DIGITAL PHOTOGRAPHY (½ Unit – 1 Semester)               | (Factor 8) |
| 8220 | JEWELRY (½ Unit – 1 Semester)                           | (Factor 8) |
| 8640 | WORLD OF FASHION (½ Unit – 1 Semester)                  | (Factor 8) |
| 8650 | FASHION FOR YOUR FUTURE (½ Unit – 1 Semester)           | (Factor 8) |
| 8660 | PAPER TO PINS (½ Unit – 1 Semester)                     | (Factor 8) |
| 8162 | ADVANCED PHOTOGRAPHY (½ Unit – 1 Semester)              | (Factor 8) |

## MUSIC & THEATRE ARTS

All courses in the Music Department, with the exception of Music Theory, Rudiments of Music, Piano 1 and 2 are offered with the option of choosing either a numeric grade (i.e. 95, 87, etc.) or an alphabetical grade (i.e. A, B, C, D, F).

Music Theory, Rudiments of Music, Piano 1 and 2 can be taken on a Pass/Fail basis only if it is not taken in a sequence. Students who are eligible for and wish to exercise their option of taking Music Theory, Rudiments of Music, Piano 1 and 2 on a pass/fail basis must follow the procedure outlined under **CONDITIONS FOR PASS/FAIL OPTION** that are explained in the opening pages of this guide book.

For all other music courses, 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 deadline date.

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.

6510 RUDIMENTS OF MUSIC

(1/2 Unit - 1 Semester)

(Factor 8)

Rudiments of Music is for students with little or no music theory, aural skills, or music reading background. The course will focus on becoming acquainted with a variety of topics including: rhythmic, melodic and harmonic notation, ear training, sight reading, composition, arranging, and improvisation. Rudiments of Music will target basic musicianship skills such as music reading, some piano technique, analysis of harmonic progression, compositional structure and form. The course serves as a strong foundation for Music Theory.

6520 PIANO 1

(1/2 Unit - 1 Semester)

(Factor 8)

Requirement: Supplemental materials will need to be purchased at the beginning of course.

Piano 1 focuses on becoming acquainted with the instrument through a variety of materials: basic technique and sight reading, solo and ensemble playing, composition and improvisation. This course also correlates with basic musicianship skills: music reading, piano technique and an introduction to music theory.

6530 PIANO 2

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: Piano 1 or approval by instructor.

Requirement: Supplemental materials will need to be purchased at the beginning of course.

Piano 2 is a continuation of Piano 1 and will go more in depth with piano technique and literature.

6550 MUSIC THEORY

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Approval of the instructor or the successful completion of Rudiments of Music (6510) is required to enter course.

This is a required course for students who plan to receive a sequence in music. Music Theory is a college preparatory course for students in Grades 10 – 12 requiring knowledge of the fundamentals of music notation and leads into four-part chorale style writing, voice leading, analysis, harmonization of melodies, and realization of figured bass. Aural skills will emphasize melodic, rhythmic and harmonic aspects of theory.

6600 NINTH GRADE BAND

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Placement in the ensemble will be contingent upon successful completion of/participation in 8th grade band and by audition and/or ensemble director's approval.

The Ninth Grade Bands are open to all qualified wind and percussion players 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 Ninth Grade Bands perform in various school concerts throughout the year. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons and performances.

6620 CONCERT BAND

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

The Concert Band is open to all qualified wind and percussion players in grades 10 through 12. The objective of Concert Band is to develop an appreciation of music through performance. The Concert Band performs in various school concerts throughout the year. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons and performances.

6630 SYMPHONIC BAND

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

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

6640 WIND ENSEMBLE

(1 Unit- Full Year)

(Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

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

6720 MIXED CHORUS

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Grades 9-12. Placement in the ensemble will be contingent upon successful completion of/participation in 8th grade chorus and by audition and/or ensemble director's approval.

Mixed Chorus is open to all qualified vocalists in grades 9 through 12. It meets every day with an additional small group voice lessons 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.

6740 CONCERT CHOIR

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

Concert Choir is for the advanced level vocalist. It meets every day with an additional weekly 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. Credit is contingent upon satisfactory participation in all required rehearsals, voice lessons, and performances.

6800 SYMPHONETTE ORCHESTRA  
6811 CHAMBER ORCHESTRA

(1 Unit - Full Year) (Factor 8)

Prerequisite: Placement in the ensemble will be contingent upon successful completion of/participation in 8th grade orchestra and by audition and/or ensemble director's approval.

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

6820 SINFONIA ORCHESTRA

(1 Unit - Full Year) (Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

Sinfonia Orchestra is a full orchestra, which is open to all qualified string, wind and percussion players in grades 10-12. Repertoire includes both standard orchestral literature and enjoyable light classical selections. Sinfonia Orchestra performs at regularly scheduled school concerts and in the community. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons, and performances.

6840 SYMPHONY ORCHESTRA

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

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

6850 PHILHARMONIA ORCHESTRA

(1 Unit – Full Year)

(Factor 8)

Prerequisite: Grade 10-12. Placement in the ensemble will be by audition and/or ensemble director's approval.

Philharmonia Orchestra is comprised of the most advanced string, wind and percussion players in grades 10 – 12. Philharmonia Orchestra will extensively rehearse and perform original works from the standard orchestral and popular repertoire. Philharmonia Orchestra will perform at regularly scheduled school concerts, numerous school functions and in the community. Credit is contingent upon satisfactory participation in all required rehearsals, group lessons, and performances.



## THEATRE ARTS

1480 INTRODUCTION TO THEATRE ARTS (1 Unit - Full Year) (Factor 8)

Prerequisite: None

Description: This course is open to all high school students wishing to obtain fine arts credit in theatre arts. The curriculum is broad with the purpose of exposing the student to all aspects of theatre. The course is entirely participatory and includes the following units of study: theatre games, vocal technique, radio plays, pantomime, improvisation, character study, scene study, stage combat, theatre history, Shakespeare and monologues. In addition, the course will include the rehearsal and production of one play to be performed for a portion of the student body in the Frank J. Pepe Jr. Black Box Theatre. Through this performance opportunity the students will learn costuming, scenic design, sound and props. Introduction to Drama meets all New York State Standards for the Arts.

◆ **This course does not meet NCAA eligibility standards.**

1490 THEATRE PRODUCTION CLASS PRACTICUM (1 Unit - Full Year)(Factor 8)

Prerequisite: Introduction to Theatre Arts or at least two years of experience with Admiral Players

Description: In this course the students will act in and produce a play or scene night, which will be performed for the public each semester. Students will explore and learn the process of mounting a theatrical production from the beginning to the end. During the participatory component, the students will rehearse the material from chosen scenes or plays. Production responsibilities will include lighting, sound, scenery, costumes, props, and stage management. Administrative aspects of the course will consist of securing royalties, logo design, marketing and publicity, playbill design, box office, and house management. **There will be two after school rehearsals per semester**. Theatre Production meets all New York State Standards for the Arts.

◆ **This course does not meet NCAA eligibility standards.**

## **BUSINESS EDUCATION**

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

Our purpose is to prepare students for entry-level employment in business and marketing occupations and for post-secondary studies in business. We also provide opportunities for students to learn about business as it relates to their personal lives, and have an active, enthusiastic Future Business Leaders of America (FBLA) club.

Upon completion of our courses, students will also be able to relate course specific material to sound business practices and real-world situations in the following areas:

### **Ethics**

- o Character building
- o Decision Making

### **Professionalism**

- o Efficiency
- o Responsibility
- o Appropriate use of Technology

### **Interpersonal Communications**

- o Appropriate Business Communication
- o Social Media Communication

Please note the following:

- The Business of Music course fulfills 1/2 credit towards the Art/Music elective graduation requirement.
- Any 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 Unit)   | College Intro. to Business | (1/2 Unit) |
| College Accounting        | (1 Unit)   | Keyboarding                | (1/2 Unit) |
| Business Law              | (1 Unit)   | Business of Music          | (1/2 Unit) |
| Sports and Ent. Marketing | (1 Unit)   | College Prep/Microsoft     | (1/2 Unit) |
| Business Management       | (1 Unit)   | Fashion Marketing          | (1/2 Unit) |
| College Marketing         | (1/2 Unit) | Social Media Marketing     | (1/2 Unit) |
| Managerial Accounting     | (1/2 Unit) |                            |            |

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

- Personal Money Management (1/2 Unit)

7015 KEYBOARDING/WORD PROCESSING (1/2 Unit - 1 Semester) (Factor 8)

Strongly recommended for all students

This 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. An introduction to business correspondence, letters, reports, and memos is part of the curriculum.

7020 COLLEGE PREP/MICROSOFT

(1/2 Unit - 1 Semester)

(Factor 8)

This course is open to all students, and is recommended for all students before graduation. This is not a college-level class; it is designed to give students the introductory computer skills necessary to succeed in college or the workforce.

Students will learn to use the components of the Microsoft Office Suite, including Word, Excel, PowerPoint, Publisher, and (if time permits) Access. Students will also learn Google Classroom, Google Docs, Google Sheets, and Google Slides. An introduction to touch-typing, including timed writings, is also part of the curriculum. The emphasis of this course is not on programming; students will learn to use these software programs in school or business applications.

7100 ACCOUNTING

(1 Unit - Full Year)

(Factor 8)

Recommended for Sophomores, Juniors, and Seniors

A beginners course into the subject of Accounting. Course content encompasses the complete Accounting Cycle. This course examines how to do accounting for a service business and a merchandising business.

