



UPPER SCHOOL CURRICULUM GUIDE 2017-2018

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THE UPPER SCHOOL CURRICULUM

The challenging Upper School program addresses the unique needs and interests of the maturing pre-university learner. We strive to offer opportunities for students to develop self-confidence, compassion, and a love of learning in and beyond our school. In order to meet these challenges, we support our students through strong relationships with our faculty and teach them to take responsibility for their learning, seek help when needed, and connect school-based learning to real life. Small classes, orchestrated by outstanding teachers, allows our students to receive deeper individualized feedback in addition to enabling us to explore topics through interactive, student-centered approaches. Our teachers are studied professionals committed to developing resourceful, independent, and responsible young people. Close personal relationships permit frequent encounters for teachers, parents, and students to know one another well.

Our Upper School curriculum is ordered to provide enthusiastic readiness for challenging university programs. A broad and demanding liberal arts curriculum offers our students the best opportunities to understand themselves and the wonders around them. At the same time, a strong liberal arts approach provides the best foundation for further study and for life. Differentiators of the CSS course of studies include a fourth year of math, the College Overview and Public Speaking course for sophomores, four Experience Centered Seminars (ECS), an integrated global perspective, at least two years of art (with exposure to music, theatre, and visual), at least one club, Athletics/Activities, at least 16 hours of Community Service each year, and a Digital Portfolio. In order to maximize our course offerings while maintaining a smaller personal community, we also offer some of our classes on a block system, which enables students taking 90-minute courses to earn full-year credits in just half a year. These longer blocks also provide adequate time for in-depth discussion, field experiences, and lab work.

Academic courses in the Upper School offer our students the opportunity to delve deeply into a wide variety of subjects. We believe knowledge becomes more meaningful when it is purposefully connected to experience; therefore, our rigorous, research-based college-prep curriculum is approached through active learning, field applications, interdisciplinary analysis, and problem solving. We place an emphasis on helping students develop the inquiry, analytical, documentation, and presentation skills they will need in competitive college environments and life. An experiential approach combined with small group, large group, and individualized student-teacher interactions provide CSS students with numerous opportunities to further develop critical thinking and problem-solving skills in all subjects. Our goal is to prepare our students so they can form and defend their own opinions on diverse topics.

CSS seeks to prepare and enable each of our students to gain admission to the colleges and universities that are a "best fit." The various components of the CSS Upper School program work together to enable our students to become the adult they want to be, equipped with a strong knowledge and skill base, multiple perspectives, and creative problem solving skills, giving them the "cutting edge" in facing the complex challenges of college and beyond.

UPPER SCHOOL GRADUATION REQUIREMENTS

A minimum of 31 credits are required for a student to earn a CSS diploma.
CSS students will take the following required coursework.

DEPARTMENT	CREDITS	SPECIFICS
ENGLISH	4.0	<ul style="list-style-type: none"> • World Literature and Composition (9th) • European Literature and Composition (10th) • American Literature & Composition or AP Language & Composition (11th) • Senior Seminar: Topics in Literature or AP Literature & Composition (12th)
MATHEMATICS	4.0	<ul style="list-style-type: none"> • Mathematics courses through at least Algebra 2, generally in the following sequence: Geometry, Algebra 2, FST, advanced electives
HISTORY	3.0	<ul style="list-style-type: none"> • Global Studies & World Geography (9th) • World History (10th) • U.S. History or AP U.S. History (11th or 12th)
WORLD LANGUAGES	3.0	<ul style="list-style-type: none"> • Three consecutive credits in one world language, successful completion of an AP course, or a score of 3 or better on an AP world language exam followed by a course of study in an alternative language, for a total of at least 3.0 credits
SCIENCE	3.0	<ul style="list-style-type: none"> • Biology (9th grade lab science) • Chemistry (10th grade lab science) • At least one advanced lab science elective
ARTS	2.0	<ul style="list-style-type: none"> • Art Foundations (9th) • Any combination of specialty art courses with a maximum of 0.5 credits contributed each by Band and/or Vocal Ensemble
ECS	4.0	<ul style="list-style-type: none"> • One Experience Centered Seminar per year (9-12th)
COLLEGE PREP	0.5	<ul style="list-style-type: none"> • College Overview & Public Speaking (10th)
HEALTH	0.5	<ul style="list-style-type: none"> • Health & Wellness class (9th)
ELECTIVES	3.0	<ul style="list-style-type: none"> • Any elective courses not being used to fulfill other departmental requirements
ACTIVITIES (1.0 credit per year)	4.0	<ul style="list-style-type: none"> • Athletics, 0.5 credits/team sport • Theatre, 0.5 credits/production • Approved non-CSS activity, 0.5 credits/50 hours

Any grade other than an F is considered “passing” at CSS, and the student will receive credit.

In addition to the above coursework, students must meet the following criteria:

- Community Service (16 hours per year, 9-12th)
- Digital Portfolio completion (each year, 9-11th) required to make Honor Roll each spring
- Completion of a Capstone Experience project (12th)

SAMPLE COURSE OF STUDY

<p>Grade 9</p> <ul style="list-style-type: none"> • World Literature & Composition • Global Studies & World Geography • Geometry • Spanish II-III or French II • Biology • Arts Foundations • Health & Wellness • Experience Centered Seminar (ECS) • Athletics/Activities 	<p>Grade 10</p> <ul style="list-style-type: none"> • European Literature & Composition • World History • Algebra 2 • Spanish III-IV or French III • Chemistry • Fine Arts Elective • College Overview & Public Speaking • ECS • Athletics/Activities
<p>Grade 11</p> <ul style="list-style-type: none"> • American Literature & Composition or AP Language & Composition • U.S. History or AP U.S. History • FST (Functions-Statistics-Trigonometry) and/or PreCalculus • Spanish IV–AP or French IV • AP Chemistry, AP Biology, AP Environmental Science or other science elective • Fine Arts Elective • ECS • Athletics/Activities 	<p>Grade 12</p> <ul style="list-style-type: none"> • Senior Seminar: Topics in Literature or AP Literature & Composition • Economics (Micro/Macro or AP Micro/Macro), or other History Elective • AP Calculus, Statistics, AP Statistics, or other math electives • Spanish IV-AP or French IV-AP • Physics, AP Chemistry, AP Biology, AP Environmental Science or other science elective • Fine Arts Elective • ECS • Athletics/Activities

ADVANCED PLACEMENT COURSES (APs)

CSS is proud to be able to offer Advanced Placement (AP) courses in several fields of study to eligible students. Through these college-level courses and exams, students can earn college credit and advanced placement, stand out in the admissions process, and learn from some of the most skilled, dedicated, and inspiring high school teachers in the world. Because AP courses are so challenging, CSS and many colleges weight AP grades an extra point when calculating GPA.

These courses are very demanding of the student's time. It is uncommon for a student to be able to handle more than three AP courses when s/he is also trying to balance time and energy between team sports, theatre production, clubs, community service, and other interests.

AP Policies and Procedures

Students with a cumulative minimum GPA of 3.00 who earn at least an A- in all regular prerequisite courses and at least a B in all advanced prerequisite courses for a given AP class are automatically eligible to take that AP course.

Students who do not meet this standard for automatic eligibility may petition to the appropriate Department Chair and the Academic Dean for a nomination to take an AP course. Interested students may obtain an AP Petition Form from the Registrar. After completing the form, the student will meet briefly with the teacher, the appropriate Department Chair and the Academic Dean to discuss the student's motivation and the wisdom of taking on this challenge. Teacher recommendations can play an important role in this petition process, and the Department Chair will discuss the situation with the student's prerequisite class teacher in addition to the AP teacher.

