



**THE VILLAGE SCHOOL**

**2017-2018**

**Upper School**

**Course of Study**

# **THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY**

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## General Academic Information – Curriculum

The curriculum at The Village School is composed of a core of required courses which form the basis of a strong liberal arts education. As a college preparatory school, The Village School provides each student with a personal course of study which is challenging but which also offers extensive extracurricular opportunities. Many clubs, activities, sports and performance opportunities are available.

## Developing a Curriculum Plan

Students are asked in the freshman year to develop, with the guidance of a counselor and the Naviance program, a four-year plan that satisfies the graduation requirements as well as their personal education goals. The purpose is to ensure that students will think through all elective choices carefully. Careful planning helps students avoid being unable to take desired subjects because they have run out of time in their schedules. Advance planning also allows students to make sure they will be prepared for important college admissions exams such as the SAT® or ACT. Students will make revisions to their plans in subsequent years, but it is important always to have a realistic plan that extends to graduation.

## Graduation Requirements

To graduate from The Village School students must:

- complete at least 26 academic credits which must include all required courses and credit totals within each department;
- complete at least 1.0 credit (two semesters or seasons) of physical education credit and 0.5 credit of health & wellness;
- complete 0.5 credit in engineering or technology and 0.5 credit in public speaking;
- complete the 30-hour annual community service requirement described in the Parent/Student Handbook; and
- abide by the behavior expectations described in the Honor Code and the Code of Conduct in the student and parent handbook available via the school website.

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## The Village School – Academic Planning Chart with Graduation Requirements

The following chart will be used when students meet with the academic team to create a four-year plan. Most courses will have College Prep and Honors levels with select courses offering Advanced Placement (AP®). Students will be allowed to take up to three AP® courses or AP® electives per year beginning their sophomore year. All AP® courses will need a teacher recommendation and the specific department chair’s approval. Students may fulfill the physical education requirement through competitive team sports or through a traditional physical education program. Students may also choose to elect a combination of these programs. Students will complete one semester of technology or engineering and one semester of public speaking. A minimum of 26 credits/units is required to graduate from The Village School along with 120 community service hours and successful completion of the Senior Capstone Project.

**The Village School reserves the right to make changes to curriculum or school programs offered to students without prior notification to parents. A minimum of 5 students are required for each course offered.**

	9th	10th	11th	12th	Requirements/Credits
English	English I	English II	English III or AP® English Language	English IV or AP® English Literature	4 required
Math	Progression from Algebra I through AP® Calculus AB/BC				4 required
History/Social Science	World I or AP® World Prep	World II or AP® World History	US History or AP® US History	Government & Economics or AP® Gov & Econ	4 required
Science	Biology w/lab	Chemistry w/lab	Science elective w/lab	Science elective or AP® elective	3 required 4 recommended
Modern & Classical Language	Spanish, French or Latin (2 years must be sequential and in the same language in Upper School)				2 required 3 recommended
Arts	Culinary, Music, Theater or Visual Arts				2 required
Physical Education & Health	Sports season = 0.5 credit Health & Wellness = 0.5 credit (1.0 credits Physical Education & 0.5 credit Health & Wellness)				1.5 required
Electives	One semester of Technology or one semester of Engineering <b>and</b> one semester of Public Speaking required				5.5+
Total Credits (minimum)					26 (minimum)
Community Service	30	30	30	30	120 hours
Senior Capstone Project					Completed senior year

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## **English – 4 years/8 semesters**

The first two years have a set curriculum. During the junior/senior years, students may take AP® English Language/Literature or choose two semester-long English electives.

## **Mathematics – 4 years/8 semesters**

Students must complete four years of mathematics and have completed the following courses: Algebra 1, Algebra 2 and Geometry.

## **History – 4 years/8 semesters**

The first and third years are set with, respectively, World History 1 and U.S. History. The second year students choose between World History 2 or AP® World History. Seniors take American Government and Economics or AP® equivalents.

## **Science – 3 years/6 semesters (4 years recommended)**

Students are required to take 3 years of science with a laboratory component including Biology and Chemistry. Science electives include Anatomy & Physiology, Marine Science, AP® Environmental Science and Physics.

## **Modern and Classical Languages – completion of 2 sequential years in any one language in US**

Students must complete at least 2 years of a language in the US. This requires two years of study in the same language. While we encourage students to continue beyond level 2, it is not required.

## **Study of the Arts – 4 semesters**

Students must take courses in the arts. They may choose Culinary Arts, Visual Arts, Theater Arts, or Music. Students may instead take AP® Art History in grades 10-12 if they qualify and are approved; most upperclassmen who enjoy this challenging course take it as an elective.

## **Physical Education – 2 semesters (or sports seasons)**

Students must complete two semester-long Physical Education courses or successfully complete two TVS varsity athletic seasons. Students may complete any combination of Physical Education courses or athletic team participation totaling 2.

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## Health & Wellness – 1 semester

Students must complete one semester of health & wellness.

## Engineering or Technology – 1 semester

Students must complete one semester of a course that emphasizes technology or engineering.

## Public Speaking – 1 semester

Students must complete one semester of public speaking.

## Electives – as necessary

Students choose electives as desired to ensure a minimum of six and a maximum of seven courses at all times and a total of at least 26 credits by graduation.

GRADE	POINT VALUE	COLLEGE PREP		HONORS		AP®	
		Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted
A+	100-98	4.0	4.0	4.5	4.0	5.0	4.0
A	97-94	4.0	4.0	4.5	4.0	5.0	4.0
A-	93-90	3.7	3.7	4.2	3.7	4.7	3.7
B+	89-87	3.3	3.3	3.8	3.3	4.3	3.3
B	86-83	3.0	3.0	3.5	3.0	4.0	3.0
B-	82-80	2.7	2.7	3.2	2.7	3.7	2.7
C+	79-77	2.3	2.3	2.8	2.3	3.3	2.3
C	76-73	2.0	2.0	2.5	2.0	3.0	2.0
C-	72-70	1.7	1.7	2.2	1.7	2.7	1.7
D+	69-67	1.3	1.3	1.8	1.3	2.3	1.3
D	66-63	1.0	1.0	1.5	1.0	2.0	1.0
D-	62-60	0.7	0.7	1.2	0.7	1.7	0.7
F	59-0	0.0	0.0	0.0	0.0	0.0	0.0

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## Academic Policies and Procedures

Students are grouped to give each individual the pace of learning that is challenging but not stressful. Groups are not static. Placement is evaluated on an ongoing basis and can change if performance indicates that coursework is too demanding or insufficiently challenging.

Early in the fall, a student may be considered for a move from a college prep class to an honors section if the student is earning at least an A (94%) in every category that comprises the student's grade in the course. Along with the earned grades, approval from the department and the upper school principal are critical components to such a move as a course load and schedule change of this kind should not be taken lightly. A student earning below a passing grade at any time during a grading period jeopardizes his or her continued placement in an honors or AP<sup>®</sup> section. The teacher will place the student on placement review. If the grade is not raised within this period, the student may be placed in a college prep section.

A student who is doing well in a college prep section but has not met the requirements to move up early in the fall will continue to thrive in the college prep class through the school year. When courses for the following school year are selected at the beginning of the second semester, the student may request to take the next course at the higher level, either honors or sometimes Advanced Placement (AP). Earning a solid A in a college prep course, along with earning department approval, is necessary to move up to an honors or AP course in that department for the following year.