Historically, students have little to no experience with Accounting when they start the course.

7120 COLLEGE ACCOUNTING Dutchess Community College - ACC 101 & 102  
(1 Unit - Full Year) (Factor 10)

A course for Juniors and Seniors.

Recommendation: Accounting grade 90 or above if a student has taken Accounting.

This course is offered in conjunction with Dutchess County Community College and encompasses Financial Accounting I & II. Students earn 6 college credits through this one-year class (3 college credits for the first semester and 3 college credits for the second semester). The course is tuition-free, however, **students are required to purchase the online textbook and supplemental materials** (approximately \$100).

This fast-paced, rigorous course is for students planning careers in accounting or a related career in business. **Accounting I students wishing to take this course must get a recommendation from the Accounting I teacher.**

7121 MANAGERIAL ACCOUNTING Dutchess Community College ACC204  
(½ unit; 1 Semester) (Factor 9)

A course for Seniors

Prerequisite: College Accounting **and** ACC102 DCC Grade of C or above.

This course provides an introduction to the accounting data and techniques used by internal managers, to show what kind of accounting information is needed, where this information can be obtained and how this information is used by managers as they make decisions about their planning, directing, and controlling operations function. This course is offered in conjunction with Dutchess Community College; students earn 4 Accounting credits. The course is tuition free, however **students are required to purchase the online textbook and supplemental materials** (approximately \$100).

7130 BUSINESS LAW

(1 Unit - Full Year)

(Factor 8)

This course is designed for Sophomores, Juniors and Seniors, and may be used to meet requirements for Business Sequence.

Business Law is the study of laws and principles used in carrying out business transactions and dealings. We will study the dual court system, civil law, contract law, financial law, and insurance.

7150 FASHION MARKETING

(1/2 unit – 1 Semester)

(Factor 8)

This course is designed for all students and may be used to meet requirements for Business Sequence.

Students will learn about fashion marketing and merchandising along with the place of apparel and accessories in the world of fashion. Students will study the manufacture and materials of men's, women's, and children's clothing through the history of the apparel market. This course will concentrate on the marketing concepts and their application to changing fashion trends.

7160 SPORTS AND ENTERTAINMENT MARKETING

(1 Unit - Full Year)

(Factor 8)

This course is designed for all students.

The purpose of this course is to integrate the basic principles of marketing with the sports and entertainment industries. Topics will include promotions, 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 these businesses. This class is project-based and students will make presentations throughout the year.

This course is recommended to all students especially for those who enjoy learning about the Sports and Entertainment Industries.

7164 COLLEGE INTRO TO BUSINESS Dutchess Community College – BUS 102  
(1/2 Unit – 1 Semester) (Factor 9)

A course for highly motivated Juniors and Seniors.

Students will learn a little about a lot of business topics! This course is designed to introduce students to the various academic areas in business, but no topic will be explored in depth. Students considering Business as a career will benefit from learning about the many options available.

This course is offered in conjunction with Dutchess Community College and provides students the opportunity to earn 3 college credits through this one semester class. **The course is tuition free; students may be required to purchase supplemental materials and/or a textbook.**

7165 COLLEGE MARKETING Dutchess Community College - BUS 107  
(1/2 Unit – 1 Semester) (Factor 9)

A course for highly motivated Juniors and Seniors

This is a college level course for students planning a career in marketing or business. Students will learn the concepts involved in meeting the needs of organizations and consumers through developing and distributing goods and services. Topics include: development of the marketing concept, marketing research, buyer behavior, product development, pricing, retailing, advertising, selling and Internet applications.

This course is offered in conjunction with Dutchess County Community College and provides students the opportunity to earn 3 college credits through this half year class. **The course is tuition-free, however, students may be required to purchase the textbook.**

7170 BUSINESS OF MUSIC

(1/2 Unit – 1 Semester)

(Factor 8)

This course is designed for all students and may be used to meet requirements for Business Sequence.

Business of Music will familiarize students with the traditional principles of business in the music industry. Course topics include: changes in the music industry, ways current artists make money, music industry careers, marketing, contracts and copyrights, and current ethical issues such as downloading music from the Internet.

Students will learn about the financially profitable music industry through business concepts such as marketing, promotion, and distribution. This course is project-based, allowing students to get hands-on and innovative with the material. The final project consists of students building their own press kits for either themselves as an artist or a musical artist of their creation.

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

7210 PERSONAL MONEY MANAGEMENT (1/2 Unit – 1 Semester) (Factor 8)

A course for Sophomores, 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 risks that exist in the world of finance. Our curriculum has been developed by the University of Chicago STEM Education Department. Students will go through six modules of topics. These topics include Saving and Spending, Borrowing, Investing, Income, and Funding Post-Secondary Education. Students will be given a student workbook and access to digital tools from the University of Chicago.



## 7231 BUSINESS MANAGEMENT

(1 Unit – Full Year) (Factor 8)

A course for Sophomores, Juniors and Seniors.

Business Management provides a step-by-step approach to understanding business operations. The main topics covered are management, entrepreneurial skills, marketing, and financial operations for small businesses.

The final project will consist of each student choosing a business they would like to develop and generating a business plan for that business. The business plan will include company description, market and industry analysis, operational, organizational, financial, and growth plans.

Throughout the year, students will engage in activities that allow them to think creatively, including coming up with their own unique ideas for products or services in the marketplace and looking at ways to improve established businesses.

Business Management will benefit all students who plan to pursue a career in business, students who are applying to work for the first time, and those who think they want to operate their own business.

## 7232 SOCIAL MEDIA MARKETING

(1/2 Unit-1 Semester)

(Factor 8)

A course for Sophomores, Juniors, or Seniors with written/verbal recommendation from a full-time Business Department faculty member.

Prerequisite: Sports and Entertainment Marketing, Fashion Marketing, or College Marketing; plus written or verbal recommendation from a full-time Business Department faculty member.

This course is designed to introduce students to the marketing concepts utilized in social media applications. Students will learn how companies use social media; and will also use social media marketing in a real world setting.

Students will take part in a practicum, in which they will work in groups and take control of the Arlington Athletics Social Media accounts. Students will create original content on Twitter, Facebook, Instagram, and YouTube to help promote the Athletic program. Students who are highly motivated and have succeeded in our other marketing courses will benefit the most from this course.

## TECHNOLOGY AND ENGINEERING EDUCATION

In the Technology and Engineering Education Department our overall focus is to provide students with an education that incorporates real-world problem solving and creative thinking skills through the use of collaboration, application and hands-on activities to better prepare students for college and careers. The need for high school graduates to have technology related literacy and skills is paramount to their future success.

Arlington High School's Technology and Engineering Department offers three different pathways to guide students in their choice of study. The **STEM** pathway focuses on science, technology, engineering and math. The **Career and Technical Education** pathway offers classes which focus on developing job oriented skills and college preparation. The **Digital Media** pathway offers courses in all areas of digital media and communications.

Students do NOT need to take only courses from one pathway but can use these pathways as a guide. We are proud to offer six college level courses through Project Lead the Way (PLTW) and Rochester Institute of Technology (R.I.T.). These courses are transferable to most colleges and universities as engineering electives.

### **PROJECT LEAD THE WAY**

The Technology Education and Engineering Department includes in their course offerings a number of exciting Project Lead The Way (PLTW) courses. Details of the PLTW classes can be found on the following pages of this guide. PLTW is a Technology Education curriculum that promotes mathematics, engineering and engineering technology courses at the high school level. PLTW prepares students to be the most innovative and productive leaders in Science, Technology, Engineering, and Mathematics (STEM). Colleges often provide tuition discounts to students majoring in STEM curriculum. Each course provides practical skills and hands-on experience to make students' knowledge count in the real world, and the basis for further study in the sciences, technology, engineering, and mathematics.

#### **PLTW courses currently offered:**

8060 Introduction to Engineering Design – IED/DDP

8062 Principles of Engineering – POE

8010 Digital Electronics – DE

8063 Computer Integrated Manufacturing – CIM

8142 Engineering Design and Development – EDD

8132 Civil Engineering and Architecture - CEA

Note: Students can receive Technology elective credit, Science and Art/Music credit as well as college credits for *some* PLTW courses. These four PLTW courses are Factor 9.