The overall rigor of a student's schedule will be considered. When an individual student desires to take more than two AP courses, the situation will be discussed by a group of US faculty, the student's advisor, the Academic Dean, and the College Counselor. This group will weigh the capacity the student has demonstrated for such intense work in the past and may make recommendations to the student and family.

In addition to AP courses, Advanced Art and 90-minute math (Advanced FST / Advanced PreCalculus) courses follow the AP eligibility protocols.

Students nominated for AP/Advanced courses consistently demonstrate the ability to:

- Turn in assignments on time
- Advocate for him/herself by attending scholar sessions as needed
- Pursue the study of a topic beyond what is presented in a textbook, class lecture, or course material independently
- Display a sincere interest, academic curiosity, and/or passion in the discipline
- Apply intellectual maturity to think critically about college level material
- Utilize integrity in the face of academic demands
- Work collaboratively as a prepared and contributing partner in group work and as a prepared and vocal participant in class discussion
- Process large volumes of challenging information at a high level.

NON-TRADITIONAL COURSES

The courses below are critical elements of the Upper School program and provide our students with academics and personal experiences that go well beyond the traditional high school curriculum in preparing them for college and beyond.

BLOCKLESS CLASSES

Blockless classes do not meet at a set time during a particular academic period. They may be hybrid, online courses or courses with an intense, independent component combined with regular teacher check-ins. We currently have two blockless class opportunities: (1) Creative Writing and (2) Yearbook.

CAMPUS INTERNSHIP

0.5 CREDIT

Through this supervised internship students gain real life experience in a professional setting. In addition to gaining experience navigating an adult environment, the internship is worth noting on a college resume and may lead to a great college recommendation. A student requesting an Internship must complete an Internship Proposal form, obtained from the Registrar. This course is Pass/Fail.

COLLEGE OVERVIEW (Required)

0.25 CREDIT

This required course is one of the hallmarks of the CSS experience and is designed to prepare sophomores for the college admission process by literally turning them into college admission experts. Information regarding every aspect of the college admission process is covered during the class. Students begin by initiating their own searches for “best fit” colleges and universities. Each student is also expected to complete a college application, develop a list of potential colleges, complete an interview simulation, create a resume, write an essay, critically analyze college propaganda, develop a college plan, identify all recommendation writers, prepare for the college entrance exams, request a transcript and research scholarship possibilities. As a result, CSS students are aware of and primed for the entire college admission process well before their senior year, which gives them the advantage of strong mentorship and advocacy with the colleges, as well as the gift of time to plan strategically. This course is partnered with Public Speaking.

PUBLIC SPEAKING (Required)

0.25 CREDIT

Public speaking is a performance course designed to improve students’ public communication skills. Students create, practice, deliver and critique speeches in a variety of modes (introductory, impromptu, commemorative, informative and persuasive.) Readings and discussions cover the following topics related to public speaking and speech-writing: origins, purposes, ethics, audience, organization, research and development of ideas, and delivery. Students are actively engaged in both the speaking and listening processes. Through this course, students gain skills and practice to prepare them for the speech each of them will deliver to the entire Upper School student body.

HEALTH & WELLNESS (Freshman Requirement)

0.5 CREDIT

Recognizing that individual wellness is foundational to developing an optimal and resilient self over time, this survey course engages students in the first year of Upper School by exploring

some of the essential elements of living a healthy lifestyle. The key health and wellness domains in the CSS Wellness Program (physical, social, emotional, brain, and essential traits of character development) form the framework of this course. Key integrated topics include: decision-making strategies, effective study habits, managing time and stress, the importance of responsible risk-taking, substance abuse/addiction, healthy relationships, foundational elements of expedition behavior, productive character traits, and leadership. This course meets five days per week and includes two days of physical fitness.

NON-CSS ONLINE COURSES

Online courses are becoming more popular in the world of education, and CSS is exploring various options for our students. Should a student wish to consider an online course not offered by CSS, please contact the Registrar.

EXPERIENCE CENTERED SEMINARS (ECSs) 1.0 CREDIT/YR

The ECS Program at CSS is designed to allow students to approach large, complex, multidisciplinary problems, to experience other cultures, and to apply classroom theory widely in the world. Each Upper School student participates in one ECS each year. Courses span three weeks and fall into several categories. Some seminars are place-based, that is, they study a problem in the part of the world in which it occurs. Examples are endangered species conservation in Nicaragua and conservation biology in the Galapagos Islands. These seminars are infused with cross-cultural exposure. Other seminars are project-based, that is, they focus on a specific product and the process that generates it. Examples of this are The Great Iron Pour, for which students study the history of metal discovery and use, build their own cupola, then melt iron to cast art pieces; and Glass: Ancient and Modern, for which students learn how glass has been used in the arts for thousands of years, then produce their own art works under the direction of experts at Corning Glass in New York. Still other ECS's combine project-based, place-based, and service learning-based models. Examples of this are Culture Shock, which exposes students to immigrant communities in San Francisco, and Life in Cameroon, which engages our students in projects with their counterparts at our sister school in Fongo Tongo.

ATHLETICS / ACTIVITIES CREDIT 1.0 CREDIT/YR

Four credits, one per school year, and preferably a half credit each semester, are required in athletics or another area of interest to graduate from CSS. The school provides a variety of options to achieve this unit of credit:

1. Team sport participation for 0.5 credits each season.
2. Participation in a theatre production for 0.5 credits each season.
3. Participation in an established community service program with a minimum of 50 hours of participation for 0.5 credits. (This is in addition to the regular community service requirement.)
4. Participation in a school-approved community-based music, dance, or athletic activity with 0.5 credits for each 50 hours of successful participation.
5. Full involvement in Model United Nations, including participation in more than half of the meets, will be rewarded with 0.5 credits.
6. Full involvement in Robotics Club, including regular attendance and participation in at least one competition, will be rewarded with 0.5 credits.

Options 3-4 above require an application and pre-approval. Forms are available from the Registrar. Only hours in which a professional coach or trainer is working directly with the student can be counted as part of the 50 required hours. A detailed time log, verified by the coach/trainer, must be filed with the Registrar on or before the last day of the semester that credit is to be recorded. This is the sole responsibility of the student. Reminders will be given, and failure to meet this annual requirement will result in an “F” on the student’s transcript. To compensate, extra credits must be earned in subsequent semesters.

COMMUNITY SERVICE

Upper school students are required to complete a minimum of 18 community service hours each year. We help students get started on this requirement by providing a 6-hour school service day, where students are placed with community partners such as the Rocky Mountain Field Institute, Cheyenne Mountain State Park, Venetucci Farm, and on campus. They are expected to follow their own passions and interests when earning the remaining 12 hours required each year, and students who are very enthusiastic often earn hours far in excess of this minimum requirement.

Students who do not meet this requirement will earn an “F” on their transcript. A student is allowed to remove this “F” by completing double the number of missed hours the following year, in addition to completing the normal number of expected hours for that year.

COURSES BY DEPARTMENT (*indicates courses offered on a rotation)

ENGLISH

English courses in the Upper School follow a scope and sequence from general survey courses to more specific, narrower foci with electives and Advanced Placement courses. We begin by looking at literature from around the world; we then move specifically to European works, followed by American pieces. All literature study is accompanied by practiced reading skills, including increasing awareness of literary technique and analysis and a variety of writing assignments, all supported by contextual vocabulary and grammar work. We adopt a multi-sensory, experiential look at reading and writing while, at the same time, we practice key writing skills that prepare students for the demands of college-level written work in many disciplines. Students leave our doors as graduates with a keen awareness of the impact literature has on our society and culture, as well as honed, original, and creative personal writing skills.