## Honors and Advanced Placement classes, ACT Aspire, PSAT/NMSQT<sup>®</sup>, SAT<sup>®</sup> and SAT Subject Tests<sup>™</sup>, and the ACT

The very significant difference between honors and Advanced Placement (AP<sup>®</sup>) is that the College Board has designated the AP<sup>®</sup> courses as college-level; therefore, the expectation for the level of learning is higher. Additionally, the work load in most AP<sup>®</sup> classes is more than in most honors classes. When creating a four-year plan, students (and parents) need to consider this when determining the cumulative work load for all the classes in any given year. Students who take an AP<sup>®</sup> class at TVS must take the AP<sup>®</sup> test in that subject in May of the same school year in order to receive AP<sup>®</sup>-weighted grade points. Students, who choose not to take the AP<sup>®</sup> test in the same school year, will receive honors-weighted grade points. These three-hour, subject-specific tests are graded on a scale of 1 to 5, and **depending on the test, the score, and the university**, students **may receive credit** towards their college graduation.

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Students take the PSAT™ 8/9, ACT Aspire or PSAT/NMSQT® (Preliminary Scholastic Assessment Test) for practice beginning in the fall of the freshman year. In the fall of sophomore year the PSAT/NMSQT® will be administered and in the spring the ACT Aspire. These tests yield diagnostic information about a student's testing pattern. The scores are not reported to the colleges. Students take the PSAT/NMSQT® again in the fall of the junior year. This score is not reported to the colleges, but National Merit Recognition is based on this testing.

Most students take the ACT/SAT® in the second semester of their junior year. SAT® vocabulary words will more closely align with those used in college courses, instead of more obscure and esoteric terms. Every exam will have a reading passage containing an excerpt from either one of the nation's "founding documents" or a text from the "ongoing Great Global Conversation about freedom, justice, and human dignity." Every exam will include source documents from a broad range of disciplines in the reading and writing sections, i.e. science and social studies.

The math portion of the test will focus on three main areas:

1. Linear equations
2. Complex equations or functions
3. Ratios, percentages and proportional reasoning

Test-takers will read a passage before analyzing it in the form of an essay for the optional essay portion of the exam.

- The total exam score will range from 400-1600
- Evidence-Based Reading and Writing section: 200-800 point scale
- Math section: 200-800 point scale
- Students will no longer be penalized for incorrect answers
- The essay will be a separate score and will be optional

The SAT Subject Tests™ are one-hour single-subject tests which are scored on a 200-800 scale. Students should plan to take two SAT Subject Tests™, and they should be taken immediately after a student has completed an affiliated course (such as Precalculus for the Math Level 2). Students may consult with their teachers, advisor and the college counselor to determine which SAT Subject Tests™ to take.

Some students may find that the ACT is better suited to their style of learning and testing. Most colleges will accept either the SAT® or the ACT, so if a student feels his/her PSAT™ and then SAT® scores do not reflect his/her ability, the ACT can be taken.



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## Course Descriptions

Course descriptions for every course, separated by department, are given on the following pages. Students are encouraged to read these descriptions prior to signing up for a course. Course and grade prerequisites, if applicable, are given. Unless specified otherwise, semester classes earn one half credit and year-long courses earn one full credit.

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## English

The Upper School English curriculum focuses on developing students as energetic readers and purposeful writers, thinkers who are eager to recognize and to make precise choices in diction, syntax, and rhetorical pattern. The critical study of literature as a class fosters an ability to recognize and articulate universal themes that unite across boundaries; independent reading choices ready students for lives as engaged and thoughtful citizens.

### **English 1 (1 year/1.0 unit)**

English 1 offers students an introduction to the empowering endeavor of Upper School reading, writing, and thinking. Students begin by establishing habits of mind and practice around vocabulary, annotation, grammar/mechanics, and independent reading. In the second quarter, with a collection of contemporary nonfiction writers as our mentors, we move beyond *what* happens in a piece of text to *how* and *why* it happens. Students learn to listen carefully to authorial choices, thereby growing the strength of their own writing voices. Writing in the first semester focuses on personal essay and narrative. Close reading of selected short fiction gives students an opportunity to hone analytical skills before moving into a second semester introduction to literary genres: poetry (Lowell, Bishop, Frost), drama (Miller, Ibsen), and the novel (Lee). The year finishes with Shakespeare's delightful *Much Ado About Nothing*.

Prerequisite: None

### **English 1 Honors (1 year/1.0 unit)**

Expectations for Honors students include increased volume and a quicker pace in reading, greater depth of analysis in discussion, and a heightened awareness of stylistic sophistication in written work.

Prerequisite: Recommendation from 8<sup>th</sup> grade English instructor along with a final grade of A, A-, or B+

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## English, cont.

### **English 2 – World Literature (1 year/1 unit)**

English 2 investigates ways in which literature has sought to explore the delicate balance between the rights of an individual and the needs of a group. Short fiction by Katherine Mansfield and poetry by Thomas Hardy build a framework within which students study pairings of seminal works by authors of differing ages and cultures. Representative pairings (a tentative reading list) include Golding (*Lord of the Flies*) and Fugard (*“Master Harold”...and The Boys*); Satrapi (*Persepolis*) and Lee (*To Kill a Mockingbird*); Shakespeare (*Macbeth*) and Achebe (*Things Fall Apart*). Short fiction and poetry will supplement the study of book-length texts, and tenth grade students will also maintain a robust commitment to independent (choice) reading.

Prerequisite: English 1

### **English 2 Honors – World Literature (1 year/1 unit)**

Students enrolled in English 2 Honors will also read Shelley (*Frankenstein*) and Zusak (*The Book Thief*); students enrolled at the honors level will be held to higher standards in terms of depth of analysis and sophistication of expression, both in discussion and on paper.

Prerequisite: English 1 and departmental approval

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## English, cont.

### **English 3 – American Literature (1 year/1.0 unit)**

This essentially chronological survey course will also examine thematic threads in American studies and make cross-curricular connections with students' work in American History. Essential questions driving student inquiry focus around identity, freedom and oppression, the "American Dream," and the enduring appeal of the frontier. Units of study will include Nation-Building: Puritan, Colonial, Native American Voices; Romanticism and Transcendentalism; Realism; Suffrage and Civil Rights; The Literature of War; and The American Dream in the 20<sup>th</sup> Century. The writing focus for the first half of the year is on literary analysis, but students will hone both research skills and personal writing voice with a multi-genre paper in the third quarter, and fourth quarter writing will include enough emphasis on personal and narrative writing to prepare students to begin to crafting college essays. Eleventh graders will continue their commitment to independent reading and maintain a writer's notebook.

Prerequisite: English 2

### **English 3 Honors – American Literature (1 year/1.0 unit)**

This essentially chronological survey course will also examine thematic threads in American studies and make cross-curricular connections with students' work in American History. Essential questions driving student inquiry focus around identity, freedom and oppression, the "American Dream," and the enduring appeal of the frontier. Units of study will include Nation-Building: Puritan, Colonial, Native American Voices; Romanticism and Transcendentalism; Realism; Suffrage and Civil Rights; The Literature of War; and The American Dream in the 20<sup>th</sup> Century. The writing focus for the first half of the year is on literary analysis, but students will hone both research skills and personal writing voice with a multi-genre paper in the third quarter, and fourth quarter writing will include enough emphasis on personal and narrative writing to prepare students to begin to crafting college essays. Eleventh graders will continue their commitment to independent reading and maintain a writer's notebook.

Prerequisite: English 2 and departmental approval

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### English, cont.

