

# Arlington Catholic High School Program of Studies

2024 - 2025

This booklet is designed to acquaint you with the courses available at Arlington Catholic High School. You must carry a minimum program of six full credit courses per year. Any ½ credit course may only be chosen as a seventh course. Consideration should be given to your abilities, interests, and aptitudes when choosing courses. Requirements for high school graduation and college admission are important factors in course selection.

## **Requirements for Graduation**

English 4 years

Theology 4 years

Mathematics 4 years

Science 3 years (including Biology & Chemistry)

Social Studies 3 years (including World History &

US History)

World Language/Classics 2 consecutive years of the same

language (3-4 years is strongly

recommended)

Fine Arts/Humanities 1 credit

Physical Education ½ credit (required in grades 9 & 10)

Community Service Specific hours required each year (see

Theology Dept. section)

## Requirements

Grade 9	Grade 10	Grade 11	Grade 12
Algebra 1	Biology*	Algebra 2	English 4
English 1	English 2	Chemistry*	Mathematics
World History	Geometry	English 3	Science*
Language	Language	Theology 3	Social Studies*
Theology 1	Theology 2	<b>United States History</b>	Theology 4
Physical Education	Physical Education		Fine Arts/Humanities*
½ credit art course			

<sup>\*</sup> These courses must be taken in these years if they are still needed

## Honors and Advanced Placement Courses

Honors (Grade 9)

- In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.
- A minimum of a B+ average in the appropriate subject area in grades 7 & 8.
- Scores on standardized tests, including the High School Placement Test, that indicate the student is capable in a particular subject area.
- Scores on Arlington Catholic's Placement Exams (see Math and World Language sections)
- Since topics covered are cumulative and require considerable critical thinking, regular school attendance, including a minimal number of tardies and dismissals, is required.

## Honors & Advanced Placement (Grades 10, 11, 12)

- In an honors/AP level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.
- Specific requirements for each course or department can be found in each department's section of this Program of Studies
- Since topics covered are cumulative and require considerable critical thinking, regular school attendance, including a minimal number of tardies and dismissals, is required.
- Standardized test scores including PSAT, SAT etc. if applicable
- Placement tests may be required for transfer students

Please note that no one standard automatically qualifies a student's placement into a course.

Department approval is required for all courses.

Students should consult with parents, teachers, and Guidance Counselors to plan a program appropriate for their abilities, interests, and future plans. Students should choose courses based on interest and ability, not by teacher. Students are encouraged to take a challenging program, but also to be realistic about their commitments in and out of school

Students must complete their enrollment packet <u>and</u> be financially up to date to be scheduled. Students who are not enrolled, up to date financially, or who do not choose courses by April 1, 2024 will not be scheduled and may then have limited course options available when they do complete the process.

Incoming students, both transfers and Grade 9, must meet requirements and pass department placement exams, as required, for certain courses. Academic departments will review course requests and student's academic records before students are scheduled. Students and families who appeal the department's decision and choose a level of course at the objection of the faculty and administration may forfeit their ability to change course levels at a later date.

We will attempt to honor all approved requests; however, we reserve the right to not run an under enrolled course. Conflicts may occur in the scheduling process, students will be advised of the issue or conflict and asked to select an alternative course.

Selection of courses is a serious matter; it will be difficult, and/or impossible, to make changes after the schedule has been created. Courses should be chosen with the assumption that changes will not be permitted. Because the course request process is a cooperative venture between the student, family, and school, it is expected that students will honor their course commitments even if they represent an academic challenge or if interests change.

After the schedule has been constructed, we must limit changes; students will be allowed to make schedule changes within the timeline and limitations listed below. Proper protocol must be followed. No changes that overload classes will be made. We will not accommodate changes for teacher preference, class period, etc.

- Prior to August 15: Students may change selections based on space available.
- No elective course changes will be permitted after August 15.
- First week of school: Level changes of the same course as space permits.
- Second and third weeks of school: Only level changes initiated by a teacher, counselor, or administrator will be allowed as space permits.
- No changes will be made after the third week of school. A minimal number of level changes may be made following midyear exams (prior to the start of Quarter 3) with permission of the current teacher, Guidance, and Administration. No course may be 'dropped' after the first semester.

## Concurrent/Dual Enrollment Program

## What is concurrent enrollment?

In concurrent enrollment (CE) courses, high school students can simultaneously earn high school and college credit for successfully completing a designated "college-level" course. At AC, these courses are taken on our campus during the school day and are taught at the college level by college-approved Arlington Catholic teachers.

For the 2024-2025 school year, we are planning to run a <u>limited</u> number of concurrent enrollment courses/sections in Math, Science, and/or Social Studies. Our goal is to explore other courses/content areas where we can expand this program. Please see below for some general information. Specific courses will be announced as soon as possible, pending approval from Middlesex.

## What are the benefits of taking a concurrent enrollment course?

The benefit of taking CE coursework as a high school junior or senior is the opportunity for students to experience college-level work in a supportive high school environment while receiving college credit at a fraction of the cost of college tuition. Additionally, the college credits may be transferred to many other two-year and four-year colleges. Transferability policies vary from college to college.

## Are students in CE courses required to pursue the college credit option?

No, since students who choose to take advantage of this opportunity must pay (a reduced fee) for college credit, they do NOT have to participate in concurrent enrollment but may still be enrolled in the course and receive high school credit. Whether the student takes the course for concurrent enrollment or not, the course expectations remain unchanged.

## What college is AC partnering with?

During the 2024-2025 school year, we are partnering with:

<u>Middlesex Community College</u>

## What are the costs and eligibility requirements?

The per-credit rate is set by Middlesex and will be announced/communicated once courses are approved.

## **English Department**

All students are required to take four years of English.

Summer reading is required each year.

Department approval is required for Honors & AP courses.

## **ENGLISH 1: Leaving For Points Unknown**

## 1 Credit

English 1 provides a comprehensive foundation of close reading, writing, and grammar skills that students build upon throughout their high school career. Fiction and nonfiction reading selections from a variety of literary genres center around the theme of *Leaving for Points Unknown*. The students and teacher often collaborate regarding the choice of readings and assignments. In order to begin to think more critically about these works, freshmen consider literal and figurative language. They identify literary devices, build vocabulary, understand effective sentence structure, and practice close reading. Using the writing process, they craft personal, expository, analytical, and argumentative paragraphs and essays, as well as imaginative pieces.

Grade: 9

## **HONORS ENGLISH 1: Leaving For Points Unknown**

## 1 Credit

Honors English 1 covers content similar to that of English 1. This course provides a comprehensive foundation of close reading, writing, and grammar skills that students build upon throughout their high school career; however, students are required to read and write on a more analytical level. In addition, students are often expected to work more independently. Students read both fiction and nonfiction selections from the major literary genres that center around the theme of *Leaving for Points Unknown*, and begin to think more critically about these works. They learn to identify literary language, build vocabulary, understand effective sentence structure, and practice close reading. Using the writing process, they craft personal, expository, analytical, and argumentative paragraphs and essays, as well as imaginative pieces. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.

## **ENGLISH 2: Navigating Through Literature**

## 1 Credit

English 2 builds upon the skills and concepts introduced in English 1. Reading selections center around the theme of *Navigating*. Texts come from a variety of genres including the novel, the short story, Greek and Shakespearean drama, the graphic novel, and poetry. The students and teacher often collaborate regarding the choice of readings and assignments. The writing process emphasizes gathering, organizing and developing ideas with greater sophistication. Students learn about diction, tone, style, and voice through close reading and imitation. They are introduced to rhetorical appeals and strategies through nonfiction essays and articles. Grammar, usage, sentence structure, and vocabulary are taught in conjunction with ACT/PSAT/SAT preparation.

Grade: 10

## **HONORS ENGLISH 2: Navigating Through Literature**

## 1 Credit

Honors English 2 covers content similar to that of English 2 and builds upon the skills and concepts introduced in English 1; however, students complete additional readings as well as read and write on a more analytical level. In addition, a short term paper on a literary topic is required. Reading selections center around the theme of *Navigating*. Texts come from a variety of genres including the novel, the short story, Greek and Shakespearean drama, the graphic novel, and poetry. The students and teacher often collaborate regarding the choice of readings and assignments. The writing process emphasizes gathering, organizing and developing ideas with greater sophistication. Students learn about diction, tone, style, and voice through close reading and imitation. They are introduced to rhetorical appeals and strategies through nonfiction essays and articles. Grammar, usage, sentence structure, and vocabulary are taught in conjunction with ACT/PSAT/SAT preparation. Students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.

## **ENGLISH 3: Exploring the American Experience**

#### 1 Credit

English 3: American Literature focuses on the works of American writers as well as major literary themes and movements from the colonial period to the present through the lens of *Exploration*. The students and teacher often collaborate regarding the choice of readings and assignments. Readings, which include fiction and nonfiction, essays, short stories, poems, novels and plays, act as springboards for discussion as well as writing literary analysis, argument, and synthesis. In addition, an intensive language component stresses close reading skills, grammar, usage and writing for the ACT/SAT. In the spring, juniors are guided through the process of writing college application essays. All students are required to write a term paper on a literary topic and complete a number of independent reading assignments.

