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Arlington High School, learning, connecting and caring as a community.

Mission Statement

In an effort to foster academic excellence and personal achievement at the highest levels, Arlington High School focuses on learning, connecting, and caring as a community. AHS provides a safe, supporting, nurturing environment in which students can acquire knowledge, values, and intellectual curiosity that will lead to life-long learning. As a community we have agreed upon the following values and habits of mind as foundational principles that will guide all teaching and learning and policy decisions at Arlington High School. They are:

- accountability and responsibility,
- communication,
- cooperation and teamwork,
- integrity, and
- respect.

We believe that living these values and habits of mind on a daily basis will ensure all students a rigorous high school education that will prepare them for their future roles as learners, leaders, and citizens in a 21st century democracy.

21st Century Focus Points

- Higher-order thinking skills through interdisciplinary learning, analysis, and synthesis of information.
- Media literacy
- Math, science, technology, and engineering expertise
- Teamwork in a diverse, multicultural world
- Stress and time management
- Communication skills

- A love of learning coupled with a willingness to work hard

Social Expectations for Students

Arlington High School students will:

1. Participate in school and/or community-sponsored events providing leadership, citizenship, unity and pride.
2. Foster respect for personal differences and cultural diversity.
3. Demonstrate responsible and respectful behavior as citizens of their school and community.
4. Develop the tools and strategies to resolve disagreements and conflicts.
5. Develop skills necessary to become responsible workers, employees, consumers and citizens in an ever-changing world.
6. Make informed responsible judgments regarding their personal, emotional and physical well-being.
7. Gain skills in time management and decision-making.

Academic Expectations for Students

Arlington High School students will:

8. Take responsibility for their learning experience.
9. Communicate effectively through multiple forms of expression.
10. Gather, interpret, and evaluate information.
11. Learn by practical application.
12. Discover connections between their own ideas and the ideas of preceding generations.
13. Demonstrate integrity, persistence, and the ability to work independently and cooperatively.
14. Explore educational and career opportunities.
15. Utilize current technology in their educational experiences.
16. Contribute positively to the learning environment.
17. Demonstrate the ability to read critically and to think logically and analytically.
18. Demonstrate an understanding and responsibility for global and environmental issues.
19. Develop multiple strategies for problem solving.
20. Demonstrate an understanding and appreciation of the arts and humanities.

Introduction

The information contained in this Program of Studies is designed to guide students and parents in making important educational decisions for the upcoming school year.

Philosophy of Course Level Enrollment

The Arlington Public Schools encourages all students to meet their maximum potential. Recommended prerequisites are intended to identify the skills and competencies students should possess prior to enrollment in a given course. Required prerequisites that are not tied to sequential course offerings, i.e., you must take Spanish II before you can take Spanish III, are inconsistent with this vision and shall not be barriers to course selection. Teachers and counselors can provide specific assignments and samples of course work to help students make their choices about appropriate courses and levels of study.

A Note To Students and Parents Course Selection Guidelines

- 6 major courses must be chosen. A student at Arlington High School is required to be scheduled for all periods. After scheduling any required courses, a student should select subjects for enrichment, enjoyment, or curiosity. All students must be fully scheduled in keeping with the demands of the Education Reform Act of 1993. We cannot guarantee placement in courses or levels. Students should list alternatives for courses and be prepared to take a course in another year if the course is over-crowded or not offered due to under-enrollment.
- The number of students in a particular course will vary based on the requests of students. If there are an insufficient number of students requesting a particular course, the course will not be offered, and those students who have requested it will be assigned to one of their alternate choices.

- Students who select a particular course at the time of the initial course selection should choose the **appropriate level** at that time. It may not be possible to adjust that level at a later date given the tightness the class size/course selection process. Students should consult with their teachers and counselors to make the most appropriate educational choices. Changes will not be made in the fall if a class overload would result.

Schedule Distribution Timetable

As has been the practice in previous years, final student schedules will be distributed by August at the latest. Every attempt will be made to issue a preliminary schedule at the end of the school year or in early summer so that attempts to resolve errors, conflicts, and omissions can take place before the start of the new school year. **No changes that unreasonably overload or imbalance the sizes of existing classes will be made.**

Graduation Requirements

Graduation Requirements Class of 2008 and beyond

1. Pass four years of English
2. Pass three years of History/Social Science (to include US History sequence 1763-present)
3. Pass three years of Science (to include Biology for MCAS preparation)
4. Pass three years of Mathematics (to include Algebra & Geometry for MCAS preparation)
5. Pass three years of Physical Education*
6. Pass one year of Fine Arts
7. Pass two years of Foreign Language
8. Demonstrate competency in Computer Technology
9. Perform and document 40 hours of community service

*Students must take a third year of PE at AHS or provide a substitute such as active participation on a sports team, membership in a dance, fitness, or self-defense class or other life-long physical activity, as defined by the PE staff. Contracts for out-of-school PE activity will be approved by the PE staff and forwarded to the guidance counselors and the principal.

Promotion and Graduation 2008 and beyond

For a student to advance from one grade level to the next higher grade level, the following requirements must be met:

Grade 10	22 points minimum
Grade 11	48 points minimum
Grade 12	72 points minimum
Graduation	106 points minimum

Instruction at Various Course Levels

The focus of instruction varies by level. Most AHS students take the majority of their courses at the Collegiate 1 level. Students who choose Collegiate 2 are often looking for remediation in a particular area of the curriculum. Students who choose Advanced, Honors, and AP often do so in order to explore a particular area or areas of the curriculum in greater depth. While all course levels require seriousness of purpose, students should be aware that teachers assume that those who choose the highest level courses are making academic success their highest priority and that students in those courses will put tremendous effort and time into these subjects. These courses include a heavy homework load.

Instruction in Collegiate 2 level courses

- Meets the needs of students whose reading & writing skills are below grade level
- Is skill-based, focusing on reading, writing, problem solving, and organizational skills
- Varies pacing to best suit the needs of learners
- Supports students as they begin to think inferentially in math, sciences, and the humanities
- Explores content information through class discussion questions that focus on knowledge, comprehension, and application skills

- Is differentiated to address individual learning styles and student interests
- Results in homework every night of approximately two hours (aggregate – all subjects)

Instruction in Collegiate 1 level courses

- Is at the recommended and appropriate level for AHS students who are planning to attend college
- Assumes good command (at or above grade level) of reading, writing, speaking and listening skills
- Assumes mastery of basic skills across the curriculum -- the 5 paragraph essay in ELA, formulating a hypothesis and designing an experiment to prove it in science, creating and supporting a thesis statement in a well-developed essay in social studies, and showing the work necessary to solve a multi-step problem in mathematics
- Explores content information through class discussion questions that focus on knowledge, comprehension, and application, analysis, synthesis, and evaluation
- Is differentiated to address learning styles and student interests.
- Results in homework every night of approximately one – two hours (aggregate – all subjects)

Instruction in Advanced level courses

- Is at the recommended and appropriate level for AHS students who are planning to attend college
- Assumes good - strong command (above grade level) of reading, writing, speaking and listening skills
- Assumes mastery of basic skills across the curriculum -- the 5 paragraph essay in ELA, formulating a hypothesis and designing an experiment to prove it in science, creating and supporting a thesis statement in social studies, showing the work necessary to solve a multi-step problem in mathematics and assumes that students want to grow and improve those skills through additional assignments
- Explores content information through class discussion questions that focus on knowledge, comprehension, and application, analysis, synthesis, and evaluation
- Is differentiated to address individual learning styles and student interests
- Results in homework every night of approximately two – three hours (aggregate – all subjects)

Instruction in Honors and Advanced Placement courses

- Is designed for the most dedicated and intellectually curious students
- Assumes strong command (above grade level) of reading, writing, speaking and listening skills
- Assumes mastery of advanced skills across the curriculum
- Explores content information through class discussion questions that focus primarily on application, analysis, synthesis, and evaluation
- Is differentiated to address individual learning styles and student interests
- Results in homework every night of approximately three - four hours (aggregate – all subjects)
- Requires students to take the College Board's National Advanced Placement Examination in May.

Indicators of Course Levels

<i>Collegiate 2</i>	<i>Collegiate 1</i>	<i>Advanced</i>	<i>Honors and AP</i>
Reading and Writing tasks directly teach skills in topic development, writer's purpose, structure, grammar, spelling & punctuation.	Reading and Writing tasks require good skill and understanding of topic development, structure tone, purpose, grammar, spelling & punctuation.	Reading and writing require increasing independence in understanding of topic development, tone, purpose, voice, structure, grammar, spelling & punctuation.	Reading and Writing tasks require proficiency in and understanding of topic, development, tone, purpose, voice, structure, grammar, spelling & punctuation.
Essays and open-ended questions include direct instruction in creating beginning, middle (development and organization) and end.	Essays and open-ended questions regularly require development of ideas in 5 paragraphs with some guidance.	Essays and open-ended questions regularly require students to extend and expand upon development of ideas in 5 paragraphs	Essays and open-ended questions regularly require development of ideas in 7-8 paragraphs.
Problems require considerable guidance in application of strategies to reach solutions.	Problems require some guidance in application of strategies to reach solutions.	Problems require minimal guidance in application of strategies to reach solutions.	Problems require independent application of multiple strategies to reach solutions.
Research assignments include explicit teaching of skills of planning, writing and syntheses and revision using electronic and traditional sources	Research assignments are carried out with some guidance and require electronic and traditional sources.	Research assignments are carried out with increasing independence and require electronic and traditional sources.	Research assignments are carried out independently and require electronic and traditional sources.
Reading, lab experiences, media viewing, etc. require comparison and contrast and some analysis and evaluation with ongoing support.	Reading, lab experiences, media viewing, etc. require comparisons, contrast and some analysis and evaluations with some support.	Reading, lab experiences, media viewing, etc. require increasing independence in drawing inferences, making comparisons, analysis and evaluations.	Reading, lab experiences, media viewing, etc. lead to independently drawing inferences and making comparisons, analysis and evaluations.
Student performance tasks and assignments require time management and study skills directly taught and reviewed by the instructor.	Student performance tasks and assignments require application of time management and study skills with guidance.	Student performance tasks and assignments are substantial and assume increasing independent time management and study skills.	Student performance tasks and assignments are substantial and require independent time management and study skills.
Textbooks and other information sources (essays, works of art, magazines, newspapers, electronic) are regularly assigned and explored with considerable support.	Textbooks and other information sources (essays, works of art, magazines, newspapers, electronic) are regularly assigned and require analysis with support.	Textbooks and other information sources (essays, works of art, magazines, newspapers, electronic) are regularly assigned and require some independent analysis.	Textbooks and other information sources (essays, works of art, magazines, newspapers, electronic) are regularly assigned for independent analysis.
Student tasks regularly require demonstration of creativity and originality with guidance & considerable support. Student tasks require comprehensive idea formation and clearly supported personal opinion.	Student tasks regularly require demonstration of creativity and originality with increasing independence with support.	Student tasks regularly require demonstration of creativity and originality. Students are increasingly independent in making original connections, and in applying them to new and different problems.	Student tasks regularly require demonstration of creativity and originality independently. Students move beyond proficiency to sophistication in both oral and written language as they make original connections, and apply them to new and different problems.

MCAS Competency Determination

Prior to the class of 2010:

In addition to meeting local graduation criteria, students must achieve a passing scaled score of 220 on the Massachusetts Comprehensive Assessment System (MCAS), on the English Language Arts and Mathematics examinations, in order to receive a diploma from Arlington High School

Beginning with the Class of 2010:

In addition to meeting local graduation criteria, students must meet or exceed a scaled score of 240 on the Massachusetts Comprehensive Assessment System (MCAS), on the English Language Arts and Mathematics examinations **OR** the student must meet or exceed a scaled score of 220 on both the English Language Arts and Mathematics examinations **AND** fulfill the requirements of an Educational Proficiency Plan (EPP) in order to receive a diploma from Arlington High School. Students must also meet the competency determination for **Science, Technology and Engineering**.

Waivers & Substitutions

Requests for relief/substitution of a graduation requirement should be made in writing to the Principal for consideration.

Graduation Credits

A student earns credits for each term passed, one quarter (1/4) of the total course credit. A student must earn a passing grade for the year to complete any of the requirements for the courses listed above.

Report Cards

The school year is divided into four quarters. At the end of each school quarter, a report card is issued to each student. This report is mailed home to parents or guardians. All grades and attendance become a part of the student's permanent high school record. The following letter grades will be used in rating scholarship achievement in the courses taken:

Letter Grade Explanation

A	Superior work. Indicates excellent effort and accomplishment
B	Better than average. Indicates good effort and consistently good work.
C	Average. Above minimum standards.
D	Low passing. Indicates effort, but poor knowledge or skill; or ordinary achievement accompanied by indifference and/ or neglect.
F	Failure to meet minimum passing standard.
I	Incomplete. Requirements of course have not been met due to excusable absence.
NG	Not for credit, also used for medical absence
W	Withdrawn
H	Honors
S	Satisfactory
U	Unsatisfactory
N	Not for credit
W	Withdrawn

Honor Roll

The high school issues an Honor Roll each term. Being listed on the Honor Roll is something that every student should strive to attain in his/her search for excellence. Arlington High School maintains a high scholastic standing and expects each student to contribute to that standard to the best of his/her ability. There are two honor rolls at Arlington High School. (PE grades are not included in Honor Roll calculation.)

**High Honors
Honors**

All A's
All grades of B or better

Final Exams

- For full year courses, final examinations are scheduled at the end of the year.
- For semester (1/2 year) courses, final exams will be administered at the end of each semester
- The final examination counts for 11% of the final year grade for full year courses; 20% for semester courses.

Course Transfer/Withdrawal

A formal withdrawal procedure must be followed in order to change or withdraw from a course. A student should consult his/her counselor when a course change is being considered. When course changes are deemed appropriate, a change in programming prior to the start of the fifth week of school will take effect without any permanent notation on the student's transcript. Course level changes made after the fifth full week of school or after result in a grade on the report card and on the permanent student record that reflects the student's performance in both classes in the quarter of transfer.

A teacher, department head, counselor and house dean will be involved in the decision to withdraw a student from a course. When a student withdraws from a course after the fifth full week of that course, the course name and grade of "W" will appear on the student's permanent record. A "W" on the permanent record will be weighted in the student's academic placement as a zero and will appear on the permanent record as zero points. In extenuating circumstances a grade of "N" may appear on the permanent record instead of a "W". A grade of "N" is not included in the GPA of Class Rank. A recommendation will be made to the Principal for final disposition of all "W" or "N" grade changes.

Auditing Courses

The option to audit a course will be approved by the Principal in extenuating circumstances.

Auditing is a procedure whereby students attend a class for no credit. It is understood that a student who wishes to audit a course and have a notation of that audit appear on the transcript must meet regular attendance and class participation standards in that class.

Academic Reporting

There are two types of academic reports. One is GPA (Grade Point Average) and the other is a weighted GPA which is used to determine Decile Rank. The GPA and the weighted GPA will be printed on all report cards and transcripts issued to a student. Decile Rank will be available to all seniors and to juniors after the second term report cards, and will be sent to schools or places of employment upon specific request of students.

Grade Point Cumulative Average (GPA)

The grades a student earns will be averaged into a grade point average (GPA). The Grade Point Average is a student's non-weighted grade point cumulative average based on the following translation for each letter grade of A, B, C, D, F, or W.

A+ (97-100) = 4.3

B+ (87-89) = 3.3

C+ (77-79) = 2.3

D+ (67-69) = 1.3

A (93-96) = 4.0

B (83-86) = 3.0

C (73-76) = 2.0

D (63-66) = 1.0

F (59 & below) or **W** = 0

A- (90-92) = 3.7

B- (80-82) = 2.7

C- (70-72) = 1.7

D- (60-62) = 0.7

Physical Education courses and courses that receive grades of "H", "S", or "U" are not included in the weighted GPA.

Weighted GPA and Decile Rank

Decile Rank is available to juniors at mid-year and seniors for reporting where needed in post-secondary placement. Decile Rank takes into consideration the level of the challenge and commitment made by the student in his/her choice of program and courses. Decile rank is determined by ordering students' weighted GPA according to the chart below.

Weighted GPA

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-
AP	5.25	5.0	4.7	4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7
Hon.	5.0	4.75	4.45	4.05	3.75	3.45	3.05	2.75	2.45	2.05	1.75	1.45
Adv.	4.75	4.5	4.2	3.8	3.5	3.2	2.8	2.5	2.2	1.8	1.5	1.2
CI	4.5	4.25	3.95	3.55	3.25	2.95	2.55	2.25	1.95	1.55	1.25	0.95
CII	4.25	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0.7

Rather than a discreet rank, students will receive a notation on their report cards indicating in which decile they fall according to their weighted GPA. In a class of 300 the notation would follow the following model: First Decile: the thirty students with the highest weighted GPA; Second Decile: the following thirty students with the next highest weighted GPAS. The sequence would continue through the following deciles: Third Decile, Fourth Decile, Fifth Decile, Sixth Decile, Seventh Decile, Eighth Decile, Ninth Decile, Tenth Decile.

Guidelines for Converting Weights and Credits And Establishing Decile Rank in Class for Transfer Students

In order to prevent disputes and misunderstandings revolving around the methodology and resulting determination of Decile Rank for transfer students, and to preserve an element of fairness to students who have spent their whole academic careers at Arlington High School, the following guidelines will be followed:

No decile rank will be computed for students who have not completed one full year (two semesters) at Arlington High School. For example, a student transferring to AHS at the start of senior year would not have a decile rank computed since it would not be possible for that student to complete two semesters of work prior to the time that the closing rank for seniors is computed. By this time frame, for a senior transfer student to be accorded a rank at the beginning of senior year, s/he would have to be enrolled at AHS at the beginning of junior year. For a junior student to be accorded a decile rank after the second term, he or she would have to be here from the mid-point of sophomore year.

The Arlington High School Class Rank is designed to determine and recognize those students who have achieved the highest levels in the AHS course of study. It is not realistic to assume that it can reflect with an unassailable level of accuracy student performance demonstrated under a different set of standards in place at other schools. **Therefore, only grades earned at Arlington High School will be used for the purpose of computing class rank.**

Honors Speakers For Graduation

A graduation committee consisting of teachers and other school staff will be appointed to select honors speakers for graduation. The committee will consider GPA, decile rank, school spirit, and effectiveness as a writer and speaker when making its choice of honors speakers for graduation.

Procedure and Requirements for Early Graduation

1. Petition for Early Graduation Release must be made in writing to the Principal.
2. Application for Early Graduation release will be reviewed by the guidance counselor and the Principal, or his designee, to outline a program for completion of graduation requirements.
3. Students accepted for Early Graduation Release are normally required to leave school at the same date as all other seniors leave school. Exceptions need to be approved by the Principal.
4. Students who intend to apply for early graduation must meet the following requirements: completion of all local graduation requirements, successful competency determination in math, ELA, and science beginning in the year 2010 on the MCAS exam, and a plan for the immediate future, signed by the student's parent or guardian.

Course Makeup Policy

It is recommended that a senior who has not met the graduation requirements attend an approved summer school (high school and/or college or junior college) and make up credits or required courses immediately in order to receive his/her diploma in August of the year he/she was to have graduated.

Any other student at the end of the freshman, sophomore or junior year is encouraged to make up credits or courses lost during that year. This will help to insure the proper credits necessary for graduation. Students may not make up more than two required courses (English, mathematics, U.S. History, etc.) in summer school. The two-course limit on required courses applies to the student's entire academic career at AHS and may not be interpreted as two courses per year.

A student must have all summer school courses approved by the Principal or his designee **prior** to registering (form available in Guidance).

Prior to continuing in a sequential course, a student must pass an AHS proficiency examination. If the course is not sequential, a proficiency examination will not be required.

Enrichment courses may be taken at any time at the discretion of the Principal. The credit and grade will not be used in the calculation of either GPA or weighted GPA.

Courses passed in summer school or courses that are taken through tutoring or outside of the normal semester or year-long timelines become a part of the student's permanent record. A grade of Pass or Fail only is recorded, and the grade is not calculated in the student's weighted GPA. Maximum point value equals 2.50 credits.

Special Reports

In an effort to help all students perform successfully in their academic programs, classroom teachers will issue special progress reports for students about whom they have concerns. The notice does not necessarily indicate failure, but rather, is a notice to the student and his / her parents that failure could result because of the unsatisfactory nature of the student's work, effort or attitude. The special report will be sent home early enough in the term so that the parent can work with the teacher in helping the student to improve his/her work.

Except for extenuating circumstances, a student cannot be failed for the term if a special report has not been sent home to the parent or guardian.