WORLD LITERATURE (GRADE 9)

1.0 CREDIT

This course explores literature from the Western and non-Western traditions, ancient and modern. After spending the first few weeks discussing the summer reading selection, Salman Rushdie's *Haroun and the Sea of Stories*, we focus on three major texts: Homer's *Odyssey*, Shakespeare's *Romeo and Juliet*, and Achebe's *Things Fall Apart*, supplementing our study of these master works with short stories, poems, and non-fiction essays. These texts also supply students with a core vocabulary that they are expected to apply in their writing. Grammar instruction, focused on mastering punctuation and developing sophistication in sentence structure, complements instruction in writing clear and effective paragraphs and essays. In the fall and winter, students hone their skills in writing expository essays. In the spring, students work on a more wide-ranging research and creative writing project in conjunction with their history class.

EUROPEAN LITERATURE AND COMPOSITION (GRADE 10)

1.0 CREDIT

This course intersperses the study of proper composition tools, including the writing process, editing skills, and in-class essay writing, with the study of literature from Europe. After working with the summer assignments, we begin with the earliest piece ever written in English: *Beowulf*. From then on, our studies move chronologically through several of Geoffrey Chaucer's *The Canterbury Tales*, a Shakespearean drama, a satire unit with Voltaire's *Candide*, and a 20th century set of short stories from World War II. Throughout the year, we practice and study a variety of writing styles such as narrative, expository, persuasive, and descriptive while we focus upon several genres such as poetry, plays, novels, and non-fiction.

AMERICAN LITERATURE AND COMPOSITION (GRADE 11)

1.0 CREDIT

This course offers an intensive examination of major works of American Literature from the nineteenth and twentieth centuries. Students read texts in all major literary genres, including drama, the novel, the short story, poetry, and the essay. Authors studied include Frederick Douglass, Sherman Alexie, Hawthorne, Poe, Melville, Twain, Hemingway, Fitzgerald, Salinger, Arthur Miller, Emerson, Thoreau, Whitman, Frost and Dickinson, Stevens, and others. Students discuss and write about key themes in the works of these authors, such as what it means to be an American, the nature of the American dream, the quest for freedom, and the relation of the

individual to society. Vocabulary building and grammar review complement instruction in writing and literary analysis.

AP ENGLISH LANGUAGE & COMPOSITION (GRADE 11)

1.0 CREDIT

Prerequisites: minimum of A- in both semesters of European Literature and Composition; teacher recommendation

This course builds upon both the World Literature and European Literature courses while focusing specifically on American Literature. Organized in rough chronological order by subject, and centered on essential questions about our diverse American society, the course examines the development of American literature from both thematic and socio-historic perspectives. The readings expose students to both classics and more recent American voices as it prepares students for more selective literary study in the senior year and beyond. Vocabulary lists are taken from the literature. Students develop their writing through formal instruction in sentence development and continued practice in writing in a variety of rhetorical modes in preparation for the Advanced Placement Language and Composition exam offered in May.

SENIOR SEMINAR: TOPICS IN LITERATURE (GRADE 12)

1.0 CREDIT

Throughout this final year, we explore a variety of pertinent topics in the study of many genres of literature while continuing to practice solid composition skills. With early application deadlines in mind, we begin with a focus on solid college essay preparation and completion. After practicing those pertinent writing skills, we move into advanced discussions, papers, tests, and quizzes that give students ample occasion to hone their skills in writing, vocabulary, and critical analysis in preparation for college-level work in multiple disciplines.

AP ENGLISH LITERATURE AND COMPOSITION (GRADE 12)

1.0 CREDIT

Prerequisites: minimum of A- in both semesters of American Literature and Composition or minimum of B in AP English Language and Composition; teacher recommendation

AP Literature and Composition engages students in the careful reading and critical analysis of English literature from the 16th century through contemporary times. We approach the study of literature from several popular critical theories, which are considered along with the works' structure, style, themes, and use of language and tone. We begin with ample reading material from the summer to introduce key skills that we practice repeatedly throughout the year in preparation for the AP Literature exam in May. Much of our study is chronological in order to see the influence past writings have on subsequent ones as well as to recognize the development of a wide variety of genres over the past several centuries.

CREATIVE WRITING

0.5 CREDIT

Prerequisites: Completion of World Literature and European Literature and Composition

This elective course offers students many opportunities to explore imaginative, unique, creative writing in several genres. Using various instructional tools, including published texts, exercises, activities, guest speakers, and inspirational models, students practice their own creative expression through fiction, poetry, drama, and non-fiction reading and writing. Similar to the "real world" of publishing, students share their work with each other in a safe workshop environment, practice the steps of the writing process through revision, and select the pieces they feel are their best for final assessment. Moreover, we make every effort to participate in local literary opportunities such as writing seminars and author talks to enhance and enrich the

creative process. This blockless course is taught either through the Hybrid Learning Consortium via an online, hybrid course or through a CSS teacher who meets with students weekly for instruction and feedback, often through writer's workshop methodologies.

HISTORY

(History, Government, Humanities, Economics, and other Social Science Courses)

History in the Upper School engages student in critical thinking about historical and contemporary events, teaches global awareness, and refines research, writing, and public speaking skills to prepare them for college and life beyond. Group projects, debates, and reenactments require students to engage actively and synthesize learning. Beginning with the core courses, students develop broad understandings of global human geography and world history before moving into a more detailed study of American history. Beginning in the junior year, students choose from a wide array of electives and three Advanced Placement offerings that introduce them to college level courses and themes. Many Experienced Centered Seminars build on the foundations of our history courses, emphasizing history, political science, cultural anthropology, economics, sociology and psychology, as well as integrating these academic fields into life experiences.

GLOBAL STUDIES & WORLD GEOGRAPHY (GRADE 9)

1.0 CREDIT

What is globalization and how does it impact societies worldwide? Why is there conflict in the Middle East? What is going on in the Ukraine? South Sudan? Global Geo will be an examination of the physical, political and cultural realities of our planet. With an in-depth examination of major world regions including: Africa, Asia, Central and South America, and Europe, students will examine geography, history, culture, politics, and current events around the world. As we explore the meaning of “global citizenship”, we will focus on a series of interrelated topics (population, gender, development, food, urbanization, globalization, democratization, water, and climate change) students will gain a deep appreciation for many of the major issues our world faces today. Students will participate in many debates, simulations, and other hands-on activities, with an emphasis on developing skills of research, historical thinking, diplomacy, negotiation, and persuasion. Students will complete two major research projects. In the fall, students select a topic of their choosing to research and create a project (web site, paper, performance, exhibit or documentary) to enter in the annual National History Day contest. In the spring, students work on a more wide-ranging research and creative writing project in conjunction with their English class.

WORLD HISTORY (GRADE 10)

1.0 CREDIT

World History is a survey course focusing on understanding, analyzing and comparing people and institutions globally from 500 CE to the present. Students hone their analytical skills through examining primary sources, reenacting important moments in history, debating controversial subjects, reading historical texts and creating original projects and essays. Whether recreating the Silk Road’s trade networks or reenacting an Enlightenment Salon, students develop the essential historical thinking skills and global understandings that can be utilized on international ECS’s or in clubs like Model United Nations--thus preparing them to meet the challenges of a dynamic world.

UNITED STATES HISTORY (GRADE 11 OR 12)

1.0 CREDIT

United States History / Geography focuses on understanding, analyzing, and making comparisons among the people and institutions of the United States from 1400 to the 1960’s. Emphasis has been placed on the themes regarding the change, conflict, and socio-economic

development of the United States. From the early history of Native Americans, to the tumultuous times of the 1960's, we examine American history from a wide variety of perspectives and with a diverse set of tools, including primary and secondary sources, literature, and contemporary journalism. Students will work on a wide variety of projects. Students also attend the annual junior history field trip to Colorado College to participate in an academic seminar.