Grade: 11

## **HONORS ENGLISH 3: Exploring the American Experience**

## 1 Credit

Honors English 3: American Literature focuses on the works of American writers as well as major literary themes and movements from the colonial period to the present through the lens of *Exploration*. The students and teacher often collaborate regarding the choice of readings and assignments. The Honors course requires additional readings, projects, and writing assignments. Readings, which include fiction and nonfiction, essays, short stories, poems, novels and plays, act as springboards for discussion as well as writing literary analysis, argument, and synthesis. In addition, an intensive language component stresses close reading skills, grammar, usage and writing for the ACT/SAT. In the spring, juniors are guided through the process of writing college application essays. All students are required to write a term paper on a literary topic and complete a number of independent reading assignments. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.

# ENGLISH 4/HONORS ENGLISH 4: Introduction to College Writing through Literary Study

## 1 Credit

English 4/Honors English 4 prepares students for reading and writing at the college level. The year is divided into two semesters, in which students select electives in content areas of interest focusing on critical literary analysis and real-world application.

First semester courses will challenge students to read novels, short stories, memoirs, and other works concerning their chosen topics and craft critical and analytical responses to these readings. In addition, in the first semester students will finish crafting their college application essays and culminate in a semester exam.

<u>Course options available:</u> Adolescent Psychology in Literature; Dystopian Literature; The Diverse American Experience

Second semester courses will build upon the foundation of writing skills and literary analysis of the first semester courses. In these second semester courses, students will use both technology and traditional methods to conduct research, design oral presentations, practice collaboration, and write and study independently. The semester will culminate with an independent research project centered around a research question of the students' choice.

<u>Course options available:</u> Author Study; Contemporary Issues; Women in Literature

Students will be asked to choose a first choice and an alternate for each semester. Every attempt will be made to honor these selections.

## ADVANCED PLACEMENT ENGLISH: LANGUAGE AND COMPOSITION 1 Credit

Advanced Placement English: Language and Composition is a college-level course that helps students become skilled readers and writers. Readings from a range of nonfiction and fiction genres provide a way to explore the interactions among subject matter, writer's purpose, and audience response, as well as the linguistic resources that contribute to effectiveness in writing.

Students read and explore written and visual texts as a basis for writing rhetorical analysis, argument, and synthesis essays. In addition, they keep journals and craft critical and creative writing of their own in a variety of genres and styles for a variety of purposes. Students often submit to the school's literary magazine, as well as seek other opportunities for publication. After the AP Exam in the spring, juniors are guided through the process of writing college application essays. Summer reading and writing are required.

Students interested in this course are strongly urged to have taken Honors English 2 or Honors English 3 and to have maintained a B average. An honors attitude, seriousness of purpose, active engagement in class material and discussion, participation, self-motivation, and strong work ethic are expected. Applicants from English 2 must have teacher approval. Students may be asked to submit a writing sample.

This course prepares students to earn college credit by passing the Advanced Placement Examination in Language and Composition. Students are required to take the AP Examination.

## ADVANCED PLACEMENT ENGLISH: LITERATURE AND COMPOSITION 1 Credit

Advanced Placement English: Literature and Composition is a college-level course which combines the reading and critical analysis of literature with extensive and detailed student composition. Students write essays interpreting works from a wide range of literary genres. Summer reading is required

Students interested in this course are strongly urged to have taken AP Language and Composition and to have maintained a B average. An honors attitude, seriousness of purpose, active engagement in class material and discussion, participation, self-motivation, and strong work ethic are expected. Applicants from Honors English 3 and English 3 must have teacher approval. Students may be asked to submit a writing sample.

The course prepares students to earn college credit by passing the Advanced Placement Examination in Literature and Composition. Students are required to take the AP Examination.

Grade: 12

## **CREATIVE WRITING\***

## 1 Credit

Get creative! This elective course offers students a forum for self-expression through writings other than the standard five-paragraph essay. Students will model a variety of genres including poetry, memoir, short fiction, drama, and news journalism, as well as work with mixed media forms, blending photography, visual art, video and music with words. They will free-write, read and imitate, keep a "real" notebook and build a digital portfolio. Students will be encouraged to enter contests and look for publishing opportunities such as *Teen Ink* and the school literary magazine, *Imaginary Gardens*. This course will fulfill the Fine Arts/Humanities requirement.

#### **JOURNALISM\***

## 1 Credit

This course is designed to teach the skills necessary to produce the school newspaper (The Cougar Growl). The year begins by planning the coverage for the school year and by designing unifying themes for each print edition. In addition to reading and discussing professional news articles, students will study journalism, including layout and design techniques, writing and editing copy, headlines and picture captions. This course provides the study of and practice in gathering and analyzing information, interviewing, note taking, and article writing. Students will learn strategies of planning, producing, and distributing the newspaper. Students will learn proofing strategies and work independently with journalists and photographers from The Boston Globe and Headliners in Education. At times, deadlines require that staff members work after school. Students will learn good work habits and are responsible for all phases of the school newspaper publication. This course may be repeated with permission of the instructor. This course will fulfill the Fine Arts/Humanities requirement and will be offered in alternating years.

## Fine Arts Department

All students are required to take one <u>credit</u> of Fine Arts or Humanities courses; note that some arts courses only earn ½ credit. Courses that fulfill this requirement are also found in other Departments, these courses are indicated by an asterisk (\*).

## Any 1/2 credit course may only be chosen as a seventh course

What makes AC Arts "inspiring and uplifting?"
The "spiritual" element comes into play when the learner becomes the artist.
The artist must be "inspired" to create.... ("Inspire" means to *breathe in the spirit*).
We offer classes that provide students with the opportunity to do just that.

## ART 1

## 1 Credit

This course is an introduction to art. Students use a range of artistic mediums and techniques to gain a broad understanding of visual art as a whole. Student work in this class includes pencil drawings, watercolor, ink, acrylic, cut paper, ceramics, and various other mediums.

Grades: 9, 10, 11, 12

## **DESIGN**

#### 1 Credit

Design is one of the most important elements of art. In this course, we break down the art making process into some of its simplest forms so that we can get to the root of what makes things visually appealing. Students learn how to use composition to guide the viewer's eye to the things the artist wants them to see. They also practice working within fixed guidelines, as designers would if they were working in the industry. Students in this class work in traditional mediums as well as digital.

#### **FINE ARTS APPRECIATION**

## 1/2 Credit

This course will provide an overview of the Visual Arts, from early art through modern times. Major artists, as well as their works will be studied. Pieces that continue to influence the contemporary world of art will be stressed. The purpose of this course is to awaken an appreciation for the arts and encourage participation in other art courses.

This course meets twice each week and is required for all students in Grade 9 unless they are enrolled in Choir I, Music Appreciation, Theater Arts, or the Achievement Center. Upper Class students may choose to enroll in this course and replace their study twice per week.

Grades: 9, 10, 11, 12

## **HONORS DRAWING AND PAINTING**

## 1 Credit

Drawing is the foundation of all the other art forms. Students in this class learn the important concepts about drawing so that they will be able to recreate what they see on paper or on a canvas. Once they have practiced the skills of drawing, they add color and begin working in acrylic. This class focuses on creating from observation and learning how to interpret and deconstruct what you see.

Grades: 10, 11, 12

## **SCULPTURE**

## 1 Credit

Students make a variety of projects in 3D in this class. There is a wide range of mediums and techniques used to create a range of styles for different assignments. Materials include organic and polymer clays, cardboard, paper mache, found objects, and various other materials. Work also ranges greatly in size where students make life sized sculptures of things ranging from snails to people.

#### AP VISUAL ARTS STUDIO

## 1 Credit

This class for seniors is student driven. Each student is responsible for designing and creating projects that cater to their own interests and skills. The purpose of this course is largely for students who want to create work for a portfolio to submit to colleges.

Grade: 12

## **MUSIC APPRECIATION**

## 1/2 Credit

Music Appreciation is a class for all students who love music and would like to develop knowledge to enhance their musical skills. This course will include an introduction to music theory and the elements of music such as rhythm, modality, tempo, timbre, and form, as well as the evolution of music throughout history. Students will then apply their knowledge of music theory and history to songwriting and recording projects. Some performance elements will also be included in the course.

This course will meet twice each week and is required for all 9th grade students unless they are enrolled in Choir I, Fine Arts Appreciation, Theater Arts, or the Achievement Center. Upper Class students may choose to enroll in this course and replace their study twice per week.

Grades: 9, 10, 11, 12

## **CHOIR I**

## 1/2 Credit

Choir I is a performing class for all students who wish to develop their vocal technique and choral singing skills. Students will sing quality choral and a cappella repertoire from a variety of musical time periods and genres including sacred, classical, world music, musical theater and contemporary music. Students will work to improve sight reading, vocal technique, choral blend, harmonic independence, diction and musical expression. There will be at least one required performance each term. Choir I may be repeated for additional credit with the permission of the instructor.

This course will meet twice each week and is required for all 9th grade students unless they are enrolled in Music Appreciation, Fine Arts Appreciation, Theater Arts, or the Achievement Center. Upper Class students may choose to enroll in this course and replace their study twice per week.

#### ADVANCED CHOIR

## ½ credit

This is an advanced performing group for students to develop their vocal technique and choral singing skills. Students in this course will have, with the permission of the choir director, the opportunity to participate in the choir at Liturgy and to cantor. This course requires conversation with the instructor before it is approved. Advanced Choir may be repeated with the permission of the instructor.

Grades: 10, 11, 12

## AP MUSIC THEORY

#### 1 credit

This course is designed to teach the theory behind common practice in music notation and writing. At the end of this course, students will be able to notate a melody from hearing it, sight sing in major and minor keys, add harmony to a bass line, and identify musical features such as pitch, intervals, scales, rhythm, and meter. Students will gain skills equal to a college music theory course. Students are required to take the AP exam in May.