Guidance Services

Counseling services at Arlington High School are geared to the individual student. Counselors work with students and parents on developmental issues, academic planning, course selection, personal issues, transition concerns, and the career/college search process. Counselors assist students to achieve their academic potentials, while encouraging social and extracurricular experiences that provide opportunities for personal growth. Each year, counselors meet with their assigned students, in small groups and on an individual basis as needed, while collaborating with teachers and administrators regarding student progress.

Group meetings for parents of grade 10, 11, and 12 students are scheduled each year as well.

In the spring, counselors meet individually with students to select challenging courses for the upcoming school year. Course selections, made by students and their parents, are further based on teacher recommendations, and post-secondary interests. Students are encouraged to explore their interests and to hone their talents through the selection of elective courses. Maintaining good grades and an appropriate level of rigor in course selection is emphasized.

Guidance counselors utilize an on-line tool through the AHS Guidance website. This program, called Family Connection/Naviance, is a customized planning and advising tool used to instruct all students on matters involving career and college research. Freshman groups focus on transitioning to the high school, goal setting, and involvement in school and community activities. They are given a Naviance account where they complete a Learning Styles Inventory, which aids them in gaining an understanding of how they learn best. They also begin the process of researching careers and colleges. Sophomore groups revolve around MCAS, PSAT's, course selection and extracurricular activities. They complete a Personality Profiler on Naviance, which exposes them to careers, college majors, and colleges, which best meet their interests and goals. Sophomores continue to

expand their college search. Junior groups focus on PSAT's, SAT's, and other standardized testing information. They fine-tune their college search, visit colleges, and interview with college representatives. Counselors help juniors to develop a list of colleges and discuss acquiring teacher letters of recommendation. Seniors work with counselors in groups and on an individual basis to focus on matching their needs and interests to colleges, which are a good 'fit'. Students and parents are guided, step-by-step, through the college application process. Guidance counselors believe that there is a suitable college match for every Arlington High School student!

College/admissions representatives schedule meetings with students in the AHS Career Center in order to discuss their requirements and to review admissions criteria. These visits include representatives from two and four year colleges, trade schools, the military, year-off programs, and other alternative programs. AHS also sponsors a Spring College Fair, which hosts representatives from over 100 colleges and universities.

The Intervention coordinator/social worker coordinates a range of support services at AHS. The Intervention Coordinator / social worker provides individual and group counseling, as well as consultation and support services to students, families, and professionals in the AHS community. Deans, teachers, students, parents, and guidance counselors identify students who are in need or at risk. Support groups are offered to address a range of issues including loss, anger, depression, and anxiety. Arlington High School has substance abuse intervention services as well. The intervention coordinator makes referrals for clinical services in the community, and serves as liaison to community agencies such as group homes, child welfare social workers, local mental health clinics, and private therapists.

Post-Secondary School Placement

Placement and acceptance into post-secondary schools, especially four-year colleges and universities, both private and state-run, are affected by the following:

- The student transcript: The transcript will express commitment to learning by the nature and sequence of the course selected and by the marks received
- Weighted Decile Rank: This is the decile (10th percent of the class) that indicates a student's placement in relation to the total number of students in the class
- Recommendations: The student's counselor and teachers usually write recommendations. Recommendations will give a picture of the student's academic abilities as well as co-curricular activities—sports, music, art, political and community involvement in order to provide a personalized assessment of the student.
- Scores of tests by the College Board or American College Testing Program
- Extra-curricular activities in school and in the community

National Standardized Tests

- **PSAT, SAT, ACT** – The College Board of the Educational testing Service and the American College Testing (ACT) Service offer examinations whose scores are sought as part of the admission criteria by post-secondary educational institutions. Arlington High School conducts a Center for Admission testing Programs of the College Board for **PSAT and SAT**. **ACT** test centers are available in the Metropolitan Boston Area. Juniors are encouraged to take the PSAT in order to participate in the National Merit Scholarship Qualifying Program (NMSQP). Although sophomores who take the exam are not eligible for the NMSQP, they are encouraged to take the PSAT as a practice for their junior year. Information about these tests is given at regular intervals through the Guidance Office and the school calendar. Students work out a tentative calendar of testing with their counselors at the end of the sophomore year.
- **AP** – The Advanced Placement Examinations provide the means by which secondary school students may demonstrate their readiness to undertake advanced courses as college freshmen. These tests help colleges judge the qualifications of candidates for advanced placement and college credit.
- **CLEP** – The College Level Examination Program gives individuals the chance to validate and receive credit for college level knowledge they already possess. These programs are recommended to reduce the cost in time and money of a college education.
- **TOEFL** – The Test of English as a Foreign Language (TOEFL) measures the ability of non-native speakers of English to use and understand North American English as it is used in college and university settings.

Learning Disabilities Support Program

In order to expand comprehensive, inclusive programming for young adults with learning disabilities, the Arlington Public Schools has developed the LD Support Program at Arlington High School. This program provides a combination of specialized and mainstream classes for identified students. Through the services of an LD classroom teacher, an LD tutor, a teaching assistant, students are offered specialized college preparatory classes in Language Arts, Mathematics, Building Strategies, Reading, and Academic Subject Support.

Criteria for program placement includes students with:

- Recommendations from Evaluation Team after appropriate assessments
- Diagnosis of specific learning disabilities (i.e., moderate to substantial language processing and decoding problems).
- Average to above average cognitive abilities

SP7801 Academic Support **Grades 9,10,11,12** **1-5 Points**

Academic Support classes serve the educational needs of students who have been evaluated through the special education evaluation team process under Chapter 766. Students' involvement in support programs focuses on the goals and objectives written in his/her Individualized Education Program (IEP). One or more of the following may be the focus of course content:

- Remediation of the specific learning disabilities
- Skill development
- Development of effective study habits & organizational skills
- Computer literacy

In addition, the special education staff monitors students' overall school performance through ongoing communication with classroom teachers, guidance counselors and school administrators. The number of days a student will be involved in a support program is determined by the recommendation of a student's IEP. Credit is awarded to students who actively participate.

SP7825 Reading/Writing Workshop **Grades 9,10** **5 Points**

This class, which is taken in addition to the required English class, helps students to develop their reading and writing skills. Emphasis will be placed on grammar, vocabulary building, reading comprehension, paragraph writing and developing a strong five-paragraph essay. Test taking skills in preparation for the SAT and MCAS will also be part of the course. Students are selected through a special education evaluation.

SP7820 Building Strategies **Grade 9, 10, 11, 12**

This class is a support class for students who have been evaluated through the special education process. The improvement of study and organizational skills, as well as the remediation of specific learning difficulties is stressed. Basic computer literacy is encouraged. In addition, students are provided with homework assistance. The special education liaison monitors the student's progress by communicating with classroom teachers, guidance counselors, school administrators and parents/guardians.

SP1335 World History 19th & 20th Centuries **Grade 9** **5 Points**

This course follows the curriculum content of the regular education Collegiate 2 curriculum and is aligned with the Massachusetts Curriculum Frameworks. Instruction focuses on skill development as determined by students' Individualized Education Programs. Students are selected through a special education evaluation.

SP1240 Language Arts 1 **SP3240 Language Arts 3** **SP2240 Language Arts 2** **SP4240 Language Arts 4**

The study of English grammar, vocabulary, composition and literature is presented in this college preparatory English class. Emphasis is on correct usage, sentence structure, and expository composition techniques. Works by Dickens and Shakespeare, as well as contemporary pieces of literature, are read and discussed. Literature selections parallel those of mainstream English classes. Language Arts classes follow a similar curriculum to that of regular education, with modification in reading demands and support for basic skills, including vocabulary,

decoding, and writing. The special education liaison monitors the student's progress by communicating with classroom teachers, guidance counselors, school administrators and parents/guardians.

SP1350 Math Applications 1

SP 2350 Math Applications 2

SP3350 Math Applications 3

SP4350 Math Applications 4

Courses in this sequence concentrate on basic skill development as determined by students' Individualized Education Programs. In addition to improvement of basic mathematical skill, curriculum will include authentic application of curriculum frameworks topics in number sense, patterns, relations, functions, geometry and measurement, and probability and statistics. Computer aided instruction is used to promote skill development as well as review of the test taking skills necessary to prepare students for the MCAS.

CLASS Program

The CLASS Program is a structured, therapeutic, inclusion support special education program located in Arlington High School. The program serves students who carry a diagnosed emotional disability that impacts the student's ability to perform academically in a mainstreamed setting. A comprehensive positive behavior support approach is used to help students succeed. CLASS Staff initially get to know a student and use this assessment information to create and implement a Behavior Support Plan. This helps to accurately address the behavior and/or social-emotional issues that impede success in less restrictive public school settings. It also allows staff to document progress and determine if and when students should begin to take mainstream courses. Referrals to the program must follow the Intake Procedures which are available through the Special Education Department.

Academics

The CLASS academic curriculum parallels the general education curriculum across all content areas and is aligned with the Massachusetts Curriculum Frameworks and the Arlington High School requirements for graduation. Related services such as counseling are provided according to a student's IEP, as is his/her participation in MCAS with either standard or non-standard accommodations.

Emotional/Social Support

Students in the CLASS Program are supported behaviorally and emotionally through daily contact, case management, and as needed counseling (group and/or individual) with a social worker.

Inclusion Support

When it is deemed appropriate for student success, students participate in general education classes with curriculum accommodations. The CLASS Program Teacher, Teacher Assistant and Social Worker coordinate with regular education teachers in order to best aide each student using a range of supports within the school.

Expectations

Students are expected to behave in accordance with the CLASS Program Handbook. CLASS Program staff use each student's Behavioral Support Plan in working with each student. The intention is to support students around their emotional diagnosis and help students avoid traditional discipline systems that have impeded their academic progress in the past. More information can be found in the CLASS Handbook.

The Workplace Alternative Program

Workplace is an alternative regular education program at AHS to meet the needs of those students who benefit from learning in a different environment than the one provided in the traditional high school. The Workplace focuses primarily on relationship building within the parameters of academic growth, social responsibility, emotional health, community awareness, and career possibilities. Classes for Workplace students are small, individualized and structured. The Workplace program offers a combination of challenging classroom experiences and specialized services. A major component of the program is centered in the Omni Class where students work on self awareness, group trust, leadership, and community service.

Placement Procedures and Criteria

Interested students are admitted to the program through an interview process involving the student, the student's parent(s) and/or guardian(s), the Workplace staff and interested parties such as the student's guidance counselor or referring faculty member. Students may be referred to the program from various sources from within the school including the AHS Learning Team. A student may inquire about the program through his or her guidance

counselor. Spaces are limited and, therefore, admittance to the program is not always possible. Students who enter this program do so voluntarily with a commitment to the program ideals of academic achievement and planning toward the pursuit of a productive future after graduating from high school. All admissions are on a trial basis and continued participation in the program is contingent upon compliance with the contractual obligations.

In general, the students in the Workplace meet the following criteria:

- The student is of average or above average cognitive ability.
- The student is seeking post high school education, whether it be college, continued academic pursuit, or vocational setting.
- The student shows motivation to improve skills and complete high school.
- The student agrees to the program contract.

Workplace Course Offerings

English, History, and Science courses are offered at the Collegiate 1 level. Mathematics is at the Collegiate 2 level, all of which satisfy the Massachusetts Curriculum Frameworks. Curriculum matches topics offered in traditional academic courses at Arlington High School.

Course offerings at the Workplace include the following:

TW1210 English 1 **TW2210 English 2** **TW3210 English 3** **TW4210 English 4**
TW1320 Algebra 1 **TW2320 Geometry** **TW3320 Algebra 2** **TW7801 Academic Support**
TW3245 US History **TW1215 World History**
TW1230 Earth/Phys Science **TW2215Biology**
TW3240 History of Arlington **TW1288 OMNI** **TW0000 Work Study**

ENGLISH LANGUAGE EDUCATION PROGRAM

		9	10	11	12
RW7850	English as a Second Language (ESL) I	X	X	X	X
RW7851	English as a Second Language (ESL) II	X	X	X	X
RW7852	English as a Second Language (ESL) III	X	X	X	X
RW7860	Intermediate Literacy	X	X	X	X
RW7861	Advanced Literacy	X	X	X	X

I. ELL students (all grades) identified at **Beginning Level English proficiency** should take 3 ELL courses:

RW 7850 (English as a Second Language I) Instruction focuses on development of development of listening comprehension and oral language development for personal, social and academic purposes and settings. Students are introduced to literacy demands through building essential vocabulary and gaining understanding of grammatical and text structures.

RW 7860 (Intermediate Literacy) This component of the beginners' program includes reading and writing in English for a variety of purposes, including access to literature to attain pre-reading foundations-- both for fiction and non-fiction-- and comprehension strategies. There is a continuous focus on vocabulary development.

RW 7801 (Academic Language Development) This course provides selected language and literacy skills needed to meet content classroom demands, eg., asking and answering questions, preparing for tests and extended assignments, homework strategies, other. Emphasis is given to essential content vocabulary for reading and writing in content classrooms (Sciences, U.S. History).

II. ELL students (all grades) identified at **Intermediate Level English proficiency** should take 2 ELL courses:

RW 7851 (English as a Second Language II) Students improve their social and academic oral language development, including awareness of cultural differences. They gain proficiency in using complex sentence structures, asking and answering questions in a variety of contexts, and working in small groups to accomplish

different tasks. Students are introduced to a variety of genres and work intensively on writing development that reflects a range of comprehension demands, including essays and a long-term writing project.

RW 7860 OR RW 7861 (by ELL staff recommendation)

RW 7860 (Intermediate Literacy) See above.

OR

RW 7861 (Advanced Literacy) Course goals include reading comprehension and rate, vocabulary development, and analysis of literary devices in a variety of genres. Students will read selected literature appropriate to grade level, often through literature circles and other collaborative approaches. Writing skill development moves to multi-paragraphs for personal, literary, and expository topics, following selected guidelines for writing products in collaboration with the English Department. Significant attention is paid to the writing process, with a focus on grammar vocabulary development through editing.

III. ELL students (all grades) at the **Advanced English proficiency level** will take one ELL class (RW 7852) and one English Department class. If recommended, RW 7861 (see above) may also be taken for content language/literacy development.

RW 7852 (English as a Second Language III) Coursework includes reading comprehension and strategic reading with attention to expository texts as well as literary. Vocabulary study and advanced grammar are focal points. Students extend their writing development to the essay of 5-paragraph length, often emerging from their reading experiences.

FINE ARTS

The Fine Arts Department of Arlington High School seeks to broaden students' thinking about ways of expression and communication. Students of the arts gain knowledge and self-critical awareness. The department aims to provide students with artistic experiences and cultural resources. Students are taught to develop and express perceptions and ideas through simultaneous combinations of shapes, colors, sounds and movements for which there are no precise verbal equivalents.

VISUAL ARTS

LEVELS	HONORS	COLLEGIATE 1	UNWEIGHTED
Grades 9,10,11,12		AC1205 Art I	
Grades 10,11,12		AC2205 Art II AC3588 Digital Photography I AC7920 Ceramics & Drawing I AC7221 Ceramics & Drawing II AC2215 Printmaking	
Grades 11,12	AC3105 Portfolio Prep AC3590 Digital Photog. II	AC7122 Ceramics/Drawing III	
Grade 12	AC4130 Advanced Portfolio AC4000 AP Studio Art		

PERFORMING ARTS

LEVELS	HONORS	COLLEGIATE 1
Grades 9,10,11,12	PA7125 Madrigal Singers PA7110 String Orchestra PA7105 Symphonic Band	PA7205 Symphonic Band PA7210 String Orchestra PA7220 Jazz Band PA1250 Drama 1 PA7225 Mixed Chorus PA7226 Women's Choir
Grades 10,11,12	PA 2140 The Art of Cinema	PA2250 Adv. Drama
Grades 11,12	PA3150 Honors Drama III	
Grade 12	PA4150 Honors Drama IV	

MUSIC TECHNOLOGY

LEVELS	HONORS	COLLEGIATE 1
9,10,11,12		Introduction to Music Technology
9,10, 11,12		Songwriting 1 (Only after Music Technology)
9,10, 11,12		Keyboarding (Only after Music Technology)

VISUAL ARTS

AC1205 Art I

Grades 9, 10, 11, 12

5 Points

Suggested Entry Criteria: Students must successfully complete one level before advancing to a higher level.

AC2215 Printmaking

Grades 10, 11, 12

5 Points

This studio art course in printmaking is aligned with the Massachusetts Visual Arts Frameworks. Students will gain a thorough knowledge of the applications, materials, and techniques used in printmaking. Techniques of intaglio, relief, and offset printing will be learned. Digital and photographic imaging will be introduced. Students will study the history of papermaking and make connections to related periods of art history. Students will complete in-depth projects and produce a portfolio of edition prints. Weekly homework and sketchbook assignments are required. **Suggested Entry Criteria: Art I or by permission of instructor**

AC3588 Digital Photography I (A & B)

This course is aligned with the Massachusetts Visual Arts Frameworks. Students will learn how to carefully compose, craft and print photographs through digital imaging processes. Students will study basic film and digital camera functions and photography equipment: lenses, aperture, depth of field, ASA, shutter speed, lighting, exposure controls, formatting, and file storage, and learn. Contextual formats, such as point of view, the history of photography, and career opportunities in commercial photography will be explored. Students will develop a portfolio of their work and participate in exhibits. All students electing this course must own a digital camera and Adobe Photoshop will be used.

Required Entry Criteria: Art I: Foundations in Elements and Principles of Art and Design.

AC3590 Digital Photography II (A & B)

This honors level course is aligned with the Massachusetts Visual Arts Frameworks. Students will further develop their skills in advanced digital imaging techniques to create well-composed images for commercial and Fine Art applications. Students will study major photographers, historical movements in art, and make interdisciplinary multimedia connections. Career opportunities in commercial photography will be explored. Students will present their work in a portfolio and in an exhibition. All students electing this course must own a digital camera and Adobe Photoshop will be used.

Required Entry Criteria: Digital Photography I (A & B)

PERFORMING ARTS

PA1250 Drama I

Grades 9, 10, 11, 12

5 Points

Drama 1 is an introductory course aligned with the Massachusetts Theatre Frameworks and core concepts. The course will approach the study of drama through encounters with such standards as acting, improvisation, storytelling, playwriting, design and dramatic literature. Beginning with the study of Oral Interpretation of Literature and continuing with introduction of character development, students will present scenes, monologues and short original pieces to their peers. Character development continues and emphasis will be placed on the physical work of an actor. Theatre history will begin to be studied during the second term. Play construction, dramatic literature and playwrighting will also be studied. The course is an introduction to drama and is meant as a survey course preparing you for more in-depth study in the future. This course fulfills the fine arts graduation requirement.

PA2250 Advanced Drama

Grades 10, 11, 12

5 Points

Advanced Drama expands upon the basic Massachusetts Theatre Frameworks and core concepts by further exploration and development of the theatrical communication disciplines. Students will study advanced acting techniques, explore plays and films, create theatre in a variety of genres, periods and styles and view the playwright as artist. In addition students will explore an introduction to directing and playmaking. Classes will encounter various aspects of the technical theatre crafts and present their own theatre creations for classroom and public performance. This course fulfills the fine arts graduation requirement.

PA3150 Honors Drama III

Grades 11, 12

5 points

PA4150 Honors Drama IV

Grade 12

5 points

Honors Drama is a deeper exploration of the Massachusetts Theatre Frameworks presented in Drama 1 and Advanced Drama. Scene work in pairs and as individuals will continue as will written analysis of plays and acting. The role of the director as interpreter will be explored. The texts chosen will reflect the rigor of this upper level

class. Theatre history and the role of the playwright in society will continue. Non-western artists will be studied, as will the alternative acting methods and theories, such as those of Anne Bogart. Self-scripted works based on contemporary themes will be explored in presented in public performances. This course fulfills the fine arts graduation requirement.

PA2140 The Art of Cinema: From Script to Screen Grades 10, 11, 12 5 Points

This course is based on the belief that strong connections can be made between the language arts and the media arts: between composing and film making, between literature and narrative film, between reader response and viewer response, among trends in literary and film criticism. The course considers film making as an art, comparing it to literature and other arts, tracing its technology and chronology, identifying major trends and variations and reflecting on its place in our culture and private lives. Reflection, discussion, analysis and evaluation will focus on the following films viewed in class, as recommended by the National Council of Teachers of English and consistent with Massachusetts communication and Performing Arts Frameworks: *Citizen Kane*, *On The Waterfront*, *Rebel Without A Cause*, *The Graduate*, *Modern times*, *Singin' in the Rain*, *Vertigo*, *Rear Window*, *Sunset Boulevard*, *Some Like It Hot*. In addition, each student will be required to complete an independent review of a film of critical substance from the list of suggestion or of a substantive film of his/her choice subject to teacher approval. Suggested Entry Criteria: A written essay to be evaluated by the instructor upon sign up.