## Arlington High School Technology and Engineering Education Pathways to Your Future

|   |  |
|---|--|
| <p style="text-align: center;"><b>STEM Pathway</b><br/>(Science, Technology, Engineering, and Math)</p> <p>Suggested courses to choose from:</p> <ul style="list-style-type: none"> <li>● Introduction to Engineering Design (PLTW*)</li> <li>● Principles of Engineering (PLTW*)</li> <li>● Digital Electronics (PLTW*)</li> <li>● Computer Integrated Manufacturing (PLTW*)</li> <li>● Engineering Drawing and Design/Applied (PLTW*)</li> <li>● Civil Engineering and Architecture (PLTW*)</li> <li>● Engineering Design and Development-Senior Capstone (PLTW*)</li> <li>● Basic Electricity and Electronics</li> <li>● Materials Processing</li> </ul> | <p style="text-align: center;"><b>CTE Pathway</b><br/>(Career and Technical Education)</p> <p>Suggested courses to choose from:</p> <ul style="list-style-type: none"> <li>● Communications Systems</li> <li>● Production Systems-Wood</li> <li>● Production Systems- Metal</li> <li>● Transportation Systems</li> <li>● Land Transportation</li> <li>● Consumer Automotive</li> <li>● Materials Processing</li> <li>● Metal Production</li> <li>● Construction</li> <li>● Furniture and Cabinetmaking</li> <li>● Basic Electricity and Electronics</li> <li>● Engineering Drawing and Design/Applied</li> <li>● Jewelry Design</li> <li>● Basic Photography</li> <li>● Digital Photography</li> <li>● Advanced Photography</li> <li>● Energy and Power Technology</li> <li>● Career and Financial Management</li> <li>● Civil Engineering and Architecture (PLTW*)</li> <li>● Independent Tech Study (with Dept. Approval)</li> </ul> |
| <p style="text-align: center;"><b>Digital Media Pathway</b></p> <p>Suggested courses to choose from:</p> <ul style="list-style-type: none"> <li>● Communications Systems</li> <li>● Audio and Recording Production</li> <li>● Video Production</li> <li>● Television Production</li> <li>● Basic Photography</li> <li>● Digital Photography</li> <li>● Advanced Photography</li> <li>● Engineering Drawing and Design/Applied</li> <li>● Independent Tech Study (with Dept. Approval)</li> </ul>  |  |

\* PLTW - Project Lead The Way (college credit offered)

The following are great **Entry Level** courses for any student interested in entering the

Technology and Engineering Education curriculum:

**Entry Level Course (1 Semester)**

- 8000 Communication Systems
- 8010 Production Systems – Wood
- 8020 Production Systems – Metal
- 8030 Transportation Systems
- 8040 Materials Processing
- 8050 Electricity
- 8100 Construction
- 8152 Basic Photography
- 8060 DDP/Introduction to Engineering
- 8220 Jewelry
- 8230 Consumer Automotive
- 8064 Energy and Power Technology

**Technology Credit Substitutions for Art/Music, Science and Foreign Language**

The following Technology Education courses may be used to fulfill the New York State Art/Music graduation requirements of 1 Unit:

|   | <b><u>Art/Music Credit</u></b> |
|---|--------------------------------|
| 8060 Introduction to Engineering Design | 1 Unit                         |
| 8152 Basic Photography                  | ½ Unit                         |
| 8170 Digital Photography                | ½ Unit                         |
| 8220 Jewelry                            | ½ Unit                         |
| 8162 Advanced Photography               | ½ Unit                         |

Credit to fulfill the New York State graduation requirement of 1 Unit for the third year of Science may be earned by completing any of the following Technology Education courses to total 1 Unit:

|                                  | <b><u>Science Credit</u></b> |
|----------------------------------|------------------------------|
| 8030 Transportation Systems      | ½ Unit                       |
| 8040 Materials Processing        | ½ Unit                       |
| 8050 Electricity                 | ½ Unit                       |
| 8111 Digital Electronics         | 1 Unit                       |
| 8152 Basic Photography           | ½ Unit                       |
| 8170 Digital Photography         | ½ Unit                       |
| 8162 Advanced Photography        | ½ Unit                       |
| 8064 Energy and Power Technology | ½ Unit                       |

**TECHNOLOGY EDUCATION SEQUENCE**  
**5 Unit Sequence**

**For the Advanced Regents Diploma, a student may substitute the 3 units of a Foreign Language with the following 5 unit sequence in Technology Education to fulfill the New York State graduation requirement.**

|  |                        |
|--|------------------------|
| <b>CAREER AND FINANCIAL MANAGEMENT - (Course 8240)</b> | <b><i>1/2 UNIT</i></b> |
|--|------------------------|

|                        |  |
|------------------------|--|
| <b>SYSTEMS COURSES</b> | <b><i>TAKE 1 OF THESE FOR 1/2 UNIT</i></b> |
|------------------------|--|

- COMMUNICATIONS SYSTEMS - (Course 8000)
- PRODUCTION SYSTEMS - WOOD (Course 8010)
- PRODUCTION SYSTEMS - METAL (Course 8020)
- TRANSPORTATION SYSTEMS - (Course 8030)
- CONSTRUCTION – (Course 8100)

|                           |                      |
|---------------------------|----------------------|
| <b>FOUNDATION COURSES</b> | <b><i>1 UNIT</i></b> |
|---------------------------|----------------------|

- Take any two of the following for 1 unit:*
- MATERIAL PROCESSING – (Course 8040)
  - ELECTRICITY – (Course 8050)
  - ENERGY AND POWER TECHNOLOGY – (Course 8064)
- OR*
- DDP/INTRODUCTION TO ENGINEERING DESIGN– (Course 8060)

|                             |                       |
|-----------------------------|-----------------------|
| <b>TECHNOLOGY ELECTIVES</b> | <b><i>3 UNITS</i></b> |
|-----------------------------|-----------------------|

*TAKE ANY OF THE ELECTIVES LISTED ON THE FOLLOWING PAGES, OR ANY OF THE SYSTEMS COURSES ON THIS PAGE FOR 3 UNITS.*

**TOTAL OF 5 UNITS**

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

## **SYSTEMS COURSES**

Take **one** of the following for the Technology Education Sequence requirement for Systems Courses:

### **8000 COMMUNICATION SYSTEMS** (1/2 Unit - 1 Semester) (Factor 8)

Communication Systems is a foundation course that offers students an exciting opportunity to explore the world of Communications and Media Arts. Students will apply the concepts studied in the class, as they learn the basic techniques of such areas as digital photography, computer graphic design, audio recording and video production. Communication Systems provides an introduction to media aesthetics, which will empower students to become both conscious content creators of media and active, literate viewers of media.

Related Occupations: Over 10,000 related occupations, some of which may include Graphic Artist, Audio Photographer, Audio Engineer, and Videographer.

### **8010 PRODUCTION SYSTEMS – WOOD** (1/2 Unit - 1 Semester) (Factor 8)

In this class students will learn how products are made in the industry of wood. Students will become involved in the making of individual items and then participate in the making of actual useful products, in the production industry, that are used everyday in real life. This course also includes experiences in construction involving residential and commercial products. Through activities in manufacturing and construction, useful experience is gained in the proper use of many tools and power equipment with emphasis on safety and the economy with a consideration for minimal environmental disruption.

#### **Possible Projects/Areas Explored:**

|                              |                                       |
|------------------------------|---------------------------------------|
| Candle Sconces               | Wall Shelves                          |
| Clocks                       | Custom Picture Frames                 |
| Box Building                 | Baseball Bats                         |
| Furniture & Cabinet Projects | Individual Projects of Student Choice |

Related Occupations: Cabinet Maker, Architectural Woodworker, Moulding Shop Technician.

8020 PRODUCTION SYSTEMS – METAL (1/2 Unit - 1 Semester) (Factor 8)

In this class, students will learn how industries of today produce everyday items from different types of metal. Students will become involved in the making of several items from raw stock. All projects are designed to keep and take home. The different types of metal production skills that will be emphasized are sheet metal fabrication, basic machining and welding. These are skills that are used in local industries today. We will cover a broad range of hand and power equipment use related to the different metal processes. Safety, organization of time and labor with minimum disruption to the environment is stressed.

Possible Projects/Areas Explored:

Toolbox – (sheet metal)  
Small hammer – (machining)  
Step stool – (welding)  
Screwdriver – (machining)

Related Occupations: Welder, Fabricator, Autobody Technician, Steelworker, Construction Worker, Iron Worker, Foundry, Plumber.

8030 TRANSPORTATION SYSTEMS (1/2 Unit - 1 Semester) (Factor 8)

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 8090.

**This course may be used to satisfy ½ unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

Related Occupations: Small Engine Mechanic

## 8100 CONSTRUCTION

(1/2 Unit - 1 Semester)

(Factor 8)

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 basic math skills 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.

### Possible Projects/Activities Explored:

Full size sheds of all description

School & community projects

Construction Site Visits

Related Occupations: Carpenter, Electrician, Plumber, Roofer, Siding Contractor, Construction Project Manager, Project Supervisor, Business Owner.



## **FOUNDATION COURSES**

Take any two of the following three; Material Processing 8040, Electricity 8050 or Energy and Power Technology 8064

**OR**

DDP/Intro. to Engineering Design 8060 to meet the Technology Education Sequence requirement for Foundation Courses.

### **8040 MATERIALS PROCESSING** (1/2 Unit - 1 Semester) (Factor 8)

This is a good entry level course recommended for every student interested in manufacturing / technology. Students will learn how to work with a variety of materials such as wood, metal and plastic. We will study how materials, both synthetic and natural, are made and how they can be used. Turning centers and milling, welding, forging and fastening are some of the production techniques investigated. All of the projects are designed for the students to keep.

**This course may be used to satisfy ½ unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

Related Occupations: Carpenter, Plumber, all Fabrication and Production Trades.

### **8050 ELECTRICITY** (1/2 Unit - 1 Semester) (Factor 8)

This is the course for you if you have ever been in the dark and you don't know how to repair the light, the switch or the actual electricity in your house. This is an introductory level, hands-on, course in electricity. Basic electrical theory is covered using residential wiring as the major emphasis. The student will also learn DC motor theory by designing, building and testing a working model. DC currents are introduced.

Overall the students will learn:

How to wire a residence,

How to work with electric circuits

How to design a workable wiring plan and what are the National Wiring Guidelines.

