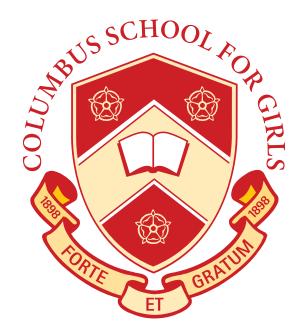
# Upper School Curriculum Guide 2019-2020



# Columbus School for Girls

# Table of Contents

| US Curriculum Overview  |    |  |
|---|----|--|
| College Counseling  | 5  |  |
| English   | 5  |  |
| Fine Arts<br>Music<br>Theater and Public Speaking<br>Visual Art | 11 |  |
| Health and Physical Education                                   | 19 |  |
| History   | 23 |  |
| Independent Studies   | 28 |  |
| Mathematics   | 29 |  |
| Publications  | 34 |  |
| Science   | 35 |  |
| Social/Emotional Learning                                       | 40 |  |
| Technology  | 41 |  |
| World Languages   | 42 |  |
| Summer Programs   | 50 |  |

# **UPPER SCHOOL CURRICULUM OVERVIEW**

Columbus School for Girls offers a varied selection of required and elective courses with increasing flexibility and options as students progress through their four years of Upper School. Some courses may vary from year to year as the curriculum changes in response to student interest and/or world events. All classes and seminars are designed around highly rigorous academic standards.

Upper School students are encouraged to research college entrance requirements and select courses that will prepare them for the particular colleges they may wish to attend. Decisions about which courses to take should be made by the student, her parents, and her academic advisor, taking into consideration the student's college and career plans.

#### Graduation Requirements: 21 credits for Classes of 2020, 2021, 2022 24 credits for the Class of 2023 and beyond

|                                   |                 | and beyond   |
|-----------------------------------|-----------------|--|
| English                           | 4 credits       | At least 1 credit per year   |
| Mathematics                       | 4 credits       | At least 1 credit per year<br>Required: Geometry, Algebra II<br>Class of 2021 and beyond:<br>Honors Algebra II <i>-or</i> - Introduction to Precalculus  |
| History                           | 3 credits       | Required: World History and US History<br>Civics or AP US Government   |
| Science                           | 3 credits       | Required: Biology, Chemistry, and Physics  |
| World Languages                   | 3 credits       | Three years in the same language, including the third level of that language   |
| Fine Arts                         | 1.5 credits     |  |
| Health and<br>Physical Education* | Varies by Track | Required: Health & Wellness, Health II, and Water Safety & Self-<br>Defense<br>*Students who are not Offsite or Interscholastic Athletes must also take Cardio,<br>Flexibility, & Strength: Wellness Revolution (page 20). |
| Technology                        | 0.5 credit      | Required: Media Design, Development, and Production for Classes of 2020<br>and 2021;<br>Introduction to Computer Science 1a for Class of 2022 and beyond   |
| Public Speaking                   |                 | .25 credits for Classes of 2020 and 2021<br>.35 credits for Class of 2022 and beyond   |
| Electives                         |                 | As required to meet total credits for graduation   |
| Non-Credit Courses                |                 | College Preparation XI and Senior May Program  |
| Service                           | 60 units        | Minimum of 10 hours per year with a total of 60 hours required   |

\*\*Students are required to take a minimum of five full-credit, graded courses each semester\*\*

Courses are designated either graded or pass/fail:

- Graded courses receive the standard grade equivalents of A, B, C, D, and F.
- **Pass/Fail courses** are graded on a pass or fail basis and do not count toward the fulfillment of departmental graduation requirements except in the areas of Health and Physical Education.

# Advanced Placement Courses

Columbus School for Girls offers many courses in the national Advanced Placement Program. AP classes are intensive and accelerated and require more preparation than other courses. These courses can offer several advantages: students will study the subject with a breadth and depth not found in other courses, many college admission officers look for a challenging course load as an indicator of an applicant's academic potential, and some universities offer credit for a score of three or better on the AP Examination.

Admission into an AP course is dependent upon meeting certain prerequisites which are explained in the course descriptions. In addition, a student who enrolls in an AP course must have the determination and motivation to do well and must demonstrate the requisite writing, speaking, organizational, creative, and analytical skills necessary for success in a college-level curriculum. Each student enrolling in an AP course must obtain departmental permission in order to do so.

Approval for AP courses at the time of scheduling is provisional and depends on continued success in the prerequisite courses. All AP scheduling will be reviewed at the end of Semester 2 to ensure that student grades and performance are consistent with AP standards. Students enrolled in AP courses are evaluated during the first few weeks of Semester 1 of the course to be sure that AP placement is appropriate.

A student who does not meet the stated prerequisites for an AP offering may request consideration with a petition. Petition forms can be obtained from the department chairperson for that course and will define the academic expectations that will earn enrollment. Petitions must be signed by the student, a parent, the designated teacher, and the department chair. The form should then be attached to the student's schedule request form. When students petition for course entry, the ultimate recommendation of the teacher, the department chair, and the director of the Upper School will be final.

Taking the College Board AP examination for each course at the end of the year is required. The cost of each exam will be billed to the family at the start of the school year. The cost, set by College Board, is approximately \$100. Exam fee reductions are available for students who qualify for financial aid.

#### Course Offerings

Courses are offered based upon projected enrollment. In the event that actual enrollment for a specific course is insufficient to support it, CSG reserves the right to cancel the course for the academic year. Any student affected by this will be offered an opportunity to select another course to complete her schedule.

#### <u>Cum Laude</u>

In order to be eligible for Cum Laude, students must be enrolled in at least five full-credit, graded courses during each semester of their upper school years. Courses taken at local colleges and universities receive credit; however, the Cum Laude average is based only upon averages in courses taught by a CSG faculty member. Grades in Advanced Placement or post-Advanced Placement courses are weighted for Cum Laude consideration.

#### **Independent Studies**

An independent study project offers students the opportunity to pursue an academic interest in consultation with a faculty advisor. Independent studies can be arranged in most areas of the curriculum and may be either a single semester or a full-year commitment. Recent independent study topics have been in areas of internet security, technology, history, French, German, Greek, writing, visual arts, and genetics.

Upon the start of the academic year (or Semester 2 if the work is limited to that semester), the student must complete an Independent Study Contract. The student is required to work with a teacher for guidance and evaluation on a regular basis, but the majority of the time is spent in independent work. Meeting times will be arranged between the student and the faculty member once the school year begins. The final project is generated by the student and requires approval by the teacher. Neither required courses nor curricular requirements will be displaced by an independent study project.

#### Independent Studies (cont.)

Students should plan to spend the equivalent of three periods per rotation on an independent study project. At least one period per rotation will be formally scheduled with the independent study teacher. Independent projects are graded on a pass/fail basis and earn 0.2 credit per semester. Credit earned does not satisfy any departmental graduation requirement. Independent study projects may not be undertaken by Semester 1 freshmen.

#### Schedule Changes

Students' course requests determine the number of faculty hired, course materials ordered, teaching assignments and the number of course sections offered. Because scheduling requests are so integral to academic planning structure for the upcoming school year, students must be committed to their requests before submitting them. Once the school year ends, no scheduling changes will be accepted until the start of the new school year and then will require written approval from a student's faculty advisor and division director.

# **Additional Academic Options**

#### **CSG Summer Programs**

Courses to fulfill the CSG graduation requirements can be taken during CSG's Summer Programs preceding the student's enrollment in Form IX and can be taken during any summer after that, up to the student's graduation. Since course time and material is condensed in the Summer Program classes, each class meeting represents one week of regular school year material. <u>Daily attendance is mandatory</u>. Appointments and vacations must be scheduled to avoid a conflict with any class period. Credit courses during the summer are offered to students who will make a commitment to the academic challenge of intensive learning.

Required classes such as PE, Public Speaking, and Health take scheduling precedence over elective courses such as second languages during the school year. Because of this, students who plan to enroll in multiple science, math, or language classes may find it necessary to complete some required classes during Summer Programs.

Dates, times, and costs for each of these courses can be found on the last page of this course booklet and in the online Summer Programs brochure at <u>www.columbusschoolforgirls.org/summer</u> which will be available beginning in February 2019.

With rare exception, students may earn credit for courses during the summer only if they are taken at CSG. In certain cases it may be possible to earn graduation credit in other programs. Permission of the Department Chair and the Division Director is required prior to taking the course in question.

#### **One Schoolhouse Courses**

Columbus School for Girls is an affiliate member of *One Schoolhouse (OS)* which is a consortium of independent girls' schools across the nation. These courses are best suited for students who are self-motivated, effective self-advocates, and conscientious independent workers. CSG students may take OS courses not offered at CSG for elective credit beginning in Form X. While the credit and grade for an OS course will be shown on the student's transcript, the grade will not be included in the GPA calculation for the student.

Tuition for OS courses is separate from CSG tuition. In the 2018-2019 school year, the cost was approximately \$1500 plus textbook fees for a full-year course. Students who are interested in a course from OS must fill out a registration form with CSG prior to June 2019. CSG will handle the course registration through OS. Please check the website www.oneschoolhouse.org for specific course descriptions and availability, and fill out the Course Intent Form by May 1, 2019.

#### US Curriculum Overview (cont.) Questions Concerning Curriculum and Scheduling

Please direct *curriculum* questions to: **Ms. Pam Hartshorne**, US Division Director *phartshorne* @*columbusschoolforgirls.org* 614.252.0781, ext. 115 Please direct *scheduling* questions to: Mr. John Hartshorne, US Scheduler jhartshorne@columbusschoolforgirls.org 614.252.0781, ext. 298

# **Upper School Courses**

# **COLLEGE COUNSELING**

# College Preparation U9800003

No credit, non-graded

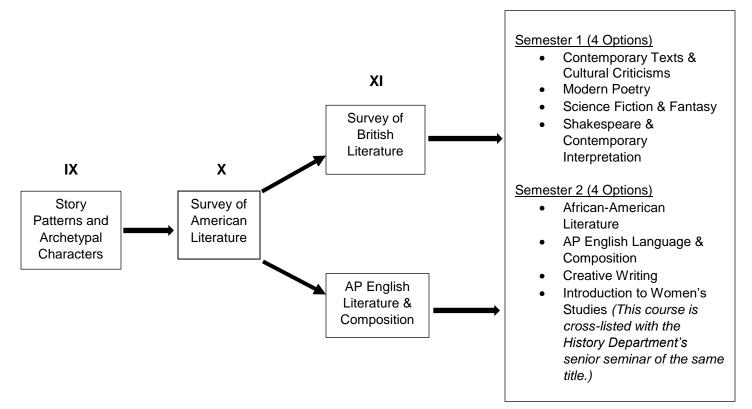
- Required of all students in Form XI
- Prerequisites: None
- · Semester 2 only; no credit

This course prepares students for the college search process. Topics of discussion include: college visits, interviewing, essay writing, the application process, the Common Application, *Naviance*, and more.