Requirements: Students must have completed a previous music course or a demonstration of knowledge of music notation through a placement test.

Grades: 10, 11, 12

#### THEATER ARTS

#### ½ Credit

Theater Arts is a mix of a performance and non performance. Students will be introduced to various aspects of theater such as playwriting, acting, set design, lighting, sound, costuming, directing, and dramaturgy. At the end of each unit, students will have the opportunity to apply their skills. This course may be repeated with the permission of the instructor.

This course will meet twice each week and is required for all 9th grade students unless they are enrolled in Choir I, Music Appreciation, Fine Arts Appreciation, or the Achievement Center. Upper Class students may choose to enroll in this course and replace their study twice per week.

## **Mathematics Department**

All students are required to take four years of math, which generally includes Algebra 1, Geometry, and Algebra 2.

The Numworks Graphing Calculator is required in all 9th - 11th grade math classes.

(New students will be billed for a calculator ordered by the school at a discount.) Any version of the TI-84 or TI-84 Plus graphing calculator is required in all other math classes.

All incoming 9th grade students will take a placement test to determine appropriate placement.

A grade of B- is required to remain in Advanced or Honors Math courses. A year end grade of A- and departmental approval are both required to move from an Honors level course to an Advanced level course; as well as to move from a college-prep level to an Honors level course.

Departmental approval is required for Honors & AP courses.

## **ALGEBRA 1**

1 Credit

Algebra 1 is designed to give the students a solid foundation in basic algebraic concepts and skills which include sets, structure of number systems, equalities, and graphing in the coordinate plane. Highlighting some of the key areas of introductory geometry and basic logical reasoning, provides students the underlying groundwork for future mathematics courses.

Grade: 9

## **HONORS ALGEBRA 1**

1 Credit

This course is designed for the student well prepared by fundamental pre-algebra. Moving at a rapid pace, students are challenged by a highly competitive atmosphere. Students discover and develop algebraic concepts and skills by relating their knowledge of numbers to the variable. Topics include the language of sets, linear equalities, and inequalities, quadratic equations, linear systems, and functions. Numerous word problems provide practical application of the concepts being developed.

#### ADVANCED GEOMETRY

## 1 Credit

This course is designed for highly motivated students with exceptional math skills and a strong background in Algebra. The course integrates Algebra concepts in the study of Geometry. The work centers around two basic understandings: the development of geometrical principles on a plane, and the nature of mathematical proofs. These two objectives are met by starting with undefined terms, such as point, line and plane, and then proceeding through the axioms and postulates to the theorems. In this approach, concepts are important as they relate to one another. The course concludes with the study of Area and Volume. In Advanced Geometry the subject matter is studied in greater depth, with more difficult proofs, than in the Honors Geometry course.

Grade: 9

## ADVANCED ALGEBRA 2 & TRIGONOMETRY

## 1 Credit

This course is designed for highly motivated students with exceptional math skills and a strong background in Algebra and Geometry. Topics covered will include linear and quadratic functions, matrices, complex numbers, exponential and logarithmic functions, analytic geometry and an introduction to trigonometry. These topics are covered at a necessary depth to progress to Advanced Precalculus as a junior and AP Calculus as a senior.

Grade: 10

## **GEOMETRY**

## 1 Credit

Basic concepts of Geometry which includes point, line, and plane are discussed; various axioms, postulates and theorems contributing to the understanding of proofs are studied. The reinforcement of algebraic concepts helps to foster an understanding of mathematical reasoning and to illustrate the interrelation between Geometry and Algebra. Basic trigonometric ratios are also explored.

#### **HONORS GEOMETRY**

## 1 Credit

The work centers around two basic understandings: the development of geometrical principles on a plane, and the nature of mathematical proofs. These two objectives are met by starting with undefined terms, such as point, line and plane, and then proceeding through the axioms and postulates to the theorems. In this approach, concepts are important as they relate to one another. In Honors Geometry the subject matter is studied in greater depth than in the college-prep course.

Grade: 10

## **HONORS ALGEBRA 2 & TRIGONOMETRY**

## 1 Credit

This is an intensive course in Algebraic skills which goes into greater depth and at a more accelerated pace than Algebra 2. Topics covered will include linear and quadratic functions, matrices, complex numbers, exponential and logarithmic functions, analytic geometry and an introduction to trigonometry. These topics are necessary for the study of Pre-Calculus and Calculus.

Grade: 11

## ALGEBRA 2

#### 1 Credit

This course consists of a detailed development of algebraic theory in the rational, real, and complex number systems. The subject matter deals with the study of relations, their properties and graphs with attention to the polynomial, logarithmic, and exponential functions. This course provides a strong foundation for all higher mathematics courses.

Grade: 11

## **PRE-CALCULUS**

#### 1 Credit

Topics include: coordinate geometry, polynomials, inequalities, functions, exponentials and logarithms. Time permitting, trigonometry would also be covered. The content taught in this course applies algebraic processes to analyze data and graphs.

## **HONORS PRE-CALCULUS**

#### 1 Credit

This course is intended for the above average math students. The same topics studied in Pre-Calculus are studied in this course, but at an accelerated pace. More emphasis is placed on the theory and use of the graphing calculator.

Grades: 11, 12

## **ADVANCED PRE-CALCULUS**

#### 1 Credit

This course is intended for advanced math students. The Pre-Calculus topics will be discussed at an advanced level and accelerated pace, with more emphasis on trigonometry. This course prepares students for the AP Calculus course.

Grades: 10, 11

## **HONORS CALCULUS**

#### 1 Credit

This course will prepare students for further study of mathematics in college. Topics covered will include a review of algebra, functions and graphs, derivatives, applications of the derivatives, exponential and logarithmic functions, integration, and applications of integration.

Students must have successfully completed Honors Pre-Calculus.

Grades: 11, 12

## ADVANCED PLACEMENT CALCULUS AB

## 1 Credit

Advanced Placement Calculus is a college-level course which includes differential and integral calculus, and their applications. This course is intended for those students who are planning careers in engineering, mathematics, or computer science, and prepares students to earn college credit by taking the Advanced Placement exam. Any student wishing to take this course must have successfully completed one full year of Advanced Pre-Calculus and be recommended by the Advanced Pre-Calculus teacher. The student is required to take the AP Calculus AB Exam.

#### ADVANCED PLACEMENT CALCULUS BC

## 1 Credit

Advanced Placement Calculus BC is a college-level course which includes differential and integral calculus, infinite sequences and series, polar functions, and applications of these topics. This course is intended for those students who are planning careers in engineering, mathematics, or computer science; and prepares students to earn college credit by taking the Advanced Placement BC exam. Any student wishing to take this course must have successfully completed one full year of Advanced Placement Calculus AB and be recommended by the AP Calculus AB teacher. The student is required to take the AP Calculus BC Exam.

Grade: 12

#### ADVANCED PLACEMENT STATISTICS

#### 1 Credit

In AP Statistics there are four major themes: Exploratory Data: Describing patterns and departures from patterns; Sampling and Experimentation: Planning and Conducting a Study; Anticipating Patterns: Exploring random phenomena using probability; and, Statistical Inference: Estimating population parameters and testing hypotheses.

In this course, students develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Any student wishing to take this course must have taken or be currently taking Precalculus. The student is required to take the AP Statistics Exam.

Juniors may elect this course in addition to a Pre-Calculus or Calculus course.

#### **SENIOR MATH TOPICS**

## 1 Credit

A variety of subject matter will be studied from financial literacy to advanced math. In part, topics will be determined by the post graduation goals of the students in the class. Early in the year emphasis will be placed on the data, statistics and probability as well as other topics of demonstrated need for success on the SATs. Toward the end of the year the curriculum will focus on college math placement tests or trade school entrance exams. Midyear students explore finance lessons such as creating a budget and renting and furnishing an apartment. We will also explore credit cards, interest and taxes and how to balance a checkbook. **This course is restricted to seniors who have been recommended by their junior year teacher and have departmental approval. This course is not NCAA approved.** 

Grade: 12

## **MATH TEACHING ASSISTANT**

#### 1/2 Credit

Under the close supervision and guidance of a teacher, senior students serve as teaching assistants to provide additional support for students who struggle in 9th and 10th grade CP-level math courses. Teaching assistants ordinarily attend a class 2 times per schedule cycle. Teaching assistants experience the teaching and learning process from an educator's perspective, come to know and value what it takes to make mathematics accessible to all students, and make connections with younger students that foster academic achievement and positive relationships. \*\*This course is under review and whether or not it runs will be determined in May. Interested students should select the course and will be notified of follow-up processes.\*\*

Grade: 12

Prerequisite: Open only to grade 12 students. Requires teacher recommendation and department approval. Interested juniors should speak to their current teacher to be recommended.

## **Physical Education**

## PHYSICAL EDUCATION

1/4 Credit

Physical Education is a requirement for all Freshmen and Sophomores. The Physical Education class is an introduction to basic skills and movement by participation and instruction in the following activities: Badminton, Basketball, Flag Football, Lacrosse, Paddle Tennis, Pillo-Polo, Ping Pong, Wiffle Ball, Soccer, and Ultimate Frisbee. Students will work on individual skills as well as group work and teamwork by participating in a variety of structured recreational games. Physical Education class will also utilize and understand the importance of the Wellness Center and the Turf Field. The program helps students develop socially, emotionally and physically in a healthy environment with emphasis placed on good sportsmanship and fair play.

Grades: 9, 10

## Science Department

All students are required to take three years of science, including Biology and Chemistry. Most students should take Biology in Grade 9 and Chemistry in Grade 10.