AP US HISTORY (GRADE 11 OR 12)

1.0 CREDIT

Prerequisites: junior or senior status; minimum of A- in both semesters of the last non-AP history course or minimum of B in both semesters of the last AP history course; teacher recommendation

AP United States History provides a rigorous, college level study of the United States from 1400 to 2008. Emphasis is placed on the themes regarding the change, conflict, and socio-economic development of the United States. From the earliest settling of America from across the Bering land bridge to the Iraq War, we examine American history from a wide variety of perspectives, and with a diverse set of tools. Students examine primary sources; work with college level textbooks, and there is a heavy emphasis on developing the skills to develop higher-level skills of historical analysis. There are numerous debates and simulations, including re-enactments of the war of 1812 and a labor strike in the 1910's.

AP COMPARATIVE GOVERNMENT AND POLITICS

1.0 CREDIT

Prerequisites: junior or senior status; minimum of A- in both semesters of the last non-AP history course or minimum of B in both semesters of the last AP history course; teacher recommendation

AP Comparative Government and Politics is an intensive college level course that is directly related to the CSS philosophy of preparing students to be active citizens of an increasingly diverse nation and an increasingly interdependent world. Focusing on specific issues of government and politics in various countries around the world, the course has a broader goal of helping students to develop a strong theoretical framework through which they will be able to analyze the political complexities of our globalized world. We do an in-depth examination of six countries as case studies: Great Britain, Russia, China, Nigeria, Iran, and Mexico. Within each of the countries, students study various aspects of history, culture, politics, and economics.

AP PSYCHOLOGY

1.0 CREDIT

Prerequisites: junior or senior status; minimum of A- in both semesters of the last non-AP history course or minimum of B in both semesters of the last AP history course; teacher recommendation

AP Psychology is an exciting yearlong course that elucidates how the mind works. The AP curriculum introduces students to the systematic study of brain function in the context of several fascinating subfields, including consciousness, learning, abnormal psychology, cognition, and ethics. Students learn why people and other animals do what they do. Surveys, experiments, and other investigations are employed to discover the biological bases for behavior and learning, as students practice thinking like psychologists and scientists. This requires that one "restrain intuition with critical thinking, judgmentalism with compassion, and illusion with understanding." (Steinberg, 1997) Whether the student chooses to pursue a career in psychology or in some entirely different field, this habit is of great value.

MICROECONOMICS (GRADE 12)**0.5 CREDIT**

Economics is a discipline that is both exciting and interesting to study—the opposite of the common misperception of dismal! The ideas in this course help us understand policies related to such topics as national defense, global warming, international trade, and minimum wage. Ultimately, economics is interested in improving people’s lives and studies how decisions are made. Topics of study include supply and demand, the benefits of competition, public goods, market failures such as externalities, and why nations trade. This is an interdisciplinary course that requires analytical thinking using the tools of graphs and mathematics, combined with reading and writing on economic conditions and public policy.

MACROECONOMICS (GRADE 12)**0.5 CREDIT**

Can we agree on the best solutions for the debt problem facing the United States? Why do we always see the Federal Reserve in the news? These two questions just scratch the surface of why it is so important to study macroeconomics. Understanding measurements of economic performance are central to the beginning of this course. Also fundamental to this course is the impact fiscal and monetary policies have on aggregate measures such as employment, price stability and economic growth. Among the topics covered are the Federal Reserve, inflation, money creation, Classical and Keynesian viewpoints and the business cycle. The course concludes with an introduction to international economics, including the teaching of exchange rates and the balance of payments.

AP MICROECONOMICS (GRADE 12)**0.5 CREDIT**

Prerequisites: senior status; minimum of A- in both semesters of FST-45 or minimum of B in both semesters of FST-90/PreCalc-90; teacher recommendation

The Advanced Placement course in Microeconomics focuses on building a strong foundation in economic theory that allows a student to understand important topics such as antitrust laws, public goods, competitive markets and international trade. From the determination of prices by demand and supply to the provision of public goods, this course provides all the ideas found in a college-level course. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. The course includes a complementary balance between theoretical ideas and current economic events.

AP MACROECONOMICS (GRADE 12)**0.5 CREDIT**

Prerequisites: senior status; minimum of A- in both semesters of FST-45 or minimum of B in both semesters of FST-90/PreCalc-90; teacher recommendation; exceptions considered for students who have an exceptional interest/knowledge in a similar subject (i.e. political science)

The Advanced Placement course in Macroeconomics emphasizes the theoretical foundation to understand topics including inflation, unemployment, economic growth, fiscal policy and monetary policy. Such a course places particular emphasis on the study of national income and price determination, and also develops a familiarity with economic performance measures, economic growth, and international economics. This interdisciplinary course blends analytical thinking and economic theory with a survey of current economic challenges facing our country.

MATHEMATICS

Upper School Mathematics builds upon the foundation set in the earlier years. Students' ability to think abstractly continues to develop through these years. The sequence of courses and projects within courses reflects this development. The link between all courses is the inclusion of real-world scenarios, projects, and the use of technology to study the concepts at hand. This reaches to the ECS program as well. For example, the Tall Ships ECS incorporated the use of vectors, mapping location, population samples, and more. On campus, students often use the pond for taking various samples, survey peers for data collection and interpretation, use a force plate to measure the force required for an action, and measure shadows to approximate heights of trees or buildings.

GEOMETRY

1.0 CREDIT

Prerequisite: completion of Algebra 1

Geometry reinforces foundational algebra skills through the lens of geometric concepts. Students continue to polish the use of variables in order to solve problems; however, the problems are based on geometric definitions and relationships. Beginning with a few undefined terms and postulates, numerous theorems are the foundation for setting up algebraic equations. Algebra skills such as writing and solving linear equations, linear inequalities, systems of equations, polynomials, and quadratics are reinforced throughout the course, with the calculations of angle measurements, areas of plane figures and volumes of three-dimensional objects. Properties of polygons and circles are investigated and the concepts of congruency and similarity are established. Peer coaching and frequent discussions in class are an important part of the proof-writing process. Current technology and hands-on activities allow the student to focus on problem-solving skills and strategies. The geometry vocabulary of the year is solidified with an Origami Unit in the second semester. Students reinforce and synthesize concepts through projects that can incorporate art and strengthen public speaking skills.

ADVANCED GEOMETRY

1.0 CREDIT

Criteria for enrollment: completion of Algebra 1; excellent score on Placement Test; teacher recommendation

Geometry emphasizes the study of shapes in order to discover underlying patterns found throughout mathematics. Properties of polygons and circles are investigated and the concepts of congruency and similarity are established, mainly by studying transformations (translations, reflections, rotations and scale changes) of these figures. Students are also introduced to a much more rigorous use of logic than in previous math courses. Peer coaching and frequent discussions in class are an important part of the proof-writing process. Beginning with a few undefined terms and postulates, numerous theorems are proven. Algebra skills are reinforced throughout the course, with the calculations of angle measurements, areas of plane figures and volumes of three-dimensional objects. The vocabulary of the year is solidified with an Origami Unit in the second semester.

ALGEBRA II

1.0 CREDIT

Prerequisites: completion of Algebra 1 and Geometry

Algebra II incorporates virtually all of the areas of mathematics studied in previous courses, including geometry and fundamental mathematical calculations. Students develop stronger and

more advanced skills in the manipulation of variables in formulas, solving equations, graphing, and finding mathematical models that approximate real-world data. A variety of functional forms are studied, including linear, exponential, quadratic, and trigonometric. Among the applications using these functional forms are direct and inverse variation, exponential growth and decay, and parabolic motion. These traditional topics are supplemented with units on matrices, conic sections, roots and powers, and solving systems of equations. Students will use *Geometer's Sketchpad* and their graphing calculator in addition to pencil and paper graphs and drawings to help visualize solutions, changes in variables, and patterns.