# ENGLISH

The English department's goals are to foster students' love of language and literature and to develop their ability to think and communicate effectively. The program emphasizes critical communication skills: reading, listening, speaking, and writing. Students continually hone their ability to read with comprehension, discrimination, sensitivity, and pleasure; to express their ideas with clarity, coherence, and fluency, and to understand the structure, complexity, and power of the English language. These skills are continually taught and reinforced at all grade levels, with the degree of development becoming more complex with each consecutive course.

Students in Forms IX through XI take courses that follow a preset trajectory which introduces them to American and British literatures, as well as the mythological, biblical, and fairy-tale traditions that influence them. Seniors, however, choose two semester-long courses. New senior electives are periodically developed and offered by the English faculty according to their areas of expertise, the interests of students, and the evolving discipline of English. Each senior elective allows students to explore specific topics within one or more broad curricular threads: author/literary periods, genre studies, and multicultural and inclusive literature.



# STORY PATTERNS AND ARCHETYPAL CHARACTERS

U1018801 and U1018802 Full-credit, graded course

- · Required of all students in Form IX
- Prerequisites: None
- Full year, 1 credit

In this course, students will read a variety of foundational stories, including myths, biblical stories, and fairy tales. In order to help students recognize allusions to these foundational stories, Charlotte Brontë's *Jane Eyre* will serve as the touchstone text at year's end. Students will write often, both in and out of class, with opportunities to engage in creative, persuasive, and analytical writing. Students are taught to read closely and carefully, to build their vocabularies through formal vocabulary study, to apply their knowledge of grammar, and to broaden their perspectives through reflection on universal themes and interrelationships among literary works.

# SURVEY OF AMERICAN LITERATURE

U1037401 and U1037402

Full-credit, graded course

- Required of all students in Form X
- · Prerequisites: Successful completion of Form IX Story Patterns and Archetypal Characters
- · Full year, 1 credit

In this course, students will focus on American literature, with an interdisciplinary approach that complements the United States history course. Students will read literature from early America to the present, including poetry, autobiography, essays, short stories, novels, and plays. Students are taught to read carefully, to think critically, and to demonstrate their reading and thinking skills in a variety of writing assignments, with particular emphasis on essays of literary analysis. The course also stresses grammar and vocabulary development.

# SURVEY OF BRITISH LITERATURE

U1027401 and U1027402

Full-credit, graded course

- Required of all students in Form XI, unless enrolled in Advanced Placement English Literature and Composition.
- Prerequisites: Successful completion of Form X Survey of American Literature
- Full year, 1 credit

In this course, students will read major works of British literature from *Beowulf* to Virginia Woolf. The course is designed to develop and refine students' skills in reading literature, thinking critically, writing analytically and imaginatively, and working with and documenting secondary sources, such as scholarly literary criticism. In addition to shorter analytical and creative writing assignments, students will write two research papers; in the process, they will find and effectively use literary and historical resources and document these sources according to MLA guidelines. They will also continue to develop their skills in vocabulary, grammar, punctuation, analytical and creative writing and speaking, and research writing and documentation.

# ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

U1030201 and U1030202 Full-credit, graded course

- · Open to Form XI
- Prerequisites: Successful completion of Form X Survey of American Literature with a Semester 1 grade of B+ or higher on writing assignments, the recommendation of the English X teacher, and full participation in class discussions and projects. A writing sample may be required; a departmental signature is required.
- Full year, 1 credit

In this course, students will develop the reading, writing, and analytical skills necessary for success on the Advanced Placement English Literature and Composition examination. AP students will not only read the works featured in the Survey of British Literature course, but they will also complete additional readings and tackle writing assignments that push them to produce high-level, rigorous work. Students will continue to develop their skills in vocabulary, grammar, punctuation, analytical and creative writing, listening and speaking, and research writing and documentation.

# CONTEMPORARY TEXTS & CULTURAL CRITICISMS: THE END OF THE WORLD AS YOU KNOW IT U1040231

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 1 only, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request

How much of your life is spent negotiating the media? How effectively do you manage the media? How effectively do the media manage you? And in what ways? Who controls the media? How aware are you of the media's influence on your life? And even if you are aware of that influence, what, if anything, can you do about it? Or do you even want to do anything about it? What are the relationships between the media and institutions that we value, like democracy, freedom, and individuality? What have we gained through our hyper-connected state? What have we lost?

Students will begin by analyzing the dominant media in our lives and identifying commonalities and distinctions between them. Students will also investigate the uses and misuses of the media and specifically examine the media's influences in areas of our lives, such as commercialism and consumption, gender, health, politics, and race. The course will draw heavily upon readings and multimedia materials from a number of internationally

#### Contemporary Texts & Cultural Criticisms (cont.)

recognized media literacy organizations, such as the Center for Media Literacy, the National Association for Media Literacy Education, the Media Literacy Project, and the Media Education Foundation. We will also watch and discuss a number of documentaries, such as *Miss Representation; The Purity Myth; Killing Us Softly 4, The Merchants of Cool; The Persuaders, and Generation Like*. Scholarly reading on the media and media literacy will also be regularly assigned, specifically *Media Literacy* by James Potter and other shorter works chosen by the instructor. Assignments may also include essays and blogs by critics, such as Susan Sontag and Caroline Heldman. In addition to reading and discussing the assigned texts, students will also continue to hone their skills in vocabulary, grammar, punctuation, analytical and creative writing, listening and speaking, and research writing and documentation.

# **MODERN POETRY**

U1040301

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 1, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request.

Emily Dickinson, one of the most famous and prolific American poets, wrote: "I reckon--when I count at all-- / First--Poets--Then the Sun--." Dickinson makes an argument for the importance of poets, due to their unique ways of seeing the world. In this course, we will broaden our exposure to poetry from the beginning of the twentieth century to the present. Through reading poems by diverse authors, we will explore some of the most common topics in poetry: nature, identity, society, and relationships. In addition to examining the printed word, we will also watch slam poems to reflect on the ways poetry changes when its medium of expression shifts. Assignments will include several analytical papers and a final project that will ask students to apply the concepts we have studied to a poet of their choice. Group work and oral presentations will allow students to practice leadership skills.

# SCIENCE FICTION AND FANTASY

U1040211

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 1, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request.

The genres of science fiction and fantasy present readers with more than imaginative world-building. They challenge us to take a deep look at ourselves and the societies that we build, live in, and destroy. This course will explore works of speculative fiction from the twentieth century to today, including works by M.T. Anderson, Italo Calvino, Ursula K. Le Guin, Helen Oyeyemi, and others. Writing assignments will include analytical and comparative essays, as well as a creative short story. In addition to reading and discussing the assigned texts, students will continue to develop their skills in vocabulary, grammar and punctuation, analytical and creative writing, listening and speaking, and research writing and documentation.

# SHAKESPEARE AND CONTEMPORARY INTERPRETATION: ALL THE WORLD'S A STAGE

#### U1040221

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 1 only, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request.

#### Shakespeare and Contemporary Interpretation (cont.)

This course will focus on a close reading of various Shakespeare tragedies, comedies, histories, and romances, and their film and/or stage adaptations. The objective of the course will be to consider, through reading, writing, and discussion the major themes presented in the Shakespearean texts and the way those themes translate to film. Because Shakespeare intended his works to be performed, this type of close reading, paired with a close study of the film/stage productions, will contribute to a deeper appreciation of each work and help students feel confident reading and understanding Shakespeare's language. In addition to reading and discussing the assigned texts, students will also continue to develop their skills in vocabulary, grammar, punctuation, analytical and creative writing, listening and speaking, and research writing and documentation.

# ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

# U1040202

#### Full-credit, graded course

- Open to Form XII
- Prerequisites: Successful completion of Survey of British Literature or AP English Literature and Composition, with a grade of B+ or better *on writing assignments*, the recommendation of the English XI teacher, and full participation in class discussions and projects. A writing sample may be required; a departmental signature is required.
- Semester 2, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request.

This course will introduce students to the principles and practice of rhetoric and composition. Students will get further exposure to the genre of literary nonfiction and will refine their skills as close and careful readers, better able to analyze the rhetorical and stylistic elements in works of fiction, nonfiction, and visual media. The course will prepare students for the Advanced Placement Language and Composition examination, as well as college-level classes in rhetoric and composition, English literature, and media literacy.

# AFRICAN-AMERICAN LITERATURE

U1047402

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 2, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request.

"I am an invisible man." Ralph Ellison begins his landmark novel with this startling and confusing sentence. In his novel *Invisible Man*, Ellison raises questions about the visibility of black Americans in American literature, culture, and history. This course will broaden our exposure to African-American literature from the pre-Civil War period to the present, and it will help us gain a deeper understanding of how these texts and writers fit into our American narrative. Assignments will include several short analytical essays and a final project that will ask students to apply the concepts we have studied to contemporary texts.

# **CREATIVE WRITING**

U1040242

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 2, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 16 students, based upon date of request.

#### Creative Writing (cont.)

This course is for students who want to take the leap from reading, interpreting, and analyzing fiction to crafting it. The focus will be primarily on prose fiction—short stories and creative-nonfiction essays—but there will also be forays into poetry. Readings will include stories by John Cheever, Yasunari Kawabata, Joyce Carol Oates, Tim O'Brian, Flannery O'Connor, and John Updike; essays by Joan Didion, Annie Dillard, Susan Sontag, and Kurt Vonnegut, and a sampling of contemporary poetry. By studying select works, tackling creative-writing exercises, participating thoughtfully in peer workshops, and revising carefully, students will produce, by semester's end, portfolios of their best original work.