Any version of the TI-84/TI-84 Plus or Numworks graphing calculator is required in all Chemistry, Physics, Astronomy, and Engineering classes.

Department approval is required for all Honors and AP courses.

## **BIOLOGY 1**

## 1 Credit

Biology 1 is a required course offered to freshmen and sophomores. This course is designed to heighten awareness of the interdependence of living organisms with the environment. Topics covered include: cell structure and function, the cell cycle, biochemistry of organic nutrients, classification, energy transformations, DNA, genetics, evolution and life processes as they relate to various organisms.

Grades: 9, 10

## **HONORS BIOLOGY 1**

#### 1 Credit

Honors Biology 1 is designed for freshmen who plan to take four years of science at Arlington Catholic and have demonstrated high aptitude in mathematics and reading comprehension. It provides students with a deeper knowledge of biology and it further develops their investigative and critical thinking skills. Its content is taught on a molecular level, which allows students a better understanding of the rapid advances in biology. Topics include: cell structure and function, energy transformations, DNA structure, protein synthesis, genetics, evolution, biochemistry, as well as a deeper study of life processes as they relate to various organisms. This course requires independent research and study.

Grades: 9, 10

## **CHEMISTRY**

## 1 Credit

Chemistry is a required course offered to sophomores and juniors. This course is designed to familiarize students with the basic concepts involved in chemistry. Topics covered include: structure, properties and classification of matter; physical and chemical changes in matter; formula writing; chemical equations; atomic structure; periodic properties of the elements; chemical bonding; behavior of gasses and the gas laws; acids, bases and salts; and basic stoichiometry. Laboratory exercises are designed to reinforce principles taught in the class.

Grades: 10, 11

## **HONORS CHEMISTRY 1**

## 1 Credit

Honors Chemistry acquaints the student with the basic concepts of chemistry as outlined in college-prep chemistry; however, it includes a more intensive treatment of subject matter with a particular emphasis on chemical mathematics. This course requires independent research.

Grades: 10, 11

## **HONORS CHEMISTRY 2**

#### 1 Credit

Honors Chemistry 2 is open to juniors and seniors who have had a solid performance in mathematics and in their first year chemistry course. This course offers a strong college preparatory background in qualitative, quantitative, and theoretical aspects of chemistry for those interested in pursuing science or health-care related courses in college. This course expects students will make a serious commitment of time and energy. Concepts presented include: structure and properties of matter; states of matter; energy transformations; solutions; reaction types; stoichiometry; equilibrium; kinetics; electrochemistry; nuclear chemistry; and introduction to both organic chemistry and biochemistry. Students are required to prepare independent projects.

Requirements: Students must have a B+ in Algebra 2 and other mathematics courses and B+ in Chemistry or B in Honors Chemistry and Honors Algebra 2 as well as other honors mathematics courses. Students coming from Chemistry are responsible for topics that bridge the gap between college-prep Chemistry and Honors Chemistry.

#### HONORS BIOTECHNOLOGY

## 1 Credit

This introductory course will give students a broad understanding of biotechnology and its impact on society. Topics covered include prokaryotic and eukaryotic cells, nucleic acids, proteins, and the technologies used to produce biotechnology products. This is a course that builds lab skills through many lab exercises. Lab exercises include the following, but are not limited to, growth of microbial cultures, bacterial transformation, DNA extraction, electrophoresis, SDS-PAGE, size exclusion chromatography, ELISA, and PCR.

Requirements: Completion of Biology and Chemistry with a B+ average in each class or B- in Honors Biology I and Honors Chemistry I or II.

Grades: 11, 12

## INTRODUCTION TO ENGINEERING

#### 1 Credit

This elective gives students a basic overview of different types of engineering and the engineering process. Topics include: history of technology, graphics and CAD, mechanical engineering, robotics engineering, electrical engineering, environmental engineering, chemical engineering, types of energy, power, work and efficiency. Laboratory activities and hands-on builds are included to reinforce topics. This involves the application of scientific knowledge to the solution of everyday problems in ways that pay attention to the needs of society and the environment while taking into account economic constraints. Students taking this course are required to prepare independent and group projects.

Requirements: Students enrolling in this course should have completed Algebra 2 and received a minimum of a B as a final average. It is recommended that students have received at least a B- in previous science courses.

#### ADVANCED PLACEMENT BIOLOGY

## 1 Credit

AP Biology is a course designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Colleges may grant credit, appropriate placement in college courses, or both, to students who have scored satisfactorily on the AP exam. Goals of this course include the following: to help students develop a conceptual understanding of science as a process; to give students personal experience in scientific inquiry; to study unifying themes that integrate major topics in biology; and to apply knowledge and critical thinking to environmental and social concerns. Students who take AP Biology will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The AP Biology curriculum revolves around four Big Ideas-- Big Idea 1: The process of evolution drives the diversity and unity of life; Big Idea 2: Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis; Big Idea 3: Living systems store, retrieve, transmit and respond to information essential to life processes; Big Idea 4: Biological systems interact, and these systems and their interactions possess complex properties.

Students will be responsible for designing and running their own experiments, which may require extra time before/after school. Students must also complete a summer assignment. All students are required to take the AP Biology Exam.

Requirements: Students must have advanced inquiry and reasoning skills, and must have received at least an A- in both Honors Biology 1 and Honors Chemistry in addition to having above average reading comprehension. Standardized test scores will also be considered.

Grades: 11, 12

## **HONORS ANATOMY & PHYSIOLOGY**

#### 1 Credit

Honors Anatomy and Physiology is open to juniors and seniors who are interested in pursuing a health-care related course of study in college. It is an in-depth, lab based course that explores the structure and function of the human body systems and how they work together to maintain homeostasis or health. The course prepares the student for a college level Anatomy and Physiology course. The course will move rapidly and go in-depth on most systems. Independent reading and research are required in this course. The lab component includes mandatory dissections.

Requirements: Completion of Biology and Chemistry with a B+ average in each class or B- in Honors Biology I and Honors Chemistry I or II.

#### ADVANCED PLACEMENT CHEMISTRY

## 1 Credit

AP Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first year in college. For some students, this course enables them to undertake, in their first year, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. AP Chemistry will meet the objectives of a college general chemistry course. Students in this course will attain a depth of understanding of fundamentals and reasonable competence in dealing with chemical problems. The course will contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. This course differs from the usual first high school level chemistry course with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. Other differences include the number of topics treated, the time spent on the course by students, and the nature and variety of experiments done in the laboratory. Topics covered include atomic theory and structure, periodicity, chemical bonding, acids and bases, gases, liquids, solids, solutions, reaction types, stoichiometry, equilibrium, kinetics and thermodynamics. The course also requires students to participate in laboratory experiments, which will involve extra time before and after school. Students must complete a summer assignment prior to the start of the course in the fall. All students enrolled in this class are required to take the AP Chemistry exam.

Requirements: Students must have received an A- in Honors Chemistry and an A- in Honors Algebra 2 or an equivalent course. Standardized test scores will also be considered.

Grades: 11, 12

#### **PHYSICS**

## 1 Credit

The course is designed to familiarize students with concepts of physics necessary for following science courses in college. Topics include: kinematics, Newton's laws of motion, work, energy, power, linear momentum, gravitation, waves, heat, electricity and magnetism. Basic algebra and simple trigonometry are used for problem solving. Laboratory experiments are included to reinforce topics. Students taking this course are required to prepare independent projects.

Requirements: It is recommended that students have received at least a B- in previous science courses and a C average in previous math courses.

#### **HONORS PHYSICS**

## 1 Credit

This course provides an introduction to physics principles with a more quantitative approach than Physics. This course moves at a faster pace and involves more problem solving than Physics. Laboratory experiments are included to reinforce topics. Topics include kinematics, Newton's laws of motion, work, energy, power, linear momentum, gravitation, waves, heat, electricity and magnetism. Students taking this course are required to prepare independent projects.

Requirements: Students should have completed Geometry (final grade of A- in CP geometry or B- in honors geometry) and be concurrently taking Algebra II or an equivalent course.

Grades: 11, 12

## **AP PHYSICS 1**

## 1 Credit

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion.

Requirements: Students should have completed Geometry (final grade of A- in CP geometry or B- in honors geometry) and be concurrently taking Algebra II or an equivalent course.

Grades: 11, 12

## ADVANCED PLACEMENT PHYSICS C: MECHANICS

## 1 Credit

This course is designed to be the equivalent of a college introductory physics course usually taken by physics and engineering majors during their first semester. This is a calculus-based course that deals with the following topics: kinematics, Newton's laws of motion, work, energy and power, systems of particles and linear momentum, circular motion and rotation, oscillations and gravitation. The course includes hands-on laboratory work that is comparable to the laboratory component of an introductory college physics course. The student is required to take the AP Exam.

Requirements: AP Calculus AB must be taken previously or concurrently. If AP Calculus is being taken concurrently then students should have received an A- in Advanced Pre-Calculus.

#### FORENSIC SCIENCE

## 1 Credit

Forensics is a multidisciplinary course which incorporates biology, chemistry, and physics as well as analytical skills. It is intended for those who have a strong interest in the sciences. The course will include labs, lab reports, projects and presentations. Topics will include, but are not limited to, observation skills, crime scene investigation, hair analysis, blood and blood splatter patterns, fingerprinting analysis, case studies, forensic toxicology, handwriting analysis, and forensic anthropology.

Students should be aware that there may be graphic material.

Requirements: Students need to have completed Biology and Chemistry.