**This course may be used to satisfy ½ unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

Related Occupations: Electrician, Construction Project Manager, Business Owner.

8064 ENERGY AND POWER TECHNOLOGY (1/2 Unit- 1 Semester)(Factor 8)

This course does not have formal prerequisites. All students interested in energy technologies and their environmental impacts are welcome to take this course as either an Elective or as a Foundation course.

Students will develop fundamental knowledge regarding energy as a sustainable resource for technological systems found in a global society. This is an introductory course that explores the solar, wind, water, nuclear energy, and power technology of alternative transportation methods. The impacts of current and future energy consumption on the environment, climate and geopolitical relations of society will be stressed.

A heavy emphasis will be placed on the new and emerging technological advances of energy and its applications from a global perspective. Instructional hands-on activities will center upon research, analysis, experimentation, and the design and fabrication of scale models to authentically demonstrate generation, application and conservation of energy.

Students will develop an awareness of the many careers that exist in energy and related technologies.

This course compliments Arlington Going Green, Course 4700.

**This course may be used to satisfy 1/2 unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

## **PLTW FOUNDATION COURSES**

### **8060 DESIGN & DRAWING FOR PRODUCTION (DDP) / INTRO TO ENGINEERING DESIGN PLTW** (1 Unit – Full Year) (Factor 9)

This introductory design course is the first high school course in a series of PLTW pre-engineering courses designed to introduce the student to the field of engineering. The major focus of this course is to expose students to the design process, engineering standards, research and analysis, technical documentation, global and human impacts, communication methods, technical documentation and teamwork. Students use 3D CAD solid modeling software to help them design solutions and solve problems and will learn how to document their work and communicate solutions.

**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 may be used to satisfy 1 unit of credit of the required one credit in Art/Music (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).** In addition, college credit can be earned with completion of this course and a supplemental exam in June. (See your guidance counselor or a technology teacher for more information.)

### **8062 PRINCIPLES OF ENGINEERING PLTW** (1 Unit - Full Year) (Factor 9)

Prerequisite: Open to Sophomores, Juniors and Seniors Only  
DDP/Introduction to Engineering Design – Course 8060

Recommended: Engineering Drawing and Design/Applied – Course 8121

This course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.

**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.

College credit can be earned with completion of this course and a supplemental exam in June.

## **PLTW SPECIALTY COURSES**

### **8063 COMPUTER INTEGRATED MANUFACTURING** (1 Unit – Full Year) (Factor 9) **PLTW**

Prerequisite: DDP/Introduction to Engineering Design – Course 8060

Computer Integrated Manufacturing (CIM) is a specialized course within the High School Engineering Project Lead The Way (PLTW) curriculum. This course teaches the fundamentals of computerized manufacturing technology. It builds on the solid-modeling skills developed in the **DDP/Introduction to Engineering Design** Course.

Students use 3D computer software to solve design problems. They assess their solutions through the relationship of design, function and materials, modify their designs, and use prototyping equipment to produce 3D models.

Some projects the CIM class will be working on are as follows:

- Computer Modeling - Students use 3D software for mass property analysis.
- Computer Numerical Control (CNC) Equipment - Students develop an understanding of the operating procedures and programming capabilities of machine tools.
- Computer Aided Manufacturing (CAM) - Students convert computer-generated geometry into a program to direct the operation of CNC machine tools.
- Robotics - Students program robots to handle material in assembly-line operations.
- Flexible Manufacturing Systems - Teams of students design manufacturing work cells and tabletop factories to solve complex problems that arise in integrating multiple pieces of computer controlled equipment.

College credit can be earned with completion of this course and a supplemental exam in June.

8111 DIGITAL ELECTRONICS  
**PLTW**

(1 Unit – Full Year)

(Factor 9)

Prerequisite: Open to Sophomores, Juniors and Seniors Only

Digital Electronics (DE) is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc.

The major focus of this course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

Using project based teaching and learning pedagogy, students will analyze, design and build digital electronic circuits. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process.

Digital Electronics (DE) is a high school level course that is appropriate for 10th, 11th and 12th grade students interested in electronics. Other than their concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge.

**This course may be used to satisfy 1 unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

College credit can be earned with completion of this course and a supplemental exam in June.

Related Occupations: Programmer, Circuit Designer, Electrical Engineer, Engineering Technician, Video Game Designer.

## TECHNOLOGY SEQUENCE ELECTIVES

8090 LAND TRANSPORTATION/POWER (1 Unit - Full Year) (Factor 8)

Prerequisite: Transportation Systems – Course 8030

Have you ever wondered how the car you are driving actually works and why? If you have then this is the perfect class for you. This course is designed to give the students the opportunity to learn the basic skills needed to work on today's complex automobiles.

Possible Projects/Areas Explored:

|                             |                 |
|-----------------------------|-----------------|
| Electric Cars & Hybrid Cars | Demo Derby Cars |
| Restoration & Sand Blasting | Lift Kits       |
| Alternative Fuel Options    |                 |

Overall the students will learn the operation of modern internal combustion engines, electric engine controls, chassis maintenance, automotive cooling systems, performance technology and vehicle maintenance

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

Related Occupations: Auto Technician, Autobody Repair Technician

8121 ENGINEERING DRAWING AND DESIGN/Applied (1 Unit - Full Year) (Factor 9)

Prerequisite: DDP/Introduction to Engineering Design – Course 8060

Do you like to design and build things? Use the skills you have learned in other engineering and technology courses to work on your own solutions to fun design problems. Use the design process and CAD to come up with a plan and spend the majority of your time building things. We do projects like a Container Home Model, a Space Station design, a 3D printed and silver cast ring, tool design or a Life Size Cardboard Chair, among others. Use 3D printers, laser cutters, computer software and other tools to see how prototypes are made.

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/manufacturing process. Students, working in teams, will follow the design process to create accurate and complete drawings and hand build scale models 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.**

## 8132 CIVIL ENGINEERING AND ARCHITECTURE (CEA)

**PLTW**

(1 Unit – Full Year) (Factor 9)

Prerequisite: Open to Juniors and Seniors Only or  
Permission of Dept. Coordinator

Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, stormwater management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.

The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation.

Civil Engineering and Architecture is a high school level course that is appropriate for 10th or 11th grade students interested in careers related to civil engineering and/or architecture. Other than their concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge.

Civil Engineering and Architecture is one of the specialization courses in the Project Lead The Way<sup>®</sup> high school pre-engineering program. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

**This course may be used to satisfy 1 unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

College credit can be earned with completion of this course and sufficient credit on the final exam in June.

8142 ENGINEERING DESIGN AND DEVELOPMENT (EDD)

**PLTW**

(1 Unit – Full Year) (Factor 9)

Prerequisite: Open to Seniors only. Juniors admitted if space is available with Permission of Dept. Coordinator

Recommended: Engineering Drawing and Design/Applied - Course 8120  
DDP/Introduction to Engineering Design - Course 8060

EDD is the capstone course in the PLTW Pathway to Engineering course sequence. Students wishing to enroll in EDD should have successfully completed a PLTW course.

In this capstone course, you will work as part of a team to develop a solution to a technical problem of your choosing. Challenge yourself with one of those “don’t you hate it when...” issues of the world and try to solve it. Or see a need here at AHS, your home high school, or your community and find a way to meet that need. Research, design, test, and construct your solution or recommendations, then present it to industry or community partners. You and your team will work with a mentor from the engineering field and use what you’ve already learned to guide you through the process of design and product development.

**This course may be used to satisfy 1 unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

College credit can be earned with completion of this course and sufficient credit on the final exam in June.



8152 BASIC PHOTOGRAPHY

(1/2 Unit - 1 Semester)

(Factor 8)

Basic Photography is a beginning photography course. Students will learn how to use 35mm Single Lens Reflex (SLR) cameras effectively and develop black and white film using the darkroom and chemicals. Students will learn to effectively compose their photos through various photography techniques. Students may use their own cameras or borrow a school camera for course work.

**This course may be used to satisfy ½ unit of credit of the required one credit in Art/Music AND ½ unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

8170 DIGITAL PHOTOGRAPHY

(1/2 Unit - 1 Semester)

(Factor 8)

Prerequisite: Basic Photography – Course 8152 or  
Studio in Photography – Course 6210 or  
Permission of Dept. Coordinator

Once students have studied the basic concepts of photography they may continue their pursuit of photography with this course. The course will continue the concepts of photo technology with the digital format. **Students should have access to a digital camera to take this course.**

This course is a hands-on introduction to digital photography. Students will acquire experience in the use of digital cameras, computers, scanners and color printers, and the image processing software **Adobe Photoshop** to produce digitally enhanced photographs. The technical and aesthetic possibilities of digital photography will be examined through a series of sequential assignments. Images and ideas will be developed through a combination of lectures, demonstrations, supervised class work, shooting assignments and critiques. Some projects the student may work on are photo essays, architectural studies, self-portraits and photo collages. It is expected that students will spend additional time outside of class completing course assignments.

**This course may be used to satisfy ½ unit of credit of the required one credit in Art/Music AND ½ unit of credit of the required three credits in Science (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

Related Occupations: Photographer, Graphic & Commercial Designer, Website Designer, Advertising and Media fields.