#### INTRODUCTION TO WOMEN'S STUDIES

U1051232

Full-credit, graded course

- Open to Form XII
- Prerequisites: None
- Semester 2, 0.5 credit
- Course will require a minimum of 8 students to run and will also be capped at 32 students, based upon date of request.

This interdisciplinary course will introduce students to key concepts, issues, and debates in women's studies. Through readings, class discussion, analytical and persuasive writing assignments, and research and service projects, students will learn how culture and society shape gender and how gender intersects in complicated ways with issues of race, ethnicity, class, and nationality. The course will also focus on women's leadership and will emphasize hands-on, meaningful learning through community service. Texts will include autobiography, biography, nonfiction, fiction, and film and will draw from the fields of history, science, politics, economy, and the arts. Students will write position papers and textual analyses; they will also present their research on a variety of historical and current, national and international women's issues. "Introduction to Women's Studies" is cross-listed as a senior English elective and as a history senior seminar. Students may take the course for either English or history credit, but those taking the course for history credit need to make sure they have fulfilled the graduation requirement of four years of English.

# **FINE ARTS**

Studies in the arts have been developed to instill a knowledge and appreciation of the creative process through both performance and academic study. Students should emerge from these studies with first-hand experience in self-expression and communication through artistic disciplines and with an aesthetic appreciation for the similar expressions of others.

Performing arts courses enable students to explore dramatic and musical literature in situations that encourage collaborative work. Skills are developed in ensemble and rehearsal technique. Students learn how to use problem-solving strategies, take direction, and acquire the discipline necessary for high quality performances. Creativity and risk-taking are encouraged as students develop confidence in their abilities. Students have the opportunity to build and refine technique, develop analytical and critical skills, and increase their repertoire of expressive tools. Performance classes allow students to grow in their involvement and appreciation for the process of the art as well as for the final performance.

The visual arts have a multifaceted goal of building confidence in artistic competence through practical experience and academic critique, nurturing individual expression through multi-cultural and interdisciplinary studies, and encouraging aesthetic literacy through the study of historic and modern modes. Process <u>and</u> product are important. Through a spiral approach, artistic growth in manipulative skills and visual perception is cultivated from early childhood to young adulthood and beyond.

Note: Scheduling priority in the Fine Arts courses is given to students in Forms XII, XI, X, and IX, in that order.

# **MUSIC**

# **CONCERT CHOIR**

U6111001 and U6111002

Partial-credit, graded course

- · Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit.
- Prerequisites: None
- Full year; 0.5 credit
- Costs: Students are responsible for covering the cost of trips and honor and all-state choir tuition and expenses; limited need-based funding is sometimes available.

Concert Choir is an intermediate vocal performance group. Students will sing a variety of styles and genres from different time periods. Emphasis will be placed on developing sight-reading, ear training, and musicianship skills, as well as exploration and development of vocal production techniques and skills necessary for achieving excellence in performance. Major concerts per year include: the CSG Thanksgiving Program, Fall, Winter, and Spring Concerts, and District/State contest (dependent on eligibility). In order to participate in the OMEA Solo and Ensemble and large group contests, enrollment in this course is mandatory.

# VOCAL ENSEMBLE: THE GRACE NOTES

# U6118501 and U6118502

Partial-credit, graded course

- · Open to Forms X, XI, and XII; this course may be taken more than once, each time for credit.
- Prerequisites: Must audition; departmental signature required; concurrent enrollment in Concert Choir.
   Full year, 0.5 credit
- Costs: Students purchase their own outfit accessories and are also responsible for covering the cost of trips and honor and all-state choir tuition and expenses; limited need-based funding is sometimes available.

The *Grace Notes* offers qualifying students an opportunity to learn and perform an advanced level of vocal repertoire from many styles and periods. Students will focus on the skills and musicianship required for

#### Vocal Ensemble: The Grace Notes (cont.)

consistent excellence in performance, as well as further development of advanced vocal techniques. The performance commitment is essential and students will be expected to represent CSG in many different settings, including competition. Interested students may participate in other events as well, including OMEA events such as Solo and Ensemble and All-State Choir.

# STRING ENSEMBLE

# U6117401 and U6117402

# Partial-credit, graded course

- Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit.
- · Prerequisites: Intermediate or advanced experience on a string instrument.
- · Full year, 0.5 credit
- Costs: Students who do not own their own instruments may rent them through private music companies or may use a school instrument, at no cost, when available. Students are responsible for covering the cost of trips and honor and all-state band tuition and expenses; limited need-based funding is sometimes available.

String Ensemble offers an opportunity for string students to continue improving their technical and musical skills in a performance based setting. Technical areas to be covered include: advanced key signatures, complex rhythm reading, upper position playing, vocabulary, and tone development. In addition, musical skills such as phrasing, balance, intonation, and blend will be developed.

Materials will include scales and selected etudes, as well as string orchestra literature appropriate for the playing level of the ensemble. Music of the major stylistic periods will be included in the repertoire of the ensemble. Several in-school and evening concerts will be scheduled throughout the year. Attendance is required at all String Ensemble events. In order to participate in the OMEA events such as the South-Central Region Orchestra and Solo and Ensemble Contests, enrollment in this course is mandatory.

# SELECT STRING ENSEMBLE

#### U6117501 and U6117502

# Partial-credit, graded course

- · Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit
- Prerequisites: Advanced experience on a string instrument; departmental signature required; concurrent enrollment in String Ensemble. Must audition; rising IX and new Upper School students may audition in the spring for the following fall, or they may audition at the beginning of the fall semester and add it to their schedules during the add/drop period.
- Full year, 0.5 credit
- Costs: Students who do not own their own instruments may rent them through private music companies or may use a school instrument, at no cost, when available. Students are responsible for covering the cost of trips and adjudicated events; limited need-based funding is sometimes available.

The Upper School Select String Ensemble will offer dedicated, advanced, and advancing string students an opportunity for increased musical challenges within a smaller chamber music setting. Students will have the opportunity to sharpen their musical, technical, and collaborative rehearsal skills by rehearsing and performing chamber music. Students in the Select String Ensemble will represent CSG by performing within the school and larger community serving as music ambassadors for Columbus School for Girls.

# WIND ENSEMBLE (BAND)

U6118901 and U6118902

Partial-credit, graded course

- · Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit.
- Prerequisites: Intermediate or advanced ability on a brass, woodwind, or percussion instrument.
- · Full year, 0.5 credit

#### Wind Ensemble/Band (cont.)

Costs: Students who do not own their own instruments may rent them through private music companies or may use a school instrument, at no cost, when available; students are responsible for covering the cost of trips and honor and all-state band tuition and expenses; limited need-based funding is sometimes available.

Wind ensemble offers an opportunity for intermediate and advanced level woodwind, brass, and percussion students to continue improving their technical and musical skills. Technical and musical areas to be covered include scales, rhythm reading, intonation, articulation, dynamics, music notation, vocabulary, and technical and tone development. Repertoire will be selected according to the appropriate ability level of the players.

Several in-school and evening performance opportunities will be scheduled throughout the year. Attendance is required at all Wind Ensemble events. In order to participate in the OMEA Solo and Ensemble Contests, enrollment in this course is mandatory.

#### SELECT WIND ENSEMBLE

U6118951 and U6118952

Partial-credit, graded course

- · Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit
- Prerequisites: Advanced experience on a band instrument; departmental signature required; concurrent enrollment in Wind Ensemble. Must audition; rising IX and new Upper School students may audition in the spring for the following fall, or they may audition at the beginning of the fall semester and add it to their schedules during the add/drop period.
- · Full year, 0.5 credit
- Costs: Students who do not own their own instruments may rent them through private music companies or may use a school instrument, at no cost, when available. Students are responsible for covering the cost of trips and adjudicated events; limited need-based funding is sometimes available.

This course is designed for students who desire a smaller ensemble experience with advanced, varying repertoire. Students will focus on aspects of their performance and how it relates to creating a well-blended, well-balanced ensemble sound. The ensemble will perform at OMEA Solo and Ensemble and may be available to perform at school and community functions as the opportunities arise.

# **AP MUSIC THEORY**

#### U6025201 and U6025202

- Full-credit, graded course
- Open to Forms XI and XII
- Prerequisite: Advanced ability on instrument (instrumental or vocal); departmental signature required.
- Full year, 1 credit
- . <u>Offered in 2019-2020</u> (not offered in 2020-2021; offered in even-numbered graduation years.)

AP Music Theory is a course designed to develop musical skills that will lead to a thorough understanding of music composition and music theory. Students will receive instruction in the following content areas: key signatures, scales, modes, chord structure and function, melodic and harmonic ear-training, meter, basic chordal analysis, secondary-dominant functions, dictation, circle of 5ths, two-part counterpoint, common compositional forms, and listening repertoire. Students will be prepared to take the AP Music Theory Exam when they have completed the course.

# THEATER AND PUBLIC SPEAKING

#### **PUBLIC SPEAKING**

U6316401 or U6316402 or S6316401 Partial-credit, graded

- Required of all students in Form X
- Prerequisites: None

Public Speaking (cont.)

- Semester course (offered each semester), 0.35 credit
- Summer Options: This course will be offered during Terms 1 & 2 of CSG's Summer Programs.

Students are introduced to the basic techniques and principles of vocal study and oral speech. Classroom exercises involve presentation of speeches both assigned and created by the student for the purpose of working out individual presentational challenges. The intent of the course is to instruct the student in the basic techniques of voice production, relaxation, and effective presentation. The course will introduce and develop breathing and relaxation technique, proper support, correct sound production and projection, standard diction and articulation, and personal decorum. Individual regionalisms and habits will be identified.