#### **AP® English Language and Composition**

**(1 year/1.0 unit)**

AP English Language and Composition is, first and foremost, a course in rhetoric. Reading primarily non-fiction texts, students develop an awareness of a writer's purpose, audience, and tone by analyzing and evaluating rhetorical appeals and fallacies. They then practice synthesizing their understanding of an array of sources (including images and graphics) into carefully crafted, evidence-based, argument-driven essays. Students enrolled in this course are required to sit for the AP® English Language and Composition exam in May.

Prerequisite: English 2 and departmental approval

#### **AP® Literature and Composition**

**(1 year/1.0 unit)**

AP English Literature and Composition is a skills-based college-level course in careful reading and persuasive analysis of imaginative literature. Students read both widely and deeply across four centuries of poetry, fiction, and drama written in English. They revel in the complexities of rich and generous texts, hone their ability to recognize and understand authors' stylistic choices, and ultimately add their voices to the global scholarly conversation by making meaning of their own. Students enrolled in this course are required to sit for the AP® Literature and Composition exam in May.

Prerequisite: English 3 and departmental approval

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## English, cont.

### **Public Speaking: TED@TVS (1 semester/0.5 unit)**

Did you know that the first TED conference was a flop? Even though it introduced the world to the wonders of Lucasfilm and compact discs and e-books, it took six years before Richard Saul Wurman’s idea for the “technology, entertainment, and design” gathering caught on and became a yearly event in Monterey, California. Still, it wasn’t until 2006 that the first TED Talks were posted online and the phenomenon --interesting people giving short, persuasive presentations about their powerful passions and great ideas-- took off to become a staple of contemporary life and thought. This course will empower students to explore their own interests and passions, create compelling presentations to share those passions with an eager audience, and practice the public speaking skills required to win over the listener. Students will be required to watch, analyze, and discuss a range of TED talks from the website; to research, develop and write their own talks; and to practice presenting both live and recorded talks.

Prerequisite: None

### **Archetypes in World Myth (1 semester/0.5 unit)**

The more things change, they say, the more they remain the same. So perhaps it comes as no surprise that some of the best-loved stories of modern time are actually based on tales as old as western civilization itself. This course will allow us to make connections across time and space and to recognize the ties that bind us as humans striving to make meaning out of our lives and our world. Our study begins with the exploits of the gods and goddesses of the classical pantheon, and their interactions with heroes and mortals of ancient Greece. A mid-semester project allows students to make cross-cultural connections as they recognize the archetypal patterns that repeat from age to age. We’ll finish the semester by reading a selection of contemporary science fiction that still draws much of its thematic power from the ancient archetypes.

Prerequisite: None

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## History and Social Science

The history and social science department introduces students to the disciplines of history and the social sciences. We cover not only the facts and figures of history but also the great concepts, controversies, perceptions and philosophies of the past. In doing so, we hope that The Village School students will become knowledgeable, ethical and responsible citizens.

### Required Courses

In grade 9, students satisfy their history requirement by taking either World History 1, World History 1 Honors, or AP<sup>®</sup> World Prep.

#### **World History 1: Early Civilizations through the Renaissance (1 year/1.0 unit)**

World History 1 focuses upon key events in the origin and development of civilization, from the Agricultural Revolutions to the start of the Renaissance in Western Europe. The key civilizations we will study include Ancient Egypt, Han China, Rome, the Islamic Civilization, the Aztecs, samurai-era Japan, and the Mongols. Special attention will be paid to the themes of humans interacting with the environment and civilizations interacting with one another. How, for example, did the Nile's characteristics shape Egyptian society? What does Marco Polo's journey tell us about cultural exchange during the Mongol era? The course will recognize that a study of civilizations includes a study of all of the components that constitute a society: politics, economics, religion, art, literature, etc. Students will work with primary sources, refining their ability to evaluate and summarize material. A study of the world's major civilizations also provides ample opportunity to practice reading, writing, and critical thinking skills.

Prerequisite: None

#### **World History 1 Honors: Early Civilizations through the Renaissance (1 year/1.0 unit)**

Honors students will be expected to evaluate, summarize, and synthesize primary source material at a higher level than that which is required at the college prep level. Already-strong abilities in reading, writing, and critical thinking will be refined.

Prerequisite: Recommendation from 8th grade history instructor along with a final grade of A, A-, or B+

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## History and Social Science, cont'd

### AP® World Prep/AP® World

(1 year/1.0 unit)

The AP® program enables students to pursue college-level study while still in high school. This course is the first in a two-year sequence. The expectation is that students take the national exam at the end of their sophomore year after completing AP® World, and, based upon their performance on the exam, they may receive credit from the college or university they choose to attend. AP® World Prep/AP® World course spans the development and growth of civilization until 1450. The major civilizations will be covered—including Rome, the Islamic Civilization, and the Mongols—but students will be expected to analyze and compare the complexities of those civilizations and the interactions between environment, religious beliefs, and social and political structures. Students will be asked to engage in consistent critical thinking and essay writing. They will work with a large number of primary sources, and will learn to analyze and evaluate like a historian.

Prerequisite: Recommendation from 8<sup>th</sup> grade history instructor along with a final grade of A or A-

### World History 2

(1 year/1.0 unit)

World History 2 begins with the Renaissance and ends in the present. Focus is placed upon the changing relationship between Western Europe and Africa, South Asia, and China, as well as the exploration and colonization of the Americas. Major revolutions will be covered, including those in the Americas, France, Russia, and China. Special attention will be paid to the themes of humans interacting with the environment and civilizations interacting with one another. Why, for example, did Western Europeans feel compelled to explore? How can the two World Wars be seen as civil wars? The course will recognize that a study of civilizations includes a study of all of the components that constitute a society: politics, economics, religion, art, literature, etc. Students will work with primary sources, refining their ability to evaluate and summarize material. A study of the world's major civilizations also provides ample opportunity to practice reading, writing, and critical thinking skills.

Prerequisite: World History 1



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## History and Social Science, cont'd

### **World History 2 Honors (1 year/1.0 unit)**

Honors students will be expected to evaluate, summarize, and synthesize primary source material at a higher level than that which is required at the college prep level. Already-strong abilities in reading, writing, and critical thinking will be refined.

Prerequisite: World History 1, World History 1 Honors, or AP® World Prep

### **AP® World History 2 (1 year/1.0 unit)**

The AP® program enables students to pursue college-level study while still in high school. This course is the second year in a two-year study begun in 9<sup>th</sup> grade. The expectation is that students take the national exam at the end of this year--the sophomore year--and, based upon their performance on the exam, they may receive credit from the college or university they choose to attend. AP® World 2 spans 1450 until the present. The major civilizations studied in World History 2 will be covered—including Western Europe, the Americas, Russia, and China—but students will be expected to analyze and compare the complexities of those civilizations and the interactions between environment, religious beliefs, and social and political structures. Students will be asked to engage in consistent critical thinking and essay writing. They will work with a large number of primary sources, and will learn to analyze and evaluate like a historian.

Prerequisite: AP® World Prep or departmental approval

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## History and Social Science, cont'd

### **AP® Human Geography**

**(1 year/1.0 unit)**

The AP® program enables students to pursue college-level study while still in high school. The expectation is that students take the national exam at the end of the year and, based upon their performance on the exam, they may receive credit from the college or university they choose to attend. AP® Human Geography teaches students the practices and tools used by geographers as they develop an understanding of the human use of, and impact upon, the Earth. Students will gain a sense of the interactions of humans with the environment and with each other, and of how these interactions have led to certain social patterns such as social hierarchy and patriarchy. Students will be asked to engage in consistent critical thinking and writing.