PA7210 String Orchestra Grades 9, 10, 11, 12 5 Points

In this course, students will develop instrumental and ensemble skills through such standards as: performing with expression and technical accuracy, exploring a large repertoire of ensemble literature representing various genres and historical periods and acquiring the knowledge of the technical vocabulary of music. Pianists may elect this course only by permission of instructor.

PA7110 Honors String Orchestra Grades 9, 10, 11, 12 5 Points

In this honors level courses, students will develop advanced instrumental and ensemble skills through such standards as: playing in a small ensemble, playing music of an advanced degree of difficulty and being encouraged to perform *solo*. The honors orchestra performs music from the Baroque period to contemporary popular selections and is aligned with the Massachusetts Arts Frameworks and core concepts. **Entry Criteria: Audition**

PA7105 Symphonic Band Honors

PA7205 Symphonic Band Grades 9, 10, 11, 12 5 Points

This Symphonic Band course is open to all instrumentalists and is aligned with the Massachusetts Art frameworks and core concepts. Students will explore various musical styles and historical periods through such standards as playing with expression, playing with technical accuracy and demonstrating well-developed ensemble skills. Pianists may elect this course only by permission of instructor. Students wishing to take this course at Honors level (PA7105) must qualify by audition, perform a selection approved by the instructor at the end of each marking period and study privately.

PA7220 Jazz Band Grades 9, 10, 11, 12 2 Points

The Jazz Band course is open to all qualified instrumentalists and is aligned with the Massachusetts Arts Frameworks and core concepts. Students will explore various musical styles from early Jazz to Latin and fusion through such standards as playing with expression, playing with technical accuracy and demonstrating well-developed ensemble skills. Students will also be encouraged to improvise in different styles. All Students electing this course must be members of either the Symphonic Band, String Orchestra or Mixed Chorus.

Required Entry Criteria: Audition

PA7225 Mixed Chorus Grades 9, 10, 11, 12 5 Points

Mixed Chorus is a course that is open to all students with no audition requirements. This course is aligned with the Massachusetts Arts Frameworks and core concepts. Students will explore various musical styles and historical periods through such standards as singing with expression, singing with technical accuracy and performing music written in four or more parts. They will also demonstrate the ability to read a vocal score and develop audience skills relating to listening and responding appropriately in classroom, rehearsal and

performance settings. In addition, attention will be given to developing proper tone, breath control, vocal range and self-confidence. **Attendance at all performances is a requirement of this course.**

PA7226 Women's Choir

Grades 9, 10, 11, 12

5 Points

Women's Choir is a course open to all and is aligned with the Massachusetts Arts Frameworks and core concepts. Students will explore music written for the female voice through such standards as singing with expression, singing with technical accuracy and performing music written in three or more parts. They will also demonstrate the ability to read a vocal score as well as develop ensemble skills. **Attendance at all performances is a requirement of this course.** **Entry Criteria: Permission of the instructor**

PA7125 Madrigal Singers

Grades 9, 10, 11, 12

5 Points

In this Honors level course, students will further explore the Massachusetts Arts Frameworks and core concepts. Students will develop advanced vocal skills through such standards as: singing in small ensembles, singing music written in more than four parts, singing music with an advanced degree of difficulty and performing from memory. An *a cappella* group, the Madrigal Singers will perform music from the 16th Century to contemporary popular selections. **Attendance at all performances is a requirement of this course.** **Entry Criteria: Audition**

Music Technology

Teaching music through technology is one of the fastest growing areas of music education. Students use technology in many aspects of their lives and this program will provide them with the tools to create music and further support our mission of creating life long music makers. Music technology reaches a broad group of students and gives them the opportunity to create, change and form sound in new ways. Working in the lab is a perfect example of differentiated instruction. Under the guidance of the teacher students will forge their own path after receiving a common, basic-level of music technology knowledge (Intro to Music Technology).

The AHS Lab is equipped with the following programs:

Band-in-a-Box, Sibelius (notation), Aurelia Ear Training, Music Theory Ed.

The following are just a few of the many concepts that will be taught:

- Music Literacy
- Sound systems
- Commercials design
- Piano skills
- Song writing
- Midi Sequencing
- Recording (producing cds)
- Create sound effects (record sounds in their environment, feed into the computer and then manipulate them to make new sounds)

****Students will be able to save their assignments in an electronic portfolio that could later be included in college application***

****This lab can also support the existing performance ensembles through ear training and literacy.***

All of the national standards are met through music technology classes.

The Nine National Standards for Music

1. Singing, alone and with others, a varied repertoire of music.
2. Performing on instruments, alone and with others, a varied repertoire of music.
3. Improvising melodies, variations, and accompaniments.
4. Composing and arranging music within specified guidelines.
5. Reading and notating music.
6. Listening to, analyzing, and describing music.
7. Evaluating music and music performances.
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relation to history and culture.

PA8200 Intro to Music Tech. (half year course) Grades 10, 11, 12 2.5 Points

This course is required before a student may take any other in music technology. Students will be introduced to the study of music technology, the equipment and to the programs offered in our lab. Instrument and equipment care will be included.

Students will complete 'mini' projects in each of the programs.

PA8201 Piano I (half year course) Grades 10, 11, 12 2.5 Points

This course is designed for the student with little or no experience playing the piano. Students will learn proper technique, note-reading and basic music theory.

Possible text: *Adult Piano Adventures by N&R Faber*

Requirement PA8200 Intro To Music Technology

PA8202 Songwriting I (half year course) Grades 10, 11, 12 2.5 Points

Students will create a song from scratch. They will learn about musical form, basic mixing techniques, song construction and more.

Requirement PA8200 Intro To Music Technology

Each class has a seat limit of 20 students.

FAMILY AND CONSUMER SCIENCES

All courses in the Department of Family and Consumer Sciences address Massachusetts Health Frameworks Standards as well as National Standards for Family and Consumer Sciences. Family and Consumer Sciences is all about “learning for living.” We offer courses to help both young men and women develop a variety of personal and career skills. Many classes are in laboratory settings that provide opportunities for learning by demonstration, practical hands-on experiences, observation and discussion. These courses encourage accomplishment through work in small groups and in individual projects. The skills learned in our classes will be useful to students now and throughout their lives.

LEVEL	COLLEGIATE 1	UNWEIGHTED
Grade 9, 10		CS1950 Teen Living
Grade 9, 10, 11, 12	CS2240 Early Childhood Education I	CS1906 Exploring Chefs, Hospitality and Tourism Careers CS1920 Fashion Design and Construction I/ Interior Design and Decorating I
Grades 10, 11, 12	CS2240 Early Childhood Education I	CS2905 Culinary Arts I CS2920 Fashion Design and Construction II/ Interior Design and Decorating II
Grades 11, 12	CS3240 Early Childhood Education II CS3101 Early Childhood Education II Honors Level CS3109 Early Childhood Education: Children with Special Needs	CS3905 Culinary Arts II CS1960 Young Adult Living I CS1997 Cooking Up Culture CS1998 Life Beyond High School CS1999 Food Science
Grade 12	CS4240 Early Childhood Education Practicum CS4101 Early Childhood Education Practicum Honors Level CS3109 Early Childhood Education: Children with Special Needs	CS4905 Culinary Arts Management CS2960 Young Adult Living II CS1999 Food Science

CHILD DEVELOPMENT

Students interested in pursuing careers working with young children as early childhood or elementary school teachers, daycare providers, child psychologists, pediatricians, social workers, etc. will find the courses in this program most valuable in preparing them for their professional lives either working immediately after high school or by continuing the study of Early Childhood in college. Students will learn about the development of children through a variety of classroom and preschool lab activities. Students will gain invaluable experience and insight into the roles of parents, teachers, and other professional who work with young children.

Students who complete the course requirements for Early Childhood Education I, Early Childhood Education II, and Early Childhood Education Practicum meet the requirements for EEC (Office for Early Education and Care) certification. This certification allows individuals to work in private early childhood programs as teachers. Students will be awarded a letter documenting their participation upon completion of requirements.

It is strongly recommended that all students who are interested in achieving the EEC certification take their Art requirement freshman year. The course sequence necessary for the certification can and should be taken during Gr. 10, 11, and 12.

CS2240 Early Childhood Education I Grades 9, 10, 11, 12 5 Points

Although all students are welcome, this elective course is especially designed for students who are interested in pursuing careers in early childhood and elementary education and care or other fields working with children. Students study the development of children from birth to age 5 with a strong emphasis on early childhood curriculum and programs. There will be a focus on current research of brain development, different learning styles, and theories of development, teaching, and learning. The study of children will be accomplished through class readings and discussion, research projects, observations in early childhood programs, media presentations, and hands-on experience working with three and four year old children in Menotomy Preschool. Students apply their knowledge of developmentally appropriate activities for young children by planning, implementing, and evaluating activities for the preschool children in all curriculum areas.

CS3240 Early Childhood Education II Grades 11, 12 5 Points

This challenging and rewarding class gives you the opportunity to begin working with children in Menotomy Preschool on a regular basis. You will write and implement lesson plans, create educational games, teach simple math, language arts, social studies and science concepts, explore music and movement activities, and develop creativity through art. You will apply these skills directly with the children on a rotating basis every other week. Bi-weekly class discussions and planning times give you the opportunity to evaluate your progress, discuss the children's growth and needs, and continue planning for the next teaching session.

Entry Criteria: Successful completion of Early Childhood Education I and Lead Teacher approval.

CS3108 Early Childhood Education II Grades 11, 12 - Honors Level 5 Points

In addition to all of the criteria described in Early Childhood Education II (above), students will work on an independent research project each term to explore an early childhood topic more deeply. Teacher and student will choose a topic together that is relevant and meaningful and related to the student's interests.

Entry Criteria: Successful completion of Early Childhood Education I and Lead Teacher approval.

CS4240 Early Childhood Education Practicum Grade 12 10 Points

This course is for students who have already taken Early Childhood Education I and II and are ready for considerable responsibility applying and practicing your teaching skills in the preschool on a regular basis. You will experience the fun and challenge of working with three and four year old children in the Menotomy Preschool Program as you become involved in all aspects of preschool teaching including planning and implementing activities with the children, interacting with them, and supervising and ensuring their safety. For those students who are planning to enter the field of childcare after high school or who will pursue a college degree in education or another child related field, this course provides an invaluable opportunity for first-hand experience in teaching.

Entry Criteria: Successful completion of Early Childhood Education II and Lead Teacher approval.

CS4101 Early Childhood Education Practicum Gr. 12 Honors Level 10 Points

In addition to all of the criteria described in Early Childhood Education Practicum (above), students will complete year-long case studies on two preschool children.

Entry Criteria: Successful completion of Early Childhood Education II and Lead Teacher approval.

CS3109 Early Childhood Educ.: Children w. Special Needs 5 credits Gr. 11 and 12

This course is for students who are interested in learning more about and/or working with young children that have special needs. Students will learn about the development of young children and what happens when development does not follow the normal path. Cognitive, social/emotional, and physical disabilities will be studied with a focus on how these children are supported in the classroom. Students will work in early childhood classrooms assisting in the education of these children. Students will also have opportunities to shadow and observe a variety of professionals who work with children with needs such as occupational, physical and speech therapists.

Entry Criteria: Successful completion of Early Childhood Education I and Lead Teacher approval.

FOODS, HOSPITALITY AND TOURISM CAREER PATHS

The exciting worlds of hospitality and tourism are two of the fastest growing and most exciting industries in the world today. This encompasses more than 15 related industries including food service, travel, tourism, and lodging services. This program will give students the opportunity to explore and research the career paths available and participate in shadow programs for a first-hand look at what the professionals in these industries actually do on the job. Students will be given a broad overview of these career paths in the grade 9 course. In the following years, students will have the option of concentrating their studies in a specific related career path. Students in this program will be provided assistance in finding job opportunities in community based restaurants.

The foods and nutrition courses provide opportunities for students to develop skills in food preparation techniques, meal planning, consumerism, and nutrition planning. Not only will the skills taught in these courses be important to students as they become adults, they will provide opportunities for them to explore the various career options available in the food industry. All courses meet related standards in the Health Frameworks.

CS1906 Exploring Chefs, Hospitality and Tourism Careers Gr. 9 – 12 -5.0 points

In this course, you will explore the wide range of career and business opportunities available in this billion dollar industry through a variety of hands-on activities, discussions, field trips, guest speakers, readings, and research projects. Learn what professionals do in these fields by preparing foods, “arranging trips”, planning functions, and comparing features of all areas of the hospitality and tourism industry. Find out what this industry can offer you as you consider your future career options.

CS2905 Culinary Arts 1

Grades 10, 11, 12

5 Points

This elective course is for students who are interested in pursuing a career in the field of culinary arts or nutrition or simply for those students who enjoy the art of food preparation. Students will study and apply food preparation techniques using a variety of methods, appliances and equipment. Knowledge of nutrition concepts will be used to design, analyze, and evaluate menus for themselves and others. Fundamentals of baking and knowledge of the science of food and nutrition will be incorporated. Students will be taking an experimental path in some labs to see what happens to baked goods when various ingredients, temperature, equipment and methods of preparation are altered from the norm. They will engage in product development, learn to prepare some recipes in production method style, and analyze nutritional content via computer technology. Students will be evaluated through a variety of hands-on activities, projects, presentations, demonstrations, and lab experiences to demonstrate their understanding of food and nutrition concepts. Students will also participate in a shadow program to learn first-hand the qualities, skills, and knowledge necessary to be successful in foods related careers.

CS3905 Culinary Arts II

Grades 11, 12

10 Points

This course is for students who are interested in quantity food preparation and in the food service industry as a possible career option. Students will prepare a variety of take-out items that are sold to staff. Through this program, students will experience large scale food planning and preparation, elements of food service, nutrition, consumer education, sanitation, use and care of commercial equipment, marketing procedures, inventory and personnel management. This course will allow students to explore many aspects of the food service industry, develop skills, and gain confidence in his/her ability to perform in this field. Emphasis is placed on how to work cooperatively with classmates as part of a team and to develop skills and behaviors necessary to be successful in the workplace. Students will learn to convert and prepare recipes for mass production, describe and follow all sanitation rules applicable to food service operations, develop menus, analyze meals for nutritional value and content, and work cooperatively with individuals and groups.

Entry Criteria: Successful completion of Culinary Arts I with teacher recommendation.

CS4905 Culinary Arts Management Grade 12 5 Points

If you really enjoy food preparation and quantity cooking and want to learn more about restaurant management and operations, this is the course for you. Students who have successfully completed Culinary Arts I and II, are ready for more classroom responsibility, and would like to develop and practice management skills will find this course the perfect way to do so. If you are considering a career in culinary arts, this class is a must for you.

Entry Criteria: Culinary Arts I and II, and teacher recommendation.

CS1997 Cooking Up Culture!

Semester Course Grades 11 and 12 2.5 points

Take a tour around the world through the local cuisine of people and countries both near and far. Explore other cultures and traditions through recipes, cooking methods, and the study of different lifestyles and traditions.

CS1999 Food Science CP1 Grades 11 and 12 5 points

Have you ever eaten your science experiment? Did you ever wonder what makes popcorn pop? What foods contain live bacteria? What is lecithin and why is it in our food? In this course you will learn to use the scientific method as you study the biological and chemical basis of food and nutrition. You will apply scientific principles used in food preparation and nutrition. Topics will include biochemical compounds, mixtures, chemical reactions, nutrition, digestion, metabolism, nutrients, microbiology in food processing, as well as the chemistry of food preparation. The course will give the student an understanding of nutrition, calories, and metabolism necessary for maintaining healthy dietary habits.

Suggested criteria: Passing grade in Biology.

This course can count towards a science requirement, with principal permission or as recommended in an IEP or 504 plan.

YOUNG ADULT STUDIES

CS1950 Teen Living Grade 9 and 10 5 points

This is a course ABOUT YOU! This course is designed to help you meet the challenges of daily life. Through discussions, guest speakers, group work, and hands-on activities, you will explore ways to better understand and address the issues and challenges you face during your high school years. It will help you develop a range of skills related to interpersonal relationships, understanding yourself better, and discovering your strengths, values, and interests. Class discussions will allow you to share your thoughts and ideas on a variety of topics with your classmates. You will learn how to set goals, how to manage your time better, and how to balance family life with school, friends and extracurricular activities. Basic skills such as managing money and time, getting organized, finding a job, asserting your rights as a citizen, and planning for your future will be addressed.

CS1960 Young Adult Living I Grades 11, 12 5 Points

As a young adult, you will have many decisions to make related to your personal and professional life. This course will help you make intelligent and informed decisions related to adolescent issues, dating, family life, relationships, personal health, consumerism, housing, finances, nutrition, home management, careers and others. Students in the class will have the opportunity to provide input into topics of interest to be addressed in the

curriculum. Activities in the class will include discussions, field trips, guest speakers, videos, and development of a personal portfolio.

CS2960 Young Adult Living II

Grade 12

5 Points

The focus of this course is life management. Using the background knowledge and skills developed in Young Adult Living I, students will explore the process of reaching goals through the effective use of human and material resources. The management of relationships, roles, communications, family systems, community resources, education, career, financial systems, and housing will be the major in depth areas of study. All junior and senior young men and women who have taken Young Adult Living I are welcome into this course.

Entry Criteria: Young Adult Living I

CS 1998 Life Beyond High School: College, Work, Finances, and Decisions

Semester Course

Grades 11, 12

2.5 points

This course is designed to help you make a successful transition from high school to life beyond. Emphasis will be placed on the life skills necessary for making it on your own. Some topics will include the college and scholarship application process, searching and applying for a job, stress management, managing finances including personal budgets and financial planning, getting out on your own, and personal health and safety.

FASHION AND INTERIOR DESIGN

Are you creative? Do you have a flair for design? Do you find yourself examining room designs and fashions and thinking of ways you would add your own creative touch? If you do, then Interior Design and Fashion Design are for you. Come explore color theory and the elements and principles of design as they apply to room interiors and fashion. Use your talents and skills to discover the designer in you. These courses are elected in tandem and can be elected for two years, the second year at an advanced level.

******These courses fulfill the Fine Arts graduation requirements.**

CS1920 Fashion Design and Construction/Interior Design and Decoration I Grades 9-12 5 Points

The first half of this course enables students to explore their creativity in the field of Interior Design by focusing on color, the elements and principles of design, room arrangements and floor planning. Students will gain an appreciation of the design fundamentals that form the foundation for which all design is judged. Opportunities for using computer aided design software will be available. Students will learn how to manipulate and apply the tools of design in a variety of situations in the home to create beautiful environments through hands-on projects, field trips, and guest speakers. The second half of this course will focus on fashion where students will develop an awareness of the role of clothing, textiles and fashion in our daily lives. The social, psychological, cultural and environmental aspects of clothing will be explored along with marketing strategies. Students will learn theory and will develop and apply their design skills through a variety of hands-on projects and experiences. They will explore the different career paths available to them in the fields of Interior and Fashion Design through field trips, guest speakers, and shadow experiences.

CS2920 Fashion Design and Construction/Interior Design and Decorating II Grades 10-12 5 Points

Students will apply more advanced design techniques as they create more complex room designs. 3-D home design software will be used to apply the knowledge and skills obtained in the introductory course for designing more sophisticated room environments. The study of background materials, lighting, flooring, furniture and architectural styles will be explored. Students will design their own line of clothing and accessories along with a marketing plan to promote their products using technology to facilitate this process. Students will study merchandising and the various careers related to fashion, merchandising, and design. Students will continue to explore the various career paths available in these areas and will be provided an opportunity to participate in shadow experiences.

Entry Criteria: Successful completion of CS 1920.