# THEATER

U6313301 Full-credit, graded course

- Open to Forms IX, X, XI, and XII
- Prerequisites: None
- Semester 1 course, 0.5 credit

This course is a broad based introduction to the fundamentals of theater. The focus will be on developing a working theater vocabulary and a practical knowledge of production techniques, history, and particularly design technology. There is a focus on World Theater styles within short one acts. Class activity will be diverse and involve hands-on experiences with set building, lighting design with the LED system, costume design and rendering, etc., as well as play analysis of a wide variety of styles from around the world. This course is important for those students who wish to take the Adv. Theater lab, those interested in theater in general and for those students who intend to pursue leadership positions within the US productions as well as design or work on stage crew.

# ADVANCED THEATER LAB

U6320252

Full-credit, graded course

- · Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit.
- Prerequisites: Theater or Acting I
- Semester 2 course, 0.5 credit
- <u>Offered</u> during Semester 2 of even-numbered graduation years.

This course is designed to allow the student to study in depth the mechanics of theatrical production from a backstage perspective and/or study acting in an advanced manner. Students will choose to explore the elements and practicalities of theatrical design, directing, stage management, and theater management (marketing, etc.), or further their studies in acting techniques. The culmination of the course may be a student-directed, designed and managed lab show. This course would be particularly beneficial during the junior or senior years. Students enrolled in Advanced Theater Lab may also be interested in taking Acting II.

# **ACTING I**

U6310201 or U6310202 Full-credit, graded course

- Open to Forms IX, X, XI, and XII
- Prerequisites: None
- · Semester course (offered each semester based upon course enrollment), 0.5 credit

Students will explore basic techniques and principles of character interpretation and performance. Classroom projects are presented for the purpose of working out particular dramatic problems. Instructional methods will include exercises, rehearsals, scene work, improvisation and individual coaching to promote physical and vocal awareness as well as self-confidence and creative problem-solving.

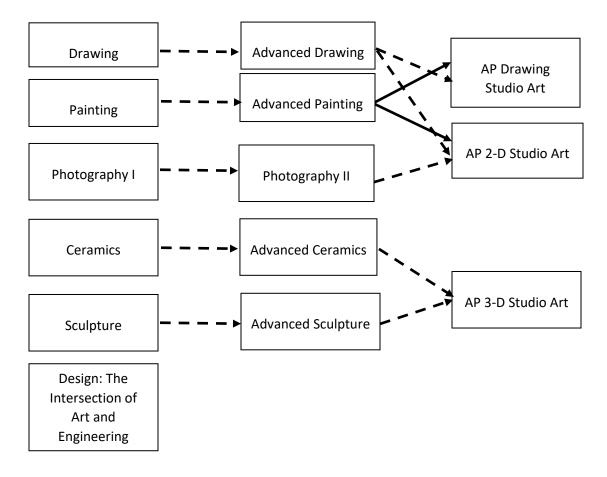
# ACTING II

U6310251 or U6310252 Full-credit, graded course

- Open to Forms X, XI, and XII
- Prerequisites: Acting I
- Semester course (offered each semester based upon course enrollment), 0.5 credit

Designed for students who are seriously interested in acting, this course provides the opportunity for in-depth one-on-one work on monologues, one woman shows, Shakespeare, and college audition prep. Since much of the work is self-directed, students must be eager, independent workers. Students will participate in some Acting I exercises/games as refreshers. This course would be particularly beneficial during the junior or senior years.

# VISUAL ART



#### DRAWING

U6610551

Full-credit, graded course

- · Open to Forms IX, X, XI, and XII
- Prerequisites: None
- Semester course (offered each semester), 0.5 credit
- <u>Not offered in 2019-20</u>; offered each Semester of odd-numbered graduation years.

The beginning of the term focuses on basic drawing methods (measured drawings, additive and subtractive processes, etc.) and introduces the student to a variety of traditional drawing materials (graphite, charcoal, conte, etc.); the latter portion of the term will focus on non-traditional methods and materials and will explore more contemporary methods of drawing. Students learn to draw from life as well as from source material for

#### Drawing (cont.)

reference and will have the opportunity to experiment with historical, contemporary and personal themes in art. Sketchbook assignments complement in-class projects and allow students to develop and research a diverse range of subject matter.

# ADVANCED DRAWING

U6730151

Full-credit, graded course

- · Open to Forms X, XI, and XII
- Prerequisites: Drawing
- Semester course (offered each semester), 0.5 credit
- Not offered in 2019-20; offered each Semester of odd-numbered graduation years.

This course is a continuation of the Drawing class. Students move from observational drawing to more challenging and conceptually based subject matter and content with each project. Traditional drawing materials are reinforced in tandem with introduction of non-traditional materials. Students learn to effectively use the medium to create the desired end result. Regular critiques at this level will be an integral part of the course.

# PAINTING

#### U6610651

Full-credit, graded course

- · Open to Forms IX, X, XI, and XII
- Prerequisites: None
- Semester course (offered each semester), 0.5 credit
- <u>Not offered in 2019-20;</u> offered each Semester of odd-numbered graduation years.

This course is intended to build and develop understanding of color theory, drawing, and compositional skills through the use of traditional painting mediums. Controlled use of color palettes and introduction to various painting techniques will be filtered into this course.

#### **ADVANCED PAINTING**

U6730301

Full-credit, graded course

- Open to Forms X, XI, and XII
- Prerequisites: Painting
- · Semester course (offered each semester), 0.5 credit
- Not offered in 2019-20; offered each Semester of odd-numbered graduation years.

This course is a continuation of the principles covered in Painting. More concentration and focus is directed at fewer, longer projects. Students learn the importance of slowing down and mastering specific painting techniques. Regular critiques at this level will be an integral part of the course.

# CERAMICS

U6621002

Full-credit, graded course

- Open to Forms IX, X, XI, and XII; class size is limited to 10 students.
- Prerequisites: None
- · Semester course (offered each semester), 0.5 credit
- Offered in 2019-20; offered each Semester of even-numbered graduation years.

This course explores clay through traditional wheel throwing and slab work. The beginning of the semester focuses on basic hand building; the latter part of the semester focuses on throwing on the wheel, glazing, and firing techniques.

#### ADVANCED CERAMICS

U6740202 Full-credit, graded course

#### Advanced Ceramics (cont.)

- Open to Forms X, XI, and XII; class size is limited to 10 students.
- Prerequisites: Ceramics
- Semester course (offered each semester), 0.5 credit
- <u>Offered in 2019-20</u>; offered each Semester of even-numbered graduation years.

This course is a continuation of the techniques covered in Ceramics. Continued development of hand building and wheel throwing skills are further enhanced in this course. Students learn how to create more complex forms and expand their learning to explore more conceptual ways to develop their skills and craft. Regular critiques at this level will be an integral part of the course.

#### SCULPTURE

U6627302

Full-credit, graded course

- · Open to Forms IX, X, XI, and XII
- Prerequisites: None
- Semester course (offered each semester), 0.5 credit
- Offered in 2019-20; offered each Semester of even-numbered graduation years.

The study and application of design principles and a variety of materials to create three-dimensional works form the foundation of this course. Students explore reductive and additive sculpting methods through the use of media such as clay, wood, cardboard, fiber, found objects, as well as non-traditional materials. Students will learn how to critique 3-Dimensional works with a critical eye and understanding to art terminology.

#### ADVANCED SCULPTURE

#### U6740402

Full-credit, graded course

- Open to Forms X, XI, and XII
- Prerequisites: Sculpture
- · Semester course (offered each semester), 0.5 credit
- Offered in 2019-20; offered each Semester of even-numbered graduation years.

This course is a continuation of the principles covered in Sculpture. Advanced sculpture students will work to further develop their skills within the medium they choose (wood, clay, wire, found objects, etc.), and will be challenged to create more complex and conceptual works of art. Regular critiques at this level will be an integral part of the course.

#### **PHOTOGRAPHY I**

#### U6620701 or U6620702

Full-credit, graded course

- Open to Forms IX, X, XI, and XII; class size is limited; scheduling priority is given to Form XI and XII students.
- Prerequisites: None
- · Semester course (offered each semester), 0.5 credit

Manual school cameras are available for student loan; in order to borrow a school camera, the student will be asked to sign a loaner form for the semester stating that she will be responsible for the camera and that a guardian/ parent must agree to pay up to \$250 if the camera is damaged or lost.

This course is an introduction to black and white film photography. Fundamentals of camera operation, film developing, and printing are taught. Regular assignments help the student develop her own style and way of seeing; critiques and class discussions aid the student in grasping the unique qualities of this medium. Students will be evaluated by a final edited portfolio of developed and printed work.

#### PHOTOGRAPHY II

U6730351 or U6730352

Full-credit, graded course

Open to Forms X, XI and XII; class size is limited; scheduling priority is given to Form XI and XII students.

#### Photography II (cont.)

- Prerequisites: Photography I
- Semester 2 course, 0.5 credit

DSLR school cameras are available for student loan; in order to borrow a school camera, the student will be asked to sign a loaner form for the semester stating that she will be responsible for the camera and that a guardian/parent must agree to pay up to \$550 if the camera is damaged or lost.

Photography II builds upon the skills and techniques learned in Photography I, utilizing more advanced traditional photo techniques in the darkroom with the option of exploring a digital format. Students will use Photoshop to paint and edit photo imagery, thereby going beyond traditional photo technology. Students will be evaluated by a final edited portfolio of printed work.

# DESIGN: THE INTERSECTION OF ART AND ENGINEERING

#### U6741231

Full-credit, graded course, co-listed science and art departments

- · Open to students in Forms X, XI, and XII
- Prerequisites: None
- Full year, 1 credit

This course will introduce students to the world of design as seen through the eyes of engineering and applied arts, building on students' abilities in math and science while applying fundamental principles taken from the fields of engineering and art. The design process, (i.e. the process of applying creative skills in the development of a solution to a defined problem), will be presented via project-based instruction. The approach will reflect the present interdisciplinary one used by many leading design companies. Various methodologies used in the execution of this process will be introduced, practiced and applied to actual problems. The course will have an emphasis on hands-on learning, allowing students to develop critical thinking and problem-solving skills. The students will learn to collaborate, innovate, and communicate. Special emphasis will be put on how to express ideas to others through both two-dimensional representations (sketches, drawings) and three-dimensional models. Students will create individual portfolios to document the process, from ideation phase to prototyping to final product. The application of the design process to the worlds of industrial design, product design, and the visual and fine arts will emphasize the interdisciplinary nature of design. Additional activities in this course will include discussions, guest speakers, class exercises, case studies, off-site field trips, and student presentations.