Prerequisite: Departmental approval

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## Mathematics

Classes within the mathematics department are designed to broaden the mathematical knowledge and skills of our students and to prepare them for higher-level mathematics and courses. With offerings from algebra to AP<sup>®</sup> Calculus and beyond, students are taught to master the fundamental processes while their problem-solving abilities are challenged with increasingly complex material. Placement is determined by the needs and talents of each individual. Students supplement their information resources with the required use of a graphing calculator and/or a laptop computer. Four years of study are required.

### **Algebra 1** **(1 year/1.0 unit)**

This is a one-year course with some discussion of theory and application beyond basic manipulative skills. Topics include simplifying expressions, solving and graphing equations and inequalities, factoring polynomials, simplifying rational expressions, solving systems of equations and simplifying radicals. The course concludes with the quadratic formula. Students will learn how to use a TI-84+ graphing calculator.

Prerequisite: None

### **Algebra 1 Honors** **(1 year/1.0 unit)**

This is a one-year course with some discussion of theory and application beyond basic manipulative skills. Algebra 1 Honors involves an in-depth exploration of algebraic concepts, through additional word problems and mathematical labs. Concepts covered in this course include simplifying expressions, solving and graphing equations and inequalities, factoring polynomials, simplifying rational expressions, solving systems of equations simplifying radicals and solving quadratic equations. Students will use a TI-84+ graphing calculator to complete hands on mathematical laboratory experiments. The Honors course concludes with an introduction to Algebra II concepts.

Prerequisite: Recommendation from 8<sup>th</sup> grade math instructor along with a final grade of A, A-, or B+

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## **Mathematics, cont.**

### **Geometry**

**(1 year/1.0 unit)**

This comprehensive two-semester, Euclidean-based geometry course emphasizes and integrates both inductive and deductive reasoning as well as visual-spatial skills. Congruence, similarity, parallelism, perpendicularity and properties of the Euclidean plane are integrated in a continual development and practice of mathematical reasoning. A balanced treatment of theory and application, as well as formal and informal reasoning as demonstrated through written proofs and problem-solving are an integral part of the course work. Students discover new theorems and explore transformations using dynamic software. Once a new theorem is accepted and internalized, students are guided through the formal mathematical proofs of these new conjectures. A graphing calculator is required. A TI-84+ calculator is suggested.

Prerequisite: Algebra 2

### **Geometry Honors**

**(1 year/1.0 unit)**

Areas of study include those listed for the Geometry course. In addition, this course places a greater emphasis on mathematical proof, creativity and transformations. Students are encouraged to explore challenging problems and stretch their sense of mathematics. A graphing calculator is required. A TI-84+ calculator is suggested.

Prerequisite: Algebra 2 and departmental approval

## **Mathematics, cont.**

### **Algebra 2 & Trigonometry**

**(1 year/1.0 unit)**

This class is designed to provide the structure necessary for a successful transition to Precalculus. Areas of study include, but are not limited to, topics in inequalities (including absolute value), properties and functions of number sets (real and complex), relations and functions, radicals, polynomial equations, quadratic, exponential, logarithmic and trigonometric functions, sequences and series, trigonometric relations and identities and solving triangles. This course is designed to prepare the student for Precalculus. A graphing calculator is required. A TI-84+ calculator is suggested.

Prerequisite: Algebra 1

### **Algebra 2 Honors & Trigonometry**

**(1 year/1.0 unit)**

Areas of study include those listed for the Algebra 2 course. In addition this course places a greater emphasis on mathematical proof and explores variation, analytic geometry and trigonometric relationships. This course is designed to prepare the student for Honors Precalculus. A graphing calculator is required. A TI-84+ calculator is suggested.

Prerequisite: Algebra 1, or Algebra 1 Honors and departmental approval

### **Precalculus**

**(1 year/1.0 unit)**

This course provides a thorough study of relations and functions with a graphing calculator. Algebraic, numerical and graphical techniques are used for understanding and solving problems. The topics covered in this course are polynomial functions, rational functions, exponential functions, logarithmic functions, trigonometric functions, conic sections, sequences & series, parametric equations and a variety of applications.

Prerequisite: Algebra 2 & Trigonometry and Geometry

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## **Mathematics, cont.**

### **Precalculus Honors**

**(1 year/1.0 unit)**

This course provides an intensive study in preparation for advanced placement math courses. The areas of study include the topics covered in Precalculus in addition to systems of equations and inequalities, matrix theory, sequences, series and a survey of discrete algebra. Students will also receive an introduction to calculus, as they begin studying limits.

Prerequisite: Algebra 2 & Trigonometry, Geometry and departmental approval

### **AP<sup>®</sup> Calculus AB**

**(1 year/1.0 unit)**

This is a college-level course in calculus designed to prepare the student for the AP<sup>®</sup> Calculus AB exam. The course covers the calculus of functions of one variable. The appropriate use of technology will be integrated into the course through the use of graphing calculators with computer algebra software on laptop computers. Ideas are explored graphically, symbolically and conceptually. Topics covered include limits, continuity, derivatives, antiderivatives, the Fundamental Theorem of Calculus, and techniques and applications of integration, separable differential equations and slope fields. This course will also prepare students for the AB Calculus Advanced Placement exam (which is required) in May.

Prerequisite: Precalculus and departmental approval

### **AP<sup>®</sup> Calculus BC**

**(1 year/1.0 unit)**

This intensive and fast-paced course is a rigorous study of single-variable calculus. The course prepares students for the Advanced Placement Calculus BC exam. Topics include all those listed under Calculus AB plus polar and parametric functions, Euler's method, applications of integration, polynomial approximations and infinite series, including Taylor Series.

Prerequisite: Precalculus Honors and departmental approval

## THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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### **Mathematics, cont.**

#### **AP® Statistics**

**(1 year/1.0 unit)**

AP® Statistics is the high school equivalent of a one-semester, introductory college statistics course. 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 in constructing models for chance phenomena. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a graphing calculator, Fathom statistical software and Web-based java applets and activities to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data.

Prerequisite: Precalculus and departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Modern and Classical Languages

Courses in the modern foreign languages develop all the basic skills – listening, speaking, reading, writing and punctuation. They provide students with an understanding and appreciation of a culture other than their own. The language being studied is used in the classroom from the onset. Students acquire a working knowledge of essential grammatical structures and learn to speak and understand the language. Accurate and effective writing is a major goal, and serious full-length works are read beginning in the third year. Entering students may wish to continue studying a language begun at their previous schools. Placement test scores will help determine the appropriate language level. Other students may begin a new language at this point in their education. To meet graduation requirements, students must complete the sequential study of one language with a minimum of two years.

### Course Descriptions - Spanish

#### **Spanish 1** **(1 year/1.0 unit)**

Students with little or no previous exposure to Spanish are introduced to the basic elements of the language and to the cultures of the Spanish-speaking world. Emphasis is on basic language skills: listening, speaking, reading and writing. The ability to communicate in the present tense through simple written and spoken Spanish is promoted through a variety of materials and activities.

Prerequisite: None

#### **Spanish 2** **(1 year/1.0 unit)**

Students continue to study grammar and vocabulary, and emphasis is placed on written and oral expression in the past tense using correct sentence structure. A study of the culture continues while students build the four language skills: listening, speaking, reading and writing.

Prerequisite: Spanish 1



# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## **Modern and Classical Languages, cont.**

### **Spanish 3**

(1 year/1.0 unit)

This course completes a review of the more complex aspects of Spanish grammar. Active vocabulary and proficiency in listening, speaking and writing are developed through discussion, written exercises, compositions and the reading of plays and short stories and legends.