Grades: 11, 12

## **HONORS FORENSIC SCIENCE**

#### 1 Credit

This course will cover material similar to that in CP Forensic Science but will cover material more quickly and in more depth. In addition, the course requires independent research and projects.

Requirements: Completion of Biology and Chemistry with a B+ average in each class or B- in Honors Biology I and Honors Chemistry I or II.

Grades: 11, 12

## **HONORS ASTRONOMY**

#### 1 Credit

This course will provide an introduction into Astronomy by dealing with celestial objects, space, and the physical universe as a whole. Astronomy is the study of objects and matter outside the earth's atmosphere and of their physical and chemical properties. Topics in this course will include gravity and orbits, planets/stars and other celestial bodies, light, general and special relativity as well as the structure and size of the universe. This class will spend time learning through lecture, video and visual representations as well as hands-on and computer simulated labs. This course tests on knowledge of definitions, problem solving using calculations and projects involving visual representations or scientific writing.

Requirements: A scientific calculator is required for this course. Students must have demonstrated strong mathematical abilities and should have taken Honors Algebra 2/Trig or Algebra 2 (or be taking either of these courses concurrently with Honors Astronomy). Departmental approval is required for enrollment in this course.

## **ENVIRONMENTAL SCIENCE**

#### 1 Credit

Environmental Science is an interdisciplinary science course focused on gaining a better understanding of how the natural world works and of the challenges facing the future sustainability of the earth. This course studies such topics as ecosystems, biodiversity, biological conservation, resource and waste management, climate change, environmental effects of human influence on renewable and nonrenewable resources, health impact on human and non-human individuals and communities, marine biology, potential consequences of the introduction of novel viruses and microorganisms into human population, threats to animal and plant life, extinction, global energy consumption, distribution of natural resources, wildlife habitat conservation, history of environmental awareness and policies and environmental science careers. Related current events issues will be highlighted and discussed in class. Students will be responsible for presenting research connected to these topics. This course will prepare students to become better-informed decision-makers, problem-solvers and global citizens ultimately responsible for ensuring the earth's sustainability.

Requirements: Completion of Biology and Chemistry. It is recommended that students have received at least a B- in previous science courses.

Grades: 11 and 12

## HONORS ENVIRONMENTAL SCIENCE

#### 1 Credit

Honors Environmental Science acquaints the student with the basic concepts as outlined in the CP level Environmental Science course. It covers topics at a quicker rate and in a more intensive manner. In comparison to CP Environmental Science, students in this course will be assigned additional assignments, projects, independent research and testing questions.

Requirements: Completion of Biology and Chemistry with a B+ average in each class or B- in Honors Biology I and Honors Chemistry I or II.

## Social Studies Department

All students are required to take three years of Social Studies, which includes World History in 9th grade and US History in 11th grade. AP Seminar may be used to fulfill the three year requirement, but does not, for juniors, replace US History.

Department approval is required for Honors and AP courses.

## **WORLD HISTORY**

1 Credit

This course is a survey of the great civilizations of the world. Beginning with pre-history, and ancient cultures, students will study The Middle East, China, India, Africa, Asia, Southeast Asia, East Asia and Europe. The course concludes with a study of the Renaissance. Students develop skills in geography and writing, as well as in document reading and analysis. Current events will be incorporated to develop and enhance historical thinking skills.

Grade: 9

## HONORS WORLD HISTORY

1 Credit

This course is a study of the great civilizations of the world, beginning with Prehistory through the Renaissance. Students will study The Middle East, China, India, Africa, Asia, Southeast Asia, East Asia, and Europe. The main aspects of a civilization are covered: culture, government structure, belief systems, societal structure, and geography. Emphasis will be placed on critical reading and writing as well as the development of a student's analytical skills. Current events will be incorporated to develop and enhance historical thinking skills. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.

#### MODERN WORLD HISTORY

## 1 Credit

This course examines the major turning points of the modern world from from the end of the Renaissance to contemporary time. Components of this class include: Historical Linkage, the Enlightenment, the French Revolution, the Industrial Revolution, Nationalism and the growth of Democracy, the Rise of Imperialism and Colonialism, World War I, Totalitarianism, World War II and the Cold War. Students should develop an understanding of the historic as well as contemporary geographic, social, political and economic consequences of the various areas and problems they review. Current events will be incorporated to develop and enhance historical thinking skills. Completion of a history course in the sophomore year is required for admission to AP U.S. History.

Grade: 10

## HONORS MODERN WORLD HISTORY

## 1 Credit

This honors course explores major themes in world history from the end of the Renaissance until the present day. Students will examine political, economic, social, and cultural aspects of history. Significant topics include the Enlightenment, Nationalism, Imperialism, Wars of the 20<sup>th</sup> century, Popular Culture and significant revolutions (both violent and nonviolent). Emphasis will be placed on analysis of issues and writing. Students are required to complete a written research project for this course. Current events will be incorporated to develop and enhance historical thinking skills. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated. Completion of a history course in the sophomore year is required for admission to AP U.S. History.

# ADVANCED PLACEMENT MODERN WORLD HISTORY 1200 A.D. - Today 1 Credit

This course allows students to develop a greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. Students examine and compare changes and the consequences of these changes throughout world history; it is these changes that, over time, have resulted in the knitting of the world into the tightly integrated whole it is today. The course covers material from 1200 A.D. through the present day. Preference will be given to students who have completed Honors World History, although the Department Chair may allow other students to select this course with the understanding that additional reading may be required. Students are required to take the AP exam in May.

Grade: 10

## **UNITED STATES HISTORY**

### 1 Credit

This course provides a one year survey of American history by exploring the themes of democracy, war, immigration, and social change. Examination of primary/secondary sources, critical thinking skills, cooperative learning, and discussion will be used to allow students to understand how the past relates to the present and the future. Current events will be incorporated to develop and enhance historical thinking skills.

Grade: 11

## **HONORS UNITED STATES HISTORY**

#### 1 Credit

This course provides a one year survey of American history by exploring the themes of democracy, war, immigration, and social change. Examination of primary/secondary sources, critical thinking skills, cooperative learning, and discussion will be used to allow students to understand how the past relates to the present and the future. Current events will be incorporated to develop and enhance historical thinking skills. The course provides an in depth look at US history topics while moving at a quicker pace than the College Prep course. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.

#### ADVANCED PLACEMENT UNITED STATES HISTORY

#### 1 Credit

This course is a single academic year survey of the history of the United States from pre-Columbian America to the present day. The course examines the geographic, political, diplomatic, cultural, social and economic forces that converged over time to forge a unique and dynamic entity that continues to impact the evolution of world society. Current events will be incorporated to develop and enhance historical thinking skills. The course involves extensive reading assignments and written work to prepare for class. Students are required to take the AP Exam in May.

Requirements: Completion of a History course or AP Seminar in the sophomore year and departmental approval.

Grade: 11

## **ADVANCED PLACEMENT EUROPEAN HISTORY**

## 1 Credit

In AP European History, students investigate significant events, individuals, developments, and processes from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world, economic and commercial development, cultural and intellectual development, states and other institutions of power, social organization and development, national and European identity, and technological and scientific innovations. Students are required to take the AP Exam in May.

Grade: 12

## ADVANCED PLACEMENT U.S. GOVERNMENT & POLITICS

#### 1 Credit

AP U.S. Government and Politics is an introductory college-level course in U.S. government and politics. Students cultivate their understanding of U.S. government and politics through analysis of data and text- based sources as they explore topics like constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis. Students are required to take the AP Exam in May.

#### AMERICAN LAW AND SOCIETY

## <u>1 Credit</u>

This course examines American Law in our judicial system today. Subject matter covered during the course of the year includes: The Constitution; Bill of Rights; other amendments, United States Supreme Court decisions; due process of law; lawmaking; the legal profession; crime in America; the criminal justice process; torts; contracts; and consumer law. Current events will be incorporated to develop and enhance critical thinking skills. Students are required to complete a written research project..

Grade: 12

## **PSYCHOLOGY**

## 1 Credit

This course examines human behavior and thought processes. Among the topics that will be covered are: research methods; social psychology; how the brain and nervous system affects our behavior; perception; learning and memory; development across the lifespan; sleeping, hypnosis, and drug use; intelligence; personality; and psychological disorders. Students will apply their study of psychology to their lives. Current events may be incorporated to develop and enhance critical thinking skills. Students will be required to do independent reading to prepare for class, actively participate and complete outside class projects.

Grade: 12

## ADVANCED PLACEMENT PSYCHOLOGY

#### 1 Credit

Advanced Placement Psychology introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods that psychologists use in their study. This course requires nightly reading assignments, numerous writing assignments, and extensive class participation. There is also a summer assignment for this course. Emphasis is placed on the ability to think, read, and write in a critical fashion. Current events may be incorporated to develop and enhance critical thinking skills. Students are required to take the AP examination and will not be permitted to withdraw from the course after the first week of classes in September.

## **ENTREPRENEURSHIP & MARKETING**

## 1 Credit

This course will encourage students to explore all aspects of business, from recognizing opportunities to plan for successful futures. The major emphasis is on developing a start-up business and by the end of the course, pitching the plan. Topics will include: the entrepreneurial mindset, developing opportunities, business organization, marketing strategies, accounting, inventory management and essential financial statements. Students will develop a business plan and present in a "Shark Tank" environment to potential "investors." Current events may be incorporated to develop and enhance critical thinking skills. Guest speakers, group projects and various simulations will be used to provide students with a thorough understanding of all aspects of running a business.