# ADVANCED PLACEMENT STUDIO ART: DRAWING, 2-D DESIGN, OR 3-D DESIGN

#### U6736401 and U6736402

#### Full-credit, graded course

- Open to Forms XI and XII; this course may be taken more than once, each time for credit.
- Prerequisites: A combination of CSG art coursework (may include variations of the following: Art of Design, Drawing, Painting, Photography, Ceramics, or Sculpture; a portfolio is a prerequisite for this course; departmental signature required.
- · Full year, 1 credit
- No April practice examination is required in this course; a portfolio must be submitted to the College Board in May. Students participating in the May program will have to submit their portfolios in April prior to the College Board deadline date.

This course is for the highly self-motivated art student and demands significant time and production commitment. It is designed to provide the same benefits to secondary school students as those provided by an introductory college course. Students will pursue special creative problems in depth and will prepare three separate portfolios consisting of quality, breadth and concentration for national committee review by the AP College Board. Students work closely with the art teacher to select the top quality work and may submit work in one of the following areas: Drawing, 2-D Design, or 3-D Design.

# HEALTH and PHYSICAL EDUCATION

# **HEALTH**

The Health curriculum provides each student with the skills and knowledge to make informed healthy choices about personal wellness and lifestyle.

# HEALTH AND WELLNESS

U8513001 or U8513002 Partial-credit, graded course Co-listed under Physical Education and Health Required of all students in Form IX

- Prerequisites: None
- One semester course (offered each semester), 0.35 Health credits and 0.15 PE credits

An introduction to personal wellness, this course emphasizes responsible decision-making, a life free of drugs, alcohol, and tobacco abuse, cancer research, mental health, issues relating to human sexuality, and certification in First Aid and CPR through the American Red Cross. This course will also focus on nutrition and individual fitness. This course also increases a student's awareness of cardiovascular fitness and movement through a variety of activities including yoga, strength training, circuit training. Health and Wellness is a graded course that meets three times each six-day rotation.

# HEALTH II

U8533001 or U8533002 or S8533001 Partial-credit, graded course

- · Required of all students in Form XI
- · Prerequisites: Successful completion of Health and Wellness
- One semester course (offered each semester), 0.35 credits
- Summer Options: This course will be offered during Term 1 and Term 2 of CSG's Summer Programs.

Health II discusses topics of concern specific to high school and college-bound women. The objective is to equip students with the knowledge and skills necessary to make intelligent decisions on matters pertaining to personal and community health. This course offers multiple speakers on different health-related topics, human sexuality, and comprehension of the law related to drugs and alcohol. Recertification through the American Red Cross, stress management and depression, breast cancer, growth and development, body image and eating disorders, and nutrition are also covered throughout the course. Health II is a graded course that meets two times each six-day rotation.

# **PHYSICAL EDUCATION**

The Upper School Physical Education curriculum emphasizes understanding the importance of leading physically active lifestyles and creating opportunities for students to take ownership of their personal fitness and physical activity. The overall goal of the program is to develop young women who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activities.

In order to meet the 120 hour/0.5 unit required for graduation by The Ohio Department of Education, students must complete one of three options:

- Academic Option: four semesters of physical education courses during Upper School
- Interscholastic Athlete option (see page 20)
- Offsite Individual Physical Education option (see page 21)

<u>All Form IX students</u> are required to take *Health and Wellness* <u>All Form X students</u> are required to take *Water Safety and Self-Defense* 

# HEALTH AND WELLNESS

U8513001 or U8513002 Partial-credit, graded course Co-listed under Health and Physical Education

- Required of all students in Form IX
- Prerequisites: None
- One semester course (offered each semester), 0.35 Health credits and 0.15 PE credits

An introduction to personal wellness, this course emphasizes responsible decision-making, a life free of drugs, alcohol, and tobacco abuse, cancer research, mental health, issues relating to human sexuality, and certification in First Aid and CPR through the American Red Cross. This course will also focus on nutrition and individual fitness. This course also increases a student's awareness of cardiovascular fitness and movement through a variety of activities including yoga, strength training, circuit training. Health and Wellness is a graded course that meets three times each six-day rotation.

# CARDIO, FLEXIBILITY, & STRENGTH: WELLNESS REVOLUTION

U8020311 or U8020312

Partial credit, pass/fail course

- Required of all IX and X students in the Academic Physical Education Program, one semester each year
- One semester course (offered each semester), 0.35 credits

The course provides a number of options for students to improve their flexibility, strength, and cardiovascular fitness. Possible class activities include yoga, circuit training, Zumba, HIIT, and weight lifting. Students <u>not</u> <u>enrolled</u> in the course may participate on a drop-in basis if their schedule and class space permit. The objective of this course is to promote lifelong physical fitness.

# WATER SAFETY & SELF-DEFENSE

U8020211 or U8020212 or S8020211 or S8020212 Partial graded source

Partial-credit, graded course

- Required of all students in Forms X or any Form XI or XII students who have not already successfully completed this course.
- Not open to Form IX
- Prerequisites: None
- · One semester course (offered each semester), 0.35 credits
- Summer Options: This course will also be offered during Term 1 and Term 2 of CSG's Summer Programs.

This course will allow students to develop comfort in the water, improve swimming strokes, and review safety guidelines when involved in water activities, including boating safety and personal safety techniques. The self-defense portion of the course follows the R.A.D. Systems program of self-defense. It will help students develop safety techniques using their voices as well as physical capabilities in real-world situations. Water Safety & Self-Defense is a graded course that meets two times each six-day rotation.

# INTERSCHOLASTIC ATHLETE PROGRAM

No credit, non-graded (successful completion waives certain PE requirements)

- Open to Forms IX, X, XI, and XII
- Prerequisites: None
- No credit\* is awarded for athletic team participation.
- One CSG US sports season <u>each of 4 years</u> plus *Health and Wellness* (IX) and *Water Safety & Selfdefense* (X)

This policy is intended to free time for additional academic scheduling during the school day for interscholastic sport student-athletes. Student-athletes meeting the requirements of this policy <u>will not receive a grade or academic credit for interscholastic athletics</u>; however, grades and academic credit will be awarded for the

#### Interscholastic Athlete Program (cont.)

additional required PE courses. Successful completion of the applicable Interscholastic Athlete Program option fulfills the graduation requirement regardless of the total number of credits earned.

Participation in an interscholastic sports season means the following:

2019-20 Interscholastic Sports Seasons:

- <u>Fall</u> (Golf, Cross Country, Field Hockey, Soccer, Tennis, Volleyball): Thursday, August 1, 2019 Postseason Tournament
- <u>Winter</u> (Basketball): Friday October 25, 2019 Postseason Tournament (Swimming and Diving): Friday November 1, 2019 – Postseason Tournament
- <u>Spring</u> (Lacrosse): Monday February 24, 2020 Postseason Tournament (Track and Field): Monday March 9, 2020 – Postseason Tournament
- Selection to any interscholastic team will require that student-athletes meet appropriate team standards in order to be a member of that team.
- A student-athlete must attend all team practices, competitions, and team events, beginning with the sport's official start date set by the Ohio High School Athletic Association (even if this date is prior to the opening of school in the fall) and continuing through all post-season play. This may also include events held over school holidays.
- Each student-athlete is responsible for remaining academically eligible throughout the sports season. If at any time a student-athlete does not meet the criteria set forth above, she will be required to make up the appropriate coursework. It is the student's responsibility to contact the US Scheduler to make any necessary schedule changes.

# OFFSITE INDIVIDUAL PHYSICAL EDUCATION PROGRAM

Partial-credit, graded course

- Open to Forms IX, X, XI, and XII
- Prerequisites: Meet criteria of <u>elite competitor</u>.
- 4 years of enrollment in an approved offsite program plus *Health and Wellness* (IX) and *Water Safety & Self-defense (X).*
- Full-year, 0.15 credits

The Ohio Department of Education mandates 120 hours of physical education to earn the one-half unit of credit required for graduation. According to ODE regulations, offsite projects in PE may be substituted for PE classes as long as the offsite project is <u>not</u> in a CSG varsity interscholastic sport and is not used to support an interscholastic sports program at the school.

Students who are <u>elite competitors</u> in sports or competition not included in the school's extracurricular interscholastic athletic program may propose an offsite project in physical education that meets the following standards:

- 1. The student must meet the <u>definition of an elite competitor</u>: a highly competitive performer who is engaged in training for competition at the college, regional or national, Olympic or professional level over a period of years.
- 2. The offsite project's number of hours must be, at a minimum, 8 hours of practice and/or competition per week for the equivalent of one semester, or 4 hours of practice and/or competition per week for the equivalent of a full year.
- 3. The student must submit a new offsite project proposal each year.
- 4. Certain physical education units must be completed at CSG: Water Safety & Self-defense (completed by all students) and Health and Wellness (completed by all students who attended CSG in Form IX prior to the 2019-2020 school year). CSG reserves the right to add or substitute additional units of activity at the discretion of the PE Department. For each year of participation in the Offsite Individual Physical Education Program, a student will earn .15 credits.

#### Offsite Individual PE (cont.)

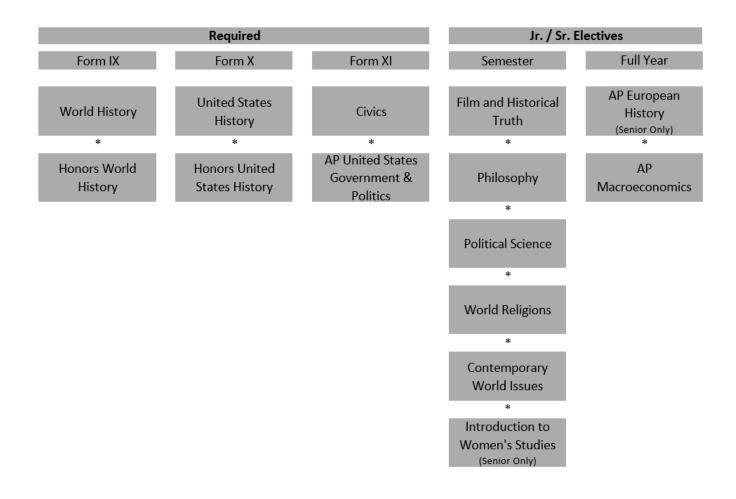
- **5.** The student's coach, instructor, or trainer must sign off on the School's form documenting student hours and activities.
- 6. It is the responsibility of the student to supply the PE Department with documentation of the offsite project and to participate in the online work through <u>www.csgmoodle.org.</u>

Offsite projects are intended to free time for academic work in the daily schedule for those elite competitors who spend numerous hours weekly in training. These projects are not intended for students who play a year-round club sport or who are training for a single event such as a marathon, or who might wish to substitute another activity in place of the school's physical education program.