ENGLISH

LEVELS	AP/ HONORS	ADVANCED	COLLEGIATE 1	COLLEGIATE 2
Grade 9	EN1105 Foundations of English	EN1110 Foundations of English	EN1215 Foundations of English EN1220 Foundations of English Double Literacy Block	
Grade 10	EN2105 Literary Heritage	EN2110 Literary Heritage	EN2215 Literary Heritage EN2216 Literary Heritage Double Literacy Block	
Grade 11 NOTE: Grade 11 Electives do not replace American Literature requirement	EN3000 AP Language and Composition EN3105 American Literature EN7120 Literature of War & Nazi Genocide, EN7205 Journalism (elective)*	EN3110 American Literature EN7110 Literature of War & Nazi Genocide (elective)* EN7130 Multicultural Literature	EN3215 American Literature EN7205 Journalism EN7230 Multicultural Literature (elective)*	EN3320 American Literature
Grade 12	EN4105 British & World Literature EN7120 Literature of War & Nazi Genocide EN4000 AP English EN7105 Journalism EN4140 Creative Writing/Short Story EN 4138 Irish Literature: Identity Beyond Conflict EN4042 Her Story – Women’s Trials and Triumphs In Literature EN4512 Science Fiction	EN4110 British & World Literature EN7130 Multicultural Literature EN7110 Literature of War & Nazi Genocide	EN4215 British & World Literature EN4240 Creative Writing/Short Story EN7205 Journalism EN 4238 Irish Literature: Identity Beyond Conflict EN 4242 Her Story – Women’s Trials and Triumphs In Literature Science Fiction EN4511 Science Fiction	EN4320 British & World Literature

The English Department seeks to engage students with the joy of connecting with literature across many cultures, time periods and worlds. Classes are designed to foster clear thinking, fruitful discussion, respectful collaboration, active listening and the improvement of student writing and reading. To these ends, all teachers monitor student growth in the English language arts through a student writing portfolio in which students reflect on their progress as writers and thinkers. The writing portfolio exhibiting student work is sent home in June; parents can request a copy of writing pieces or schedule a conference with their child’s teacher to discuss progress at any time.

- English courses are offered at varying levels to enhance the proficiencies of our students. See Page 5 for delineation of the suggested skills required for success at a particular course level.
- All students must pass English 9, 10, 11, and 12. Students who fail English 9 or 10 must master the course material prior to entering the next course in the sequence.
- Grade 11 electives do not satisfy the American Literature full year requirement. Elective courses may be taken in addition to American Literature. American Literature is a required course for all students.
- A full year of English must also be selected in Grade 12. Grade 12 students can choose a full year course to meet their senior year English requirement, or select two half year courses such as *Her Story*, *Irish Literature*, or *Science Fiction* to complete a full year of senior English. Students who choose a full year English course can also supplement their English choice by taking an additional half-year elective course, such as *Her Story-Women's Trials and Triumphs In literature*.
- Students who take more than one English course should carefully consider their ability to meet the reading and writing requirements of courses since all senior English courses require substantial reading, writing, and research. Research for the senior paper commences in the fall with the senior English teacher.

Suggested Entry Criteria for Freshman Honors Courses

1. The eighth grade English teacher's recommendation for Honors Grade 9 placement
2. The student can successfully compose a five-paragraph essay focused on a specific prompt without teacher support. If a student is entering from another district, writing samples from that district as well as a recommendation for Honors English by the grade 8 English teacher should be provided to the guidance counselor and English Chair for appropriate placement.
3. The student demonstrates consistent, punctual completion of assignments
4. The student has strong study, organizational and reading skills
5. The student has a positive attitude toward learning
6. The student willingly takes responsibility for his/her learning
7. The student has the ability to:
 - Complete rigorous research independently
 - Write coherent, logical and mechanically correct essays
 - Retain factual information
 - Initiate and participate actively in class discussions
 - Reason abstractly and think symbolically
 - Effectively manage his/her time and completion of assignments.

Summer Reading

The summer reading program is required for all students at Arlington High School. While it is expected that Arlington High School students will read several books over the summer, two or more books are required in every course for completion before September. Summer reading adds greater depth and breadth to the student's study of literature by including works of literature that reach beyond the curriculum. Further, summer reading introduces students to new works by contemporary authors, including nonfiction, biographies and autobiographies. The summer reading program also assists students in maintaining reading skills year round. During the summer students encounter texts that connect to the content of their upcoming courses. Students of **all ability levels are required to read at least two texts** and come to class ready to discuss the texts in September. Teachers will assess your child's summer reading through graded discussions, writing assignments and creative projects. **The**

summer reading grade comprises 10% of the first quarter grade. Look for the summer reading program brochure posted each spring on our web site and distributed to each student in English classes.

ADVANCED PLACEMENT SUMMER READING

In addition to the regular Grade 11 summer reading texts, students electing Advanced Placement Language and Composition are required for entry into the AP course. Similarly, in addition to the Grade 12 texts, students in Advanced Placement English Literature are required to read **two AP texts** over the summer and complete AP style essays, which are *required* for the AP course. These texts will be discussed in September and are connected to AP writing prompts. AP students must be sure to obtain the AP summer reading packet in June before they take an AP course. AP summer reading packets can be obtained in the English office, or viewed and printed on the English web page. **Particulars of the complete AHS summer reading program are on the AHS web site and can be obtained in hardcopy at the Main Office or through the English or Guidance Dept. Offices.**

English 9 Foundations of English

EN1105 Foundations of English Honors

EN1110 Foundations of English Advanced

EN1215 Foundations of English Collegiate 1

5 Points

English 9 presents the careful reading and discussion of the major literary genres including poetry, non-fiction, drama, the short story, and the novel. Core works are: The Odyssey by Homer, The Tragedy of Romeo and Juliet by William Shakespeare, and Great Expectations by Charles Dickens. Students explore these as well as various supplemental texts to examine the nature of human conflict. Supplementary texts are: *The Lord of the Flies*, *Ellen Foster*, *The Old Man and the Sea*, *House on Mango Street*, and *Monster*. Other major emphases include: MCAS preparation, instruction and review of grammar, mechanics and usage, vocabulary development, responsible research, literary analysis and creative writing. Writing is taught in conjunction with reading. Students learn approaches and strategies for process writing, creative writing, and writing on demand. Compositions are kept in a writing portfolio. Students regularly reflect on their growth as writers and thinkers. Library skills, organizational skills and technology use are important facets of the course. Students who choose to study at the Honors level should expect substantial reading, homework, and minimal scaffolding of assignments and projects.

EN1220 Foundations of English Collegiate I Double Literacy Block Grade 9 10 Points

This course is designed for students who may have difficulty succeeding on the grade 10 ELA MCAS examination as indicated by their performance on their grade 7 or 8 MCAS examinations and their performance in grade 8 English. The goal of this course is immersion in the writing and reading processes. This course adheres to the same curriculum and materials studied in single period Foundations of English. In Double block the student receives direct instruction in reading comprehension, study skills, discussion techniques and test-taking strategies in addition to daily writing. Double block English affords the teacher and student the time and opportunity for technology instruction, lengthier discussions, mini-lectures, group activities, pre-writing support, use of graphic organizers, writing workshop and writing conferences.

English 10 Literary Heritage

EN2105 Literary Heritage

EN2110 Literary Heritage Advanced

EN2215 Literary Heritage Collegiate 1

5 Points

English 10 is a full year course blending literary and analytical skills gained in 9th grade while focused on masterworks of World Literature. Representative works are: Shakespeare's Julius Caesar and Twelfth Night, A Tale of Two Cities, Fences, A Separate Peace, and To Kill A Mockingbird. Students at the honors level read two texts of Shakespeare as well. Students explore how an individual contains integrity in a complex society. Students write creative and analytical essays for each major genre studied, and they maintain a reflective writing portfolio to monitor their growth as writers and thinkers. Integration of evidence and quotations from texts into student writing is emphasized. Students continue to work on: vocabulary-building, extending their essays with greater length and detail, using technology for research, learning and reviewing grammar fundamentals, acquiring an understanding of literary elements and genres as well as public speaking. MCAS test-taking strategies are

taught to prepare for the English Language Arts MCAS exam given in the spring of the sophomore year. Students who elect to study at the Honors level should expect substantial homework and minimal scaffolding.

EN2216 Literary Heritage Double Literacy Block 10 Points

Double literacy grade ten presents the same curriculum of single literacy block English over two blocks of English. This course is designed for students who may have difficulty succeeding on the grade 10 ELA MCAS examination as indicated by their past MCAS performance or by their grade 9 reading and writing classroom performance. The goal of this course is immersion in the writing and reading processes through writer's and reader's workshop and direct instruction in how to succeed as a student. A key text beyond the literature in the grade ten curriculum is Sean Covey's *7 Habits of Highly Effective Teens*. In Double block the student receives direct instruction in reading comprehension, study skills, discussion techniques and test-taking strategies in addition to daily writing. Double block English affords the teacher and student the time and opportunity for technology instruction, lengthier discussions, mini-lectures, group activities, pre-writing support, use of graphic organizers, writing workshop and writing conferences in a caring and supportive classroom community. Students can enter this grade ten course based on their grade 9 teacher's recommendation or parent choice.

Suggested Entry Criteria: See Page 5 – Indicators of Course Levels

English 11 American Literature

EN3000 Advanced Placement Language and Composition

EN3105 American Literature Honors

EN3110 American Literature Advanced

EN3215 American Literature Collegiate 1

EN3320 American Literature Collegiate 2

5 Points

The English 11 full-year American Literature program is a survey of major American writers from colonial times to the modern day. Core texts include: The Scarlet Letter, The Crucible, Ethan Frome, The Great Gatsby, as well as Steinbeck's Of Mice and Men or The Grapes of Wrath. These works are richly supplemented by various short stories, poems and essays as teachers emphasize close reading of texts, use of evidence and detail in writing and research. In this course students explore the essential questions: *What does it mean to be American? and, How does the American Dream change over particular literary and historical periods?* Students write critical and creative papers related to each work studied, broaden their vocabulary to prepare for the PSAT and SAT exams, and learn more sophisticated sentence structure while working on correct usage and mechanics. Student analytical writing and writing on demand is maintained in a cumulative writing portfolio as students and teachers reflect on writing growth.

Suggested Entry Criteria: See Page 5 – Indicators of Course Levels.

EN 3000 Advanced Placement Language and Composition Grade 11

5 Points

AP Language and Composition is intended for juniors who have demonstrated proficiency in composition and literary analysis and are ready to engage in college-level study of more sophisticated writing and effective rhetoric. The course will emphasize an awareness of purpose and audience, the tools of effective argument, the elements of style, and the use (and misuse) of language. Although students will read the core texts of the American Literature canon, such as *The Scarlet Letter*, *The Great Gatsby*, *The Grapes of Wrath*, and *The Crucible*, greater emphasis will be given to classic essays, speeches, political tracts, and literary criticism from such authors as Benjamin Franklin, Frederick Douglass, Henry David Thoreau, Eudora Welty, Malcolm X, Martin Luther King, Jr., Maya Angelou, Susan Sontag, and John Updike. Through close analysis of these texts, students will more skillfully approach the expository, analytical, and argumentative writing that forms the basis of academic and professional communication, as well as the personal and reflective writing that fosters the development of writing facility in any context. AP students will be expected to read deeply, prepare oral presentations, deliver speeches, teach lessons, and debate frequently. Students will also enrich their vocabulary in preparation for the SAT. Suggested entry into the course is attained by endorsement of the sophomore year English teacher who can attest to the student's work ethic, skill, and enthusiasm. Completion of the **AP Language and Composition** summer reading packet is essential preparation for the course. **AP students are required to take the College Board's National Advanced Placement Language and Composition examination in May.**

English Grade 12

In order to graduate, the senior must be enrolled in and pass a full year of senior English extending from September to June. Students may elect 2 senior English electives to satisfy the senior English requirement, or take a half-year elective in addition to their full year English course. A senior research paper or culminating project is required at all levels and in all courses. In the fall, attention is given to the composition of the College Essay and the final administration of the SAT.

EN4000 Advanced Placement English

5 Points

Advanced Placement English is intended for seniors who have attained the reading and writing skills generally expected in introductory college courses in composition and literature and who will be ready for more highly specialized courses when they arrive in college. In this course the teacher acts as a discussion leader, questioner, critic and scholar, guiding the members of the class to assume much of the responsibility for their reading and research. Close study of a variety of works from the British literary canon takes place including works of Dickens, Shakespeare, Shelley, Conrad, Orwell, Milton, Joyce and Chaucer. Since contemporary and world authors also figure largely on the Advance Placement exam each May, authors such as Gabriel Garcia Marquez, Seamus Heaney, Fyodor Dostoevsky, Toni Morrison, Ralph Ellison and Eavan Boland are also studied. AP students are asked to read carefully and deeply, prepare oral presentations, deliver soliloquies, teach parts of the class and debate frequently. The College Essay is an integral part of coursework in September. Suggested entry into this course is attained by written endorsement by the junior year English teacher who can attest to a student's work ethic, and demonstrated organizational skills. Completion of the 3-book AP summer reading packet is an essential preparation to the course. **AP Students are required to take the College Board's National Advanced Placement examination in May.**

EN4105 British and World Literature Honors

EN4110 British and World Literature Advanced

EN4215 British and World Literature Collegiate 1

EN4320 British and World Literature Collegiate 2

5 Points

English 12 full year focuses on a chronological survey of major British writers ranging from Beowulf to contemporary authors. An Anthology serves as the center of the reading materials along with several full-length paperbacks as students explore the nature of good and evil. Students will read Shakespeare's Macbeth, Othello or Hamlet, as well as Frankenstein, Gulliver's Travels, Mort D'Artur, Brave New World, 1984, Hard Times along with selections from the world canon such as Ibsen's A Doll's House. A unit of poetry, supplementary essays, and plays are analyzed. Critical and creative papers are written in conjunction with major works or units. Analytical papers are evaluated for their coherency, logic and evidence marshaled to support the thesis. Students study vocabulary to enhance their fluency as writers and readers as they prepare for the final administration of the SAT. Participation, presentations, and public speaking are important features of this course. Practice in writing college application essays are part of the first semester and a senior research paper is required. Suggested Entry Criteria: See Page 5 – Indicators of Course Levels

EN7120 Literature of War & Genocide Honors Grade 11 elective or Grade 12 5 Points

EN7110 Literature of War & Genocide Advanced Grade 11 elective or Grade 12 5 Points

Theodore Adorno reflected that after Auschwitz there can be no poetry. Provocative and disturbing, this statement is in practical terms, false. Since the Holocaust and other world genocides there has been a proliferation of artistic materials in the form of fiction, poetry, visual art, film, videos and television, music and theatre, which attempts to provide a moral response to the experience of genocide. This course provides varied reading of major dramatic value and engages the student with the ethical issues of the Holocaust and other genocides, including Armenia, Cambodia, Bosnia, Sudan, and Rwanda. Japanese internment in the United States during WWII is also studied. Attention will be paid to the College Essay, as well as vocabulary development in preparation for the final administration of the SAT. All students will write a senior research project exploring the themes of the course. Readings may include The Cannibals, Bent, Kindertransport, Who Will Carry the Word?, When the Emperor Was Divine, Sisters Matsumoto, Farewell to Manzanar, Hiroshima, The Sunflower, and graphic novels such as Art Spiegelman's Maus.

EN7130 Multi-Cultural Literature Advanced Grade 11 Elective or Grade 12 5 Points

EN7030 Multi-Cultural Literature Honors Grade 11 Elective or Grade 12 5 Points

In an enlightened multi-cultural society, individuals will retain their original identity as well as enrich their lives with exposure to other culture. To survive, humanity needs a multi-cultural society in which individuality is encouraged, all cultures can flourish and teamwork is the norm. Through multi-cultural literature students will become familiar with cultures other than their own. The characters in the literature inform us of the circumstances of their lives, as we understand their voices. Students learn to identify, analyze, and apply knowledge of the characteristics of various genres. Moreover, students provide evidence from various texts to support their understanding of fiction, non-fiction, or informational material through reading, writing, journaling and discussion. Students learn to think critically about race, ethnicity, and culture. Attention to the college essay and vocabulary development for the final administration of the SAT are also part of the course. Moreover, a senior research paper/project is a required component of the course. Readings may include: Arranged Marriage, The Spirit Catches You and You Fall Down, Interpreter of Maladies, Passing, Let's Not Go to the Dogs Tonight, Balzac and the Little Chinese Seamstress, Waiting for Snow in Havana, and New Boy

EN4240 Creative Writing/Short Story Collegiate 1 Grade 12 5 Points
EN4140 Creative Writing Honors Grade 12 5 Points

Creative writing is a course for students who like to write and who wish to improve their creative expression. Students will keep journals of ideas for polished pieces of writing and will practice both the art of inspiration and revision in producing finished pieces. Models of personal essays, poetry and fiction will be studied for the purpose of understanding the writer's craft in various genres. The interconnectedness of reading and writing will be explored through point of view, voice and audience. The class will write like readers and read like writers. During the study of personal essay writing, practice will be given to writing the College Essay. Key readings are: Moffet's Points of View, A Gathering of Old Men, Slaughterhouse Five, and The Bluest Eye. In the fall quarter, attention is given to SAT preparation and composition of the College Essay. Students select, design, and complete a Creative Writing senior project before graduation.

EN7205 Journalism Collegiate 1 Grade 11 Elective or Grade 12 5 Points
EN7105 Journalism Honors Grade 11 Elective or Grade 12 5 Points

This course can supplement junior English courses, or it may fulfill the senior English requirement at the CPI level. Journalism can be elected at the Honors level through arrangement with the instructor. This will entail additional projects and responsibilities. Journalism introduces students to the many aspects of print and non-print media. The focal point is newspaper journalism which includes newspaper writing, human-interest stories, sports writing, feature stories, art and music reviews, and editorial. This course starts with a brief history of newspapers and also covers advertising, photography and broadcast journalism. Newspaper layout and production are taught through writing and production of Arlington High School's newspaper, The Ponder Report. This course offers students the opportunity to have hands-on experience covering stories and publishing them. Field trips in conjunction with Mass Media students visit local media shops. This course extends full year to continue newspaper production, writing, distribution and promotion. Students actively communicate and collaborate with local businesses to write newspaper advertisements. Additionally, students explore contemporary issues that face journalists today such as ethics, free speech, and censorship. A summer reading list is required. SAT preparation is part of the course, as is composition of the college essay.

EN4238 Irish Literature: Identity Beyond Conflict Collegiate I Fall or Spring Sem. 2.5pts.
EN4138 Irish Literature: Identity Beyond Conflict Honors Fall or Spring Sem. 2.5pts.

Starting with the stories of conflict in our Irish American community of South Boston, this course will examine the ways contemporary Irish writers explore conflict, identity, inclusion and exclusion. Students will explore the way Irish writers and filmmakers depict family, land/space, division and dreams as they shape political and personal lives. In addition, we will examine the different ways myth and history have sometimes merged, and in the process, fostered or even obstructed peace. A key component of the course will be an examination of The Troubles in Northern Ireland from 1969 through 1998, and from 1998 to present day through literature and case study. Embedded in the course is an optional fee-based trip to Ireland and Northern Ireland that includes a home stay with Northern Irish families.

Autobiographical texts include *All Souls* and sections from *Easter Rising* by Michael Patrick Macdonald, and *Angela's Ashes*. By Frank McCourt. We will study the poetry of Seamus Heaney, Eavan Boland, W.B. Yeats, Ciaran Carson and Paula Meehan; the plays of Brian Friel and John B. Keane; and the full-length works of Roddy

Doyle, Sebastian Barry. Short stories from Bernard MacLaverty, Liam O'Flaherty, Maeve Kelly, and Edna O'Brien. Students will read and present on topics of Ireland, focusing mainly on the Twentieth Century. The films *Michael Collins*, *Bloody Sunday*, and *Some Mother's Son*. All students in Grade 12 English engage in a research topic over the course of the year. N.B. Students who are taking a full year of English will complete a research paper for the full year's course. Students who are taking two semester-long electives will begin their research topics in the first semester and write the paper in the second semester. The Fall semester teacher guides students in developing their research topic. The fall course will focus on the college essay, SAT Prep, and vocabulary development. Please note that spring course electives includes completion of a senior research paper connected to the course content.

Her Story- Women's Trials Her Story- Women's Trials and Triumphs in Literature Fall or Spring Semester
2.5 Points

Collegiate EN4242 & Honors EN4042

"I myself have never been able to find out precisely what feminism is. I only know that people call me a feminist when I express sentiments that differentiate me from a doormat." --Rebecca West

In this course, students will study the history of the women's movement and feminism. Students will also explore women's experiences by reading literature by women, about women. Major units will focus on marriage and motherhood, mental health, the beauty standard, sexual politics, and women leaders. Core texts include "The Yellow Wallpaper," "Story of an Hour," *Smashed: The Story of a Drunken Girlhood*, *The Bell Jar*, *The Bluest Eye*, and *The Tenth Circle*. The course will be richly supplemented with poetry, short stories, essays, films, and guest speakers. Vocabulary building will continue as students prepare for the final SAT administration. Also, students will write critical, creative, and self-reflective essays in addition to the college essay and The Senior Paper, a research paper based on the three-search method.