# **Technology Department**

In addition to the courses below, a variety of Technology courses are available through VHS and Catholic Virtual. Please see your Guidance Counselor or the Associate Principal for Academics for more information on courses and the registration process.

## **HONORS ROBOTICS**

## 1 Credit

This is a STEM-related (science, technology, engineering, and mathematics) course that will be challenging but great fun! We will be designing and building remote controlled robots as well as building, designing, and programming autonomous robots. Students will also learn about the history of robotics, uses and functions of robots, and how to calculate speed, gear ratios, and mechanical advantage as related to their robots.

Requirements: Students need to have completed two years of Science and should have attained a B- in each class. Departmental approval is required for enrollment in this course.

Grades: 11, 12

# AP COMPUTER SCIENCE A

## 1 Credit

This course covers topics typically found in a college-level first course in Computer Science, and provides a solid preparation for the College Board's Advanced Placement Computer Science A examination. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. This course is designed for students with knowledge of basic English and algebra and having intermediate to advanced PC skills. Students should be comfortable with functions and the concepts found in the uses of functional notation, such as f(x) = x + 2. Emphasis will be placed on the study of Java syntax, object-oriented programming, problem solving, and algorithmic development. Students are required to take the AP Exam in May. Students must have a device other than an iPad for this course.

Grades: 11, 12

#### AP COMPUTER SCIENCE PRINCIPLES

#### 1 Credit

AP Computer Science Principles is designed to be equivalent to a first-semester college computing course and introduces students to the foundational concepts of computer science, challenging them to explore how computing and technology impact the world. In this course, students will develop a broad and robust understanding of computer science while using computational tools to analyze and visualize data, draw conclusions from trends, and develop solutions to problems. Among the concepts presented are abstraction, algorithms, data structures, encapsulation, resource management, security, software engineering, and web development. Students will gain familiarity with a number of programming languages, including Python, C, JavaScript, CSS, and HTML. Students will work cooperatively as well as individually to solve problems to build team collaboration skills. Students will also develop effective communication skills as they discuss and write about the impact these solutions could have on their community, society, and the world. It is recommended that a student in the AP Computer Science Principles course should have successfully completed Algebra 1 and Geometry with a strong foundation in linear functions. Students should be able to employ problem-solving strategies that require multiple approaches and collaborative efforts. Students are required to take the AP Exam in May.

Grades: 11, 12

# **Theology Department**

All students are required to take four years of Theology. Active participation is expected in all classes. Departmental approval is required for Honors courses.

# THEOLOGY 1

1 Credit

# **ENCOUNTERING CHRIST**

The purpose of this course is to introduce students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be. This course introduces students to the Blessed Trinity in and through the fullness of God's revelation of Himself: Jesus Christ. They will study the Incarnation, the union of Christ's two natures, Jesus as the exemplar of humanity, as well as the unique role of Mary, the mother of God. This course prepares students to overcome the challenges of Faith, and leads them to a more profound understanding of what it means to believe.

# SACRED SCRIPTURE: EXPLORING THE OLD TESTAMENT

This course is designed as an introduction to the Bible as well as a study of the Hebrew Scriptures. It offers students an opportunity to read the Bible and learn how to understand and apply its truths to their own lives. Through a study of basic biblical themes, the course develops an understanding of how God has worked in human history and still works in our world today.

## THEOLOGY 2

<u>1 Credit</u>

# SACRED SCRIPTURE: DISCOVERING THE NEW TESTAMENT

This course introduces students to the person and message of Jesus and continues the study of the Bible begun in the freshman year. It shows students how to understand the message of the Christian Scriptures in light of the Gospels. Students are given opportunities to apply Jesus' message to their own lives.

# LIVING THE MORAL LIFE IN CHRIST

This course will introduce students to the moral teaching of the Catholic Church with the goal of inviting them to live a moral life in Christ. Students will learn about every person's deep desire for God that is written in our hearts and God's plan to bring us true happiness by living as He created us to live. They will also explore the meaning of law, the Ten Commandments and Jesus' great commandments, Jesus' moral teaching and example, the reality of sin, and the relationship between human freedom and conscience.

Grade: 10

# **HONORS THEOLOGY 2**

## 1 Credit

This course covers essentially the same material as the college-prep course. However, it offers students the opportunity to explore these concepts in more depth. Therefore, this course requires students to do additional reading, write quality essays, and engage in active, meaningful discussions. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated.

Requirement: Students must have a minimum grade of B+ in Theology 1.

# THEOLOGY 3

<u>1 Credit</u>

## SEEKING JUSTICE: CATHOLIC SOCIAL TEACHING

Students will learn of the body of doctrine collectively known as Catholic Social Teaching, which proposes principles for integrating the truth of the Catholic Faith into society in pursuit of justice, peace, and the common good. This course will provide an overview of this teaching, with a focus on developing an understanding of human dignity, justice, and charity in the various spheres of human life. This course is designed to enable students to make mature, Christian decisions about complex world problems. Specifically, the course addresses national and global problems such as racism, sexism, poverty, and war.

# ENGAGING THE SACRED: THE CHURCH AND HER SACRAMENTS

This course examines the concepts of sacredness and sacramental awareness from a Catholic perspective. The meanings of symbols and rituals are explored through the study of the sacraments and prayers of the Catholic Church. Students will learn of the origin, foundation, and manifestation of the Catholic Church, established by Jesus Christ during His earthly life to continue His saving mission until the end of time. Through their exploration of the Church, students will consider various images of the Church, the four marks of the Church, and the role of the Church in the life of the believer.

Grade: 11

# **HONORS THEOLOGY 3**

#### 1 Credit

This course covers essentially the same material as the college-prep course. However, it offers students the opportunity to explore these concepts in more depth. Therefore, this course requires students to do additional reading, write essays, and engage in active, meaningful discussions. In an honors level course, students are expected to have a serious, consistent work ethic, be actively engaged in class material and discussion, and be self-motivated. Required: Students must have a minimum grade of an A- in Theology 2 or a B+ in Honors Theology 2

# THEOLOGY 4 (Choose ONE of the following courses): 1 Credit

# EXAMINING THE PROBLEM OF EVIL: A CATHOLIC-CHRISTIAN PERSPECTIVE

This course examines the Problem of Evil: what is evil, and why does it exist? The theological form of the Problem of Evil can be stated in this way: If God is all powerful and loving, then why is there evil in the world? However, we will see that this problem is not limited to religious believers, but is part of a much broader question about the issue of purpose and meaning in the world. This course will attempt to wrestle with the question of the Problem of Evil by examining traditional Christian theological answers to this problem such as: The Fall of Man and Original Sin, Christ's Atonement, and the Fall of Lucifer. In addition to the theological answers to the Problem of Evil, we will examine the intriguing contributions of modern social science to this question, particularly Social Psychology and the work of Philip Zimbardo. Case studies will be drawn from various historical events such as the Witch Trials of Europe and America, the Jewish Holocaust, and the Rwandan Genocide.

#### RELIGIONS OF THE WORLD

Students will develop a critically reflective approach to the study of the major religions of the world. This course explores the various forms of religious expression throughout history and into the modern world. Specifically, the students study concepts such as theism, atheism, cults, mythology and indigenous religion along with major religions such as Judaism, Christianity, Islam, Hinduism, Buddhism and the religions of Japan and China. The context of the course is our increasingly globalized, pluralistic world. The course aims to clarify how religious beliefs and practices shape and influence society, and how culture shapes and influences particular religions and our own religious experiences.

#### CHRISTIAN SPIRITUALITY AND DISCIPLESHIP

This course is designed to deepen students' understanding of Christian spirituality and discipleship. Students will examine discipleship as a process of lifelong transformation that results from engaging with God as revealed to us through Jesus Christ. Through a survey of the mystical tradition of the saints, this course examines how to pursue and obtain the goals of Christian spirituality such as: transformation, freedom, holiness, joy, union, and peace. It is in the wisdom and witness of these saints that students will confront the power of the Gospel made manifest in the human heart, and identify ways how Christ's saving work can be as real in our lives as it was in the lives of his followers two thousand years ago. Students will engage with the wisdom and witness of the saints. Through reflection and experiential learning, students will encounter the transforming power of living out the fullness of the Christian life.

# **CATHOLIC VIRTUAL COURSES**

An additional fee is charged for these courses and they may not be dropped once students are enrolled. These courses will not replace a student's required Theology course offered at Arlington Catholic. ½ credit courses may only be chosen as a seventh course and will replace a student's study hall for a semester.

Scriptures: The Historical Books, .5 credit Scriptures: The Gospels & Acts, .5 credit Scriptures: Paul's Letters, .5 credit

Scriptures: General Letters & Revelation, .5 credit

Scriptures: Genesis, .5 credit

# **COMMUNITY SERVICE REQUIREMENT**

"I give you a new commandment: love one another. As I have loved you, so also you should love one another." (John 13:34)

In keeping with our mission as a Catholic school and to living out our Core Values, students are required to complete community service hours each year. As part of their Theology course, students will reflect on service from a Christian perspective.

# **Required Hours:**

Bridge Academy: 10 hours
Freshmen: 20 hours

Seniors: 10 hours

Seniors: 10 hours

Sophomores: 20 hours

Service Site Requirements: No more than half of service hours may be accrued in service to the school (Orientation, Open House, Retreats, Mass participation, etc.).

Remaining hours must be completed through (or in partnership with) an official organization that serves the wider community beyond the walls of AC (non-profits, hospitals, churches, libraries, schools, etc.). Service is *not* given to family and friends and is, by definition, not financially compensated in any way. Service sites must be approved by the Campus Ministry office; students are strongly encouraged to find volunteer opportunities at their local parish, St Agnes Parish or St Agnes School.