Students planning to request approval for an offsite program will receive the appropriate paperwork in April. The Department Chair will designate one teacher to oversee the offsite project, conduct the online portion of the course, and contact the student's coach for progress reports. Oversight of the project may include an onsite visit or a video demonstration. This teacher will be responsible for assigning the student's grade at the end of the academic year.

# HISTORY

The history department offers courses in several areas of history and in the allied social sciences. The history curriculum seeks to promote reflective thinking and values education. More specifically, the curriculum emphasizes the following themes and subject areas: geography and geopolitical analysis, global interrelationships, historical change and continuity, the historical contributions of women to world civilizations, the challenges of citizenship, and individual moral responsibility. Particular attention is given to the skills necessary to develop a critical understanding of the diversity of global cultures and the issues confronting the world at large. These skills include the application of logic in constructing written analytical arguments, effective oral communication, an understanding of chronological relationships, note-taking and outlining skills, independent research and effective use of library research and information technology.



#### WORLD HISTORY

U3011801 and U3011802

Full-credit, graded course

- · Required of all Form IX students not enrolled in Honors World History.
- Prerequisites: None
- Full year, 1 credit

This course introduces Upper School students to the foundations of historical inquiry and analysis by focusing on world regional geography and world history from 1200 to the present. Extensive map exercises familiarize students with the world around them and discussions of primary sources lay the foundation for historical and geopolitical analysis of civilizations in Europe, Asia, Africa, Latin America, and the Middle East. The course is arranged chronologically with emphasis placed on analytical essays and creative exercises in logic.

# HONORS WORLD HISTORY

U3011811 and U3011812

#### Full-credit, graded course

- · Required of all students in Form IX not enrolled in World History.
- Prerequisites: Recommendation of the Middle School faculty
- Full year, 1 credit

This course introduces Upper School students in greater depth to the foundations of historical inquiry and analysis by focusing on world regional geography and world history from 1200 to the present. Extensive map exercises familiarize students with the world around them and discussions of primary sources lay the foundation for historical and geopolitical analysis of civilizations in Europe, Asia, Africa, Latin America, and the Middle East. The course is arranged chronologically with emphasis placed on analytical essays and creative exercises in logic.

Students taking this level of World History are expected to work at a higher level of critical thinking and writing. This course will introduce students to AP history disciplinary practices and reasoning skills.

# UNITED STATES HISTORY

U3038101 and U3038102 Full-credit, graded course

- Required of all students in Form X not enrolled in Honors United States History.
- Prerequisites: Successful completion of World History
- · Full year, 1 credit

United States History surveys the evolution of our country's history from the colonial era to the present. This course seeks to define who we are as a nation, what we believe in, and why we are as we are. The course concentrates on the following major topics: colonialism, revolution, nationalism, sectionalism, isolationism, imperialism, the role of women and people of color in the growth of the nation, economic change, and political development and reform. The class is student-centered and oriented toward an open discussion of the challenges facing the United States. Independent research and cooperative learning projects are an integral part of the course. Numerous opportunities are provided to encourage reflective, independent thinking. Current events play a role in the daily life of this class.

# HONORS UNITED STATES HISTORY

## U3038151 and U3038152

#### Full-credit, graded course

- Required of all students in Form X not enrolled in United States History.
- Prerequisites: Successful completion of World History or Honors World History with a grade of B+ or better; successful completion of Story Patterns/Archetypal Characters with a grade of B+ or better; departmental signature required.
- Full year, 1 credit

Honors United States History surveys, in greater depth, the evolution of our country's history from the colonial era to the present. This course seeks to define who we are as a nation, what we believe in, and why we are as we are. The course concentrates on the following major topics: colonialism, revolution, nationalism, sectionalism, isolationism, imperialism, the role of women and people of color in the growth of the nation, economic change, and political development and reform. The class is student-centered and oriented toward an open discussion of the challenges facing the United States. Independent research and cooperative learning projects are an integral part of the course. Numerous opportunities are provided to encourage reflective, independent thinking. Current events play a key role in the daily life of this class.

Students taking this level of United States History are expected to work at a higher level and will be prepared to take the AP United States History exam in May.

# CIVICS

#### U3021001 or U3021002 or S3021001 Full-credit, graded course

- Required of all students in Form XI who do not enroll in AP US Government and Politics or who have not earned credit in Civics during CSG's Summer Program.
- · Prerequisites: None
- Semester course (offered each semester), 0.5 credit
- Note: Students may not earn credit in both Civics and AP United States Government and Politics.
- Summer Options: This course, offered in Term 1 of CSG's Summer Programs, may be taken during the summer prior to junior year.

This course pursues a thematic approach to the political and social responsibilities required by residence in a nation served by a democratic constitution and tradition. Emphasis is placed on the development of critical thinking skills necessary for participation in social, civic, and political processes, recognition and consideration of moral dilemmas and ethical awareness, an appreciation of civic involvement and constructive social criticism, and the development of interpersonal skills necessary for the resolution of social conflicts. Students will study the primary documents of our democratic heritage with special emphasis on the Constitution as it relates to everyday situations, major Supreme Court decisions and a discerning analysis of civil liberties.

# ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS

# U3030011 and U3030012

Full-credit, graded course

- · Required of all students in Form XI who do not enroll in Civics.
- Prerequisites: Successful completion of United States History with a grade of B+ or better, or successful completion of Honors United States History with a grade B or better; departmental signature required.
- Full year, 1 credit
- Note: Students may not earn credit in both Civics and AP United States Government and Politics.

Advanced Placement United States Government and Politics will give students an analytical perspective on a variety of topics, institutions, groups, beliefs, and ideas that constitute political life in the United States. Topics of investigation include the underpinnings of constitutional government, the structure of national political institutions, public policy, political beliefs and behaviors, political parties, interest groups, mass media, and civil rights and liberties. We will also explore a wide variety of topics through current event discussions, primarily focusing on governmental policies and their political bias, bureaucratic reform, and the relationships between citizens and government institutions. Students will be prepared to take the AP United States Government and Politics exam in May.

# ADVANCED PLACEMENT MACROECONOMICS

U3031801 and U3031802

- Full-credit, graded course
- Open to Forms XI and XII
- . Full year, 1 credit
- Prerequisites: Successful completion of United States History with a grade of B+ or better or successful completion of Honors United States History with a B or better; or departmental signature.
- Course will be capped at 18 students based upon date of request; priority will be given to Form XII students.

This Advanced Placement Economics course is a one year elective course open to juniors and seniors. The course will provide the student with a learning experience equivalent to that in a typical college introductory economics course. Students will engage and learn the principles of economic thinking and decision-making; how to support and explain concepts with both written responses and a variety of graphical models. Students will also demonstrate understanding of the connections between economics and personal financial decisions; the general development of modern economic theory; become familiar with the basic language of business and economics; and be able to understand the basic measurements of economic performance. This class prepares students for the AP Macroeconomics exam in May.

# FILM AND HISTORICAL TRUTH

U3031601

Full-credit, graded course

- · Open to Forms XI and XII
- Prerequisites: None
- Semester 1 course, 0.5 credit
- <u>Offered this year</u>; offered during Semester 1 of even-numbered graduation years.

This course will focus on the relationship between historical events and their depiction on film. In this regard, we will act as historians, working hard to understand past events and then assessing the accuracy and legitimacy of Hollywood's big screen. Our purpose is not to kick back with our popcorn and enjoy the show, but to evaluate film as a primary source, a vehicle for the delivery of political propaganda and the establishment of cultural myth, or as a credible courier of Truth. In a seminar format, students will engage their critical thinking skills by viewing several important films and then by participating in research, analytical papers, class discussion, and presentation of ideas through argument and debate.

#### **CONTEMPORARY WORLD ISSUES**

U3027801 or U3027802 Full-credit, graded course

- · Open to Forms XI and XII
- · Prerequisites: None
- Offered both semester 1 and semester 2, 0.5 credit
- Not offered this year; offered during Semester 1 and 2 of odd-numbered graduation years.
- Course will be capped at 18 based upon date of request; priority will be given to Form XII students.

This course will introduce students to global issues and institutions and the increased ties between economics, politics, cultures, and societies. We will debate the benefits and detriments of organizations, actions, and policies. Through readings, class discussion, analytical and persuasive writing assignments, projects, and debate, students will learn how governments and organizations work together to shape response to global issues such as terrorism, poverty, environmental change, trade, and more. Texts will include scholarly articles and film and will draw from the fields of history, science, politics, economics, geography, and sociology.

Students will write position papers and textual analyses; they will also present their research on a variety of current international issues with special consideration to historical understanding. It is the intent of this class to provide a discriminating perspective to international problem solving in hopes of promoting tolerance and an appreciation of cultural diversity and interconnection.

#### PHILOSOPHY

U3036302 Full-credit, graded course

- · Open to Forms XI and XII
- · Prerequisites: None
- Semester 1 course, 0.5 credit
- <u>Offered this year</u>; offered during Semester 1 of even-numbered graduation years.

This course is an introduction to the discipline and tradition of philosophy. Students will study and discuss argumentative structure, epistemology, the good life, metaphysics, the existence of God, ethics, political justice, and bioethics. Readings come from a range of philosophers throughout world civilization (ancient and modern, western and eastern) as well as novels relevant to topics at hand. The course is student-directed with an emphasis on analysis, self-reflection, discussion, and the written articulation of considered views. Assignments are meant to be exploratory, introspective, interactive, creative, and motivated by or relevant to students' own philosophical questions. The goal is that by engaging with the past, each other, and themselves in this way, students will have a foundation for investigating the existential, moral, and political issues that confront them daily.