Science Fiction Fall or Spring Semester (2.5 points)

Grade 11 Elective or Grade 12

Collegiate EN4511 I or Honors EN4512

Ray Bradbury, writer of science fiction, once said, "I don't try to describe the future. I try to prevent it." A unique genre, science fiction expresses our greatest hopes for humanity: increased powers of body and mind, travel through space and time, worlds better than our own. It also explores our greatest fears: the dangers of unbridled technology, the end of the world, the unknown. Surveying a range of classic and contemporary texts, this course will examine how science fiction illuminates society's anxieties and aspirations. Core texts will include *War of the Worlds*, *Dune*, *The Martian Chronicles*, and *Ender's Game*, as well as literature circles and a rich selection of short stories from authors such as Isaac Asimov, Ray Bradbury, Kurt Vonnegut, and Philip K. Dick. We will consider Joseph Campbell's "hero's journey" archetype as well as the philosophical and ethical dilemmas raised by topics such as time travel, teleportation, cloning, and artificial intelligence. Students will encounter a variety of media, including film, television, and graphic novels, and should expect frequent, short writing assignments, both creative and critical. The fall course will additionally focus on the college essay and vocabulary development as students prepare for the final administration of the SATs; the spring course will include completion of a senior research paper connected to the course content.

HISTORY & SOCIAL SCIENCES

The History and Social Sciences Department of Arlington High School seeks to educate students to understand America's history and heritage, to know about the history and heritage of other civilizations and to become aware and active citizens. This will be achieved through the study of the disciplines of history, geography, economics and government.

PLEASE NOTE With the one exception of the non-weighted history teaching internship, students may NOT use a history or social studies class to dovetail with a science lab, and may not miss class to attend science labs.

Required Courses: All students must take and pass Modern World History and United States History I and II in order to graduate from Arlington High School. AP US History may take the place of United States History II.

LEVELS	HONORS/Advanced Placement	ADVANCED	COLLEGIATE 2
Grade 9	Modern World History	Modern World History	Modern World History
Grade 10	United States History I	United States History I	United States History I
Grade 11	AP US History OR United States History II	United States History II	United States History II

The **Advanced Placement** level course is intended to prepare students for a challenging College Board sponsored examination. Students who score a 3, 4, or 5 on this exam will generally receive college credit for the course when attending university. Students in an AP class should have well-developed reading and writing skills and should be prepared for a rigorous academic experience.

The **Honors Level** course encompasses a scholarly approach, a quick pace, essay AND objective examination, a required substantial research project, historical fiction and nonfiction books and historical interpretations of primary source materials.

The **Advanced Level** course encompasses a demanding approach designed to prepare students for a four-year college, a fast pace, essay and objective examinations, a major research project, and examination of secondary and some primary source materials.

The **Collegiate 2** course encompasses a balanced approach, a deliberate pace that reflects the need for substantial development of writing, reading and study skills. Objective examinations are given with some open-response questions, research based project, excerpts from historical fiction and secondary source materials. Students in this level have some academic limitations and require significant instructional support from the teacher in order to succeed in the course.

Grade 9:

SS1105 Modern World History Honors Grade 9 5 Points

SS1110 Modern World History Advanced Grade 9 5 Points

SS1320 Modern World History Collegiate 2 Grade 9 5 Points

The World History course is the first year in a four-year honors sequence. The course aligns with the 2003 History and Social Sciences Framework. Students study major historical events in 19th century and 20th century World History. Among the events studied are the rise of the nation state, nationalism, political revolutions, Industrialism, Imperialism in Africa, Asia and the Americas, world wars, economic depression, the major Isms of the 20th century, Cold War and the multiple conflicts in an increasingly interdependent world. The core knowledge content is drawn from the disciplines of History, Geography, Economics and Government.

Grade 10:

SS2105 United States History I Honors Grade 10 5 Points

SS2210 United States History I Advanced Grade 10 5 Points

SS2320 United States History I Collegiate 2 Grade 10 5 Points

The United States History I course aligns with the 2003 History and Social Sciences Framework and prepares students for the History MCAS examination. Students examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras, the important political and economic factors contributing to the Revolution and the basic ideas of the Constitution eras, the important political and economic factors contributing to the Revolution and the basic ideas of the Constitution and of the American Government. Students trace the development of Westward Expansion, the establishment of political parties, the increase in economic and social change and the impact of the voices of Women, African Americans, Native Americans and Immigrants. Finally, students study the growth of sectional conflict and the Civil War and Reconstruction. The core content is drawn from the disciplines of History, Geography, Economics and Government.

Grade 11:

SS4000 AP United States History	AP	Grade 11	5 Points
SS3105 United States History II	Honors	Grade 11	5 Points
SS3110 United States History II	Advanced	Grade 11	5 Points
SS3320 United States History II	Collegiate 2	Grade 11	5 Points

The United States History II course aligns with the 2003 History and Social Sciences Framework and prepares students for the History MCAS examination. Students will analyze: the Industrial Revolution, America's role in the world, Populism, Progressivism, the New Deal and Great Society, the world wars, the Cold War, Civil Rights and Women's movements and the post Cold War era. The core content is drawn from the disciplines of History, Geography, Economics and Government. Students selecting the AP US History course must take the College Board AP US History course in May in order to receive AP credit for the class.

ELECTIVE OFFERINGS: All electives are open to grade 11 and grade 12 students. Grade 10 students may take elective courses with the permission of the department chair.

LEVELS	Advanced Placement	Honors	Advanced
Grades 11, 12	AP European History AP Psychology (both AP European History and AP Psychology are full year courses)	Full year elective: Symposium on Current World Issues One semester electives: American Law Introduction to Psychology American Citizenship in the 21 st Century Economics International Relations America in the TV Age Race, Society, and Identity	One semester electives: American Law Introduction to Psychology American Citizenship in the 21 st Century Economics International Relations America in the TV Age Race, Society, and Identity
Unweighted elective: History Teaching Internship (with permission of dept. chair)			

SS4400 AP European History Grades 11, 12 5 Points

AP Modern European History focuses on European history from the Renaissance to the present. Coursework includes analysis of historical documents, essay writing, oral projects, and examination of document-based questions. This course is designed to prepare students for the Advanced Placement Modern European History Exam by making demands upon them equivalent to that of an introductory college course. Students who are highly motivated and have a strong interest in European history should take this course. Students will be required to take the AP examination in May.

SS7099 American Law	Honors	Grades 11, 12	2.5 Points
SS7198 American Law	Advanced	Grades 11, 12	2.5 Points

This course examines the fascinating areas of criminal, civil, and constitutional law. Major emphasis is placed upon understanding one's legal rights and responsibilities both inside and outside of school. The specialized areas of criminal justice and the court system receive considerable attention and provide students with a general

knowledge of their rights and civic duties. Debate, discussion and mock trials will be heavily utilized to examine current legal issues and important court cases. Topics include homicide, conflict resolution, search and seizure, race and gender discrimination, and property crimes.

SS7140 America in the Television Age **Honors** **Grades 11,12** **2.5 Points**
SS7340 America in the Television Age **Advanced** **Grade 11,12** **2.5 Points**

This course will examine the influence of television on the political, social, military, economic, cultural and ethnic dimensions of American life from the 50's through the 90's. Examples of topics studied are television and the presidency, McCarthyism, Civil Rights, Women's Movement, Watergate, Gulf War, Myths and Stereotypes.

SS7096 International Relations **Honors** **Grades 11,12** **2.5 Points**
SS7195 International Relations **Advanced** **Grades 11,12** **2.5 Points**

This course seeks to develop student understanding of various modern international conflicts and how those conflicts may be resolved. Historical causes of conflicts, parties involved in conflicts, and attempts to reconcile conflicts will be featured in each case study. Case studies will include Northern Ireland, the Israeli-Palestinian Conflict, the United States' involvement in Latin America and Southeast Asia during the Cold War, and the Darfur region of Sudan. This will be a discussion-based class that requires a high level of student participation in class.

SS7151 Symposium on Current World Issues **Honors** **Grades 11, 12** **5 Points**

This course is designed for highly motivated students with excellent critical thinking and writing skills. A small, highly energized group of twenty students working together in a symposium format will select important problems facing the global community and will conduct in-depth research and analysis of these topics. The range of topics may include current issues such as the Middle East crisis, nuclear proliferation, crimes against humanity, important elections, and domestic issues facing the United States. Considering these topics, the goal of the class is to produce tangible products, as teaching tools, which will serve the larger school community. The class will also be involved in speech and debate, diplomatic simulations, and educational teach-ins.

SS7080 Race, Society, and Identity **Honors** **Grades 11, 12** **2.5 Points**
SS7380 Race, Society, and Identity **Advanced** **Grades 11, 12** **2.5 Points**

Concepts of racial identity have a long and complex history that has led to many shockingly inhumane events in American history. The concept of whiteness and blackness are multifarious and intertwined: causing Americans to own, abuse, rape, murder, and isolate large segments of the population. The concept of barbarianism or savagery caused Americans to commit a somewhat intentional genocide on our own soil. The concept of exoticism and a feeling of distrust led Americans to imprison a significant portion of its citizenry for fear of false alliances; or prevent the immigration of a huge segment of the world's population. The concept of genetic superiority led respected American scholars to promote a "cleansing" of population. All of these ideas are linked to race, "otherness" and membership. This course will explore these issues.

SS7094 Economics **Honors** **Grades 11, 12** **2.5 Points**
SS7193 Economics **Advanced** **Grades 11, 12** **2.5 Points**

This course familiarizes students with certain basic economic principles and laws governing our economic system. Principles of economics are made clear through work with graphs and charts. In addition, ideas of the great economists are discussed as well as specific topics, such as the Federal Reserve System, labor unions, collective bargaining, causes and effects of recessions/depressions, the stock market, and international trade.

SS7092 American Citizenship in the 21st Century **Honors** **Grades 11,12** **2.5 Points**
SS7191 American Citizenship in the 21st Century **Advanced** **Grades 11,12** **2.5 Points**

This course will show students the role of American Government in their lives and how they can involve themselves in the action and direction of the United States. Students will study the importance of the U.S. Constitution, different American political beliefs and behaviors and the role of political parties, interest groups and the mass media in the processes of government. Students will cover in-depth the institutions of national government such as the Congress, the Presidency and executive departments and the federal court system as well as institutions in state and local government. Finally, students will explore problems in current American domestic and foreign policy as well as issues regarding civil rights and liberties. During the 2008-2009 school year, an extra emphasis will be placed on the upcoming Presidential election.

MATHEMATICS

The course sequences in the chart below represent the traditional progression at each level. However, students may take courses at any grade, just not out of sequence. For example, a student may take Algebra 1 as a senior or Calculus as a tenth grader, depending upon preparation.

LEVELS	AP HONORS	ADVANCED	COLLEGIATE 1	COLLEGIATE 2
Grade 9	MA1105 Geometry	Math 1110 Geometry	MA1215 Algebra 1 MA2215 Fundamentals of Computer Programming *	MA1320 Algebra 1
Grade 10	MA2105 Algebra 2 MA3150 Computer Programming	MA2110 Algebra 2 MA1110 Geometry	MA2215 Geometry MA2215 Fundamentals of Computer Programming *	MA2320 Geometry
Grade 11	MA3105 Precalculus MA3150 Computer Programming MA4050 AP Computer Structures	MA3110 Precalculus	MA3215 Algebra 2 MA2251 Fundamentals of Computer Programming *	MA3320 Intermediate Algebra
Grade 12	MA4000 AP Calculus MA4105 Calculus MA4100 AP Statistics MA3150 Computer Programming MA4050 AP Computer Structures	MA4105 Calculus (Honors credit) MA4125 Statistics	MA4215 Precalculus/Statistics MA2251 Fundamentals of Computer Programming *	MA4320 Math Applications

* May be taken at the honors level

MCAS Preparation: The Mathematics Framework is divided into the following strands: Number Sense, Patterns, Relations & Functions, Geometry & Measurement, and Statistics & Probability. These four strands are divided into ten subcategories, each of which contains two or more standards. The following chart indicates the subcategories of standards that are addressed in each course offered in grades 9 and 10. Each standard of the subcategories is addressed in the 9th/10th grade course of a given sequence. Thus, all grade 9 and 10 math

to Honors Geometry but taught at a less rigorous pace and depth. Students will engage in the core concepts of the Mathematics Framework through: problem solving, communicating, reasoning, and critical thinking.

Suggested Entry Criteria: Proficiency in the concepts and skills of Grade 8 Impact Mathematics Program or an equivalent full year Algebra I course. CMP (Connected Math) is a half-year Algebra I course. Next course: MA2110 Advanced Algebra II

MA1215 Algebra I **Collegiate 1** **Grades 9, 10, 11, 12** **5 Points**

The C1 Algebra 1 course is the first in a four-year college prep sequence. This college prep course addresses the four strands of the Framework with major emphasis on the Patterns, Relations, and Functions Strand. In the content standards from this strand, students will investigate patterns, relations, and functions, simplify polynomials, and solve linear and quadratic equations, inequalities, and systems of equations. Students study powers and roots as they address standards from the Number Sense Strand. Content areas including scatter plot, line of best fit, and basic counting principles connect to the Statistics and Probability Strand. The Geometry Strand is addressed in the work done in the coordinate plane. In all content strands, students engage in the core concepts of the Mathematics Framework through: problem solving, communicating, reasoning and connecting.

Suggested Entry Criteria: Understanding of the concepts and skills in Grade 8 Connected Mathematics Program or equivalent including operations with fractions, decimals, order of operations and sign numbers. Next Course: MA2215 Geometry

MA1320 Algebra I **Collegiate 2** **Grades 9, 10, 11, 12** **5 Points**

The C2 Algebra I course is the first in a four year modified college preparatory sequence. Students progress from intuitive understanding to abstract representation of concepts. The Number Sense Strand is addressed as students review rational number skills, study powers and square roots, and apply properties of real numbers. In the content standard of the Patterns, Relations, and Functions strand, students will investigate patterns, relations, and functions. They will learn to analyze linear systems, recognize quadratic systems, and simplify polynomials. Students work in the coordinate plane finding slopes, midpoints, and distances. Students will learn to represent and analyze data and basic probability as they connect to the Statistics and Probability strand. Students engage in the core concepts of the Mathematics Framework through: problem solving, communicating, reasoning, and connecting. Many of the students in this course are enrolled in a math lab course, which meets three additional times each cycle. This math lab allows students extra time to work on various math projects. Another advantage to the lab is that students are given the opportunity to use computer software specifically designed to help improve their problem solving strategies for MCAS testing.

Suggested Entry Criteria: Understanding of the concepts and skills in Grade 8 Connected Mathematics Program or equivalent. Next Course: MA2215 Geometry or MA2320 Geometry

MA2105 Honors Algebra II **Grades 10, 11, 12** **5 Points**

This is the second course in the honors mathematics sequence. The students continue to demonstrate higher order thinking skills by applying concepts to challenging problems and 'real-world' problems. This honors course addresses the four strands of the Framework with emphasis on the Patterns, Relations, and Function Strand. Consistent with the content standards of this strand, students expand their knowledge of functions to include exponential, logarithmic, and polynomial functions using discrete and recursive models. They will expand their knowledge of equation solving to include multiple methods of solving quadratics and linear systems in three variables. The Number Sense Strand is addressed as students study complex numbers and finite graphs, extend the real number system to rational exponents, and study its structure and properties. Students work in the coordinate plane studying quadratic relationships as they address the standards of the Geometry Strand. The standards in the Statistics and Probability Strand are addressed as students interpret data to find a model to fit the data. In all content strands, students engage in the core concepts of the Mathematics Framework through: problem solving, communications, reasoning, and connecting. Purchase of a TI83+ is recommended. **Suggested Entry Criteria: Mastery of the concepts and Skills in MA 1105 Honors Geometry.** Next course: MA3105 Honors Pre-calculus

MA2110 Advanced Algebra II **Grades 10, 11, 12** **5 Points**

This is the second course in the advanced math sequence. In this course, the four strands of the Framework are addressed, with emphasis on the Patterns, Relations, and Function Strand. Algebra I concepts and skills are reviewed at the beginning of the year. The content topics of this course include linear relationships, quadratic equations, linear, quadratic functions and exponential functions, matrices, polynomials, graph translations, systems of equations, radicals and complex numbers. Students will construct, draw inferences and reason with tables and graphs that summarize data from problems as they address the standards outlined in the Statistics and Probability Strand of the Massachusetts Curriculum Framework. In all content strands, students engage in the core concepts of the Mathematics Framework through: problem solving, communicating, reasoning, and connecting. **Suggested Entry Criteria: Proficiency in the concepts and skills of MA 1110 Advanced Geometry.** Next Course: MA3110 Advanced Pre-calculus

MA2215 Geometry **Collegiate 1** **Grades 10, 11, 12** **5 Points**

This is the second course in the college preparatory sequence. This course addresses the four strands of the Framework with major emphasis on the Geometry Strand. In the content standards of this strand, students study a full geometry curriculum. Major content areas include the study of lines, angles, polygons, circles, and congruency and similarity relationships. Students apply area and volume formulas to solve problems. They use inductive and deduction reasoning processes to justify conclusions. Students address the standards of the Patterns, Relations, and Function Strand as they work in the coordinate plane with transformations, distance and midpoint formulas, and parallel and perpendicular lines. The Number Sense Strand is addressed as students work with powers and roots and use estimation in problem solving. Students use sample spaces to find simple probabilities, which is consistent with the standards of the Probability and Statistic Strand. In all content strands students engage in the core concepts of the Mathematics Framework through: problem solving, communicating, reasoning and connecting. **Suggested Entry Criteria: Understanding of the concepts and Skills in MA1215 Algebra 1.** Next course: MA3215 Algebra II

MA2320 Geometry **Collegiate 2** **Grades 10, 11, 12** **5 Points**

Collegiate 2 Geometry is the second course in the modified college preparatory sequence. This course addresses the four strands of the Framework, using visual and manipulative models. Students progress from intuitive understanding to abstract representation of concepts. The Geometry Strand is addressed as students study lines, angles, polygons, polyhedrons, and their congruency and similarity relationships. Students apply area and volume formulas to solve problems. Students explore complex relationships between 3-dimensional solids using creative constructions and Euler's formula. They are introduced to the deductive reasoning process by using theorems to justify statements. Students address standards in the Patterns, Relations, and Function Strand as they work in the coordinate plane with transformations, finding slope, midpoints, and distance. Students use sample spaces to find simple probabilities, design and conduct a statistical experiment and interpret the outcomes consistent with the standards of the Probability and Statistic Strand. In all content strands students engage in the core concepts of the Mathematics Framework through: problem solving, communicating, reasoning, and connecting. **Suggested Entry Criteria: Successful completion of MA 1320 Collegiate 2 Algebra I or equivalent.** Next course: MA3320 Collegiate 2 Algebra II

MA3105 Honors Precalculus **Grades 11, 12** **5 Points**

Honors Precalculus is a rigorous course focusing on mathematical relations and their graphs, inverses, and applications. It is aligned with the standards of the Massachusetts Mathematics Curriculum Framework. Topics studied include polynomial, trigonometric, exponential and logarithmic functions, matrices, polar coordinates, complex numbers, sequences, series and conics (and as time permits, combinations, permutations, probability and statistics.) The course is designed to emphasize theory and mathematical structure. Exploratory "Problems of the Month" are also assigned. Students will participate in the Competitive Math Exam Program of the Math Department, taking both the Math Olympiad and the AHSME Exams. Students will be prepared to take the SATII, Math Level 2 College Board Achievement exam in June. A TI83 or TI84 graphing calculator is highly recommended. **Suggested Entry Criteria: Mastery of the concept and skills in MA2105 Honors Algebra II.** Next Course: MA4000 AP Calculus or AP Statistics

MA3110 Advanced Precalculus **Grades 11, 12** **5 Points**

This course addresses the same topics as Honors Precalculus at a modified level of rigor. A TI83+ graphing calculator is highly recommended. **Suggested Entry Criteria: Mastery of the concepts and skills in MA 2110 Advance Algebra II.** Next Course: MA4105 Calculus

MA3215 Algebra II Collegiate 1 Grades 11, 12 5 Points

This course is a standard college preparatory course in Algebra that further develops and strengthens the concepts and skills of Algebra I (MA1215) and extends these concepts and skills into the traditional topics of Algebra 2. The course is aligned with the Massachusetts Mathematics Curriculum Framework and addresses all four strands with emphasis on Patterns, Relations, and Functions. The topics emphasized include linear, quadratic, and exponential functions, graphs, inequalities, polynomials, rational expressions, systems of equations, graph translations, radicals, and an introduction to complex numbers. Students apply their knowledge in problem solving applications. Technology is integrated into the course to support problem solving. In all content strands, students engage in the core concepts of the Massachusetts Framework through: problem solving, communicating, reasoning, and connecting. Suggested Entry Criteria: Successful completion of C1 Geometry. Next Course: MA4215 Precalculus/Statistics.