Deadlines: Students may choose to complete their service hours over the summer. All service must be completed no later than *March 1st* of each year; service hours for seniors must be completed by the *end of the first quarter*.

# **Instructions for Logging Hours:**

Hours must be logged, by families/students, in the RenWeb Portal. This is done by clicking the Family section, changing the name in the dropdown menu at the top to the name of the student, clicking the "+" sign, and adding the necessary information:

- Date: Select the date the service was completed, not the date you are logging
- Hours: # of hours
- Description: 1-2 sentences detailing who and how you served
- Verified by: Provide the name of your volunteer supervisor as well as a phone number or email

As Community Service is both essential to our mission as a Catholic school as well as a graduation requirement, students who do not complete the requirement may be ineligible to return to Arlington Catholic.

# World Language/Classics Department

All students are required to take a minimum of two consecutive years of the same language: French, Italian, Latin, or Spanish. Students are strongly encouraged to take 3 or 4 years of a language.

A minimum of a B- average in an honors course is required to remain at that level.

A minimum of a B+ average in the appropriate prerequisite college preparatory course(s) is required to move to the honors level.

Incoming Grade 9 and Bridge Academy students must take the department placement test in order to be placed in a College Prep level 2 or Honors level 2 course.

Departmental approval is required for all Honors and AP courses.

# FRENCH 1

## 1 Credit

French 1 is for students who have never studied French before or have had very little French at the middle school level. Emphasis is on developing communicative competence by practicing listening, speaking, reading, and writing skills with basic structures and vocabulary. Developing an understanding of the customs and cultures of the French-speaking world is also emphasized. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted mostly in French and students are encouraged to speak as much French as possible.

Grades: 9, 10, 11

# **HONORS FRENCH 1**

#### 1 Credit

Honors French 1 is for students who have never studied French before or have had very little French at the middle school level and are generally strong students academically. Emphasis is on developing communicative competence by practicing listening, speaking, reading, and writing skills with basic structures and vocabulary. Developing an understanding of the customs and cultures of the French-speaking world is also emphasized. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted mostly in French and students are encouraged to speak as much French as possible.

Grades: 9, 10, 11

## FRENCH 2

# 1 Credit

French 2 is for students who have completed a French 1 course either at the middle school level or at the high school level. This course builds on the listening, speaking, reading and writing skills developed in level 1 and continues to explore the customs and cultures of French-speaking countries. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in French and students are expected to speak only French during class time. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **HONORS FRENCH 2**

# 1 Credit

Honors French 2 is for students who have completed a French 1 course either at the middle school level or at the high school level and are generally strong students academically. The course builds on the listening, speaking, reading and writing skills developed in level 1 and continues to explore the customs and cultures of French-speaking countries. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in French and students are expected to speak only French during class time. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **HONORS FRENCH 3**

#### 1 Credit

Honors French 3 continues to build on the skills learned in prior levels, emphasizing both fluency and accuracy through more advanced listening, speaking, reading and writing activities. The course also focuses on developing a greater understanding of the customs and cultures of French-speaking countries. The Level 3 National French Exam is taken in the spring. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in French and students are expected to speak only French during class time.

Grades: 10, 11, 12

# **HONORS FRENCH 4**

# 1 Credit

Honors French 4 continues to build on the skills learned in prior levels, emphasizing both fluency and accuracy through advanced listening, speaking, reading and writing activities. It also focuses on developing an even greater understanding of the customs and cultures of French-speaking countries. The Level 4 National French Exam is taken in the spring. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in French and students are expected to speak only French during class time.

Grades: 11, 12

# ADVANCED PLACEMENT FRENCH LANGUAGE AND CULTURE

# 1 Credit

This is a challenging, college-level course for students who have had a minimum of four years of French (at least one year in middle school and Honors French 2, Honors French 3 and Honors French 4 in high school). The course prepares students for the various components of the AP exam: reading comprehension, listening comprehension, a formal email response, a persuasive essay using three sources, a recorded conversation, and a recorded cultural presentation. Students must take the AP exam in the spring in order to receive AP course credit. In addition, students may opt to take the Level 5 National French Exam in the spring.

Grade: 12

# **ITALIAN 1**

# 1 Credit

Italian 1 is for students who have never studied Italian before or have had very little Italian at the middle school level. Emphasis is on developing communicative competence by practicing listening, speaking, reading, and writing skills with basic structures and vocabulary. Developing an understanding of the customs and culture of Italy is also emphasized. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted mostly in Italian and students are encouraged to speak as much Italian as possible.

Grades: 9, 10, 11

#### **HONORS ITALIAN 1**

# 1 Credit

Honors Italian 1 is for students who have never studied Italian before or have had very little Italian at the middle school level and are generally strong students academically. Emphasis is on developing communicative competence by practicing listening, speaking, reading, and writing skills with basic structures and vocabulary. Developing an understanding of the customs and culture of Italy is also emphasized. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted mostly in Italian and students are encouraged to speak as much Italian as possible.

Grades: 9, 10, 11

# **ITALIAN 2**

## 1 Credit

Italian 2 is for students who have completed an Italian 1 course either at the middle school level or at the high school level. This course builds on the listening, speaking, reading and writing skills developed in level 1 and continues to explore the customs and cultures of Italy. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Italian and students are expected to speak only Italian during class time. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **HONORS ITALIAN 2**

## 1 Credit

Honors Italian 2 is for students who have completed an Italian 1 course either at the middle school level or at the high school level and are generally strong students academically. The course builds on the listening, speaking, reading and writing skills developed in level 1 and continues to explore the customs and cultures of Italy. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Italian and students are expected to speak only Italian during class time. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **HONORS ITALIAN 3**

#### 1 Credit

Honors Italian 3 builds on the listening, speaking, reading and writing skills developed in level 2 and continues to explore the customs and cultures of Italy. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Italian and students are expected to speak only Italian during class time.

Grades: 10, 11, 12

# **HONORS ITALIAN 4**

# 1 Credit

Honors Italian 4 will encapsulate the skills learned in Italian 1, 2, and 3 (listening, reading, writing, and speaking) while continuing to explore the customs and culture of Italy. In order for students to have an immersive language experience, the entire course will be conducted in Italian and students will be expected to speak, read, and write the language proficiently.

Grades: 11, 12

# **AP ITALIAN**

# 1 Credit

This is a challenging, college-level course for students who have had a minimum of four years of Italian (at least one year in middle school and Honors Italian 2, Honors Italian 3 and Honors Italian 4 in high school). The course prepares students for the various components of the AP exam: interpretive communication (reading comprehension, listening comprehension), a formal email response, a persuasive essay using three sources, a recorded conversation, and a recorded cultural presentation. Students must take the AP exam in order to receive AP course credit.

Grade: 12

#### LATIN 1

#### 1 Credit

This course is designed for students who have had no previous study of Latin. Latin-derived English vocabulary and the general principles of how such words are formed will be a major focus of the course. In addition, important aspects of Roman civilization will be presented.

Grades: 9, 10, 11

## **HONORS LATIN 1**

## 1 Credit

This course is designed for students who have had no previous study of Latin and are generally strong academically. Students will work at a more intensive pace than in Latin 1. The major focus of the course is Latin vocabulary, grammar and reading comprehension. In addition, important aspects of Roman civilization will be presented. Students will be prepared to take the Level 1 National Latin Exam in the spring.

Grades: 9, 10, 11

## LATIN 2

# 1 Credit

This course builds on the skills learned in Latin 1. Students will be expected to do work involving the active production of Latin as well as reading comprehension of increasingly authentic Latin prose. In addition, important aspects of Roman history and civilization will be presented. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **HONORS LATIN 2**

#### 1 Credit

This course builds on the skills learned in Honors Latin 1. Taught at a more rigorous pace than Latin 2, students will be expected to do work involving the active production of Latin as well as reading comprehension of increasingly authentic Latin prose. In addition, important aspects of Roman history and civilization will be presented. Students will be prepared to take the Level 2 National Latin Exam in the spring. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **HONORS LATIN 3**

## 1 Credit

This course builds on the skills learned in Honors Latin 2 with a focus on literary vocabulary and advanced concepts of grammar. Students will be expected to do rigorous work involving the active production of Latin as well as reading comprehension of authentic Latin prose. Unique to this level is the study of the late Republican era of Roman history and the writings of Julius Caesar and Virgil. Students will be prepared to take the Level 3 National Latin Exam in the spring.

Grades: 10, 11, 12

# HONORS LATIN LITERATURE (Will not be offered in 2024-2025) 1 Credit

This course is designed to bridge the material of Cambridge Latin Course to the A.P. Latin curriculum or, for students who have completed A.P. Latin, as an opportunity to explore extra Latin literature. Students will read a Latin author of their choice and explore the more complex features of the language along with features specific to Latin prose or poetry. Depending on student interest, the text may be supplemented by conversational Latin activities. This course will be offered in alternate years, with AP Latin offered in years when this course is not offered.

Grades: 11, 12

# **AP LATIN**

#### 1 Credit

The AP Latin course focuses on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. The course requires students to prepare and translate the readings and place these texts in a meaningful context, which helps develop critical, historical, and literary sensitivities. Throughout the course, students consider themes in the context of ancient literature and bring these works to life through classroom discussions, debates, and presentations. Additional English readings from both of these works help place the Latin readings in a significant context. Students are required to take the AP Exam in May. This course will be offered in alternate years, with Honors Latin Literature offered in years when this course is not offered.