# POLITICAL SCIENCE

U3026401

Full-credit, graded course

- Open to Forms XI and XII
- · Prerequisites: None
- Semester 1 course, 0.5 credit
- <u>Not Offered this year</u>; offered every four years during Semester 1 of odd-numbered graduation years with presidential elections.

Political Science is an elective course designed to acquaint students with both political theory and practical politics. To that end, the course is divided into three subject areas: 1) Political theory 2) American campaign politics 3) Foreign Policy formulation. Topics studied include democracy, capitalism, Marxism, socialism, communism, fascism, liberalism and conservatism, revolution, imperialism, and civil disobedience. The class is student-centered with assignments that demand independent and creative thought. Political Science is oriented toward respectful, open discussion of different political experiences and viewpoints.

# WORLD RELIGIONS

U3028801

Full-credit, graded course

- Open to Forms XI and XII
- · Prerequisites: None
- Semester 2 course, 0.5 credit
- <u>Offered this year</u>; offered during Semester 2 of even-numbered graduation years.

This course provides an introduction to five major religions of the world: Judaism, Christianity, Islam, Buddhism, and Hinduism. Through primary sources and other readings, the historical roots and philosophical tenets of each are examined. This course stresses the importance of tolerance and the acceptance of diversity as fundamental elements in the expansion of knowledge and human interaction. By inviting speakers to the classroom and by occasionally asking students to attend services of different faiths, this course provides interaction with the Columbus community.

# ADVANCED PLACEMENT EUROPEAN HISTORY

U3040101 and U3040102

Full-credit, graded course

- Open to Form XII
- Prerequisites: Successful completion of Civics with a grade of B+ or better or successful completion of AP United States Government and Politics with a grade of B or better; successful completion of English XI with a grade of B or better; departmental signature required.
- Full year, 1 credit

This course traces the history of Europe from the Renaissance to the present day and builds upon the student's knowledge of the narrative background established in World History. This class addresses the theme of change in history and emphasizes political revolutions (English Civil War, French Revolution, Revolutions of 1848, Russian Revolution, etc.), the social impact of economic conditions (Industrial Revolution), intellectual movements (Humanism, Scientific Revolution, and Enlightenment), and artistic schools (Romantics, Cubists, Surrealists, etc.). Major themes that have influenced our contemporary world are developed and historically traced: nationalism, liberalism, conservatism, industrialism, internationalism, imperialism, and socialism. Emphasis in this course is placed upon a critical and sophisticated analysis of primary and secondary historical sources, a personal definition of human nature, and an appreciation of the competing forces of history. There is considerable supplementary reading on particular themes that are examined in depth. Students are prepared to take the AP examination.

# **INTRODUCTION TO WOMEN'S STUDIES**

#### U3051232

Full-credit, graded course, Co-listed English and History departments

- Open to Form XII
- Prerequisites: None
- Semester 2 only, 0.5 credit
- · Course will be capped at 30 students based upon date of request.

This interdisciplinary course will introduce students to key concepts, issues, and debates in women's studies. Through readings, class discussion, analytical and persuasive writing assignments, and research and service projects, students will learn how culture and society shape gender and how gender intersects in complicated ways with issues of race, ethnicity, class, and nationality. The course will also focus on women's leadership and will emphasize hands-on, meaningful learning through community service. Texts will include autobiography, biography, nonfiction, fiction, and film and will draw from the fields of history, science, politics, economy, and the arts. Students will write position papers and textual analyses; they will also present their research on a variety of historical and current, national and international women's issues. "Introduction to Women's Studies" is cross-listed as a senior English elective and as the history department's senior seminar. Students may take the course for either English or history credit, but those taking the course for history credit need to make sure they have fulfilled the graduation requirement of four years of English.

# **INDEPENDENT STUDIES**

Partial-credit, pass/fail course

- Open to Forms IX (Semester 2 only), X, XI, and XII; this course may be taken more than once, each time for credit.
- · Prerequisites: Instructor's agreement required, common time availability.
- Semester (offered each semester) or full-year course, 0.2 credits per semester.
- Meets 1 or 2 times a rotation based on the discretion of the instructor.
- · Credit earned does not satisfy departmental graduation requirements.

An independent study offers the student an opportunity to design a project in an area of interest to her. Upon the start of the academic year (or Semester 2 if the work is limited to that semester), the student must complete an Independent Study Contract. The student meets with a teacher on a regular basis for guidance and evaluation, but the majority of the time is spent in independent work. The final project is generated by the student and requires approval by the teacher. Recent independent study topics have been in areas of internet security, technology, history, French, German, writing, visual arts, and genetics.

# MATHEMATICS

The mathematics department is committed to a core college preparatory curriculum that reflects the mandates set forth by the National Council of Teachers of Mathematics in "Curriculum and Evaluation Standards for Teaching Mathematics." Mathematics must be ever-developing so that students continually expand their understanding of mathematical concepts in both breadth and depth as they progress through middle school and upper school. We strive to maintain a balance between skills and concepts, the concrete and the abstract, intuition and formalism, structure and problem solving, and induction and deduction. We are open to revisions required by the quickly growing area of advanced computing technology. The goals of the mathematics department are that all students learn to value mathematics; to apply mathematical techniques confidently, skillfully, and accurately; to reason mathematically; to become effective mathematical problem-solvers; to communicate mathematically; and to become efficient users of modern technology. Students are encouraged to seek out and to accept appropriate challenges as they pursue their mathematics education.

# ALGEBRA I

# U2010201 and U2010202

# Full-credit, graded course

- Required of all students in Form IX who did not study Algebra I in Middle School.
- Prerequisites: None
- Full year, 1 credit
- Technology required: TI-84+

Algebra I is an in-depth course in the study of algebra which provides the essential foundation for all further study of mathematics at the Upper School level. Students study operations with polynomial, rational, and radical expressions; factoring; solving linear, quadratic, absolute value, rational, and radical equations, inequalities and systems; and linear and quadratic functions and their graphs. Emphasis is placed on development of algebraic computational and problem-solving skills. Students are introduced to graphing technology.

# GEOMETRY

#### U2012601 and U2012602 Full-credit, graded course

- Open to Forms IX and X
- Prerequisites: Successful completion of Algebra I
- Full year, 1 credit
- Technology required: TI-84+

The content of Geometry includes a strong emphasis on the basic concepts of Euclidean Geometry and the development of logical reasoning, including the formal method of proof. Concepts of coordinate geometry and three-dimensional geometry are integrated with plane geometry throughout the course. Students are introduced to a drawing/construction software program, which is used throughout this course.

# HONORS GEOMETRY

U2012611 and U2012612

Full-credit, graded course

- Open to Forms IX and X
- Prerequisites: <u>Form IX</u>: Recommendation of the Middle School faculty; <u>Form X</u>: Successful completion of Algebra I with a minimum average of 80% and a minimum of 80% on the S1 exam. Departmental signature required.
- Full year, 1 credit
- Technology required: TI-84+

The content of Honors Geometry is similar to Geometry but emphasizes formal proofs.

# ALGEBRA II

U2020201 and U2020202 Full-credit, graded course Open to Forms X and XI

- Prerequisites: Completion of Geometry and Algebra I
- Full year, 1 credit
- Technology required: TI-84+

Algebra II is a continuation of the study of algebra. Topics covered are a review of Algebra I, linear equations, quadratic equations, factoring, graphing using transformations, irrational and complex numbers, and exponential and logarithmic functions. Students enrolled in Algebra II will take Introduction to Precalculus the following year.

# HONORS ALGEBRA II

U2020251 and U2020252

Full-credit, graded course

- Open to Forms IX, X, and XI
- Prerequisites: Successful completion of Geometry with an average of 90% and a minimum score of 90% on the S1 exam or successful completion of Honors Geometry with an average of 80% and a minimum score of 80% on the S1 exam, and the recommendation of the Upper School faculty. Departmental signature required.
- · Full year, 1 credit
- Technology required: TI-84+

Honors Algebra II is an in-depth course in which the student continues the study of algebra. The course content commences with a review of Algebra I topics and progresses to include a study of the irrational and complex numbers, quadratic equations and functions, equations and numerical methods, exponential and logarithmic functions, sequences and series, probability, and trigonometry. Students in Honors Algebra II spend significant time investigating the graphs of functions and transformation of functions. Graphing technology plays an integral role in the learning of mathematics in this course. Because students enrolled in Honors Algebra II should plan to enroll in Precalculus the following year, they are expected to engage with the formative concepts of mathematics as well as to gain computational competence in the many areas of study which are presented.

# ADVANCED STATISTICS

U2047501 and U2047502

Full-credit, graded course

- Open to Forms X, XI and XII
- Prerequisites: Successful completion of either Algebra II or Honors Algebra II. Departmental signature required.
- · Full year, 1 credit
- Technology required: TI-84+

Advanced Statistics is a year-long course that is the equivalent of a semester of introductory college statistics. The course provides students with a strong foundation in basic statistics. Students study four main concepts: data exploration, sampling and experimentation, probability and simulation, and statistical inference. In addition to thinking critically about the concepts, students are also expected to write clear and concise explanations. Students should expect to be challenged to think logically and critically to solve interesting and complex problems and, more importantly, to explain the method by which they reached their conclusions. Though this course is taught in the mathematics department, statistics is a field of its own and the course is very different from a typical mathematics course.

# INTRODUCTION TO PRECALCULUS

U2030201 and U2030202

- Full-credit, graded course
- Open to Forms X, XI, and XII

  Proroquisitor: Successful complet
- Prerequisites: Successful completion of Algebra II
- · Full year, 1 credit
- Technology required: TI-84+

Introduction to Precalculus is a bridge course between Algebra II and Precalculus. It provides students with an opportunity to strengthen their algebra and problem-solving skills as well as to gain some experience with elementary pre-calculus concepts prior to undertaking the more theoretical course in Precalculus. This course is a skill-level introduction to these topics. Graphing technology plays an integral role in the learning of mathematics in this course.