MA3320 Intermediate Algebra Collegiate 2 Grades 11, 12 5 points

Intermediate Algebra is the third course in a modified four-year college preparation sequence that further develops, reinforces and extends the basic concepts and skills of Algebra 1 (MA1320-Collegiate 2). The content topics of this course include: functions and relations, simplifying polynomials, graphing and solving linear, quadratic, and simple exponential equations, solving systems of linear equations, basic properties and uses of exponents, and an introduction to higher order polynomials, radicals and roots. All the topics will be taught with an emphasis on the application of these concepts in the real world. In all content strands, students engage in the core concepts of the Massachusetts Mathematics Curriculum Framework through: problem solving, communication, reasoning, and connecting. Suggested Entry Criteria: Successful completion of MA2320 CP2 Geometry or MA2215 C1 Geometry. Next Course: MA4320 Math Applications C2 or MA3215 C1 Algebra II.

MA4000 AP Calculus Grade 12 5 Points

This course covers the AB syllabus set by the College Board as preparation for the Advanced Placement Test in Calculus. The content topics of this course include limits, continuity, derivatives; graph characteristics of a function and its first and second derivative equations, applications of derivatives, anti-differentiation, integrals, applications of integrals, and the fundamental theorem of calculus. Students are required to take the Advanced Placement Exam at the AB level (cost approx. \$83). Success on this exam gives up to one semester of college credit in mathematics at some colleges. In addition, students will participate in the competitive Math Exam Program of the Math Department, taking both the Math Olympiad and the AMC Exams. A TI83+ graphing calculator or equivalent is highly recommended.

Suggested Entry Criteria: proficiency in the concepts and skills of MA3105 Honors Precalculus. AP Students are required to take the College Board's National Advanced Placement examination in May.

MA4105 Calculus Honors Grade 12 5 Points

This course completes the advanced sequence with an emphasis on functions, their derivatives and anti-derivatives. Students are introduced to the basic topics in calculus, including limits, simple derivatives, and their applications to functions and problem solving. Applications of the derivative and integral are introduced throughout the course. A TI83+ graphing calculator or equivalent is highly recommended. **Suggested Entry Criteria: Proficiency in the concepts and skills of MA3105 Honors Precalculus or MA3110 Advanced Precalculus.**

MA 4100 AP Statistics Honors Grade 12 5 Points

This course covers the AP Statistics syllabus set by the CEEB as preparation for the Advanced Placement Test. The course is an introduction to the study of how numerical data may be analyzed as an aid to decision-making.

**MA3150 Intermediate Computer Programming Honors Grades 10, 11, 12 5
Points**

This course introduces object oriented programming through rigorous training in Java programming. Students will work on programming problems individually and in groups. In addition, they will participate in the American Computer Science League contests. **Suggested Entry Criteria: Successful completion of MA2251**

MA4050 AP Computer Structures Grades 11, 12 5 Points

This course completes the AB syllabus for Compute Science set by the College Entrance Board. It covers structures such as stacks, queues, maps, and linked lists; and, processes such as recursion, sorting, and searching. Students will also participate in the American Computer Science League contests. Suggested Entry Criteria: MA3150 Intermediate Computer Programming. AP students are required to take the College Board's National Advanced Placement examination in May. (cost approx. \$83).

MA7240 Computer Aided Drafting and Design I (CADD) Collegiate 1 - Honors 5 Points

MA7241 Computer Aided Drafting and Design II (CADD) Collegiate 1 - Honors 5 Points

The CADD class is being offered as an elective within the Mathematics Department for all students, grades 9 - 12 and can be taken at the CP1, Advanced or Honors level. The designation of the level for each student will happen in the fall after discussion with the teacher. CADD can be taken for more than one year. The class will provide the students with a high level of computer versatility and could ultimately result in a certificate. Some colleges, such as Middlesex Community College, may accept the class for college credit.

This course will offer students an opportunity to explore the world of architectural, civil and mechanical drafting and design. The students will use the following software: AutoCAD, 3D Home Design, PhotoShop, Sketchpad, Access, as well as other applications in order to develop a solid background in engineering drawing, CAD technology, and architectural, civil and mechanical design. This course is recommended for students interested in pursuing a career in civil or mechanical engineering, drafting technology, or architectural design. This is a class that can go in many different directions -all depending on the choice of the student with guidance from the instructor. While C.A.D.D. is focused around digital drafting and design aspects, in other words, visual or creative projects involving a computer, there are also many additional features as well. In project-based curriculum, students work in an area of their own interest, generating works of their own inspiration. Within the class the flexibility exists to assign projects ranging in difficulty (CP1 to Honors level) depending on the student's ambition and ability. Whether simply designing the blueprints of a house, modifying a preexisting plan, or creating a digitally enhanced pamphlet, students are the designers of their project. As students advance through the year, they learn how to take on greater challenges, including real jobs. Overall, C.A.D.D. is a great class for anyone – students work hands-on creating computer oriented projects, which generate final products sparked by their own interests.

Business Elective in Math

MA7277 Computerized Accounting I Grades 10 11, 12 5 Points

This course is a comprehensive instructional program designed to meet the needs of today's students. By bringing the real world of accounting into the classroom, the course addresses the impact of technology on accounting by exposing students to integrated computerized accounting activities using Peachtree Accounting, Glencoe Integrated Accounting, Spreadsheet templates, Internet activities, and illustrations of real-world source documents.

Business

BU1255 Computer Literacy 1 (levels vary) Grades 9, 10, 11, 12 2.5 Points

This course is designed to introduce students to the Microsoft Office suite. No previous knowledge or computer ability is required. Students will learn how to keyboard correctly and apply real life skills in proofreading. They will

also be able to improve their ability to use the computer in all aspects of the curriculum especially for Word and Power Point.

BU1256 Computer Literacy 2 (levels vary) Grades 9, 10, 11, 12 2.5 Points

This course will concentrate on the basics of Excel and Desktop Publishing. In Excel, the topics covered will be entering formulas, formatting and enhancing spreadsheets. In Desktop Publishing, the use of graphics, rules, box text and drawing tools to make documents more attractive will be studied.

BU7834 Word Processing Semester Course Grades 9, 10, 11, 12 2.5 Points

The course will be offered as a half-year course for first or second semester. It will emphasize the improvement of keyboarding skills and use of the Internet and graphics for the enhancement of word processing documents. Students who take Word Processing will be prepared to take Computer Literacy 2 if they so choose.

CLASSICAL AND MODERN FOREIGN LANGUAGES

IMPORTANT – PLEASE NOTE:

All sequential courses in Foreign Language must be taken at Arlington High School. Neither curriculum programs nor credits from outside sources or institutions will be accepted for partial fulfillment of the language sequences (excepting credits from students transferring from approved accredited high schools). Students selecting honors and A/P courses, especially in grades 11 and 12, will need to take special care in choosing their annual academic programs in order to avoid the conflicts that sometimes make the scheduling of such courses difficult.

Foreign Language has become a graduation requirement beginning with the Class of 2008. Successful completion of at least two years of sequential language study will be necessary for a student to receive a diploma. Pupils who are starting a foreign language in high school may choose from the following:

CL1205	Latin I	Collegiate 1
ML1205	French I	Collegiate 1
ML1210	Spanish I	Collegiate 1

Students selecting Honors level or Advanced Placement courses: Success is normally achieved at these levels by students who have attained a minimum grade of at least **B-** in the prior/prerequisite course. For example, a pupil electing to take ML2105, French II Honors, would do well to compile a final grade of B- in ML1105, French I Honors.

LEVELS	AP / HONORS	COLLEGIATE 1
GRADE 9 ONLY	CL1105 Latin I ML1105 French I ML1110 Spanish I	
GRADES 9, 10,11,12		CL1205 Latin I (beginning) ML1205 French I (beginning) ML1210 Spanish I (beginning)
GRADES 10,11,12	CL2105 Latin II ML2105 French II ML2110 Spanish II	CL2205 Latin II ML2205 French II ML2210 Spanish II
GRADES 11, 12	CL3105 Latin III ML3105 French III ML3110 Spanish III	CL3205 Latin III ML3205 French III ML3210 Spanish III
GRADE 12	CL4005 Latin IV AP ML4005 French IV AP ML4010 Spanish IV AP CL4105 Latin IV ML4105 French IV ML4110 Spanish IV	CL4205 Latin IV ML4205 French IV ML4210 Spanish IV

ML1105 French I Honors

Grade 9

5 Points

This accelerated course is open only to qualified students who have excelled in French in Middle School. The curriculum is aligned with the learning standards of the Massachusetts Foreign Language Curriculum Frameworks. This course is thorough and comprehensive. Students will work toward proficiency in French in the four communicative skills: reading, writing, speaking and listening. Students will make connections to other academic areas and will study the influences of French culture on art, literature, music and history. They will develop the skills of analyzing French literature and art such as Symbolism, Surrealism and Impressionism. They will read and discuss short stories and newspaper articles in French.

Suggested Entry Criteria: Students must have a reasonably strong written and oral command of present and past tenses of regular and irregular verbs. They must have the ability to express themselves in French in both written (3 to 4 paragraphs) and oral format about their interests and activities, likes and dislikes.

ML1205 French I Collegiate 1 Grades 9, 10, 11, 12 5 Points

This is a beginning language course requiring no previous knowledge of the language. The course addresses the strands of the curriculum frameworks by practice in listening, speaking, reading and writing through oral and written exercises and the extensive use of role playing activities, tapes, songs and games. Students will explore French culture and its contributions to the arts, sciences, history and world society. The class will make comparisons with their own culture and experiences. Awareness is enhanced through student magazines, videos, and a research project.

ML2105 French II Honors Grade 10 5 Points

This is an advanced course, which is open only to students who have successfully completed or who have passed the final examination for the French I Honors (ML1105). Students will continue to build communication skills through cooperative practice, interactive activities, and discussion of ideas and opinions in French. They will read more advanced stories and newspaper articles and discuss them with increased detail and depth in French. Students will continue to develop the skills necessary to appreciate, evaluate and analyze French literature, art, film and culture.

Suggested Entry Criteria: Students must have mastery of the skills listed above for ML1105 and be able to converse briefly in French. They must be able to understand spoken French, as the class will be conducted mainly in the target language.

ML2205 French II Collegiate 1 Grades 10, 11, 12 5 Points

This course is a continuation of ML1205. Students will learn how to communicate their opinions, ideas, agreements and disagreements both orally and in writing. They will learn to identify patterns of social behavior typical to French culture, as well as demonstrate knowledge of French geography and distinctive cultural products. They will also be encouraged to

contrast and compare ways in which the French language and culture differ from their own. Other skills to be developed include applying to other disciplines the knowledge acquired through French sources and reaching beyond the classroom setting to communicate and interact with native speakers. **Suggested Entry Criteria: ability to listen to spoken French for 10 minutes; ability to respond “yes” or “no” in French or to answer with a single word in French to questions asked in French; ability to construct sentences in French with the proper structure (with reasonable mistakes).**

ML3105 French III Honors Grade 11 5 Points

This honors level course is a continuation of ML2105. Students will learn how to identify and use verbal and non-verbal cues reflecting the French culture in a large array of situations. They will read the French press (newspapers, magazines) and understand main ideas expressed in the present, future and past tenses. They will be able to write e-mail or letters in order to request specific information. Comparing, contrasting, and exchanging opinions on contemporary or historical issues in the French and the American culture will be encouraged. Other skills to be developed include researching and studying primary sources in French in order to enrich the student’s knowledge in other academic disciplines, and expanding the practice of French outside the classroom.

Suggested Entry Criteria: Students must be able to express their opinions, compare and contrast views on French culture both verbally and in writing. They must understand concepts and details in authentic and adapted text; show familiarity with French history, geography and patterns of social behavior.

ML3205 French III Collegiate 1 Grades 11, 12 5 points

In alignment with the state Foreign Language Curriculum frameworks, this course offers the building of communication skills by means of conversation, and the continuation of cultural study through reading and listening. Additional emphasis is placed on listening by means of taped responses and by writing. Students will converse and reinforce grammatical structures using situational and cultural vocabulary. They will compare and contrast social conventions such as holiday celebrations and cultural events. The class will also learn about and analyze significant events in French history as background to class reading. **Suggested Entry Criteria: ability to listen to spoken French for 15 minutes; ability to respond in short phrases (with reasonable mistakes) to questions asked in French; ability to write a short letter in French (with few mistakes) about personal activities.**

ML4005 French IV Advanced Placement Grade 12 5 points

This is a college level course for highly motivated and committed students who wish to take the French Language AP exam. The goal of this course is to develop further the students' already solid language skills of reading, writing, listening, and speaking. They will thus be able to understand and critique, orally and in writing (in all verb tenses), French novels, plays, articles, orations, movies, videos, and CD's. The students will be exposed to cultural perspectives through analysis and discussion of French literature, historical documents, music, dance and theatre. They will learn how to compare, contrast, and discuss the different ways in which events, news and issues are presented and treated in the French language and in their own. They will also be encouraged to apply their knowledge of the French language and culture to deepen their understanding of documents in the original language. Other skills to be developed include reaching beyond the classroom setting via the Internet, newsletter, and other media to communicate and interact with native speakers and groups interested in the promotion of the French culture and language. **Suggested Entry Criteria: Students must show a superior ability to read primary sources in French, understand main ideas, compare, contrast and express their opinions (orally and in writing) in the present, future and past tenses. Students must demonstrate a well-developed and strong familiarity with French history, geography and patterns of social behavior. AP Students are required to take the College Board's National Advanced Placement examination in May.**

ML4105 French IV Honors Grade 12 5 Points
ML4205 French IV Collegiate 1

This course builds upon the skills acquired in ML3105. The curriculum reflects its alignment with the state's Foreign Language Curriculum Frameworks. Students will use listening, speaking, reading, and writing to provide and obtain information, express feelings and emotions, and exchange opinions on topics of personal interest. Students will present and interpret literary concepts and ideas after reading fables, plays, short stories and poetry. Students will develop a perspective of French culture through the study of attitudes, values, and ideas of the French speaking populations of the world. French language cassettes, films, magazines, newspapers, and the Internet will bring French politics, actors, singers, and historical figures into our classroom. Insight into the nature of language and culture will be developed by a comparison of the pupils' own language and culture with those of the French. Time will be spent in preparation for the Grand Concours and SAT II tests. A study of French artists of the 19th and 20th centuries and of French history will facilitate the connections between the target language and other subject areas. Students and the teacher will speak exclusively in French. **Suggested Entry Criteria: Students must be able to identify and use verbal and non-verbal cues reflecting the French culture in a large array of situations. Students must be able to identify and use verbal and non-verbal French and understand main ideas expressed in the present, future and past tenses. They must show evidence of being able to compare, contrast and exchange opinions on contemporary or historical issues in the French and American cultures.**

ML1110 Spanish I Honors Grade 9 5 Points

This accelerated course is open only to qualifying students who have demonstrated advanced aptitude in Spanish at the Middle School level. The course addresses the strands of the curriculum frameworks as students use the skills of listening, speaking, reading, and writing to exchange opinions, express feelings and emotions, obtain and present information on the products, traditions and perspectives of the culture being studied. This cultural understanding will be gained through the reading and discussion of short stories, narratives, advertisements, brochures, videos, music and the study of famous artists, historical and literary figures and events. Students will also gain knowledge of the nature of the language through comparisons of the Spanish language with their own. **Suggested Entry Criteria: Students must demonstrate an aptitude for conversing at a basic level about**

the community, their hobbies and activities, their likes and dislikes, and their families. They should be able to give appropriate physical descriptions and ask and receive directions.

ML1210 Spanish I Collegiate 1 Grades 9, 10, 11, 12 5 Points

This is a foreign language course for beginning students. No previous knowledge of the language is required, although some students may have had some previous Middle School experience. The subject matter of this course is aligned with the learning standards of the Commonwealth's Foreign Language Curriculum Frameworks. Students will begin to converse in a language other than English by asking and answering questions, expressing feelings and emotions, indicating likes and dislikes, following directions, and describing others. Students will demonstrate an understanding of the traditions, views, and products of Hispanic culture as reflected in the history and visual presentations. They will demonstrate an understanding of the nature of the language through a comparison of Spanish with English, as they examine cognates, idiomatic expressions, and similar grammatical constructions, and compare the culture studied with that of English. They will use Spanish to reinforce and expand their knowledge of other disciplines through the investigation of websites that yield information on history and geography. Students may also begin to use Spanish within and beyond the school setting and to be involved in a cultural event such as Spanish Food Day, *El Día de los Muertos*, and *La Navidad* in Spanish speaking countries.

ML2110 Spanish II Honors Grade 10 5 Points

This second level course is open only to students who have successfully completed Spanish I Honors to the satisfaction of the teacher. In this course the curriculum frameworks are addressed through oral and written interpretations of various concepts in Spanish in order to express feelings and emotions, obtain information, exchange opinions and make suggestions. Students will also observe and commemorate customs, holidays, and special events, identify distinctive cultural products or aspects through various media in Spanish. Comparisons and contrasts between the Spanish and English languages and culture will be explored and discussed to strengthen understanding and interpretive abilities. Other skills that will be developed include describing and analyzing literature, works of art, and historical events in the Hispanic culture. Students may also create displays or presentations for the school and community about the Spanish language and the larger Hispanic culture.

Suggested Entry Criteria: Students must demonstrate an ability to converse briefly on a variety of topics in Spanish and to write a paragraph incorporating skills such as exchanging opinions, and expressing feelings and emotions. They should also be able to use the preterite tense.

ML2210 Spanish II Collegiate 1 Grades 10, 11, 12 5 Points

This course is a continuation of ML1210. Throughout this course the strands of the curriculum frameworks are followed. In class the students will speak, understand, read, and write phrases, statements, simple polite commands, questions, and answers in Spanish. Besides the present tense, the students will begin to use the past tense to express their likes and dislikes, emotions, opinions, and other information. Additional skills to be developed include studying, comparing, and contrasting the different Hispanic countries and cultures through short readings, discussions, and projects. These projects on diverse cultures may be displayed for the school community. **Suggested Entry Criteria: Students must demonstrate an ability to converse briefly on a variety of topics in Spanish and to write a paragraph incorporating skills such as exchanging opinions, and expressing feelings and emotions.**

ML3110 Spanish III Honors Grade 11 5 Points

This honors class is open only to those who have successfully completed Spanish II Honors or who have passed the final examinations from ML2110 to the satisfaction of the teacher. In this course all learning standards of the state's Foreign Language Curriculum Frameworks are addressed. Through continual study of vocabulary and grammar, students will express their opinions, ideas, and emotions, and will form questions in the target language. This will be done in the present, past, future, and conditional tenses. The subjunctive mood will also be introduced and used. During the year current events and topics of interest will be summarized and opinions will be exchanged as well as debated. Hispanic literature (short stories, fables, magazines articles from authentic Hispanic magazines, and poems) will be read and analyzed both orally and in writing. The class will continue to study as well as compare and contrast Hispanic culture and traditions with our own culture. Written and oral projects will be assigned.

Suggested Entry Criteria: Students must demonstrate an ability to speak, read, write and understand various topics in Spanish. They must be able to deal with such topics as expressing emotions, obtaining

information, exchanging opinions and making suggestions, all of which will be done in the present, past and future tenses.