Prerequisite: Spanish 2

### **Spanish 3 Honors**

**(1 year/1.0 unit)**

This course is an accelerated, intermediate-level Spanish course designed to review grammar at a quick pace with an emphasis on the more complex grammatical structures. It assumes that the student has already undergone a thorough study of certain basic grammar and vocabulary, and has demonstrated a natural ability for the language. Students must know, for example, the forms and uses of the present and past tenses. The objective of the course is not only to review and build upon grammar and vocabulary, but also to guide students in incorporating more idiomatic structures of the language into their speech and writing and to delve deeper into current issues facing several Latin American countries. They will also continue to cultivate the ability to understand the target language at a normal pace and to read effectively examples of literary and cultural texts: newspapers, short stories, and realistic fiction. The course will prepare students to take the AP language course in the following year.

Prerequisite: Spanish 2 and departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Modern and Classical Languages, cont.

### **Spanish 4: Advanced Conversation and Composition (1 year/1.0 unit)**

This is an advanced Spanish course designed to help students develop further the skills acquired through the intermediate levels of Spanish. While students continue to review grammar (especially the more complex and difficult elements, such as the subjunctive and the preterit imperfect), they move to a more advanced level of the language-learning process. They read, write and discuss more, and they do frequent oral presentations. They implement the grammar reviewed throughout the course to discuss the history, culture, art and literature of disparate areas of the Spanish-speaking world. The textbooks chosen for the course create the framework for intense study. In addition, students will be required to research specific historical, literary and cultural topics and to make frequent use of technology, such as digital oral-aural lab exercises and Internet projects. The entire course is conducted in Spanish, and there are both written and oral evaluations.

Prerequisite: Spanish 3

### **Spanish 4 Honors (1 year/1.0 unit)**

This is an accelerated Spanish course designed to strengthen further the language skills acquired through the intermediate levels of Spanish. All four language skills (speaking, writing, reading and listening) are rigorously trained through a full range of engaging and interactive activities. Basic grammar is reviewed to a degree, but there is a special emphasis on the more complex structures of the language. The development of topic vocabulary continues, but the course also ushers students into a more expansive acquisition of idiomatic expressions. Moreover, the course has a clearly defined cultural component, with an eye toward the AP Spanish Language and Culture course. Students study a good selection of cultural readings and do written and oral cultural comparisons in which they juxtapose particular cultural products, perspectives and practices of the Spanish-speaking world with those of the U.S. The course is conducted entirely in Spanish, and students are required to communicate in the target language exclusively. Spanish 4 Honors serves as a pre-AP course for qualified students from the Spanish 3 regular course or any Spanish 3 honors students needing an additional year of linguistic fortification.

Prerequisite: Spanish 3 Honors or Spanish 3 with departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Modern and Classical Languages, cont.

### AP® Spanish Language and Culture

(1 year/1.0 unit)

This intensive course is designed to prepare students for the AP® Spanish Language examination. It focuses on strengthening all four language skills, according to the AP® guidelines. Supplemental reading, writing and speaking activities will also be included. All students are expected to take the AP® Spanish Language examination in the spring.

Prerequisite: Spanish 3 Honors or Spanish 4: Advanced Conversation and Composition, and departmental approval

## Course Descriptions - French

### French 1

(1 year/1.0 unit)

Students with little or no previous exposure to French are introduced to the basic elements of the language and to the culture of the French-speaking world. Emphasis is on basic language skills: listening, speaking, reading and writing. The ability to communicate in simple written and spoken French is promoted through a variety of materials and activities.

Prerequisite: None

### French 2

(1 year/1.0 unit)

Students continue to study grammar and vocabulary, and emphasis is placed on written and oral expression, using correct sentence structure. A study of the culture continues while students build the four language skills: listening, speaking, reading and writing.

Prerequisite: French 1

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## **Modern and Classical Languages, cont.**

### **French 3 Honors (1 year/1.0 unit)**

This course completes a review of the more complex aspects of French grammar. Active vocabulary and proficiency in listening, speaking and writing are developed through discussion, written exercises, compositions, and the reading of plays and short stories.

Prerequisite: French 2 and departmental approval

### **AP® French Language and Culture (1 year/1.0 unit)**

This intensive course is designed to prepare students for the Advanced Placement French Language examination. It focuses on strengthening all four language skills, according to the AP® guidelines. Readings and conversations on topics of current interest are used to advance the acquisition of vocabulary. The class is expected to take the AP® French Language examination in the spring.

Prerequisite: Juniors or seniors must have completed French 3 Honors and have departmental approval

## **Course Descriptions - Latin**

### **Latin 1 (1 year/1.0 unit)**

The major objective of the course is to develop the ability to read and comprehend continuous Latin. In order to do that, students will need to know and understand the vocabulary, forms, functions and syntax of the language. Another objective is to know the words in Latin from which English, Spanish, French and Italian words are derived and how their spellings and meanings evolved. In addition, students will learn about Roman and Greek history and mythology and gain command of Latin expressions and mottoes that are current in modern English.

Prerequisite: None

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Modern and Classical Languages, cont.

### Latin 2

(1 year/1.0 unit)

After a thorough review of first-year material, students will continue the study of more advanced grammar and syntax of Latin. Study of derivatives, mottoes and expressions, history, culture and art continues, but with an emphasis on items pertinent to the readings. Students will continue to develop their ability to read and understand the Latin language.

Prerequisite: Latin 1

### Latin 3 Honors

(1 year/1.0 unit)

Students will continue working with previously learned grammar and syntax and are introduced to advanced language skills appropriate to course readings. This section of the course leads students from adapted texts to unadapted texts. The major concepts introduced and consolidated include recognizing how to deal with indirect discourse, including active and passive perfect infinitives, future infinitives, the use of the supine, a review of verbs in the subjunctive mood, gerunds and gerundives. Original unadapted Latin text is gradually included with the adapted, including epigrams of Martial, selections from Ovid, letters of Trajan and Pliny, fables of Phaedrus, and poems of Catullus and Horace.

Prerequisite: Latin 2

### Latin 4 Honors

(1 year/1.0 unit)

The review of grammar, forms and conditional sentences and further work in indirect speech will accompany readings in such authors as Ovid, Vergil, Phaedrus, Catullus, Cicero, and Livy. After the completion of the Cambridge material, students will read further in *Eutropius* and *Nepos* and, depending on interest, students will begin reading either Caesar's *De Bello Gallico*, or Vergil's *Aeneid*.

Prerequisite: Latin 3 or Latin 3 Honors

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## **Physical Education**

Physical Education is an important aspect of a total education. A healthy human being should develop mind, body, and spirit. Some form of daily physical activity should become part of each person's life in order to promote health and develop fitness. We offer opportunities for decision-making and confidence-building while learning fair play and teamwork. Students may fulfill the Physical Education requirement through successful completion of a season on a TVS athletic team at the varsity level or through traditional Physical Education courses. Students may also choose to elect a combination of programs. Physical Education classes are on a pass/fail grading systems and are, therefore, not included in the G.P.A. calculation.

## **Physical Education**

**(1 semester/0.5 unit)**

The Village School Physical Education program is based upon the acquisition of knowledge and skills that are the foundation for engaging in physical activity. Our mission is to empower all students to sustain regular, lifelong physical activity as a foundation for a healthy, productive and fulfilling life.

## **Team Sports**

**(1 semester/0.5 unit)**

This course is designed for student interested in learning in in the skills of team sports. Students will develop skills, strategies and participate in various team sports such as basketball, soccer, pickleball, volleyball and flag football.