FUNCTIONS, STATISTICS, AND TRIGONOMETRY

1.0 CREDIT

Prerequisite: completion of Algebra 2

This course begins with a vigorous review of functions, inequalities and graphing. Advanced characteristics of functions are studied, and they include maxima and minima, discontinuities and end behavior. Much of this is done by recognizing the patterns in equations and graphing by hand; however, there is a fair amount of data interpretation with the TI-84 as well. The latter portion of the course emphasizes rational functions, trigonometry and vectors. The course includes a team project in which students develop an appropriate question to ask a sample population and then statistically interpret their findings. Virtually all major strands of mathematics are found throughout this course and therefore frequent in-class practice is vital. This practice is generally accomplished with individual whiteboards so that each student may get immediate feedback to their solutions.

ADVANCED FST / ADVANCED PRECALCULUS

2.0 CREDIT

Prerequisites: minimum of A- in both semesters of Algebra II; teacher recommendation

This challenging series of two courses in a single year meets 90 minutes per day five days per week. The first semester of this course covers the entire year of Functions, Statistics, and Trigonometry, exploring topics at a deeper level than the regular FST course (see above). The second semester of this course covers the entire year of PreCalculus at a level that prepares students to take the AP Calculus BC class the following year. The Advanced FST / Advanced PreCalculus course is required for any student aspiring to take AP Calculus. The PreCalculus section of this course gives students a broad foundation of all mathematics needed for calculus. Precalculus topics include advanced properties of functions, polar coordinates, complex numbers and introductions to the derivative and integral. Students study the rules of vectors in part by investigating how the force required to pull a student on a skateboard depends on the angle at which one is pulling. Complementing these topics are several areas of discrete mathematics, such as recursion, induction and combinatorics. While many of these topics are studied in detail for the first time (e.g. infinite sequences and probability), other topics extend their understanding of material in prior courses (e.g. trigonometry). The course lends itself to frequent discussions of concepts and investigations as questions arise.

***INVESTMENT AND FINANCE**

0.5 CREDIT

Prerequisite: completion of Algebra 2

The goal of this semester course is to teach students to be savvy about money. From savings and investment options with varying risk, to credit options, to the role of insurance, this course will provide a life-long foundation to help students in making wise financial decisions. Experiential components of the course include an on-line investment simulation, comparing purchase and

lease options for a new car, examining the fine print in credit card applications, exploring the causes and consequences of the financial crisis, and setting short and long-term financial goals.

MATH ANALYSIS

0.5 CREDIT

Prerequisite: completion of Algebra 2

What are the general and wide-ranging strategies for solving real life problems? Most real-world problems involving math can be solved using a variety of strategies. This course will expose students to challenging problems where diagramming, drawing a table or picture, creating a real-life model, and/or using matrix logic are just a few of the strategies that can lead to a solution. We'll also explore historical great discoveries in mathematics to check their relevance to our lives today. Selected math labs (*Geometer's SketchpadI*) and projects will cover a variety of "discovery" topics, and students will engage in both collaborative and individual work throughout the semester. Direct applications for students range from everyday uses to scientific and career-specific purposes.

AP CALCULUS AB/BC

1.0 CREDIT

Prerequisites: minimum of B in both semesters of FST-90/PreCalc-90; teacher recommendation

AP Calculus focuses on the mathematics of changing quantities, develops the concepts of limits and continuity, and proceeds through the differentiation and integration of transcendental functions students have studied up to this point. Students do not learn new functions; rather they acquire the skills of differential and integral calculus to give the familiar functions new breadth and an essential tool to this end. The TI-Nspire CX CAS graphing calculator provides a powerful platform /for the exploration of mathematical ideas. Handheld data collection devices and associated probes and sensors provide students with ample material for analysis. Most students take the Calculus BC Advanced Placement exam in May, but some may choose to take the AP Calculus AB exam.

STATISTICS

1.0 CREDIT

Prerequisites: junior or senior status and completion of FST

Statistics is an amazing discipline that permeates fields ranging from psychology to biology to manufacturing. The ideas studied in this course are practical, and many classroom activities and experiments are used to reinforce statistical concepts. Students examine four broad conceptual themes: exploratory analysis of data, sampling and experimentation, anticipating patterns, and statistical inference. Technology is viewed as a helpful tool in both analyzing and displaying data. Among the areas studied are descriptive statistics, normal distributions, statistical design, bias, probability, and hypothesis testing. This is a course that introduces some of the most valuable concepts in the world of statistics.

AP STATISTICS

1.0 CREDIT

Prerequisites: minimum of B in both semesters of FST-90/PreCalc-90 or minimum of A- in both semesters of FST-45; teacher recommendation

AP Statistics includes an in-depth study of how to work with data, and includes some of the most important and practical applications of mathematics found in high school. Students examine four broad conceptual themes: exploratory analysis of data, sampling and experimentation, anticipating patterns, and statistical inference. In the first section of this course students construct and interpret graphical displays, summarize and compare univariate data, compare distributions

and are introduced to statistical techniques involving categorical data. The second portion of the course requires the study of planning and conducting a study. Among the areas studied in this section are census data, surveys, and random sampling. Interpreting probability from a sampling distribution leads to the study of the t-distribution and Chi-square distribution. The course finishes with students studying statistical inference. This section of the course examines testing hypotheses, estimating parameters and interpreting confidence intervals.

SCIENCE

Science is an intensely participatory study in the US. It is about making things happen, watching things happen, and analyzing how and why things happen. Experimentation, demonstration, and analysis are used liberally to illustrate theory. While Physics uses a playground merry-go-round or a river raft to calculate angular momentum and vectors, Chemistry uses a thermal gradient to collect data on reaction rates and chemical equilibria, and Biology keeps cultures of everything from bacteria to plants and invertebrate and vertebrate animals to observe behavior and population growth rates. Top-line texts are used for both high school and Advanced Placement (AP) courses, but because active learning is deeper and more enduring than textbook learning, emphasis is placed on numerous activities and labs to give students a life-long appreciation for the practice of science. Repetitive use of scientific methodology, with guided inquiry and analysis provides a clear distinction between scientific thinking and other epistemological approaches such as philosophy, art, or religion. While the US produces students who score very high on AP Exams, the curriculum also includes numerous elective courses for students who enjoy science but who are not targeting science as a profession.

BIOLOGY (GRADE 9)

1.0 CREDIT

The course is approached from an ecological perspective, beginning with large-scale, easily observed phenomena such as interactions of organisms, structure of communities, population size and density, and the biotic and abiotic components of ecosystems. The first half of the course progressively drops to the cellular and macromolecular level. During the first term, the course pursues biological continuity in terms of ecosystems, populations, reproduction, cell division, genetics, heredity, and evolution. It is here that the student learns cellular ultrastructure and biochemical processes such as photosynthesis and cellular respiration, and the structure, properties, and activity of the four classes of macromolecules (carbohydrates, lipids, proteins, and nucleic acids). In the second term, the course covers two broad areas: human biology and the processes relating to the history of life. The former focuses on studies of the circulatory, immune, and digestive systems, and includes dissections of invertebrate and vertebrate specimens. The latter includes evolutionary processes (speciation, biogeography, extinction, and the paleontological record), lower and higher classification, and the six kingdoms. As time permits, evolutionary features of primitive and advanced plant groups are compared and contrasted.

CHEMISTRY (GRADE 10)

1.0 CREDIT

Chemistry focuses on lab-oriented studies where students gather experimental results in an effort to discover regularities that lead to an understanding of the chemical properties of matter and the chemical changes that occur in the composition of matter. Readings and class discussion supplement laboratory work and help develop a detailed descriptive and quantitative understanding of the physical and chemical properties of matter, atomic structure, and chemical reactions.