8162 ADVANCED PHOTOGRAPHY (½ Unit – 1 Semester) (Factor 8)

Prerequisite: Basic Photography – Course 8152 *or*  
Studio in Photography – Course 6210  
*AND*  
Digital Photography – Course 8170 *or*  
Permission of Dept. Coordinator

This course will continue the discussion of the materials, techniques and terminology already discussed in prerequisite courses. It will afford the student further opportunity to refine and extend the technical skills acquired to produce digitally-generated photographic media.

A progression of topics will follow, including advanced image manipulation/editing skills and techniques, discussion and demonstration of printing/output issues, needs and methods and general aesthetic/image-making concerns. The student's ability to edit images digitally will expand exponentially as they concentrate on using advanced Photoshop software.

Topics covered will introduce students to advanced principles of design as they relate to digital photography as a business and communication tool. The goal of this industry-based approach is to facilitate the integration of aesthetics and technical ability and visual problem solving skills in order to strengthen visual design and communication with the medium of digital photography.

This course will culminate with the development of a teacher approved student portfolio to consist of an independent project of original work using a wide variety of advanced photographic techniques.

Students will find that this course provides the groundwork for higher education beyond high school and/or a career in digital photography or related industries.

**This course may be used to satisfy 1 unit of credit of the required one credit in Art/Music (see Technology Credit Substitution for Art/Music, Science and Foreign Language section).**

Related Occupations: Photographer, Graphic & Commercial Designer, Website Designer, Advertising and Media fields.

8181 AUDIO RECORDING & PRODUCTIONS (1/2 Unit - 1 Semester)(Factor 8)

Prerequisite: Communication Systems - Course 8000

Audio Recording & Productions provides an introduction to the field of audio production for recording, radio and film. In this course students will learn and practice techniques for recording, editing, mixing and radio.

The goal of this course is to introduce the students to the basic principles of the art and science of sound production and design. The students will gain hands-on experience in digital audio editing and mixing, public service announcements, radio broadcasting and sound for film.

8190 VIDEO PRODUCTIONS (1/2 Unit - 1 Semester) (Factor 8)

Prerequisite: Communication Systems - Course 8000

This course introduces students to the fundamentals of digital video production. Students will learn how to produce short videos, including story-boarding, directing, lighting and shooting, and will finish productions using current video and sound-editing software. Video Productions develops basic skills for any student whether for a hobby or entering a profession that involves video production, such as television, documentation, film-making, contemporary art, web design, multi-media communication, animation and computer gaming, etc. Ownership of a video camera is not mandatory but is helpful to manage project due dates.

8195 TELEVISION PRODUCTIONS (1 Unit – Full Year) (Factor 8)

Prerequisite: Communication Systems – Course 8000

Recommended: Video Productions - Course 8190

This course provides an introduction to the principles and practices of single-camera production for broadcast. Students will work collaboratively in small production teams and gain hands-on experience in planning and producing short television programs, including news and documentaries, commercials, and short videos.

The goal of the course is to provide students with both applied skills and critical knowledge about the field of television production. Reading assignments, lectures and lab-based activities are intended to provide students with a variety of learning opportunities of television production including: screenwriting, story boarding, casting, directing on-camera talent, camera angles, framing, lighting, and editing, composing music, adding sound effects and creating titles. Students enrolled in TV Productions will also have opportunities to work with and on the ABC TV3.

The course will focus on exercises designed to bring visual richness and conceptual depth to the student's work.

8210 CREATIVITY IN FURNITURE & CABINET MAKING

(1 Unit - Full Year)

(Factor 8)

Prerequisite: Production Systems - Wood – Course 8010 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, entertainment center 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.

Related Occupations: Kitchen Installer, Furniture Maker, Furniture Refinisher, Interior Decorator, Custom Built-in Contractor, Business Owner.

8220 JEWELRY

(1/2 Unit - 1 Semester)

(Factor 8)

Recommendation: Materials Processing – Course 8040

Jewelry making is one of man's oldest technologies. By blending technology and design, every culture throughout history has decorated itself in some fashion. Arlington students will be introduced to a wide range of jewelry concepts, techniques, and skills using a variety of metals such as copper, brass, nickel silver and sterling silver.

Possible Projects/Areas Explored

Creating earrings      Pendants & necklaces  
Bracelets                Rings

Overall the students will learn:

Wire wrapping with beads      Woven wire                Pierced metal  
Silver soldering                Sheet metal forming      Lost wax casting

Some projects may also incorporate acrylic, cloth fibers, exotic woods, natural and "found" objects, and more. Interested students may ask about independent study after completing this class.

**This course may be used to satisfy 1 unit of credit of the required one credit in Art/Music (see Technology Credit Substitutions for Art/Music, Science and Foreign Language section).**

Related Occupations: Jeweler, Dental Technician, Optometrist, Electronic Technician.

8230 CONSUMER AUTOMOTIVES

(1/2 Unit - 1 Semester)

(Factor 8)

What do you need to be aware of for car ownership? This course will discuss the different consumer issues that involve automotive ownership starting with how to research and purchase a car. There will be discussions of insurance needs, warranties offered, important safety information and other areas of concern. Students will understand what to look for on third-party vehicle valuation information sites such as Edmunds, Kelley Blue Book, NADAguides, etc.

Emphasis will be on basic car technology so students will know how to discuss problems with a mechanic. They will also learn about fuel economy and any other new automotive options being offered. The course will also help students understand maintenance schedules, recalls and a car's owner manual to name a few.

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

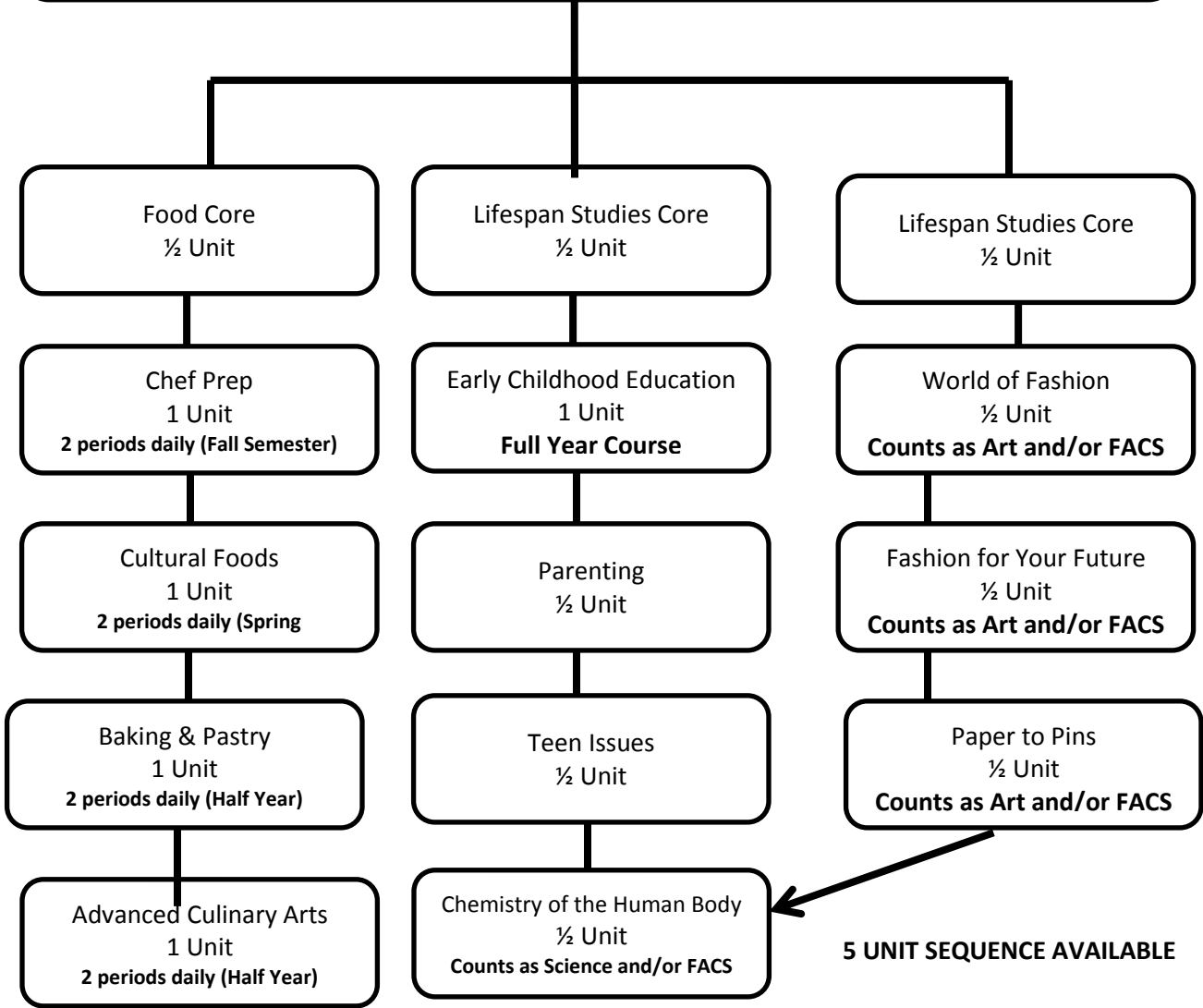
8240 CAREER AND FINANCIAL MANAGEMENT

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

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

Course includes 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.