## **Strength & Conditioning**

**(1 semester/0.5 unit)**

This course will provide an opportunity for development of strength and conditioning for various sports and fitness related activities. Free weights, cardio machines and conditioning activities will be incorporated to promote improvement in strength, endurance, balance, agility and speed. Students do not need to have experience on sports teams to enroll in this course.

## **Health Science & Wellness Concepts**

**(1 semester/0.5 unit)**

This course is designed for students to understand the need for maintaining a healthy lifestyle.

## **Village School Athletic Team Participation**

**(1 season/0.5 unit)**

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Science

The Village School science courses provide a strong background in science for every student. For those who plan careers in science or technology, this program is designed to provide students with opportunities for advanced placement studies and elective courses. All science classes at The Village School stress problem-solving and hands on learning in a laboratory setting.

### Required Courses

All students are required to take Biology and Chemistry as a graduation requirement. Additionally, students must complete one additional credit in a science course with a lab. Many colleges recommend four years of science although it is not a requirement for graduation.

### Biology

**(1 year/1.0 unit)**

This year-long course is designed to provide students with an introduction to the fundamentals of life through a variety of methods including laboratory experiences. Concepts covered in this course include: ecology, the cell, genetics, biological diversity, single celled organisms, plants, invertebrates, vertebrates, and human anatomy and physiology. This course requires students to perform laboratory experiments to analyze data and to draw conclusions based on experimental results. New students matriculating after their freshman year that have not taken Biology are required to take this course during their upper school career.

Prerequisite: None

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Science, cont.

### **Biology Honors**

**(1 year/1.0 unit)**

This year-long course covers the same concepts as Biology, but with more depth, a greater degree of analysis, and additional laboratory experiences. Students will be required to master topics related to the fundamentals of life. Concepts covered in this course include: ecology, the cell, genetics, biological diversity, single celled organisms, plants, invertebrates, vertebrates, and human anatomy and physiology. This course is designed to challenge the student's critical thinking skills while performing complex scientific experiments. Students will be required to complete formal laboratory reports including technical summaries and data analyses.

Prerequisite: Recommendation from 8<sup>th</sup> grade Science instructor along with a final grade of A, A-, or B+

### **Chemistry**

**(1 year/1.0 unit)**

This course emphasizes a conceptual understanding of chemistry rather than a mathematical one. Atomic theory, chemical bonding, acid-base behavior, oxidation, reduction and other types of reactions are studied. Students conduct many laboratory experiments to develop an understanding of chemical principles as related to everyday life.

Prerequisite: Biology or Biology Honors

### **Chemistry Honors**

**(1 year/1.0 unit)**

This course serves as an introduction to modern chemistry. Atomic structure, bonding, phase change, solutions, chemical reactions, thermodynamics, acid-based equilibria, kinetics and aspects of organic and inorganic chemistry are included. Emphasis is placed on developing problem-solving skills. This course incorporates a substantial component of hands-on laboratory work.

Prerequisite: Biology or Biology Honors and departmental approval



# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Science, cont.

### Elective Courses

As juniors and seniors, students are given the opportunity to take a science course of their choosing. This allows students to focus on their specific goals. Science electives are presented below.

#### Physics

**(1 year/1.0 unit)**

This introductory physics course includes studies in motion, forces, optics, sound, electricity, magnetism, waves and nuclear physics. The emphasis is conceptual rather than mathematical. Lab activities and demonstrations are a major component of the course. Students will use computers for data collection, analysis, and simulation.

Prerequisite: Chemistry or Chemistry Honors

#### Physics Honors

**(1 year/1.0 unit)**

This course provides the tools necessary to make sense of the universe at its most basic level via conceptualization and rigorous problem-solving. Quantitative and qualitative analysis are developed through software analysis of data to construct mathematical models. Scientific literacy is promoted in order to help students make informed and responsible decisions in their lives.

Prerequisite: Chemistry or Chemistry Honors and departmental approval

## THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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### Science, cont.

#### **AP<sup>®</sup> Biology** **(1 year/1.0 unit)**

This year-long lab course prepares students for the AP<sup>®</sup> Biology examination as well as the SAT Subject Test™ in biology. Included in this course are biochemistry, cytology and cellular energy transformations, taxonomy, ecology and population dynamics and molecular genetics, heredity and evolution.

Prerequisite: AP<sup>®</sup> Biology is available to juniors and seniors who satisfy department requirements to take the course (an A- or better in previous science courses and departmental approval).

#### **AP<sup>®</sup> Chemistry** **(1 year/1.0 unit)**

This course is the equivalent of an introductory college general chemistry course. A brief review of some basic topics in chemistry relating to the nature of atoms, molecules, ions, the concept of mole and stoichiometry is presented. This is followed by a more in-depth discussion of the electronic structure of atoms, the nature of chemical bonding and how it relates to states of matter, thermochemistry, chemical kinetics, chemical equilibrium, thermodynamics and electrochemistry, organic and nuclear chemistry. A major objective of this course is to understand basic principles and apply them towards solving comprehensive problems. The course is integrated with a rigorous laboratory program. Students who have completed this course will be prepared to take the AP<sup>®</sup> Chemistry examination as well as the SAT Subject Test™ in chemistry.

Prerequisite: AP<sup>®</sup> Chemistry is available to juniors or seniors who satisfy department requirements to take the course, earn an A- or better for the first semester of Chemistry Honors, and obtain department approval.

### Science, cont.

#### **AP® Environmental Science**

**(1 year/1.0 unit)**

AP® Environmental Science is a lab-based elective. The class is interdisciplinary in nature, drawing on students' backgrounds in biology, chemistry and physics. Topics covered include earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution and global change. Students are prepared for the AP® Environmental Science examination.

Prerequisite: AP® Environmental Science is available to juniors or seniors who satisfy department requirements to take the course, earn a B+ in Honors science classes and department approval

#### **AP® Physics 1**

**(1 year/1.0 unit)**

AP® Physics is the equivalent of a first-semester college course in algebra-based physics, but it is designed to be taught over a full academic year to enable AP® students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits.

Prerequisite: Physics or Physics Honors and concurrent enrollment in Precalculus Honors or higher level math course and departmental approval.

#### **AP® Physics 2**

**(1 year/1.0 unit)**

AP® Physics 2 is the equivalent of a second-semester college course in algebra-based physics, but it is designed to be taught over a full academic year to enable AP® students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics.

Prerequisite: AP® Physics 1 and departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Science, cont.

### **Marine Science** **(1 year/1.0 unit)**

This year-long course explores the major concepts in ecology through an exploration of the Earth's ocean ecosystems. Students explore the unique conditions in the ocean and implications for life living there. They investigate the distribution of the Earth's oceans, the major currents and the control and effect of tides. Students also explore the various components of marine food webs, starting with phytoplankton and working our way up to fish, marine mammals and sea birds. The last part of the course includes a survey of the major ocean ecosystems and their unique features.

Prerequisite: Departmental approval

### **Human Anatomy and Physiology Honors** **(1 year/1.0 unit)**

This year-long course is a study of the structure and function of the human body. The course is preparation for advanced biological studies, biomedical nursing, and other science-based careers. Laboratory experiences provide student learning in the following topics: major body systems, how body systems work together to provide homeostasis, body functions in healthy and diseased states, blood typing, muscle action, nerve functioning and bioethics. Dissections of various preserved animals and organs are an integral part of this course.