PHYSICS

1.0 CREDIT

Prerequisites: completion of Biology, Chemistry, and PreCalculus

Physics starts by covering the basic concepts of motion as a precursor to Newton's laws. After an intensive study of Newton's laws, the conservation laws of linear momentum, energy, and angular momentum are developed in light of Newton's laws. Once the study of Newtonian physics is completed, attention turns to the four fundamental forces of nature. The force laws of gravity and electricity/magnetism are studied in conceptual and mathematical detail, all the while invoking Newton's laws for justification and clarification. The strong nuclear force and the weak nuclear force are studied conceptually, with an understanding and appreciation of the central role of Newton's laws.

***AP BIOLOGY**

1.0 CREDIT

Prerequisites: minimum of A- in all semesters of Biology and Chemistry; teacher recommendation

Advanced Placement Biology follows the syllabus written by the College Board. Twenty-five percent of the course involves a review of chemistry, the nature of water, classes of macromolecules, and cell structure and function. Another 25% of the course covers heredity and evolution, including molecular genetics and the effects of mutation on macroevolution. The remaining 50% of the course, lumped under ecology, involves organisms, populations, reproduction, development, anatomy, behavior, and classification. Laboratory exercises teach experimental design and technique and provide enhancements to specific concepts. Students who successfully challenge the AP exam may receive credit from a college or university that they attend. AP Biology alternates every other year with AP Chemistry. AP Biology is taught in even years during AB-block, so it is offered in 2016-17.

***AP CHEMISTRY**

1.0 CREDIT

Prerequisites: minimum of A- in both semesters of Chemistry; teacher recommendation

AP Chemistry alternates every other year with AP Biology. AP Chemistry is taught in odd years during BA-block, so it is not offered in 2016-17.

ENVIRONMENTAL SCIENCE

1.0 CREDIT

Prerequisites: completion of Biology and Chemistry

Environmental Science explores the interrelationships between human society and environmental health. It is one of the most interdisciplinary courses taught at CSS, as it contains elements of sociology, history, mathematics, and politics in addition to life, chemical, and physical sciences. In addition to learning about the many perspectives that should be brought to bear on a wide variety of environmental topics, students will be encouraged to develop their own set of priorities related to their personal lifestyles and political choices. Laboratory investigations, simulations, projects, and activities are an important part of this course.

AP ENVIRONMENTAL SCIENCE

1.0 CREDIT

Prerequisites: completion of Biology and Chemistry; minimum of A- in all semesters of Biology and Chemistry or minimum of B in all semesters of last AP science course; teacher recommendation

Advanced Placement Environmental Science considers the environment in which humans live, discovering what makes our habitat suitable and sustainable as well as what makes it unhealthy

and deteriorating. The course is roughly broken into parts as follows. About 25% of the content considers the interdependence of Earth's systems; about 10% covers population dynamics especially involving human populations; about 15% covers renewable and nonrenewable resources; about 20% covers environmental quality and effects of pollutants; about 20% covers global changes in the atmosphere, oceans, and among animals; and about 10% covers the environment in relation to decision making, laws, and ethics. Numerous labs are conducted to gather and analyze data. Students who successfully challenge the AP exam may receive credit from a college or university that they attend.

INTRODUCTION TO COMPUTER SCIENCE (GRADES 10-12) 0.5 CREDIT

This course will introduce students to the fundamentals of computer science. Serving as a prerequisite course, it will prepare students for AP Computer Science, which will be offered in upcoming years. In the course, students will learn the fundamentals of computer hardware, computer networking, and computer coding.

***ANATOMY & PHYSIOLOGY (GRADES 11-12) 0.5 CREDIT**

Prerequisites: completion of Biology and Chemistry

This 1-semester course takes students on an in-depth tour of human form and function. Students study the major systems of the body, such as nervous, muscular, skeletal, digestive, reproductive, endocrine, cardiovascular and how they are interrelated. The connection between structure and function is emphasized throughout the course as students continually relate anatomy to physiology. Students have an opportunity to meet with physicians and travel outside the classroom to witness medical procedures. Lab opportunities to augment class work are a part of the course, and they include mammal dissection as one of many activities.

***ASTRONOMY (GRADES 11-12) 0.5 CREDIT**

Prerequisite: completion of Chemistry

Astronomy is a 1-semester course that explores the dynamic nature of the universe and the forces and processes at work. We study basic laws of motion and gravity as they pertain to celestial objects, magnitudes of scale (regarding distance, mass, and time), life cycles of stars, and the behavior of various elements in space such as asteroids, moons, planets, comets, and black holes. Students also take a close look the tools humans use to explore space: telescopes, satellites, probes, and rovers. In this laboratory science course, students use various imaging tools, run orbital simulations, examine space exploration from an engineering perspective, model space processes, and apply mathematical and scientific skills and knowledge to predict future events.

***BOTANY (GRADES 11-12) 0.5 CREDIT**

Prerequisite: completion of Biology and Chemistry

Botany is a 1-semester course that considers plants from many perspectives, from cellular ultrastructure to economics and illustration. Physiology, anatomy, evolutionary trends, genetics, and the cultural uses of plants are studied. Students learn to identify, collect, preserve, illustrate, and use plants. A portion of the course is directed at helping students relate to the plant world on a daily basis, appreciating garden flowers, landscape architecture, and agriculture.

***GEOLOGY (GRADES 11-12)**

0.5 CREDIT

Prerequisite: completion of Biology and Chemistry

Geology deals with earth materials and processes. This 1-semester course begins with the chemistry and identification of minerals and the main rock types. This section also includes sidelights on precious and semiprecious gemstones, their occurrence, and the physical features that make them valuable. The course then takes up the processes by which the main rock types are made. This includes units on volcanism, metamorphism, and sedimentation. Geomorphology naturally follows, as most earth forms result from movement and metamorphism of the earth's crust. Tectonic theory is introduced to explain patterns of geologic features. The course ends with units on erosional agents such as wind, water, and ice, and the landforms associated with these processes. Students are taught to use topographic maps, and local geologic sheets are used for reference in the field. This course is highly visual, involves a number of regional field trips (students sometimes get dirty!), and is strongly hands-on.

WORLD LANGUAGES

Our Upper School program continues to foster language fluency and cultural understanding. Students learn, practice and work toward mastery of increasingly complex structures, as well as nuances unique to each language and culture. In the classroom, students read, discuss, present, and prepare projects on a variety of relevant topics that engage them in the use of the language and provide them with opportunities for meaningful self-expression and communication. Students in the Upper School also have the unique opportunity to participate in immersion experiences in Spanish and French through our Experience Centered Seminar (ECS) program. Past seminars have taken students to Spain, Mexico, Chile, France, and Cameroon.

FRENCH

FRENCH I

1.0 CREDIT

French I introduces students to the sounds of the French language and the cultures of French-speaking countries around the world. Students build a basic vocabulary on a variety of topics, learn key phrases, and are introduced to the concept of verb conjugation. By the end of the course, students are able to conjugate common verbs in the present tense, form simple sentences, and maintain basic dialogues in French. This course targets all four aspects of language acquisition: listening, speaking, reading, and writing.

FRENCH II

1.0 CREDIT

Prerequisites: French I, or sufficient score on placement test

French II fosters fluency in listening and speaking, reinforces and adds to the basic structural patterns learned in French I, enhances writing and reading skills, and arouses awareness and understanding of cultural differences. Various new tenses and structures are acquired which enhance student ability to tell stories and express ideas. Students create and share technical presentations highlighting events from a virtual trip to a Francophone country where they are required to price, plan, and schedule everything from flights to trains to meals and cultural activities. Later in the year, groups also choose a Francophone dish to prepare while filming their own cooking demonstration. Students are expected to use French in class discussions and activities.