**Food and Human Services**  
 1 Unit  
 Should be taken first since ALL OTHER COURSES BUILD UPON IT



The Family & Consumer Science Department offers a wide variety of career and technical education classes. The courses 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

|      |                         |          |
|------|-------------------------|----------|
| 8640 | World of Fashion        | 1/2 Unit |
| 8650 | Fashion for Your Future | 1/2 Unit |
| 8660 | Paper to Pins           | 1/2 Unit |
| 8540 | Food as Art             | 1/2 Unit |

Science Requirement (fulfills second year requirement)

|      |                      |        |
|------|----------------------|--------|
| 8590 | Chemistry/Human Body | 1 Unit |
|------|----------------------|--------|

*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:**

**8500 FOOD AND HUMAN SERVICES** (1 Unit - Full Year) (Factor 8)

The first marking period of this course provides a comprehensive introduction to careers in human services. Topics covered include stages of human development, communication and leadership skills.

The second marking period introduces careers in food services. Focus will be put on safety, sanitation, meal management, nutrition and special diets.

Introduction to Occupations makes up the second half of this course. Students practice career and financial management skills and receive an introduction to finance in order to satisfy the state mandate for Occupational Education.

Related Occupations: Counselor, Social Worker, Psychologist, Cook, Baker, Teacher

**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.**

**8520 FOOD CORE** (1/2 Unit - 1 Semester) (Factor 8)

This course is a prerequisite for all of the advanced Culinary Arts classes.

Food Core is an introduction to the culinary world and will teach students the basics in food preparation and food safety. As the students' grades will come largely from performance in the food labs, good attendance is critical. Food Lab Units include: eggs, milk, cheese, vegetables, basic knife skills, pasta and grains, fruit as well as baking.

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



8530 LIFESPAN STUDIES CORE

(1/2 Unit - 1 Semester)

(Factor 8)

This is a half year course that focuses on growth and development across the entire lifespan-conception to old age. The course is ideal for those interested in the fields of psychology, teaching or any career where you will be involved with people in different stages along the lifespan. Focus will be given to Erickson and Piaget's contributions to the study of human development. There are many activities and projects so attendance is important.

Related Occupations: Social Worker, Counselor, Psychologist, Therapist

8540 FOOD AS ART

(1/2 Unit - 1 Semester)

(Factor 8)

Have you ever eaten out? When your plate arrived, did you ever think the design of the food made it look too nice to eat? In this class, students will learn how to plate food for presentation and learn the ins and outs of garnishing. Each student will create a portfolio throughout the class of all the creations they designed and made.

Students will earn ½ credit that counts as FACS and/or Art.

Related Occupations: Chef, Baker, Photographer, Stylist, Blogger

8560 CHEF PREP

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

A course for sophomores, juniors and seniors

Prerequisite: Food Core or Department approval

**Students enrolling in this course should have already completed Food Core or have a firm understanding of basic cooking techniques. Also, students enrolling in this course should be passionate about food, have an interest in possibly attending a culinary school and/or pursuing a careers in the food service industry.**

Students are expected to be proficient in basic math skills, proper 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, cookies, salads, sandwiches, and cheeses are a few of the foods that students will prepare.

This is a production class. 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. Field Trips taken in the past include a day trip to *The Culinary Institute of America*, in Hyde Park, NY and to *Johnson & Wales University* in Providence, Rhode Island. Students are required to have a chef coat for class, and this coat can be used in the other advanced culinary classes if the student takes those as well.

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

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

8570 CULTURAL FOOD (1 Unit - 2 Periods Daily - Spring Semester)(Factor 8)

A course for sophomores, juniors and seniors

Prerequisite: Food Core or Department approval

**Students enrolling in this course should 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. They will be given the opportunity to learn different ethnic techniques and prepare these foods and evaluate them each week with a different ethnic meal.

A field trip to Chinatown and Little Italy (NYC), to observe the different cultures and sample ethnic cuisine, will be included in this course. Students are required to have a chef coat for class, and this coat can be used in the other advanced culinary classes if the student takes those as well.

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

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

8580 BAKING & PASTRY (1 Unit – 2 Periods Daily – Fall & Spring Semester)  
(Factor 8)

A course for juniors and seniors.

Prerequisite: Food Core or Department approval

**Students enrolling in this course should 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

Students are required to have a chef coat for class, and this coat can be used in the other advanced culinary classes if the student takes those as well.

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

## 8585 ADVANCED CULINARY ARTS

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

Prerequisite: Chef Prep, Cultural Foods or Baking & Pastry

A course for juniors and seniors

**Students enrolling in this course must be interested in attending a culinary school and pursuing a career in the food service industry.**

This is a food production and table service course. Students will be responsible for both the Back of the House (cooking) and Front of the House (serving) operations of the Admiral Café. In addition to preparing all of the food that is served, students will learn about the basic types of menus and use this knowledge to create their own menus for the café. Culinary Math will be introduced and used to determine the selling prices of the items on their menus. Students will also learn the various types of table service and utilize these with the serving of their menus to actual customers. Students are required to have a chef coat for class, and this coat can be used in the other advanced culinary classes if the student takes those as well.

**Successful completion of this course will help students in obtaining the required restaurant experience and an opportunity for credit in Culinary Math for the Culinary Institute of America.**

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

Related Occupations: Chef, Executive Chef, Restaurant Owner, Manager.

## 8590 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.**

The first semester of this course introduces the workings of the human body systems and food related illnesses. The focus is on the digestive system and other body systems that are affected by diet and nutrition. The food related illness unit includes food safety, eating disorders, obesity and diabetes. There is a research project related to lesser known food related illnesses.

The second semester of this course explores topics of food chemistry. Topics include the scientific evaluation of food and basic chemistry. The scientific process will be applied to topics which will include water, proteins and dairy products. There is a lab component to this course during the second semester.

Related Occupations: Food Technologist, Food Designer, Food Chemist

8595 SPORTS AND NUTRITION

(1/2 Unit – 1 Semester)

(Factor 8)

Recommendation: Food and Human Services or Food Core

This course will focus on the nutritional aspects which come along with being an athlete or highly active individual. Students will have the opportunity to learn how the athlete's body and nutritional needs may differ from that of other students their age. Some of the topics covered could include nutrients and their function in the body, MyPlate.gov, energy, body composition, diets including pre and post competition, hydration and supplements for an athlete. This course will explain how energy is produced and used in the body, the importance of fluids in the diet, nutrients and performance, training diet versus competition diet.

8600 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

8630 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

## 8640 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? If your answer to any of these questions is yes, this class is for you!

This introductory fashion course is for students who are interested in art and design. Topics covered include fashion styles, design principles, color schemes, costume history, top fashion designers and fabric characteristics. Students enrolled in this course will utilize these topics in the completion of a variety of hands on projects. For one of these projects, students will research a time period in fashion history and develop a lesson to present to the class. The focus of this course is on human figure and original outfit drawing.

Students will be required to purchase some of their own supplies.  
Estimated cost: \$10.

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

## 8650 FASHION FOR YOUR FUTURE

(1/2 Unit - 1 Semester)

(Factor 8)

A career in the fashion industry can be very exciting. In this course, students 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.

Students develop a model floor plan of a store that fits their personality in the diorama competition.

The hands-on nature of this course makes prompt daily attendance mandatory for a passing grade.

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

8660 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

8670 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**

### **8700 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 curriculum at Arlington High School is to help students explore, personalize, and adopt healthy behaviors. Students will learn, practice, and apply skills that will assist them in making choices necessary to lead an active and healthy lifestyle. Students will acquire skills in the following domains; self management, planning and goal setting, stress management, relationship management, decision making, communication, and advocacy.

Health Education is a student-centered course designed to enhance overall wellness. Students will acquire functional knowledge pertinent to physical activity, nutrition, HIV/AIDS, sexual risk, tobacco, alcohol and other drugs, family life/sexual health, unintentional injury violence prevention, and other required health areas. This is accomplished by following the NYS Health Education Learning Standards and the New York State Guidance Document for Health Education.

Health is a mandated course needed for general graduation from high school.



# 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. Physical Education classes are semester classes that emphasize participation and preparing students to live healthy active lives. 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.

### **Course Content:**

|  |   |
|--|---|
| Application of Skills                    | Application of Rules and Conventions      |
| Application of Strategies                | Sportspersonship                          |
| Personal performance in games/activities | Personal/Social Responsibility and Safety |

The *Methods of Assessment* illustrate the various techniques that may be implemented and utilized by the AHS PE staff.

### **Methods of Assessment:**

|  |                               |
|--|-------------------------------|
| Individual Performance/Skill Rubric        | Written Tests and/or Quizzes  |
| Authentic Assessment in Group & Team Games | Fitness Testing and PE Survey |
| Critical Literacy Assignments              | Peer and self assessments     |

## **PHYSICAL EDUCATION COURSE TITLES**

8798 9<sup>th</sup> Grade Physical Education  
8799 10<sup>th</sup> Grade Physical Education  
8881 Physical Education First Semester (grades 11-12)  
8891 Physical Education Second Semester (grades 11-12)  
8791 Independent Study Dance First Semester  
8792 Independent Study Dance Second Semester  
8800 Physical Education Mentor  
8910 Introduction to Athletic Training

## PHYSICAL EDUCATION COURSE DESCRIPTIONS

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

(1/4 Unit – Each Semester)

9<sup>th</sup> grade Physical Education is a full year course from September to June with multiple 5 week units. The units of emphasis include dance and aesthetic activities, cardiovascular activities, muscular fitness, personal performance (cooperative games and adventure programming), tactical games, net activities and striking and fielding activities. Throughout the course of the year, students will participate in a variety of activities that promote teamwork, cooperation, enhance personal performance, fitness and wellness concepts. Students will be assessed on their physical activity, personal and social responsibility, content knowledge, strategy, movement and skill application. Students will become aware of their own comprehensive fitness needs and able to develop an appropriate plan that addresses all fitness components. Emphasis is placed on students developing personal and social responsibility for the positive and safe experience of others. The importance of fitness concepts and the acquisition of motor skills for a healthy life-style will be emphasized in each unit. 9<sup>th</sup> grade Physical Education grades are numerical and included in students' grade point average.