Grades: 11, 12

## **SPANISH 1**

# 1 Credit

Spanish 1 is for students who have never studied Spanish before or have had very little Spanish at the middle school level. Emphasis is on developing communicative competence by practicing listening, speaking, reading, and writing skills with basic structures and vocabulary. Developing an understanding of the customs and cultures of the Spanish-speaking world is also emphasized. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted mostly in Spanish and students are encouraged to speak Spanish in class.

Grades: 9, 10, 11

# **HONORS SPANISH 1**

# 1 Credit

Honors Spanish 1 is for students who have never studied Spanish before or have had very little Spanish at the middle school level and are generally strong students. This course is taught at a more rigorous pace than Spanish 1. Emphasis is on developing communicative competence by practicing listening, speaking, reading and writing skills with basic structures and vocabulary. Developing an understanding of the customs and cultures of the Spanish-speaking world is also emphasized. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted mostly in Spanish and students are encouraged to speak as much Spanish as possible.

Grades: 9, 10, 11

# **SPANISH 2**

# 1 Credit

Spanish 2 is for students who have completed a Spanish 1 course either at the middle school level or at the high school level. This course builds on the listening, speaking, reading and writing skills developed in level 1 and continues to explore the customs and cultures of Spanish-speaking countries. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Spanish and students are expected to speak only Spanish during class time. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

## **HONORS SPANISH 2**

## 1 Credit

Honors Spanish 2 is for students who have completed a Spanish 1 course either at the middle school level or at the high school level and are generally strong students academically. Taught at a more rigorous pace than Spanish 2, this course builds on the listening, speaking, reading and writing skills developed in level 1 and continues to explore the customs and cultures of Spanish-speaking countries. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Spanish and students are expected to speak only Spanish during class time. Please note: Incoming freshmen must take the department placement test to enroll in this level.

Grades: 9, 10, 11, 12

# **SPANISH 3**

## 1 Credit

This course emphasizes a building of the listening, speaking, reading and writing skills learned in Spanish 2 with a focus on more advanced structures, vocabulary and idiomatic expressions. The course also develops a greater understanding of the customs and cultures of Spanish-speaking countries. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Spanish and students are expected to speak only Spanish during class time.

Grades: 10, 11, 12

# **HONORS SPANISH 3**

## 1 Credit

Honors Spanish 3 emphasizes building both fluency and accuracy through more advanced listening, speaking, reading and writing activities. Taught at a more rigorous pace than Spanish 3, the course also develops a greater understanding of the customs and cultures of Spanish-speaking countries. The Level 3 National Spanish Exam is taken in the spring. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Spanish and students are expected to speak only Spanish during class time.

Grades: 10, 11, 12

# **SPANISH 4**

#### 1 Credit

Spanish 4 continues to emphasize the building of fluency and accuracy through advanced listening, speaking, reading and writing activities. It also focuses on developing a deeper understanding of the customs and cultures of Spanish-speaking countries. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Spanish and students are expected to speak only Spanish during class time.

Grades: 11, 12

# **HONORS SPANISH 4**

# 1 Credit

Honors Spanish 4 continues to emphasize the building of both fluency and accuracy through advanced listening, speaking, reading and writing activities. Taught at a more rigorous pace than Spanish 4, the course also focuses on developing a deeper understanding of the customs and cultures of Spanish-speaking countries. The Level 4 National Spanish Exam is taken in the spring. In order for students to have an immersive language experience which facilitates acquisition, the class is conducted in Spanish and students are expected to speak only Spanish during class time.

Grades: 11, 12

# ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE 1 Credit

This is a challenging, college-level course for students who have had a minimum of four years of Spanish (at least one year in middle school and Honors Spanish 2, Honors Spanish 3 and Honors Spanish 4 in high school). Taught exclusively in Spanish, the course prepares students for the various components of the AP exam: reading comprehension, listening comprehension, a formal email response, a persuasive essay using three sources, a recorded conversation, and a recorded cultural presentation. Students must take the AP exam in the spring in order to receive AP course credit. In addition, students may opt to take the Level 5 National Spanish Exam in the spring.

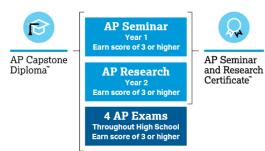
# VIRTUAL HIGH SCHOOL COURSES

Please review the VHS section at the end of this booklet. An additional fee is charged for these courses and they may not be dropped once students are enrolled. ½ credit courses may only be chosen as a seventh course and will replace a student's study hall for a semester. Two ½ credit courses may also be taken (one each semester) to have a full credit course on their transcript. These courses <u>may not</u> be used to fulfill Arlington Catholic's World Language requirement.



The College Board's AP Capstone<sup>™</sup> is an innovative college-level program based on two courses, AP Seminar and AP Research, that complement and enhance discipline-specific AP courses. The program immerses high school students in the challenging practice of the critical skills, in an interdisciplinary approach, that students need today. The ability to think independently, write effectively, research, collaborate, and learn across disciplines is essential for success in college and beyond.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma<sup>™</sup>. This option allows students taking multiple AP courses to distinguish themselves to colleges and universities. Students who earn scores of 3 or higher in AP Seminar and AP Research but not



on four additional AP Exams will receive the AP Seminar and Research Certificate™.

Students typically take AP Seminar in grade 10 or 11, followed by AP Research in grade 11 or 12. AP Seminar is a prerequisite for AP Research.

In both courses, students investigate a variety of topics in multiple disciplines. Students may choose to explore topics related to other AP courses they're taking. Both courses guide students through completing a research project, writing an academic paper, and making a presentation on their project.

Over the course of the two-year program, students are required to: Analyze topics through multiple lenses to construct meaning or gain understanding; Plan and conduct a study or investigation; Propose solutions to real-world problems; Plan and produce communication in various forms; Collaborate to solve a problem and, Integrate, synthesize, and make cross-curricular connections.

#### **AP SEMINAR**

# 1 Credit

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. The course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

Students who are highly motivated and prepared for college-level coursework are best suited for the program, but the program also benefits those students who show potential for AP course work but have not yet enrolled in AP courses. Students should demonstrate curiosity about real-world issues, a willingness to take intellectual risks, and a dedication to acquiring the skills that colleges and universities value — critical inquiry, analysis, and research. In short, AP Capstone students have an interest in becoming curious, independent, and collaborative scholars. Above average grades in English are highly suggested.

May fulfill the 3 year Social Studies requirement; does not replace US History.

**Prerequisite:** Instructor approval. Students will be required to sign an enrollment contract and make a commitment to remaining in the course once enrolled.

Grades: 10, 11, 12

# **AP RESEARCH**

# 1 Credit

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong investigation to address a research question.

Students further develop the skills acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of approximately 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

**Prerequisite:** AP Seminar is a prerequisite for AP Research. Instructor approval required.

Grades: 11, 12



A limited number of seats are available to highly motivated juniors and seniors to take online courses through VHS Learning or Catholic Virtual. A student may take only one online course per year to pursue a course that is not offered at Arlington Catholic. Students are expected to be highly motivated, independent learners. A period is added to their schedule during which students are expected to attend their class online. The grading policy is set by VHS or Catholic Virtual; Arlington Catholic has no control over grades assigned, whether instructors will accept late work, or what penalties for late work may be. Students may be required to complete assignments during vacation periods, even if Arlington Catholic is not in session.

Students should consult with their Guidance Counselor and/or the Associate Principal for Academics in selecting these courses.

Students may combine two ½ credit courses to have a full credit in their program.

Courses, especially on the AP level, may have summer assignments that students are responsible for completing, usually with a due date in the first week of the course.

Students are responsible for the fee charged to AC. Students who select an online course may not drop the course once enrolled. Plagiarism or violations of AC's Academic Integrity policy may result in course removal with no fee refund.

# Sample of Available Courses:

American Sign Language- 1 credit
American Popular Music- ½ credit\*
Animal Behavior and Zoology½ credit
AP Economics- 1 credit
AP Environmental Science- 1 credit
AP Human Geography- 1 credit
Basic Web Design- ½ credit\*
Bioethics- ½ credit
CAD- ½ credit\*
Chinese- 1 credit
Cybersecurity- ½ credit^
Film and Literature- ½ credit\*
German Language and Culture-

1/2 credit

Ghosts & Haunting in Literature
1/2 credit\*
History of Photography- 1/2 credit\*
Investing in the Stock Market
1/2 credit
Meteorology- 1/2 credit
Personal Finance- 1/2 credit
Screenwriting- 1/2 credit\*
Video Game Design-1/2 credit\*
Web Design- 1/2 credit\*

Other courses listed under Theology Department

#### **STUDY HALL**

Study Hall is designed to provide students with opportunities to do independent study, to use the Library, and to take tests missed. Also, the student can arrange conferences with teachers or guidance counselors. While always under adult supervision, the student develops a sense of self-responsibility, self-discipline, efficient use of unstructured time, and serious study habits. This will prepare students for the reality of college classes, so that they know the discipline required to use time wisely.

Students in the Achievement Center will have those 2 periods replace their study hall.

Students in Grade 9 will have one scheduled study period per week.

Students in Grade 10 will have 3 scheduled study periods per week. They may wish to choose a ½ credit music or arts course in lieu of 2 study periods.

Students in Grades 11 & 12 will have 4 scheduled study periods per week. They may wish to choose a seventh course instead of a study. They may also wish to choose a ½ credit music or arts course or a ½ credit virtual course in lieu of 2 study periods each week.