FRENCH III

1.0 CREDIT

Prerequisites: French II or sufficient score on placement test

French III continues to develop and hone skills in all areas of language acquisition: listening, speaking, reading and writing. New, complex grammatical structures are introduced and emphasized in context. Vocabulary is expanded and conversational ability improves. Students are introduced to literary analysis as they read short stories, essays, and news articles in French. Students study in depth French and Francophone culture through texts, videos, and music. They write original song lyrics in French and create music videos that share cultural elements they have studied. Participation is maximized through the use of skits, dialogues, presentations, and other meaningful and engaging activities.

FRENCH IV

1.0 CREDIT

Prerequisites: French III or sufficient score on placement test

French IV reviews and reinforces auditory, oral, reading, writing and cultural skills. A strong emphasis is placed on refining all grammatical concepts as well as developing the ability to write expository essays by combining idiomatic expressions with academic language. Students work to develop speaking fluency and proficiency in thought and expression. A global awareness is fostered through the appreciation and understanding of Francophone cultures as we study history and literature from various French speaking regions of the world. Students participate in an in-depth study and analysis of *Le Petit Prince* by Antoine de St. Exupéry.

FRENCH V/AP FRENCH LANGUAGE

1.0 CREDIT

Prerequisites: minimum of A- in both semesters of French IV; teacher recommendation

This course fosters overall language proficiency. An emphasis is placed on refining all grammatical structures as well as developing the three modes of communication (Interpersonal, Interpretive and Presentational) defined by the Standards for Foreign Language Learning in the 21st Century. Students continue to work toward fluency and proficiency in thought and expression. In activities, discussions, presentations and written work, students demonstrate an understanding of French and Francophone cultures, make use of interdisciplinary topics, make comparisons between languages and cultures and effectively use French in real-life situations. Those enrolled in the AP course complete additional activities and exercises designed to prepare them for successful performance on the AP exam.

SPANISH

SPANISH I

1.0 CREDIT

Spanish I introduces students to the sounds of the Spanish language and the cultures of Spanish-speaking countries around the world. Students build a basic vocabulary on a variety of topics, learn key phrases, and are introduced to the concept of verb conjugation. By the end of the course, students are able to conjugate common verbs in the present tense, form simple sentences, and maintain basic dialogues in Spanish. This course targets all four aspects of language acquisition: listening, speaking, reading, and writing.

SPANISH II

1.0 CREDIT

Prerequisites: Spanish I or Intermediate and Advanced Spanish at the Middle School level

Spanish II fosters fluency in listening and speaking, reinforces basic structural patterns in the language, develops writing and reading skills, and increases awareness and appreciation of cultural differences. Students are expected to use Spanish in all class discussions and activities.

SPANISH III

1.0 CREDIT

Prerequisites: high school Spanish II or sufficient score on placement test

Spanish III advances student fluency through reading, writing, speaking and listening. Students learn additional structures and acquire a wide range of vocabulary while increasing awareness of cultural differences and ways of thinking in Spanish speaking countries. Students watch videos in Spanish, read articles from Spanish web sites such as bbcmondo.com, and learn about Latin American and Spanish holidays such as “El día de los muertos.” Different types of music are

introduced and “salsa” lessons are performed in class. Cooking is part of the course as well. Students participate in field trips to make cultural immersion educational and engaging. Classes are taught in Spanish and students are expected to use Spanish in all class activities.

SPANISH IV – GRAMMAR AND COMPOSITION

1.0 CREDIT

Prerequisites: Spanish III or sufficient score on placement test

Spanish IV continues to advance student fluency in the language through reading, writing, speaking and listening. Students hone their ability to conjugate regular and irregular verbs in basic and complex verb tenses. Students also acquire a wide range of advanced vocabulary words, reinforce past vocabulary and increase awareness of cultural differences and ways of thinking. They read and analyze stories, essays and articles from a variety of sources. Students learn about American and Spanish holidays and traditions. They learn about music and cultural dances. Students participate in field trips to make cultural immersion educational and engaging. Classes are taught in Spanish and students are expected to use Spanish in all class activities.

SPANISH V/AP SPANISH LANGUAGE

1.0 CREDIT

Prerequisites: for AP Spanish, minimum of A- in both semesters of Spanish IV; teacher recommendation

An emphasis is placed on refining all grammatical structures as well as developing the three modes of communication (Interpersonal, Interpretive and Presentational) defined by the Standards for Foreign Language Learning in the 21st Century. Students continue to work toward fluency and proficiency in thought and expression. In activities, discussions, presentations and written work, students demonstrate an understanding of Spanish and Spanish-speaking cultures, make use of interdisciplinary topics, make comparisons between languages and cultures and effectively use Spanish in real-life situations. Those enrolled in the AP course complete additional activities and exercises designed to prepare them for successful performance on the AP exam.

FINE ARTS

The Upper School Arts program provides comprehensive training and exposure to a wide variety of artistic disciplines. The arts are considered equal to core subjects, with two years of arts classes required for graduation. Through diverse offerings students are consistently challenged in creative problem solving, refinement of artistic techniques, and adaptability to new forms of self-expression. The Art Department believes in educating the whole individual; students find themselves performing on stage through music, acting and dance, while producing visual art in such diverse areas as metal-casting, oil painting, darkroom photography, figure drawing, ceramics, graphic design, printmaking and glass-working. Classroom interaction and critique strengthen the student's artistic voice, vision and ability to communicate effectively. Visiting professional artists provide connections to the greater community, helping to reinforce coursework within the studio environment of the arts classroom and often assist as integral elements of arts ECS courses. Every individual is provided the tools and experiences required to participate in local and regional exhibitions and to perform for a wide range of audiences. Students are encouraged to enrich their resumes and develop personal portfolios for collegiate admissions, scholarships, personal growth, and to develop life long abilities in creative thinking and problem solving.

ARTS FOUNDATIONS (freshman requirement)

0.5 CREDIT

This course is designed to provide exposure to the critical elements of each of three disciplines: Music, Theatre, and Visual Arts. The section of Arts Foundations dedicated to music focuses on the language, practices and possibilities of music. Students will learn to explain the music we hear and see and have the opportunity to advance their knowledge and understanding of music in its instrumental and vocal forms. This course provides the tools to refine listening skills, enhance performance skills and foster creativity in the budding composer/musician. The theatre component fosters the development of fundamental skills in multiple elements of Theatre. The purpose of this section of the course is to foster development of fundamental skills in the multiple elements of theatre. Students will be exposed to acting and characterization, movement and vocal production, pantomime and improvisation, theatre terminology, theatre history and influences, theatre production, elements of a play/script, audience etiquette, theatrical critique, and relationships between theatre and life. Through the visual arts section of the course, students develop foundations in concept, design and communication while they solidify skills in drawing, composition, color use and working with 3D materials. The course prepares students to engage in US art electives with established skills and an ability to apply art concepts as they express their own ideas.

VISUAL ARTS

ADVANCED ART

1.0 CREDIT

Prerequisites: junior or senior status; teacher recommendation

Advanced Art is for exceptional art students who are excited about exploring their artistic side with more independence. Students have the opportunity to pursue more refinement in their skills, explore new areas of art, and intensely study previously experienced art forms. This course allows access to a wide variety of materials and techniques, establishes portfolio and art reviews,

and creates a dialogue with professional artists. The course allows students some flexibility in level of productivity. Whereas one student may want to create as many different pieces as possible another student may want to focus more deeply on a fewer number of pieces. Classroom interaction and critiques strengthen the student's artistic voice, vision and ability to communicate effectively. This course will serve as the first of two courses for serious art students who want to develop a personal art portfolio. This portfolio may be directed toward college applications, competing for awards and scholarships, taking the AP Studio Art Exam, and/or for personal growth.