Prerequisite: A or better in Biology or B or better in Honors or AP Biology and department approval

### **Engineering: Technical Robotics 1, 2, 3, 4** **(1 semester - Fall/0.5 unit)**

Students will apply technology skills to solve engineering design problems and create innovative solutions to real world problems. Students will be involved with *FTC – FIRST Tech Challenge* robotics competition and engage teams from other high schools operating robots in a head-to-head challenge. The focus will be on the design, construction and programming of a competition robot, including the opportunity to use CAD software and 3D printers to design and fabricate custom parts for the robot.

Prerequisite: Departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Science, cont.

### **Engineering: Aeronautics (1 semester - Fall/0.5 unit)**

The fascination of the history and methodology behind flying machines – from Leonardo daVinci’s early conceptual sketches and the Wright brothers’ famous flight of 1903 through to the sophistication and progress of modern jets. This course is an overview and introduction to the fundamentals of aeronautics, using the history of aviation as a story line. Design, development, and implementation of cockpit systems and multi-function displays; cockpit system requirements and specifications; human-machine interfaces, Flight Management Systems, navigation and guidance systems; 3-D real-time displays of weather, traffic, and terrain; characteristics and missions of air vehicles; project design and cost analysis are many of the topics covered. The use of flight simulators will also be part of this semester course.

Prerequisite: Departmental approval

### **Engineering: Aeronautical Structure and Design (1 semester - Spring/0.5 unit)**

Discover the fascinating world of aviation by investigating aeronautics, aerodynamics and flight mechanics while designing and constructing machines for flight. Standard atmosphere; basic aerodynamic theory, isentropic flow, airfoil and wing descriptions; distributed load systems; static equilibrium; free body diagrams; wing structures; elementary aerospace vehicle performance; aircraft stability and control; experiential introduction to aerospace engineering are topics students will investigate during the semester. Students will design, construct, and test overall structural integrity of complete aerospace systems; structures subjected to critical loads; design considerations in aerospace structures along with aerodynamic design, specification, arrangement, performance analysis, weight and balance, and stability of different machines of flight. Students will have the opportunity to use CAD – Computer Aided Design software and 3D printers to design and fabricate custom parts for the flying machines.

Prerequisite: Departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Science, cont.

### **Engineering: Principles of Naval Architecture**

**(1 semester – Fall or Spring/0.5 unit)**

Students in this course will learn principles of ship geometry, load lines, classification regulations, hydrostatics and marine vessel stability. Propulsion systems of marine vehicles and submersible design are also examined. Students study movement variables in relation to ships and waves and also learn navigation skills and gain an understanding of technical information sources, such as sonar and Doppler navigation. In addition, classes cover ocean and coastal structures, current underwater systems and the fundamentals of naval architecture. Students will have the opportunity to use CAD – Computer Aided Design software and 3D printers to design and fabricate custom parts for the submersible ROV – Remotely Operated Vehicle.

Prerequisite: Departmental approval

### **Engineering: Renewable Energy**

**(1 semester – Spring/0.5 unit)**

The demand for energy is expected to grow 30% by 2040. What role can engineers play in developing renewable energy sources? In this course, students will explore some of the science, math, and technology used to extract energy from renewable resources. Students will:

- Apply engineering concepts and principles to solving renewable energy issues
- Examine how wind energy and solar power systems work
- Learn how to determine the efficiency of an energy system
- Understand the concepts of energy conversion, work, and power.

Teams will design, build and test various renewable energy systems including wind, hydroelectric, and solar applications. Students will have the opportunity to redesign a gasoline-powered go-kart to run on solar energy, including the use of CAD – Computer Aided Design software and 3D printers to design and fabricate custom parts for the go-kart, and compete in the FGCU Solar Go-Kart Competition.

Prerequisite: Departmental approval

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Visual, Culinary and Performing Arts

The visual, culinary and performing arts department provides students with an understanding of the value of arts in culture by giving them a balanced exposure to and appreciation of the arts. Culinary, theater arts, music and visual arts are offered in an environment where students can discover and nurture their artistic affinities and creative potential. Students are provided a forum in which to demonstrate their ability via performances, recitals, productions and art displays, thus enriching both The Village School and the community. Costume and/or material fees may apply for some performing arts classes.

## Required Classes

All students must complete two years (four semesters) of an artistic class. Courses which satisfy this requirement are Theater Arts, Music, Visual Arts, Culinary Arts and AP<sup>®</sup> Art History. AP<sup>®</sup> Art History is open to sophomores, juniors and seniors. Students who plan to take AP<sup>®</sup> Art History to satisfy the requirement should choose other electives in the freshman year.

## Foundations of Art (1 year/1.0 unit)

Students will study and apply the elements of art and the principles of design by creating two- and three-dimensional projects. Students will explore a variety of art materials and techniques used in professional art and will be required to create and respond to works of art that express concepts, ideas and feelings.

Prerequisite: Departmental approval – required course for advancement to other art electives

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## **Visual, Culinary and Performing Arts, cont.**

### **Visual Arts Studio 1 (1 semester/0.5 unit)**

An advanced course that entails an in depth study of art techniques and media. In addition, drawing, painting, mixed media, and three-dimensional media will be studied. Furthermore, students will link art history to their portfolios. This course will involve diverse artistic processes in both individual and group settings. Lastly, students will work closely with faculty to develop an ongoing or culminating area of concentration based on material preferences.

Prerequisite: Foundations in Art or Departmental Approval

### **Visual Arts Studio 2 (1 semester/0.5 unit)**

Additional advanced course that would continue an area of concentration or develop a new concentration. Students will create a portfolio that is tailored to their individual talents and material preferences.

Prerequisite: Visual Arts Studio 1 or Departmental Approval

### **Digital Photography 1 (1 semester/0.5 unit)**

This is a beginner's course designed to introduce digital imagery and computer technology as a medium for artistic expression. Fundamental concepts to be surveyed include the study of light, time, composition, and subject. Students will develop a strong sense of visual, critical thinking skills while studying the elements of art and principles of design. In addition to acquiring basic photographic skills, students will apply their artistic knowledge to design a school year book.

Prerequisite: Departmental approval



# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## **Visual, Culinary and Performing Arts, cont.**

### **Digital Photography 2 (1 semester/0.5 unit)**

This is an advanced photography course during which students will expand on the techniques already learned during the first semester. Students will work with Adobe Photoshop Cloud and other software for the purpose of modern photographic editing, such as retouch and manipulation. Students will continue to maintain a professional website of their photographs.

Prerequisite: Digital Photography 1 or Departmental approval

### **Digital Photography 3 Portfolio (1 semester/0.5 unit)**

This course is designed for students who have in depth knowledge in photography and aspire to pursue portfolio development. Students may choose to explore specific technical applications in such as camera settings and or editing software. Other topics include macrophotography, time-lapse, action photography, black and white, color, landscapes, light painting, portraiture, elements of art and principles of design, photojournalism, commercial photography, and techniques common to the history of photography.

Prerequisite: Digital Photography 2 or Departmental approval

### **AP® Art History (1 year/1.0 unit)**

Intended to prepare students for the AP® examination in art history, the course is a survey of world art from pre-history to the present with a strong emphasis on Western art. Students will develop a vocabulary while studying all major forms of artistic expression including painting, sculpture and architecture within diverse historical and cultural contexts. Image identification, critical analysis and evaluation of both context and aesthetics are emphasized.

Prerequisite: World History 1 or World History 1 Honors and departmental approval.

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Visual, Culinary and Performing Arts, cont.