### 8799 10<sup>TH</sup> GRADE PE

(1/4 Unit – Each Semester)

10<sup>th</sup> grade Physical Education is a full year course from September to June with multiple 5 week units. The units of emphasis include individual lifetime activities, tactical games, net/wall sports, fitness activities, muscular fitness, cardiovascular activities, target activities and striking and fielding activities. Throughout the course of the year, students will participate in a variety of activities that promote teamwork, cooperation, enhance personal performance, fitness and wellness concepts. Students will be assessed on their physical activity, personal and social responsibility, content knowledge, strategy, movement and skill application. The importance of physical activity will be emphasized in each unit. Students will become more familiar with how to analyze and interpret fitness data from multiple sources and be able to create goals and plan fitness programs. For example, students will be expected to plan programs that are appropriate for maintaining or improving cardio-respiratory fitness, muscle strength and endurance, flexibility, and body composition for people of various ages, genders, and health and fitness levels. 10<sup>th</sup> grade Physical Education grades are numerical and included in students' grade point average.

|  |                                 |              |
|--|---------------------------------|--------------|
| <u>8881 11<sup>th</sup> &amp; 12<sup>th</sup> GRADE PE</u> | (First Semester, Grades 11-12)  | (1/4 Credit) |
| <u>8891 11<sup>th</sup> &amp; 12<sup>th</sup> GRADE PE</u> | (Second Semester, Grades 11-12) | (1/4 Credit) |

Physical Education in grades 11-12 is a semester course from September to June with multiple 5 week units. Units of emphasis include individual lifetime activities, target sports, net/wall sports, functional fitness activities, international games, cardiovascular activities, stress management and striking and fielding sports activities. Upon the completion of a unit, students rotate to a new unit every 5 weeks. Throughout the course of the semester, students will participate in a variety of activities that promote literacy, teamwork, cooperation, enhance personal performance and fitness and wellness concepts. Students will be assessed on their physical activity, personal and social responsibility, content knowledge, strategy, movement and skill application. The rules, regulations, and essential skills for various activities will be applied. Students will be empowered to create products, 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. Students need to show their ability to play strategically and/or make appropriate activity decisions, to participate safely in accordance with the most important rules and conventions, and to participate so that all involved can have a positive experience. 11<sup>th</sup> grade and 12<sup>th</sup> Grade Physical Education grades are numerical and included in students' grade point average.

## INDEPENDENT STUDY DANCE

### COURSE DESCRIPTIONS:

A Physical Education Independent Study Dance program is available for students in 11<sup>th</sup> and 12<sup>th</sup> grades with the approval of the Department Coordinator. This one semester course is divided into multiple units providing students with opportunities to learn a variety of dance styles, including modern dance, hip hop, world dance, and jazz. **NO PRIOR DANCE EXPERIENCE IS NECESSARY.** The IS Dance classes account for varying degrees of skill and ability. This is a Pass/Fail Course.

The Independent Study Dance program encourages students to develop and understand the role of movement skills, timing, rhythm and other important dance concepts. In addition, this course includes yoga, Pilates, aerobics, and other fun fitness activities. Group fitness classes are becoming more popular because they provide a sense of camaraderie and support.

IS Dance is offered periods 2, 3, 4, 6, 7, 8. All classes are taught by approved Teaching Dance Artists. There is no additional cost to enroll in this program. If you are interested please speak with your guidance counselor.

### COURSE REQUIREMENTS

1. The student must be in grade 11-12 and be on track to pass Physical Education. If the student has failed P.E. in the previous semester, he/she is ineligible to take Independent Study Dance. If students have not meet requirements in previous Independent Study course they may not be eligible to take Independent Study again.
2. The student must attend Independent Study Dance class on the assigned day and period.
3. Independent Study Dance can only be taken *one* semester per year.
4. Students are welcome to stop in the athletic office if they have questions or conflicts regarding the course.

## **PHYSICAL EDUCATION MENTOR PROGRAM**

### **Course Description:**

The Physical Education Mentor program is designed to promote student leadership, increase academic learning, increase physical activity, enhance motor performance, improve social interactions, improve social skill development, and improve self- efficacy. Students will be exposed to several peer mentoring/tutoring models such as one-on-one peer tutoring, reciprocal peer tutoring, and cross-age peer tutoring. Peer mentors/tutors will help reinforcement student routines within the classroom by assisting peers with classroom activities, peer assessments and assessments that integrate journals, portfolios, interest surveys, skill inventories and/or class discussion.

### **Application Process:**

Students that are interested in applying must submit an application, essay and 2 teacher recommendations.

### **Course Requirements:**

To be eligible students must have a 90 or higher overall grade point average and 90 physical education grade average.

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

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 quarterly 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 mentor credit if deemed appropriate by Physical Education staff.

### **Essay:**

250-500 word essay explaining student's leadership experience and qualification. Please share why you want to be a mentor and what would make you an effective mentor.

### **Recommendations:**

1 physical education teacher recommendation

1 teacher recommendation

### **Mentor Agreement:**

Mentor agreement must be signed by the student and parent.

I have read and understand the mentor guidelines (attached). I agree to follow these guidelines and uphold the ACSD student code of conduct.

- Be on time.
- Welcome peers by name and with a smile.
- Prompt the student to take the lead by describing his/her questions and concerns
  - about the assignment/activity.
- Explaining the lesson goals/objectives for each session.
- Discover the student's preferred learning style or best way of learning.
- Identifying student strengths and weaknesses.
- Give students your full attention.
- Don't complete assignments for students. Clarify any confusing material.  
encourage students to come prepared for each class with materials, questions, concerns.
- Demonstrate appropriate cooperative behavior (e.g., readily contributing to the process of performing with a partner, complimenting/encouraging others, preventing/resolving conflicts).
- Participate energetically and safely, showing self-control and respect for the positive and safe experience of others.
- Appropriately challenge themselves and others to high levels of performance.

### **Program:**

All new mentors will participate in orientation training and follow up training during the first year. Training includes instructional techniques, communication skills, scenario based learning, behavior management, and appropriate mentor social interactions.

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. 11th grade and 12th grade Physical Education electives courses are letters grades.

Textbooks: Arnheim, Daniel, Principles of Athletic Training,

## **MESSAGE TO STUDENTS**

As you go to each class on course selection day, your teachers will advise you regarding the selection of courses for next year. Make a list of your tentative course selections that you would be interested in taking next year. Take your list 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