ML3210 Spanish III Collegiate 1 Grades 11, 12 5 Points

This course is open to those who have successfully completed Spanish II CP. In this course, all learning standards of the state's Foreign Language Curriculum Frameworks are addressed. There is an increasing emphasis on vocabulary and grammar, and from this, an increasing emphasis on comprehension and conversation. Additional tenses will be studied, including the preterite and imperfect tenses. Students will be encouraged to write free compositions on assigned topics and current events, and present them orally to the class. The class will continue to study, compare and contrast the Latino culture and traditions with our own culture, and to continue the study of the influence of Spain in many parts of our country. Projects may be assigned to augment the textbook. **Suggested Entry Criteria: Students must demonstrate an ability to carry on a brief conversation in Spanish and to write a short essay using the present tense, some preterite forms, and the verbs which use infinitives to express their likes, dislikes, abilities, emotions, opinions, plans and obligations. They should also be able to discuss and write about everyday topics such as vacation, the weather and entertainment.**

ML4010 Spanish IV Advanced Placement Grade 12 5 points

This is a college level course for highly motivated and committed students who wish to take the Spanish Language AP exam. It is expected that all students enrolled in this course will take the AP exam administered by the College Entrance Examination Board in the spring of senior year. The goal of this course is to further develop the students' already solid language skills of reading, writing, listening and speaking. They will thus be able to understand and critique, orally and in writing (in all of the verb tenses), Spanish novels, short stories, plays, articles, orations, movies, videos and CD's. They will learn and use advanced grammar structures. The students will develop an appreciation of cultural perspectives through analysis and discussion of Spanish literature, historical documents, music, art, dance and theatre. They will compare, contrast and discuss the different ways in which events, news and issues are presented and treated in the Spanish language and in their own. They will also be encouraged to apply their knowledge of the Spanish language and culture to deepen their understanding of documents in the target language. Other skills to be developed include reaching beyond the classroom setting via the Internet, newsletters and other media to communicate and interact with native speakers and groups interested in promoting Spanish culture and language. **Suggested Entry Criteria: Students must demonstrate a superior ability to read and analyze Spanish literature and short stories, express opinions, describe events and people, and ask/answer questions (orally and in writing) in the present, past, future and subjunctive tenses. Students must exhibit a strong familiarity with the culture, history and geography of Spanish speaking countries. AP Pupils are required to take the College Board's National Advanced Placement examination in Spanish language.**

ML4110 Spanish IV Honors Grade 12 5 Points

This is an advanced course of study, which follows the successful completion of ML3110. It includes intensive studies of Hispanic language, literature, history, and culture. In this course, all of the foreign language learning standards from the state's Curriculum Frameworks are addressed. Through the study of advanced vocabulary and grammar, students will elaborate, orally and in writing, on their ideas and opinions, as well as discuss current events and issues in the target language. Literary texts, such as poetry, short stories, magazine articles, and novels will be read, discussed, and critiqued. Students will also observe and commemorate certain Hispanic customs and holidays. In addition, the class will view and discuss videos dealing with Hispanic history, culture, and cultural dilemmas. Written, oral, and video-taped projects will be assigned. **Suggested Entry Criteria: Students must be able to speak, read, comprehend and write in Spanish on topics which involve describing past and future events and activities. They must display typical skills such as asking for and giving directions, expressing feelings and opinions, giving commands and telling what would happen under certain circumstances.**

ML4210 Spanish IV Collegiate 1 Grade 12 5 Points

This course follows a successful completion of ML3210. It is designed for those students interested in increasing their language skills of speaking, listening, reading and writing. In addition to the continuation of vocabulary study and concentration on more difficult grammar, the class will study the history of Spain. This course addresses all of the Foreign Language learning standards from the state's Curriculum Frameworks. Students will continue to

express their ideas and opinions, both orally and in writing, in the target language. Students will investigate foreign language websites and will view and write essays on a variety of Latino films, which not only tell a story, but also afford an opportunity to discuss the history of the particular country. **Suggested Entry Criteria: Students must demonstrate an ability to speak and write about their school and what they do before and after school. Additional topics include the clothes they wear, past times (e.g. their childhoods), and celebrations during the year, all of which must reveal competence in the use of the present, preterite and imperfect tenses.**

CL1105 Latin I Honors Grade 9 5 Points

This accelerated course is suggested only for qualifying students who have studied Latin in middle school. Students continue working in the Cambridge Latin (CLC) Series, Unit III. This course addresses the strands of the curriculum frameworks through a reading of the text, which leads to an understanding of the themes, characters, and settings of the story. Students will be able to explain the relationship between and among social structures such as Roman town life, military customs, and religious practices. They will also compare, contrast, and analyze the use of the Latin language to develop a sense of complex sentence structure in English and in Latin. Other skills to be developed include describing and analyzing current and/or historical events through a study of major happenings during the Roman Empire. Pupils may also prepare displays for the school community about the target language and culture.

Suggested Entry Criteria: Students must demonstrate a working knowledge of four of the six indicative verb tenses and of three declensions of Latin nouns/adjectives. They must show an ability to work with and utilize the Latin case system. The foregoing will contribute to the further development of reading and translation skills.

CL1205 Latin I Collegiate 1 Grades 9, 10, 11, 12 5 Points

This Latin program utilizes the Ecce Romani textbook series which depicts the daily life and adventures of the Corneli, a typical Roman aristocratic family of the first century, A.D. Students will read adapted and authentic material in Latin such as short stories and narratives dealing with the people of the early Roman Empire. They will identify historical or cultural figures and discuss their contributions, while also comparing and contrasting ways in which the Latin language is different from or similar to English. Pupils will use the knowledge of Latin vocabulary to understand specialized expressions used by contemporary institutions such as government. An increased understanding of English will be an additional benefit derived from the study of Latin.

CL2105 Latin II Honors Grade 10 5 Points

This honors level course picks up where CLC Unit IIIB leaves off and follows the further adventures of Salvius. The story recounts the Roman conquest of Judea, the building of Titus' Arch, and the intrigue between Domitia Augusta and the actor Paris. Students will read the literary text and understand historical characters, plots, settings and themes. The effects of "Romanization" on the inhabitants and their culture will be discussed and compared. Students will also relate works of art, architecture and literature to legendary and historical aspects of Greco-Roman culture. **Suggested Entry Criteria: Students must demonstrate thorough knowledge of four of the six indicative verb tenses and two of the four subjunctive verb tenses. Students must also have a firm grasp of all five declensions of nouns, as well as all degrees of first, second and third declension adjectives. Students should possess basic knowledge of Roman cultural topics such as family life, geography, and military organization.**

CL2205 Latin II Collegiate 1 Grade 10, 11, 12 5 Points

A continuation of the Ecce Romani series and the further adventures of the Corneli family of the first century are featured in this course. Students will read and analyze original and adapted material in the story, and then learn to write simple Latin incorporating newly encountered linguistic concepts. Further study of cultural aspects will involve comparing and contrasting ancient Roman issues (such as slavery and religion) with those of our own civilization. Pupils will also master additional grammatical categories, such as verb tenses and specialized constructions, and compare them to similar concepts in English. Students will also have the opportunity to expand their appreciation of ancient art and architecture by studying such famous Roman sites as the Forum and the Colosseum. **Suggested Entry Criteria: Students must be able to read, translate and interpret simple**

Latin texts and passages. They will need to possess a working knowledge of the five Latin noun cases, three indicative verb tenses, and three declensions of Latin nouns/adjectives. They must also be conversant with certain mythological topics such as the Olympian gods and selected heroes of Classical folklore.

CL3105 Latin III Honors Grade 11 5 Points

This advanced course will build upon the skills developed in CL2105. Students will continue in the fourth unit of the *Cambridge Latin Course* whose readings are again set in the city of Rome. The highlight of the narrative is the ultimate downfall of the senatorial scoundrel Salvius. While developing skills as prescribed by the state's Curriculum Frameworks, students read and identify samples of the major genres such as satire and poetry as they develop advanced skills in reading and translation. In the area of culture, they will learn about and demonstrate an understanding of significant Roman institutions such as marriage, law, and legal proceedings. Comparing and contrasting advanced aspects of Latin grammar with those of English provide insight into the various workings of the ancient language and our own. Pupils will also be able to draw comparisons and note differences between Roman cultural customs such as patronage and similar practices in our own society. A connection with the history of the Roman Imperial period will afford students the opportunity to obtain essential information as background to the class readings. **Suggested Entry Criteria: Students must demonstrate thorough knowledge of all tenses of indicative active and passive verbs, as well as the four subjunctive verb tenses. Furthermore, students should demonstrate the ability to translate complex passages of created Latin into fluent, coherent English. Students must show a basic understanding of the social and political structures of the classical world.**

CL3205 Latin III Collegiate 1 Grades 11, 12 5 Points

Students will begin the second book of the *Ecce Romani* series in which they will continue their acquaintance with the Cornelli family. Complex reading skills are mastered and simple Latin-writing skills are developed. Students will also identify a plethora of English vocabulary words and compare them to Latin cognates. The cultural material analyzes the Roman traditions of rituals, marriage and education as well as historic personalities such as Cicero, Caesar and Augustus. The influence of Roman culture in literature and the visual and performing arts is a constant theme for discussion. **Suggested Entry Criteria: Students must demonstrate thorough knowledge of four of the six indicative verb tenses and two of the four subjunctive verb tenses. Students must also have a firm grasp of all five declensions of nouns, as well as all degrees of first, second and third declension adjectives. A basic knowledge of such cultural topics as clothing, family life and military organization is also essential**

CL4005 Latin IV Advanced Placement Grade 12 5 Points

This college level course is designed for highly motivated and committed students who plan to take the Latin AP exam of the College Entrance Examination Board. The content of the course will focus upon Vergil and his momentous epic poem, the *Aeneid*. Students will utilize their already considerable skills in Latin to gain a mastery of the Latin language as a medium of poetic expression, and will examine the phenomenon of language and poetic technique as utilized by the premier Roman poet, Vergil. Students will gain insight into the roots of cultural diversity from such ancient civilizations as Greece, Carthage and the Near Middle East and will learn how these cultural forces pervaded the early legends of Rome as well as the age of the Emperor Augustus during which Vergil prospered. Students will compare and contrast the nature of the epic poem in the hands of the Roman poet with that of more traditional, recent authors. There will be constant reference to and investigation of the history of the Augustan age, including the undercurrents and political environment surrounding the *Pax Romana* as well as the forces which influenced Vergil's authorship of the *Aeneid*.

Suggested Entry Criteria: Students must demonstrate an excellent mastery of all basic elements of Latin grammar as well as the ability to recognize and handle such advanced grammatical topics as indirect statement, uses of participles and gerundives, and the plethora of complex sentence types in Latin. The ability to use one's imagination and insight into poetry and literature will be a valuable skill that will enhance the pupil's appreciation of the material. AP students are required to take the College Board's National Advanced Placement examination in May.

CL4105 Latin IV Honors Grade 12 5 Points

Having completed the *Cambridge Latin Course*, students will move on to more challenging readings. The curriculum reflects alignment with the Commonwealth's Foreign Language Curriculum Frameworks. This upper

level course will find students reading and analyzing genuine selections from Roman literature such as the poetry of Vergil and Ovid, and the letters of Cicero and Pliny. They will gain an understanding of these writings as true literature and as representations of the Roman literary tradition. Pupils also expand their appreciation of the ancient culture and way of life as revealed by the Romans themselves in these original works. Additional work in vocabulary building and grammar will facilitate the process of comparing and contrasting the respective language systems of English and Latin. As always the essence of the study of Latin will again lead students into the fields of history, mythology, art, architecture, etc. **Suggested Entry Criteria: Students must be able to read, translate and interpret connected Latin passages of moderate to advanced difficulty. They must demonstrate the ability to write sentences in Latin of at least medium length utilizing advanced grammatical constructions such as indirect statement. Preparatory to the study of literature at this level, they should be familiar with the basic characteristics of Latin poetry and be conversant with the major historical and cultural movements of the Roman Imperial period.**

CL4205 Latin IV

Collegiate 1

Grade 12

5 Points

Students continue in the Ecce Romani series, where the highlights are Marcus' coming of age and Cornelia's wedding. Students will learn the complex workings of Latin verbs and compare them to high performance English writing skills. Additional literary work may include an oration of Cicero and/or a play by the comic writer, Plautus. Controversial issues in Roman history are compared and contrasted to modern events. Mythological and historic works of literature and art are analyzed as the continuing influence of Roman culture on modern artists and writers. **Suggested Entry Criteria: Students must demonstrate thorough knowledge of all tenses of indicative active and passive verbs, as well as two of the four subjunctive verb tenses. Students should demonstrate the ability to translate complex passages of Latin into fluent, coherent English. Students must show a basic understanding of the societal and political structure of the classical world.**

PHYSICAL EDUCATION, HEALTH and WELLNESS

The program of Physical Education, Health and Wellness at Arlington High School is a four-year sequence that aligns with many components of the Health Framework of the Massachusetts Department of Education. Content is drawn from Physical Health, Social and Emotional Health, Safety and Prevention, and Personal and Community Health Strands of the Framework. All students are scheduled to take Health through their Physical Education classes. A parent may request to have his/her child exempt from classes related to sexuality. Such requests shall be made in writing to the principal.

PE Graduation Requirement

3 Years

Student Contract for grade 11/12 Physical Education

Students must have proof of professional membership to a fitness club or other physical activity and provide logs with instructor/organizational sign off on a monthly basis to their Physical Education Teacher liaison. The minimal requirement for exemption is 72 hours of Physical Activity. Course requirements include: initial meeting with the Physical Education staff, completion of a questionnaire, 3 reflective/evaluation essays and on-going communication with Physical Education staff throughout the contract.

GRADE	Physical Education and Health Courses	Electives in Physical Education
Grade 9	PE 1610 9 th Grade Program/HE	
Grade 10	PE 2620 10 th Grade Program	
Grade 11		PE 3620 Competitive Team Sports PE 7651 Survival and Wilderness Camping PE7652 Lifetime Activities PE7654 Adventure Team / High Challenge Course PE7657 A.M. Fitness PE 7653 Personal Fitness PE 7658 Physical Education Leader PE 7680 Health
Grade 12		PE 3620 Competitive Team Sports PE 7651 Survival and Wilderness Camping PE7652 Lifetime Activities PE7654 Adventure Team / High Challenge Course PE7657 A.M. Fitness PE 7653 Personal Fitness PE 7658 Physical Education Leader PE 7680 Health

- All electives in grades 11 and 12 have been redesigned from existing classes to appeal to student needs and wishes for PE. Students are required to take two semester courses at anytime in grades 11 and 12.
- Elective – Outdoor Pursuits/Survival I and II and Winter Camping, Adventure Team, and Workout. Spaces may be limited. Seniors are given preference. Other students who can schedule will be placed in a lottery.
- Outdoor Pursuits/Survival II and Winter Camping Prerequisite is Outdoor Pursuits/Survival I. Spaces may be limited. Students who are able to schedule are placed in a lottery.

PE 1610 Ninth Grade Physical Education, Health and Wellness Grade 9 2.5 Points

This introductory course includes regular physical activity with a core of adventure programming and cooperative games, introduction to fitness, orienteering, dance, and some lifetime and team sports. Students examine motor

skill development, fitness, and personal and social competency. In Life issues, students address substance addictions, dating issues, sexuality, media influence, and personal wellness.

PE 2620 Tenth Grade Physical Education, Health and Wellness Grade 10 2.5 Points

This course includes regular physical activity with a core of adventure initiatives, fitness and wellness, yoga, track and field and lifetime and team sports. Students refine motor skills and fitness, and practice personal and social competency. In Life Issues, students address harassment issues, responsible decision making, and participate in the Red Cross (or American Heart Association) Cardio-Pulmonary Resuscitation program.

Fall Electives

PE7651 Survival and Wilderness Camping Grades 11, 12 1.25 Points

This course offers students the opportunity to experience adventure in the outdoors. Through hands-on experience, students learn wilderness survival skills such as orienteering, shelter-building, fire-making, edible plants, water purification, and other skills to make them more comfortable and capable in a remote forested environment. These skills are put to the test when the students participate in a required four-day solo winter camping experience.

PE3620 Competitive Team Sports Grades 11, 12 1.25 Points

This course offers instruction and games for the individual who enjoys a competitive environment. Examples of activities offered are flag football, basketball, soccer, floor hockey, team handball, volleyball, ultimate frisbee, and lacrosse.

Spring Electives

PE7652 Lifetime Activities Grades 11, 12 1.25 Points

This course offers instruction and game play in lifetime recreational activities such as archery, golf, tennis, badminton, pickle-ball, volleyball, ping-pong, and softball.

PE 7654 Adventure Team Grades 11, 12 1.25 Points

This course offers students the opportunity to be part of a team of outdoor adventure seekers participating in a variety of outdoor adventure sports including wilderness hiking, rock climbing, canoeing, archery, search and rescue, winter hiking, and backpacking and wilderness camping. These skills are put to the test when students participate in a required two-day overnight camping trip and adventure team challenge.

Will be merged with: High Challenge Course

This course offers students the opportunity to participate in a series of high-impact challenges on our indoor and outdoor challenge courses. With a focus on climbing techniques, students will learn how to use modern climbing equipment to safely ascend high climbing elements, rock faces, climbing walls, and other various high challenge activities. A focus of the course will be on personal challenge as well as on safety and support of others.

Fall & Spring Electives

PE 7653 Personal Fitness Grades 11, 12 1.25 Points

This course offers instruction and practice in various fitness components such as cardio-respiratory endurance, muscular endurance, muscular strength, and flexibility. Activities include strength training, aerobic training, cardio-respiratory fitness, fitness games, yoga, nutrition, injury prevention and fitness testing. Personal training and fitness plan development are offered in this course.

PE7658 Physical Education Leader Grades 11, 12 1.25 Points

Prerequisite: Must be recommended by a physical education teacher.

This course is designed for the student who has been successful in the freshman/sophomore physical education program. He/she has demonstrated effective leadership and cooperative skills. The student gets the opportunity to assist in the freshman physical education class.

PE7680 Grade 11/12 Health Grades 11, 12 1.25 Points

The grade 11/12 Health Issues course will focus on the dimensions of wellness and the direct correlation between choices and achieving optimal health. The course will emphasize individual responsibility, the importance of motivation and the need for a life – long commitment in order to understand that health and fitness is a process with no end point. Students will focus on prevention strategies and will have a clear understanding of the resources available to them. Topics will include: stress management, personal fitness, nutrition, sexuality and relationships, substance abuse, media and communication.

SCIENCE

Any student planning to go to college should satisfactorily complete at least three years of science at the level of Collegiate 1 or higher. Students should take one of the ninth grade sciences as preparation for all other science offerings. Biology is required to prepare students for the science MCAS examination at the end of grade 10. In making selections, freshmen students should include earth science or physical science, life sciences, and physical sciences for their college preparation sequences. Students planning to attend selective four-year colleges should ideally take courses in biology, chemistry, and physics. **The suggested course sequence is indicated in bold.** Students planning on careers in engineering, chemistry, medicine, or any other science field should include a year of both chemistry and physics in their four-year sequence. Students are encouraged to take additional science courses as electives. Doubling of sciences during grades 10 through 12 is permitted with teacher recommendation. Courses designated at the Collegiate 2 column will prepare students for two-year colleges or technical schools. **All science courses include laboratory experiences.**

LEVELS	AP/HONORS	ADVANCED	COLLEGIATE 1	COLLEGIATE 2
Grade 9	SC1105 Physical Science Honors	SC 1115 Physical Science Advanced SC7110 Introduction to Engineering Advanced	SC1215 Earth and Physical Science CP1 SC1290 Introduction to Engineering	SC1320 Earth and Physical Science SC1390 Introduction to Engineering
Grade 10	SC1105 Physical Science Honors SC2105 Biology Honors	SC2110 Biology Advanced SC7110 Introduction to Engineering Advanced	SC1215 Earth Science CP1 SC2215 Biology CP1 SC1290 Introduction to Engineering	SC2320 Biology SC1390 Introduction to Engineering
Grade 11	SC2105 Biology Honors SC3105 Chemistry Honors SC4000 AP Biology SC4005 AP Physics SC4105 Physics Honors	SC3110 Chemistry Advanced SC2110 Biology Advanced SC7110 Introduction to Engineering Advanced	SC2215 Biology CP1 SC3215 Chemistry SC4215 Physics SC1290 Introduction to Engineering SC3250 Anatomy and Physiology SC7256 Astronomy SC7276 Oceanography SC7266 Environmental Science SC 2099Biotechnology	SC2320 Biology SC3320 Chemistry SC1390 Introduction to Engineering
Grade 12	SC3105 Chemistry Honors SC4001AP Chemistry SC4000 AP Biology SC4105 Physics Honors SC4005 AP Physics SC4001 AP Chemistry	SC4110 Physics Advanced SC3110 Chemistry Advanced SC7110 Introduction to Engineering Advanced	SC2215 Biology CP1 SC3215 Chemistry SC4215 Physics SC1290 Introduction to Engineering SC3250 Anatomy and Physiology SC7256 Astronomy SC7266 Environmental Science SC 2099Biotechnology	SC2320 Biology SC3320Chemistry SC1390 Introduction to Engineering

SC1105 Physical Science Honors

Grades 9,10

5 Points

This course is designed to introduce honor students to the relationships that exist between matter and energy. Through meaningful problem-solving and laboratory investigation, students will apply physical laws and chemical processes in order to become aware of the strong partnership between science and technology and between

process and product of science. Areas of concentration will include structure of matter, interaction of substances (chemical/physical changes), forces and motion, and conservation and transmission of energy. This course includes a wide variety of laboratory demonstrations and activities.