### Culinary Arts Certificate Program

Students especially interested in the culinary arts may apply for participation in The Village School Culinary Arts Certificate program. To receive the certificate, students engage in a four-year program with emphasis in culinary. The program culminates in the senior year with a final presentation accompanied by the awarding of the certificate. Transcripts will reflect the attainment of the Culinary Arts Certificate. Students striving for national recognition or scholarships can research opportunities using the following link:

<https://www.chooserestaurants.org/Programs-and-Scholarships>

### Requirements:

- Culinary classes for 8 semesters in Upper School
- Involvement in preparation for special TVS events
- 80 volunteer hours focused in the food industry
- Maintain an A average in all culinary classes
- Senior year presentation before a panel of culinary advisors
- Cumulative exam of culinary application with an 80% or higher

### Culinary Arts: Kitchen Basics

**(1 semester-Fall/0.5 unit)**

This course provides classroom and laboratory experience to introduce the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on practical experiences including recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling and related topics. Upon completion, students should be able to demonstrate competency in the basic cooking skills used in the foodservice industry.

Prerequisite: None

## Visual, Culinary and Performing Arts, cont.

### **Culinary Arts: The Art of Baking**

**(1 semester-Fall/0.5 unit)**

Cakes, cookies, icing, frosting, piping and sampling...this course covers the “science” behind baking through the study of basic ingredients, techniques, weights and measures, baking terminology and formula calculations. Topics and laboratory experience include yeast/chemically leavened products, laminated/pastry dough, batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate a basic proficiency in bakeshop applications, and prepare and evaluate a variety of bakery products.

Prerequisite: Kitchen Basics

### **Culinary Arts: Notable Chefs – Escoffier to Bobby Flay**

**(1 semester-Fall/0.5 unit)**

Who was the first notable chef? What chef is credited with the most influence over the culinary world thus far? How can chefs influence culture? This course will take young chefs through the history and influence of several of the world’s most renowned chefs of our time. Students will experience making some of their recipes and tasting the food culture of that time.

Prerequisite: Kitchen Basics

### **Culinary Arts: Sauces and Stocks – Foundations for Great Cooking**

**(1 semester-Spring/0.5 unit)**

Every chef takes great pride in the sauces that transform a good meal into a great dining experience. In this course students are introduced to the use and production of stocks and sauces. From the classic sauces of France to modern salsas, relishes, infused oils, coulis and chutneys students will explore all the diverse expressions of the saucer’s art. Students will produce the five “Mother sauces” using the stocks produced as well as the fundamentals of making clear, thick and nutritional soups. Reductions, finishing methods, pairings and plating techniques will be taught and practiced.

Prerequisite: Kitchen Basics

### **Visual, Culinary and Performing Arts, cont.**

#### **Culinary Arts: Chocolate Craze**

**(1 semester-Spring/0.5 unit)**

Comprehensive hands-on chocolate course emphasizing the techniques necessary to make unique molded chocolate pieces and gourmet chocolate confections. Students experience an introduction to chocolate decorating techniques including tempering, coloring, cutting and using transfer sheets, and working with modeling chocolate. Students will prepare products using different types of chocolate and sample the final products.

Prerequisite: Kitchen Basics

#### **Culinary Arts: Test Kitchen – Baking Addition**

**(1 semester-Spring/0.5 unit)**

Testing recipes is a science! In this course students practice taking risks and making mistakes — that's how innovation happens in a test kitchen. The goal of this test kitchen is to rewrite a baking recipe that can easily be replicated at home. Be ready to weigh, measure, and exchange ingredients to transform a tried-and-true recipe into your very own culinary creation for everyone to enjoy.

Prerequisite: Kitchen Basics

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Visual, Culinary and Performing Arts, cont.

### Performing Arts Certificate Program

Students especially interested in the performing arts may apply for participation in The Village School Arts Certificate program in one of the following areas: instrumental music, vocal music, drama, musical theater or technical theater. To receive the certificate, students engage in a four-year program with special emphasis in the discipline in the student's choice. The program culminates in the senior year with a final presentation accompanied by the awarding of the certificate. Transcripts will reflect the attainment of the Arts Certificate.

### Requirements of the Certificate Program

- Performing Arts class for 8 semesters in Upper School
- Private lessons or extensive workshops in the chosen discipline
- Involvement in productions, ensembles, concerts, or recitals
- Attending a professional production for four semesters with written critique
- Junior Year, meet with Performing Arts chair and staff to outline Senior year program/project
- Sophomore and Junior year Jury participation in May
- Senior Year recital required

### Acting and Choreography (1 semester/0.5 unit)

Students work on specific acting techniques in performing dramatic, comedic or musical scenes from favorite works. Students will expand their own movement through dance phrases and motifs.

Prerequisite: None

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Visual, Culinary and Performing Arts, cont.

### **Music Studio 1** **(1 semester/0.5 unit)**

This class is for instrumentalists and vocalists. In the first semester, the language of music is examined, including musical symbols and notation, the tonalities of different musical instruments, harmonization, arrangement and composition. The history of music is explored through listening, reading assignments, class discussion and written work. Class will break out two days per week to work on individual instruments, accompanying and ensembles preparing for performances throughout the year.

Prerequisite: None

### **Music Studio 2** **(1 semester/0.5 unit)**

This class is for instrumentalists and vocalists.

Prerequisite: Music Studio 1 or departmental approval

### **Music Appreciation** **(1 semester/0.5 unit)**

Students will acquaint themselves in the understanding of music. Students do not need any prior knowledge in the world of music. Students will develop their ear to identify instruments, musical pieces, and musical periods by their sound. Students will also learn music terminology to engage in conversations in accurate descriptions of music. This course information will be useful for future music concerts the students may attend, providing an outlet for expression, personal awareness, and aesthetic enlightenment.

Prerequisite: None

# THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY

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## Visual, Culinary and Performing Arts, cont.

### **AP® Music Theory** **(1 year/1.0 unit)**

This intensive year long course is designed to prepare students for the AP® Music theory exam in May. This course will reflect a range of skills typically developed during a freshman theory college course. Significant critical, analytical and creative thinking skills will be emphasized in theory and composition, ear training, sight-singing, analysis and keyboard skills, harmonic progressions, formal structuring and style, and dictation.

Prerequisite: Completion of Music 1 and Music 2 and departmental approval

### **Theater Arts 1** **(1 semester/0.5 unit)**

The first semester course gives students an understanding of theater as it exists today and provides a common vocabulary covering all aspects of modern stage performance, production and history. Through individual exploration, group discussion and practical experience, students will examine the forces throughout history that have shaped the evolution of acting, directing, technical theater and musical theater. By examining theater from many regions and styles, students gain an appreciation of the skills employed by theater artists today and those artists whose works endure.

Prerequisite: Departmental approval

### **Theater Arts 2** **(1 semester/0.5 unit)**

The second semester of theater arts focuses on performances and productions.

Prerequisite: Theater Arts 1 or departmental approval

## **THE VILLAGE SCHOOL – UPPER SCHOOL COURSE OF STUDY**

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### **Visual, Culinary and Performing Arts, cont.**

#### **Casting Call**

**(1 semester/0.5 unit)**

What's your calling in the world of drama? Find your niche in producing a successful drama -- playwrights, directors, lighting, sound engineers, set design, costumes, makeup, choreography, marketing, ticket sales, producers and more. Be prepared to present a program at the end of the term.

Prerequisite: Theatre Arts 1 and 2

#### **Knights of Steel 1**

**(1 semester/0.5 unit)**

This steel drum group rehearses compositions expressively for Caribbean ensembles. The musical styles each student will encounter are calypso, Cuban, Brazilian, classical, pop and jazz.

Prerequisite: None

#### **Knights of Steel 2**

**(1 semester/0.5 unit)**

The second semester of this course will focus on performances and productions.

Prerequisite: Knights of Steel 1