PORTFOLIO STUDIO ART

1.0 CREDIT

Prerequisite: senior status; completion of Advanced Art; teacher recommendation

This course builds on the foundations created in Advanced Art and students add to their evolving work portfolio that they started in this prerequisite course. By the end of the year, students will create a rich portfolio of their artwork. The development of a personal portfolio through consistent and thorough creative studies has far reaching effects into any future pursuits. Students may use their portfolio at the annual art school portfolio review to determine collegiate choices, compete in scholastic awards, and prepare materials for the AP Studio Art Exam. They are informed about and encouraged to enter various art shows and competitions, and to submit for publication.

***BRONZE CASTING**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

In this course students develop wax models, learn mold making, pour molten bronze into their creations and finish their sculptures with classic patinas. Three-dimensional design concepts are practiced using models of various materials, leading to both freestanding sculptures and reliefs. Bronze works from ancient Greece through contemporary artists are explored with lectures and research projects on specific artists. Aspects of metallurgy and chemistry of metals are explored and culminate in a final written exam. Students are required to keep a sketchbook with their notes and drawings as they work their way through the many materials and techniques that must be learned to produce their bronze sculptures.

***CERAMICS / ADVANCED CERAMICS**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

This course introduces the student to working with clay. Through lectures, demonstrations and hands on activities, the student learns the following techniques in creating pottery: slab, coil, pinch, press mold, and wheel-thrown ceramics. Firing procedures, glazing, Raku and other decorating techniques, as well as caring for works in progress and studio maintenance are also presented. Students will experience how different clay bodies behave and learn how to properly load, program and use electric kilns to fire their creations. Various styles of pottery-making are researched. The historical background of these styles is offered to the class through oral presentations. Projects done in various styles enhance the understanding of historical pottery making techniques. Visits by artists working in ceramics and field trips to local pottery studios to witness professional potters in action reveal personal styles and different techniques.

***DARKROOM PHOTOGRAPHY**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

In Darkroom Photography students gain a thorough understanding of camera mechanics, 35mm black & white film developing, and black & white printing. The history of photography is briefly covered, mostly in context of the innovations necessary for the invention of the modern process of photography. Students complete a series of assignments that explore fundamental characteristics of camera vision as an art form. Emphasis is placed on creating the best possible image quality.

***GLASS**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

This course explores a wide range of historical and contemporary methods of glass working. The class begins the challenging process of learning how to handle molten glass by working with torches to create small-scale works, beginning with bead making. Other torch-based projects include small animal sculptures and small blown objects. The class also explores the less dexterously demanding area of kiln-based fusing and slumping, which often requires more deliberate planning and forethought.

***METAL SCULPTURE**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

This course explores the diverse and challenging world of 3D design and fabrication. Beginning with small-scale projects, students explore some of the methods and means of expression possible using 3D materials including bending, curving, stretching and creating armatures. From this foundation, students begin to work with steel and other metals, and are introduced to various welding methods as well as traditional blacksmithing techniques. Students also investigate the many possibilities of color and texture created by paint and patinas. Each student creates at least one research presentation and a variety of sculptural projects. Keeping an active sketchbook is an important component of this class.

***OIL PAINTING**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

This course explores a broad range of materials and techniques that operate within oil based medium. Some of these media are familiar to many, such as linseed or solvent-based oils, while others are less so, such as encaustic and oil sticks. Even though these media are some of the simplest forms of pigment vehicle, they each have their own specialized techniques, many of which are tied to specific periods and places in history. Students explore these diverse forms of painting as media and technique, and learn their historical contexts. Students create research presentations on artists or periods associated with these media. A wide variety of projects are completed while practicing painting technique and color theory.

***PRINTMAKING**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

Printmaking is the multiplication of images. Historically it dates back to the Paleolithic Period when man printed his hand on cave walls. In this course the student explores the two kinds of prints: the multi-unit print and the self-contained print. The student creates at least one print in each of the four processes of printmaking: intaglio, relief, serigraph, and lithograph. Homework assignments provide a source of ideas for class work and are essential to understanding the different processes of printmaking. There are many artists who have used printing as their

medium. Each student writes a research paper and presents findings to the class. There is a final written exam covering printmaking terms and the information presented about the artists researched. The student also writes a critical analysis for each finished edition.

***STONE CARVING**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

In this course, students create sculptures in stone using both modern and classical techniques. Three-dimensional composition is developed while surveying the rich history of working in hard and soft stone. Sketchbooks, clay models, paper, plaster, and foam forms created while researching various artists and historical works in stone lead to the production of several stone sculptures and reliefs. Hammers and chisels, power grinders and sandblasting, and various finishing techniques are explored. Students give presentations on their research projects and display their finished stone sculptures around the CSS campus.

***STUDIO DRAWING**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

In this course the student learns to draw various subjects using traditional drawing media. The elements and principles of art are presented and used to create drawings of quality. Different approaches to drawing are explored using mediums like charcoal, graphite, colored pencil, ink and pastel. Focus is on developing technical skills while refining composition and design within each artwork. Homework assignments are designed to enhance the classroom projects and develop proficiency. Art History is used extensively to reference specific developments in representation and mark-making techniques and student research projects are presented to the class orally along with visual references. Through demonstrations, exercises and completed works the student exhibits growth in drawing skills. In writing critical analyses of completed works the student will evaluate his/her own success and develop an understanding of the language of art.

***VIDEO PRODUCTION**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

Students learn the fundamentals of independent digital video (DV) production, including simple steps to dramatically improve camerawork, sound, lighting and editing. The class learns and explores Photoshop and works on individual and group projects. Individual video cameras are not required, but are helpful.

YEARBOOK

0.5 CREDIT

Prerequisite: completion of Arts Foundations

The Yearbook class is responsible for creating each year's edition of *Et Après*, the CSS yearbook. The class begins by brainstorming possible ideas for yearbook pages and concepts. Each student chooses his or her assignment via a lottery system. Students are responsible for initiating, organizing, and photographing assignments using their own or the school's digital cameras. All pages are created using Photoshop, with which students become familiar. This blockless class requires much independent student work with regular teacher check-ins.

THEATRE

***ACTING: MAKING THE CONNECTION**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

This course is for both experienced performers and students who are curious observers ready to grow. Students participate in an encouraging and collaborative atmosphere as they explore the craft of acting and hone their gifts for the stage. The fundamentals of listening and reacting, concentration, presence, intention and the script, finding the objective and creating and maintaining believability feed a passion for the stage! Students discover their gifts, improve their abilities and have a great time doing it.

***MAKER'S THEATRE**

0.5 CREDIT

Prerequisite: completion of Arts Foundations

This class is about creating theatre from the ground up. There is no script. Instead, a main idea, concept, or stimulus guides the creation of a product. Those stimuli can range from fairy tales, short stories, and paintings/photographs to current events. Maker's Theatre requires research, decision-making, listening, initiative, setting and meeting internal deadlines, and working together as a unified team – all things that are key to theatre. In this course, students will truly get out of it what they put in. It will be challenging; it will also be rewarding. We will aim to create a production by the end of the semester.

MUSIC

BAND

1.0 CREDIT

This full-year course places emphasis on the student's continual skill development with his/her chosen instrument. The focus of study is on a wide range of music literature that includes (but is not limited to) classical, jazz, and pop. Students gain greater control of instrumental fundamentals, basic musicianship, music reading, intonation, development of style, and teamwork. Students participate in the concerts given throughout the year (including BFL Band Day, the CSS Spring Concert and at the School's Graduation Ceremony) and may participate in Solo & Ensemble and Large Group Adjudicated Events.

VOCAL ENSEMBLE

1.0 CREDIT

Drawing on repertoire from diverse traditions, including Western classical music, world folk music, and jazz, this full-year course explores the art of ensemble singing. This course is open to all students in grades 9-12. Although some background in music is helpful, prior experience or training is not required. There is no audition. Required performances: Fall and Spring Concerts and the Black Forest League Vocal Music Clinic are required.