Suggested entry criteria:

- **A in eighth grade Science**
- **A in eighth grade Math**

SC1115 Physical Science Advanced

Grades 9,10

5 Points

This course is designed to introduce advanced level students to the relationships that exist between matter and energy. Through meaningful problem-solving and laboratory investigation, students will apply physical laws and chemical processes in order to become aware of the strong partnership between science and technology and between process and product of science. Areas of concentration will include structure of matter, interaction of substances (chemical/physical changes), forces and motion, and conservation and transmission of energy. This course includes a wide variety of laboratory demonstrations and activities, including experimentation with physical science equipment from Cambridge Physics Outlet (CPO).

Suggested entry criteria:

- **B in eighth grade Science**
- **B in Impact Math or A in Connected Math**

SC1215 Earth and Physical Science Collegiate 1

Grades 9, 10

5 Points

By means of classroom discussions, laboratory work and some field exercises, students are introduced to selected areas of astronomy, mapping, geology, geochemistry, paleontology, plate tectonics, oceanography, and meteorology. Areas of concentration will include matter and energy, the evolution of the universe, and geochemical processes and cycles in the Earth system. The course considers human use and abuse of the environment. It provides a general science background that will prove useful in later science courses such as biology, chemistry and physics, along with a better understanding of the changes in the world around us.

Suggested entry criteria:

- **C or better in eighth grade Science**
- **C or better in eighth grade Math**

SC1320 Earth and Physical Science

Grades 9, 10

5 Points

By means of classroom discussions, laboratory work and some field exercises, students are introduced to selected areas of astronomy, mapping, geology, geochemistry, paleontology, plate tectonics, oceanography, and meteorology. Areas of concentration will include matter and energy, the evolution of the universe, and geochemical processes and cycles in the Earth system. The course considers human use and abuse of the environment. It provides a general science background that will prove useful in later science courses and better understanding of the changes in the world around us.

Suggested entry criteria:

- **Passing grade in eighth grade Science and Math**

SC1290 Introduction to Engineering College 1

Grades 11, 12 5 Points

This course will utilize the Engineering the Future curriculum developed by the Museum of Science (Boston), with particular emphasis on engineering design, manufacturing, construction, communication, and energy systems. By reading about practicing engineers and completing hands-on design projects, students learn about the role of engineering in society and the man-made world. The class considers the role of future technological development and how people influence development through the choices that they make as workers, consumers, and citizens. The course helps students to understand the ways in which they will engineer the world of the future, whether or not they pursue technical careers. Students work in a workshop setting with woodworking materials, metals, and laboratory equipment.

Suggested Entry Criteria:

- **B or better in Algebra I**

Points

SC1390 Introduction to Engineering

Grades 11, 12 5 Points

This course will utilize the Engineering the Future curriculum developed by the Museum of Science (Boston), with particular emphasis on engineering design, manufacturing, construction, communication, and energy systems. By

reading about practicing engineers and completing hands-on design projects, students will learn about the role of engineering in society and the man-made world. The class considers the role of future technological development and how people influence development through the choices that they make as workers, consumers, and citizens. The course helps students to understand the ways in which they will engineer the world of the future, whether or not they pursue technical careers. Students work in a workshop setting with woodworking materials, metals, and laboratory equipment.

Suggested Entry Criteria:

- **Passing grade in Math and Science**

SC2105 Biology Honors

Grades 10, 11

7 Points

Biology Honors students encounter the principles of biology through scientific inquiry and laboratory investigation. Special emphasis is placed on the molecular, cellular, organisms, and ecological aspects of the living world. Methods used by the great scientists of the time are reviewed to help establish inductive and deductive applications in a laboratory environment. Special emphasis is placed on characteristics of organisms, evolution of life, principles of heredity, and matter and energy in ecosystems. Students will be required to complete approximately thirty laboratory exercises that include formal laboratory reports, as well as a half-year in-depth project with a research paper (twenty pages) and presentation. Supplementary reading and writing assignments from journals and scientific papers will be required to add depth and scope to the curriculum.

Suggested Entry Criteria:

- **A in Advanced Physical Science or B in Honors Physical Science**

SC2110 Biology Advanced

Grades 10, 11, 12

6 Points

Biology Advanced emphasizes the molecular, cellular, organisms and ecological aspects of the living world. Special emphasis is placed on characteristics of organisms, evolution of life, principles of heredity, molecular genetics, and the dynamics of ecosystems. Students complete approximately twenty laboratory exercises that include formal lab reports. Reading and writing assignments will include articles from science journals and magazines, and students will research and do a project on a topic in modern biology each quarter.

Suggested Entry Criteria:

- **B- or better in Advanced Physical Science or A in Earth and Physical Science College 1**

SC2215 Biology Collegiate 1

Grades 10, 11, 12

6 Points

This course familiarizes students with the many aspects of the living condition. Topics include cell structure and function, biochemistry, the fundamental principles of heredity, molecular genetics, natural selection and evolution, adaptation, and ecology. Special emphasis is placed on the evolution of life, the kingdoms of living organisms, and matter and energy in ecosystems. Students will be required to complete approximately twenty laboratory exercises during the year.

Suggested Entry Criteria:

- **C or better in Earth and Physical Science College 1**

SC2320 Biology

Grades 10, 11

5 Points

This course is designed to promote understanding and excitement in science with special emphasis on the nature of the living organism, physiology of man, diseases of their control, health and heredity, and ecology. Special emphasis is placed on characteristics of organisms, evolution of life, principles of heredity, and matter and energy in ecosystems. NOTE: Not offered to students who have successfully completed any other introductory biology course.

Suggested entry criteria:

- **Passing grade in Earth and Physical Science**

SC3105 Chemistry Honors

Grades 11, 12

7 Points

This course is designed for students who have both aptitude and an interest in an advanced science program. Primary emphasis is upon modern chemistry theory, problem sets, and the quantitative and structural aspects of chemistry. The analytical phase of chemistry will be encouraged through approximately thirty laboratory exercises and formal lab reports. The laboratory program will involve theoretical and mathematical problem-solving. Students are thoroughly prepared for introductory college chemistry and for the SATII in chemistry.

Suggested Entry Criteria:

- **B or better in Honors Biology or A- or better in Advanced Biology**
- **B- or better in Honors Math**

SC3110 Chemistry Advanced**Grades 11, 12****6 Points**

This course is designed for students who want a rigorous course in modern chemistry that conforms completely to the Massachusetts Science Curriculum Frameworks. Students are thoroughly prepared for introductory college chemistry and for the SAT II in chemistry. The course includes a full laboratory program, problem-solving, and applications. Students should have both aptitude and interest in science. Primary emphasis is on modern chemistry theory, problem sets, and the quantitative aspects of chemistry. The analytical phase of chemistry will be encouraged through laboratory exercises and formal lab reports. The laboratory program will involve theoretical and mathematical problem-solving.

Suggested Entry Criteria:

- **A- or better in CP 1 Biology or B- or better in Advanced Biology**
- **Math at the Advanced level**

SC3215 Chemistry College 1**Grades 11, 12****6 Points**

This course prepares a student for further study in science or related fields, but it is not intended for students who plan to pursue college majors in science, technology, or engineering departments. The course utilizes the Living by Chemistry curriculum developed by the University of California (Berkeley). Topics studied include atoms, elements, compounds, molecular structure and properties, gas laws, phase changes, chemical reactions, and stoichiometry. The course includes a variety of laboratory demonstrations and exercises in applied chemistry.

Suggested Entry Criteria:

- **Passing grade in CP1 Biology and CP level sophomore Math**
- **C or better in Biology SC2320**

SC4105 Physics Honors**Grades 11, 12****7 Points**

This course is designed for students with a strong background in science and mathematics. Analytical reasoning, problem-solving, and the development of physical intuition are emphasized. The topics covered will include Newtonian mechanics, heat, optics and waves, electricity and magnetism. The coverage and rigor of this course is appropriate for those students interested in science-related careers, but the curriculum is not as demanding as the Advanced Placement Physics course curriculum.

Suggested entry criteria:

- **B- in Honors or AP Chemistry or A- in Advanced Chemistry**
- **B in Honors Pre Calculus or A in Advanced Pre Calculus**

SC4110 Physics Advanced**Grades 11, 12****6 Points**

This course is designed for academically strong students whose future orientation is towards the humanities or social sciences but nevertheless want to obtain a fundamental understanding of physics at a challenging level. The development of logical thinking skills and physical intuition through problem-solving is emphasized. Topics to be covered include Newtonian mechanics, optics and waves, and electricity and magnetism. The content and approach of this course will be similar to that of Physics Honors, but more conceptual in nature and not quite as mathematically rigorous.

Suggested Entry Criteria:

- **B- in Honors Chemistry or B in Advanced or A in CP1 Chemistry**
- **B- in Honors Pre Calculus or B in Advanced Calculus or Advanced Algebra II or A in CP1 Algebra II**

SC4215 Physics**Grades 11, 12****6 Points**

This course is designed for students who are interested in science but who lack the prerequisites for physics at the advanced or honors levels or for students who do not plan to pursue college science, technology, or engineering majors. The emphasis is on applied physics and the problem-solving and analytical skills necessary

to deal with contemporary issues. The course covers the material of a standard physics course and involves many real-world problems. There is an extensive lab component to the course and, though the mathematics required in the course is less than at the honors or advanced levels, the quantitative nature of the science will not be abandoned.

Suggested Entry Criteria:

- **B- or better in CP1 Chemistry or B or better in Junior level Math**

SC3250 Anatomy and Physiology

Grades 11, 12

5 Points

This course will concentrate on areas of anatomy and physiology not generally covered in depth in a first year biology course. It will provide a balanced and integrated introduction to the human body suitable for students with varying needs and interests but especially for those interested in allied health fields, pre-nursing, and pre-medical education. Students complete a required internship, projects, research papers, anatomical dissections, and other laboratory exercises that reinforce the basic principles of physiology and anatomy.

Suggested Entry Criteria:

- **B- or better in CP1 Biology or C or better in Advanced Biology**

SC7256 Astronomy

Grades 11, 12

5 points

This course provides an introduction to astronomy, including terminology, history of the study of astronomy, and current theories about the universe and its origin. Students examine the relationship among the Earth, moon, and sun and the Earth's place in space. The study of the solar system includes the planets and their moons, asteroids, meteorites, meteor phenomena, and comets. The course concludes with a study of the universe beyond the solar system, including the properties of stars, stellar evolution, star clusters, galaxies, and the evolution of the universe. The course includes evening telescope observations, term research projects, and one or more field trips. Basic principles of chemistry and physics are integrated into the course, as they relate to the study of astronomy.

Suggested Entry Criteria:

- **Passing grade in 2 previous Sciences**

SC7276 Oceanography

Grades 11, 12

2.5 points

This half-year course provides an introduction to oceanography, including origin of the Earth and its oceans, the geography and geology of ocean basins, and plate tectonics. Students examine the chemistry of ocean water, marine sediments, and saltwater organisms and their unique adaptations. Waves and tides provide examples of the physical science supporting oceanography. Marine habitats are studied as examples of ecosystems impacted by the ocean environment. The course includes term research projects and one or more field trips. Basic principles of chemistry and physics are integrated into the course, as they relate to the study of oceanography.

Suggested Entry Criteria:

- **C or better in Biology**

SC7266 Environmental Science

Grades 11, 12

5 points

Environmental science is the study of how human activity affects habitats and the relationships among organisms and the natural world. The course will include the detailed study of the principles of ecology, including several hands-on investigations and research projects and papers. Students will investigate the earth's natural resources, including biodiversity, soil, land, air, water, and energy, with the goal of understanding the delicate balance of life on earth. Problems such as pollution, overpopulation, and extinction are studied in a global context, and students investigate a wide range of solutions based on the in-depth study of environmental science. The basic principles of chemistry and physics are integrated into the course, as they relate to environmental science.

Suggested Entry Criteria:

- **C or better in Advanced Biology or B- or better in CP1 Biology or A in Biology**

SC4000 Advanced Placement Biology

Grades 11, 12

8 Points

The Advanced Placement Biology Course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their freshman year. It provides students with the conceptual framework, factual knowledge, and analytical skills necessary to deal with the rapidly changing science of biology.

As suggested by the College Board in its Advanced Placement Course Description, the course is divided into three major topic areas: 1) molecules and cells, 2) genetics and evolution, and 3) organisms and populations. Laboratory experiences comprise approximately one quarter of the grade, and students are involved in original research during the year. In addition to reading from a college text, students will be required to read articles from outside sources including scientific journals.

AP Students are required to take the College Board's National Advanced Placement examination in May.

Suggested Entry Criteria:

- **B or better in Honors Biology or A- or better in Advanced Biology**

SC4001 Advanced Placement Chemistry

Grades 11, 12

8 Points

Advanced Placement Chemistry is designed to be the equivalent of the college introductory chemistry course usually taken by science majors during their freshman year. As suggested by the College Board, the topics covered include the structure of matter, states of matter, reactions, and descriptive chemistry. Laboratory work includes quantitative analysis of molar mass and volume, titration, colorimetry, chromatography, and the other standard laboratory exercises that are included in the AP curriculum. Laboratory work will contribute about 25% of each term grade. In addition to working with a college text, students will read articles from current scientific journals. ***AP students are required to take the College Board's National Advanced Placement examination in May.***

Suggested Entry Criteria:

- **B or better in Honors Chemistry or A in Advanced Chemistry**
- **B in Honors Pre Calculus or A in Advanced Pre Calculus**

SC4005 Advanced Placement Physics

Grades 11, 12

8 Points

This course is designed to be the equivalent of an algebra-based course in introductory college physics. The content of the course corresponds to the requirements of the College Board Advanced Placement Physics AB curriculum. This involves Newtonian mechanics, optics and waves, electricity, magnetism, atomic physics, and thermodynamics. The pace of the course is demanding in terms of both content and problem-solving. Students entering this class should be highly motivated in science and willing to apply themselves to studying an advanced curriculum. There will be an integrated lab component to the course and long-term projects will be assigned both semesters. ***AP Students are required to take the College Board's National Advanced Placement examination in May***

Suggested Entry Criteria:

- **B in AP Chemistry**
- **A- or better in Honors or A or better in Advanced Chemistry**
- **B+ or better Honors Pre Calculus or A in Advanced Pre Calculus**
- **Students should be simultaneously taking AP Calculus**

SC 2099 Biotechnology

Grades 11,12

College 1

2.5 points

This one semester course offers an introduction to laboratory techniques in recombinant DNA and biotechnology. Students will learn the basic tools for gene isolation and analysis, including bacterial transformation, restriction digestion, electrophoresis, PCR, and bioinformatics. Emphasis will be placed on the application of these techniques to everyday life and to possible careers in biotechnology research and industry. In addition, the course will offer an opportunity to discuss the ethics of cloning, gene therapy, and the use of biotechnology in producing new pharmacological drugs.

Suggested Entry Criteria:

- **Students should have successfully completed one year of Biology**

CAREER/COMMUNITY SERVICE INTERNSHIP EXPERIENCE

AD7910 Career/Community Service Experience (CCSE)-*E

Grades 11, 12

5 Points

Assist in classes, in the front foyer, or in specialized programs at AHS. This is an easy and helpful way to earn community service hours during the school day. Students may also develop non-AHS community service internships and get credit for those by documenting their internships with a letter or attendance from the site supervisor.

Arlington Public Schools Technology Graduation Standards

Achievement of these competencies is arrived at through use of technology in various classes across the curriculum. Students are expected to know several skills in each area listed below upon graduation.

Computer Ethics

- Explain and demonstrate understanding of classroom rules regarding responsible use of computers (2.6)
- Explain and demonstrate ethical and legal behavior in copying files, applications, and media (2.7)
- Explain potential problem of computer viruses and exercise caution in opening e-mail attachments from unknown sources; class e-mail account only (2.8)
- Explain safe practices for sharing personal information via e-mail and the Internet (2.9)
- Explain proper mail etiquette (2.10)
- Describe and demonstrate knowledge of the school's Acceptable Use Policy, and know the consequences of violating that policy (2.11)
- Validate a Web site for authenticity; find site sponsor, author, date the site was last updated (2.12)
- Explain how media and technology can be misused to distort or exaggerate information (2.13)
- Write correct citations for text and images gathered from electronic sources. Understand that use of materials is limited by the fair use rule of copyright law (2.14)
- Develop an awareness of the issue of ergonomics and how to use equipment safely (2.15)

Computer Skills

- Identify and use drawing and painting applications as appropriate for class projects (1.33)
- Run multiple applications simultaneously, alternating among them (1.36)
- Identify and use basic features of computer operating system, e.g., format/initialize disks, access information on size and format of file, create folders on local hard drive (1.12)
- Save a file to the desktop, the hard drive, and external storage spaces, e.g., floppy disk, CD-ROM, virtual electronic space (1.13)
- Resolve commonly occurring error messages and hardware and software problems (1.37)
- Use a variety of external peripherals and understand how they connect to the computer (1.40)
- Perform efficient keyboarding technique (1.41)
- Identify and use methods for downloading and converting graphic, sound, and video files (1.38)
- Select the appropriate technology tool for the task (1.60)
- Select a printer and print a document with appropriate page setup and orientation (1.14).
- Operate peripheral equipment, e.g., scanner, digital camera, camcorder (1.15)

Word Processing

- Identify and use editing and formatting features of a word processing program, e.g., centering, line spacing, margins, cut and paste, fonts, styles, spelling, page numbers (1.17)
- Insert images (e.g., graphics, clip art, tables) from other files into word-processed document (1.18)
- Import/import and link data between word process and other application (1.42)

Spreadsheet

- Describe structure and function of database, identify components (1.19)
- Create a database, defining field formats and adding records (1.20)
- Perform simple operations in a database (1.21)
- Use formulas in a spreadsheet (1.47)
- Customize formatting of charts or graphs (1.49)
- Define and use functions such as sort, filter, find (1.50)

- Describe structure and function of a spreadsheet (1.22)
- Create an original spreadsheet, entering simple formulas (1.23)
- Produce simple charts from a spreadsheet (1.24)
- Duplicate spreadsheet structure without data (1.43)
- Use features of spreadsheet such as mail merges (1.44)
- Import/link data between spreadsheet and other applications (1.45)
- Use advanced format features such as repositioning columns (1.46)
- Create multiple links among various pieces of information in different applications such as a chart imported into a word processor from a spreadsheet (3.18)
- Use various number formats, percentages, exponents, etc. (1.51)

Internet

- Identify and use navigation features of browser (1.25)
- Using a browser, “bookmark” a Web site, e.g., URL, hyperlinks, site map, etc. (1.26)
- Identify basic elements of a Web site, e.g., URL, hyperlinks, site map, etc. (1.27)
- Copy an image from a Web site into a file on the desktop; write a correct citation in keeping with copyright law (1.28)
- Organize bookmarks into folders for future reference (1.52)
- Open e-mail attachment from class account and save it to the desktop (1.30)
- Using e-mail, create an address book (1.55)
- Send e-mail attachment using class account (1.56)
- Using e-mail, create and send a message using class account (1.29)
- Using e-mail, using a class account, to communicate with other schools (3.11)

Multimedia

- Create a multimedia presentation, desktop-published report, or Web page that incorporates data from other files (1.57)
- Create and manipulate illustrations using a drawing or painting program, e.g., adjust scale, size shape (1.58)
- Communicate results of research and learning with others using the most appropriate tools, e.g., desktop-published or word-processed report, multimedia presentation (3.9)
- Use a variety of external peripherals and understand how they connect to a computer (1.40)
- Manipulate data using charting tools and graphic organizers, e.g., concept mapping, flow charting, and outlining software, to connect ideas (3.10)
- Present information, ideas, and results of work using any of a variety of communications technologies, e.g., multimedia presentations, web pages, videotapes, desktop-published documents (3.15)
- Import graphics, photos, and other media into report or presentation, citing sources appropriately (3.16)
- Demonstrate how specialized technology tools can be used for problem-solving, decision-making, and creativity, e.g. simulation software, environmental probes, computer-aided design, graphing calculators, art and music composition software (3.19)

Research

- Routinely evaluate Web sites for authenticity when using them (3.14)
- Explain effective search strategies to locate and retrieve electronic information, e.g. understand and use syntax and Boolean logic operators (1.54)
- Identify capabilities of technology resources and understand how they can be used for lifelong learning (1.59)
- Know how to select and use search engines. Understand the differences between search engines (1.53)