ARLINGTON HIGH SCHOOL 2019 - 2020

| <u>SCIENCE</u>          |                             | <u>SEM</u> | <u>ART</u>                    | <u>SEM</u>                    |
|-------------------------|-----------------------------|------------|-------------------------------|-------------------------------|
| 4011                    | ACADEMIC INTRVNTN-BIO       | 1&2        | 6000                          | STUDIO IN ART ACCELERATED 1   |
| 4012                    | ACADEMIC INTRVNTN-EARTH     | 1&2        | 6010                          | STUDIO IN ART 3               |
| 4113                    | FOUNDATION OF SCIENCE       | 3          | 6040                          | STUDIO IN CRAFTS 3            |
| 4241                    | FNDATNS OF LIVING ENVIRNMT  | 3          | 6072                          | CHOICE BASED ART 1&2          |
| 4250                    | REGENTS BIOLOGY             | 3          | 6080                          | STUDIO IN DRAW & PAINT 3      |
| 4260                    | BIOLOGY HONORS              | 3          | 6090                          | STUDIO IN COMPUTER GRPHICS 3  |
| 4350                    | REGENTS EARTH SCIENCE       | 3          | 6095                          | ADVERTISING DESIGN 3          |
| 4450                    | REGENTS CHEMISTRY           | 3          | 6100                          | STUDIO IN ADV CMPTR GRPHICS 3 |
| 4460                    | CHEMISTRY HONORS            | 3          | 6120                          | ADVNCNCD STUDIO IN PAINTING 3 |
| 4550                    | REGENTS PHYSICS             | 3          | 6130                          | ADVNCNCD STUDIO IN DRAWNG 1&2 |
| 4601                    | TOPICS IN EARTH SCIENCE     | 3          | 6150                          | SCULPTURE 1&2                 |
| 4605                    | TEACHING SCI THEORY&PRACT   | 3          | 6180                          | STUDIO IN CERAMICS 1 1&2      |
| 4611                    | MAR BIO-TNTACLS TO CLAWS    | 1&2        | 6190                          | STUDIO IN CERAMICS 2 1&2      |
| 4612                    | MARINE BIO-FINS TO FLUKES   | 1&2        | 6200                          | POTTERY 1&2                   |
| 4630                    | FORENSIC SCIENCE            | 1&2        | 6210                          | STUDIO IN PHOTOGRAPHY 3       |
| 4640                    | SRC: NATURAL DISASTERS      | 1&2        | 6230                          | STUDIO IN GLASSWORKING 1&2    |
| 4650                    | CHEMISTRY IN COMMUNITY      | 3          | 6240                          | STUDIO IN ADVNCD GLASSWRK 1&2 |
| 4660                    | SRC: EVOLUTION&ANML BHV     | 1&2        | 6250                          | AP STUDIO IN ART 3            |
| 4670                    | CONTMPRY ISSUES BIO-BIO MED | 3          | 6260                          | AP ART HISTORY 3              |
| 4690                    | ASTRONOMY                   | 1&2        | 6270                          | STUDIO IN PORTFOLIO DEVLP 1&2 |
| 4710                    | AP BIOLOGY                  | 3          |                               |                               |
| 4730                    | AP ENVIRONMENTAL SCIENCE    | 3          |                               |                               |
| 4750                    | AP CHEMISTRY                | 3          |                               |                               |
| 4760                    | AP PHYSICS C                | 3          |                               |                               |
| 4800                    | SCIENCE RESEARCH            | 1&2        |                               |                               |
| <u>FOREIGN LANGUAGE</u> |                             | <u>SEM</u> | <u>MUSIC AND THEATRE ARTS</u> | <u>SEM</u>                    |
| 5010                    | FRENCH 1                    | 3          | 6510                          | RUDIMENTS OF MUSIC 1&2        |
| 5020                    | FRENCH 2                    | 3          | 6520                          | PIANO 1 1&2                   |
| 5030                    | FRENCH 3 R                  | 3          | 6530                          | PIANO 2 1&2                   |
| 5040                    | FRENCH 4                    | 3          | 6550                          | MUSIC THEORY 3                |
| 5050                    | AP FRENCH 5                 | 3          | 6600                          | NINTH GRADE BAND 3            |
| 5210                    | ITALIAN 1                   | 3          | 6620                          | CONCERT BAND 3                |
| 5220                    | ITALIAN 2                   | 3          | 6630                          | SYMPHONIC BAND 3              |
| 5230                    | ITALIAN 3 R                 | 3          | 6640                          | WIND ENSEMBLE 3               |
| 5240                    | ITALIAN 4                   | 3          | 6720                          | MIXED CHORUS 3                |
| 5250                    | AP ITALIAN 5                | 3          | 6740                          | CONCERT CHOIR 3               |
| 5410                    | SPANISH 1                   | 3          | 6800                          | SYMPHONETTE 3                 |
| 5420                    | SPANISH 2                   | 3          | 6811                          | CHAMBER ORCHESTRA 3           |
| 5430                    | SPANISH 3 R                 | 3          | 6820                          | SINFONIA 3                    |
| 5440                    | SPANISH 4                   | 3          | 6840                          | SYMPHONY ORCHESTRA 3          |
| 5450                    | AP SPANISH 5                | 3          | 6850                          | PHILHARMONIA 3                |
|                         |                             |            | 1480                          | INTRODUCTION TO DRAMA 3       |
|                         |                             |            | 1490                          | THEATRE PRODUCTION 3          |

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| <u>BUSINESS</u>   |                             | <u>SEM</u> | <u>TECHNOLOGY continued</u>          |   | <u>SEM</u> |
|-------------------|-----------------------------|------------|--------------------------------------|---|------------|
| 7015              | KEYBOARDING/WORD PROC       | 1&2        | 8210                                 | CREATIVE FURN&CBNTMKNG                              | 3          |
| 7020              | COLLEGE PREP/ MICROSOFT     | 1&2        | 8220                                 | JEWELRY   | 1&2        |
| 7100              | ACCOUNTING                  | 3          | 8230                                 | CONSUMER AUTOMOTIVES                                | 1&2        |
| 7120              | COLLEGE ACCOUNTING          | 3          | 8240                                 | CAREER & FINANCL MGT-A                              | 1&2        |
| 7121              | MANAGERIAL ACCOUNTING       | 3          |                                      |   |            |
| 7130              | BUSINESS LAW                | 3          |                                      |   |            |
| 7150              | FASHION MARKETING           | 1&2        | <u>FAMILY &amp; CONSUMER SCIENCE</u> |   | <u>SEM</u> |
| 7160              | SPORTS&ENTRTAINMNT MRKT     | 3          | 8500                                 | FOOD & HUMAN SERVICES                               | 3          |
| 7164              | COLLEGE INTRO TO BUSINESS   | 1&2        | 8520                                 | FOOD CORE   | 1&2        |
| 7165              | COLLEGE MARKETING           | 1&2        | 8530                                 | LIFESPAN STUDIES CORE                               | 1&2        |
| 7170              | BUSINESS OF MUSIC           | 1&2        | 8540                                 | FOOD AS ART   | 1&2        |
| 7210              | PRSNL MONEY MGT             | 1&2        | 8560                                 | CHEF PREP   | 1          |
| 7231              | BUSINESS MANAGEMENT         | 3          | 8570                                 | CULTURAL FOOD                                       | 2          |
| 7232              | SOCIAL MEDIA MARKETING      | 1&2        | 8580                                 | BAKING & PASTRY                                     | 1&2        |
| 8240              | CAREER AND FINANCIAL MGT    | 1&2        | 8585                                 | ADVANCED CULINARY ARTS                              | 1&2        |
|                   |                             |            | 8590                                 | CHEMISTRY/HUMAN BODY                                | 3          |
|                   |                             |            | 8595                                 | SPORTS AND NUTRITION                                | 1&2        |
|                   |                             |            | 8600                                 | EARLY CHILDHOOD EDUCATION                           | 3          |
|                   |                             |            | 8630                                 | PARENTING   | 1&2        |
|                   |                             |            | 8640                                 | WORLD OF FASHION                                    | 2          |
|                   |                             |            | 8650                                 | FASHION FOR YOUR FUTURE                             | 1&2        |
|                   |                             |            | 8660                                 | PAPER TO PINS                                       | 1&2        |
|                   |                             |            | 8670                                 | TEEN ISSUES   | 1&2        |
|                   |                             |            |                                      |   |            |
|                   |                             |            | <u>HEALTH</u>                        |   | <u>SEM</u> |
|                   |                             |            | 8700                                 | HEALTH  | 1&2        |
|                   |                             |            |                                      |   |            |
|                   |                             |            | <u>PHYSICAL EDUCATION</u>            |   | <u>SEM</u> |
|                   |                             |            | 8791                                 | IND STUDY DANCE-FALL                                | 1          |
|                   |                             |            | 8792                                 | IND STUDY DANCE-SPRING                              | 2          |
|                   |                             |            | 8798                                 | 9 <sup>TH</sup> GRADE PE                            | 3          |
|                   |                             |            | 8799                                 | 10 <sup>TH</sup> GRADE PE                           | 3          |
|                   |                             |            | 8800                                 | PE INTERN   |            |
|                   |                             |            | 8910                                 | INTRO TO ATHLETIC TRAINING                          |            |
|                   |                             |            | 8881A                                | 11 <sup>TH</sup> & 12 <sup>TH</sup> GRADE PE-FALL   | 1          |
|                   |                             |            | 8891A                                | 11 <sup>TH</sup> & 12 <sup>TH</sup> GRADE PE-SPRING | 2          |
|                   |                             |            |                                      |   |            |
| <u>TECHNOLOGY</u> |                             | <u>SEM</u> |                                      |   |            |
| 8000              | COMMUNICATIONS SYSTMS       | 1&2        |                                      |   |            |
| 8010              | PRODUCTION SYSTMS WOOD      | 1&2        |                                      |   |            |
| 8020              | PRODUCTION SYSTMS METAL     | 1&2        |                                      |   |            |
| 8030              | TRANSPORTATION SYSTEMS      | 1&2        |                                      |   |            |
| 8040              | MATERIALS PROCESSING        | 1&2        |                                      |   |            |
| 8050              | ELECTRICITY                 | 1&2        |                                      |   |            |
| 8060              | INTRO TO ENGINEERING DESIGN | 3          |                                      |   |            |
| 8062              | PRINCIPLES OF ENGINEERING   | 3          |                                      |   |            |
| 8063              | COMP INT MANUF – CIM        | 3          |                                      |   |            |
| 8064              | ENERGY&POWER TECH           | 1&2        |                                      |   |            |
| 8090              | LAND TRANSPRTATN/POWER      | 3          |                                      |   |            |
| 8100              | CONSTRUCTION                | 1&2        |                                      |   |            |
| 8111              | DIGITAL ELECTRONICS         | 3          |                                      |   |            |
| 8121              | ENGRG DRW/DESIGN/APPLIED    | 3          |                                      |   |            |
| 8132              | CIVIL ENGINEERING AND ARCH  | 3          |                                      |   |            |
| 8142              | ENGOMEEROMG DESIGN&DEV      | 3          |                                      |   |            |
| 8152              | BASIC PHOTOGRAPHY           | 1&2        |                                      |   |            |
| 8162              | ADVANCED PHOTOGRAPHY        | 1&2        |                                      |   |            |
| 8170              | DIGITAL PHOTO TECHNOLOGY    | 1&2        |                                      |   |            |
| 8181              | AUDIO RECRDNG & PRDCTNS     | 1&2        |                                      |   |            |
| 8190              | VIDEO PRODUCTIONS           | 1&2        |                                      |   |            |
| 8195              | TELEVISION PRODUCTIONS      | 1&2        |                                      |   |            |