# PRECALCULUS

# U2036401 and U2036402

Full-credit, graded course

- · Open to Forms X, XI, and XII
- Prerequisites: Successful completion of Honors Algebra II with a minimum average of 80% <u>and</u> a minimum score of 80% on the S1 exam or successful completion of Introduction to Precalculus; and the recommendation of the Upper School faculty. Departmental signature required.
- Full year, 1 credit
- Technology required: TI-84+

This course focuses on the concepts and methods necessary for the study of college-level calculus. It enables students to model a written description of a physical situation with a function; to use technology to help solve problems, experiment, interpret results, and verify conclusions; and to determine the reasonableness of solutions, including size, relative accuracy, and units of measurement. Students will be encouraged to communicate mathematics orally as well as in written form.

Particular emphasis is placed on the study of linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, absolute value, and piecewise functions, each of which will be represented in a variety of ways: graphical, numerical, analytical, and verbal. Additional topics studied include conic sections, complex numbers, vectors, and the polar coordinate system. The year ends with a chapter on limits, continuity, and derivatives.

# PRECALCULUS/CALCULUS A

U2036411 and U2036412 Full-credit, graded course

- Open to Forms X, XI, and XII
- Prerequisites: Completion of Honors Algebra II with an average of 90% and a minimum score of 90% on the S1 exam and the recommendation of the Upper School faculty. Departmental signature required.
- · Full year, 1 credit
- Technology required: TI-84+

This course will cover all topics in both the traditional Precalculus course and the beginning topics of calculus. This class is offered to prepare our most accomplished mathematics students for our most advanced course offerings. Students who complete this course successfully will enroll in AP Calculus BC the following year. The course teaches students to model a written description of a physical situation with a function; to use technology to help solve problems, experiment, interpret results, and verify conclusions; and to determine the reasonableness of solutions, including size, relative accuracy, and units of measurement. Students will be encouraged to communicate mathematics orally as well as in written form. Topics include logarithmic and exponential functions, trigonometry, sequences, series, analytic geometry, limits, and basic derivatives.

# ADVANCED PLACEMENT CALCULUS AB

U2040151 and U2040152 Full-credit, graded course

- Open to Forms X, XI, and XII
- Prerequisites: Successful completion of Precalculus and the recommendation of the Upper School faculty. Departmental signature required.
- · Full year, 1 credit
- Technology required: TI-84+

This course consists of a full academic year of work in calculus that is comparable to courses in colleges and universities and prepares students for the AP Calculus AB examination. Centered on the themes of derivatives, integrals, limits, approximation, and applications and modeling, this course is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and various interdisciplinary applications. It emphasizes a multi-representational approach to calculus, with concepts, results, and problems expressed geometrically, numerically, analytically, and verbally.

# ADVANCED PLACEMENT CALCULUS BC

U2040201 and U2040202

- Full-credit, graded course
- Open to Form X, XI, and XII
- Prerequisites: Successful completion of Precalculus/Calculus A and the recommendation of the Upper School faculty. Departmental signature required.
- · Full year, 1 credit
- Technology required: TI-89 Titanium technology (on loan from CSG)

Through a multi-representational approach to calculus, with concepts, results, and problems expressed in geometric, tabular, numerical, analytic and verbal form, this course prepares students for the AP Calculus BC examination. Students are expected to work both together and independently to apply, to synthesize and to articulate their understanding of the interconnectedness of the various mathematical topics to which they have been introduced over the years. The course begins with a review of material related to the themes of limits and continuity and quickly builds to explore the concepts of derivatives and their applications, definite and indefinite integrals (including improper integrals) with applications, differential equations and mathematical modeling, sequences and series and concludes with a study of parametric, vector defined and polar functions.

# MATHEMATICAL MODELLING FOR ENVIRONMENTAL AND SOCIAL JUSTICE

U2053611

- Full-credit, graded course
- Open to Forms XI and XII
- Prerequisites: Successful completion of Algebra II
- Semester 1 course, 0.5 credit
- Technology required: TI-84+
- Offered this year.

This course will give students practical experience doing mathematics in a real-world context and as a means for exploring and making recommendations on a contemporary issue. Each project will be presented as a question that students must answer through consulting experts, conducting original research and/or working with raw data, collaborating with peers and content experts, and presenting to an authentic audience. The necessary mathematical concepts will be taught as a means to help students to understand and analyze their research and data sets, ensuring that their mathematical models convey the story that the data tell and/or make predictions for the future. Each project will culminate in a final product (examples: podcast, PowerPoint, briefing document, letter to senator, presentation to community influencers, etc.).

# MATHEMATICS' GREAT THEOREMS

U2053612

Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of, *or concurrent enrollment in*, Precalculus; department signature required.
- Semester 2 course, 0.5 credit
- Technology required: TI-84+
- Offered this year.

In this course, students will spend time exploring, critiquing, and interpreting the mathematical arguments used to prove the great theorems that have guided mathematical thinking for thousands of years. Focusing on algebraic proofs and using only the math available to the original authors at the time they were written, we will learn the impact of those theorems on mathematics, science, society, and politics. This course will also expose students to a diverse group of individuals who developed the proofs of the theorems and the social milieu in which they lived and worked, including the infighting, jealousy, and sabotage that nearly undid many of them. Through this exploration of the major theorems of math, students will grow to appreciate the foundation upon which their study of math has been built, as well as understand that their own mathematical thinking exists in a social context of other contemporary thinkers and that there are many mathematical questions that remain unanswered. Students will use the theorems studied as evidence to explore the unanswered question of whether mathematics is created or discovered.

#### MULTIVARIABLE CALCULUS: A SURVEY COURSE

U2040301

Full-credit, graded course, offered in even graduation years

- · Open to Forms XI and XII
- Prerequisites: Successful completion of AP Calculus BC. Departmental signature required.
- Semester 1 course, 0.5 credit
- Technology required: TI-84+
- <u>Offered this year</u>.

This semester course follows AP Calculus BC and is an introduction to multivariable calculus. It is designed to be a college level course in terms of both its content and rigor. Applications to science and engineering will be highlighted throughout the course, and computer technology will be used to help students visualize the three-dimensional problems. The course content includes vector-valued functions, functions of several variables, partial derivatives, directional derivatives, gradients, extrema, multiple integrals, line integrals, Green's Theorem, parametric surfaces, Divergence Theorem, and Stokes Theorem.

#### LINEAR ALGEBRA CONCEPTS

U2040302

Full-credit, graded course, offered in even graduation years

- Open to Forms XI and XII
- Prerequisites: Successful completion of Honors Algebra II or Introduction to Precalculus. Departmental signature required.
- · Semester 2 course, 0.5 credit
- Technology required: TI-84+
- · Offered this year.

This semester course is a rigorous introduction to the study of linear systems through the use of matrix algebra. It provides the mathematical content necessary for application to college-level science and engineering classes. The course content includes systems of linear equations, matrices, determinants, vector space, coordinate systems and bases, linear transformations, eigenvalues, eigenvectors, inner product and orthogonality, orthogonal matrices, geometric and real-world applications.

# ABSTRACT ALGEBRA THEORY

U2052621

Full-credit, graded course, offered in odd graduation years

- Open to Forms XI and XII
- Prerequisites: Successful completion of AP Calculus BC; departmental signature required.
- Semester 1 course, 0.5 credit
- Not offered this year.

Topics covered in this course include basic number theory, congruence and congruence classes, modular arithmetic, ring theory, arithmetic in F[X], congruence in F[X], and group theory. Possible additional topics include public-key cryptography, geometric construction, algebraic coding theory, and field extensions.

# DIFFERENTIAL EQUATIONS: A SURVEY COURSE

#### U2053632

Full-credit, graded course, offered in odd graduation years

- Open to Forms XI and XII
- Prerequisites: Successful completion of AP Calculus BC; departmental signature required.
- Semester 2 course, 0.5 credit
- Technology required: TI-84+
- Not offered this year.

This course is a study of the basic concepts and methods for solving ordinary differential equations. Topics include slope fields; separable, linear, exact, Bernoulli, and homogeneous first order equations; homogeneous and nonhomogeneous second and higher order linear equations; Laplace transforms; series solutions; and numerical methods. Applications to physical sciences and engineering are highlighted.

# PUBLICATIONS NEWSPAPER (Silhouette)

# Newspaper Workshop (Editors-in-Chief)

U9229101 and U9229102

Partial-credit, graded

- Requires submission of an application, writing and page-layout samples, and approval and signature of the faculty advisor.
- Full year, 0.4 credits

# Newspaper Workshop (Staff)

U9229151 and U9229152 Partial-credit. pass/fail

- Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit.
- May be taken one or two semesters, 0.2 credits per semester

This workshop gives students an opportunity to participate in the publication of the Columbus School for Girls newspaper, *Silhouette*. Activities include writing and editing articles and using *InDesign* to lay out pages. Each student will have an active role in the publication along with instruction in journalistic writing.

# YEARBOOK (Topknot)

Yearbook Workshop (Editors)

U9229201 and U9229202 Partial-credit, graded

#### Publications/Yearbook (cont.)

- Prerequisites: Approval and signature of faculty advisor. Completion of at least one semester as Staff. Open to XI and XII
- Full year, 0.4 credits

# Yearbook Workshop (Staff)

# U9229251 and U9229252

Partial-credit, pass/fail

- · Open to Forms IX, X, XI, and XII; this course may be taken more than once, each time for credit.
- Full year, 0.4 credits

This workshop affords students an opportunity to participate in the publication of the Columbus School for Girls yearbook, *Topknot*. Activities include digital layout design online, digital photo editing and cropping, and copywriting to prepare materials for use by a publishing company. Students interested in taking pictures for the yearbook are encouraged to sign up for the class but may still contribute to the publication if this class will not fit into their schedules.

# SCIENCE

The science department strives to help students 1) realize that science is fascinating, fun, and rewarding; 2) understand that scientific discovery is an ongoing, ever broadening, self-correcting search for answers, and that any one discovery leads to further questions and experimentation rather than an absolute or ultimate truth; 3) appreciate how the cooperative nature of the current scientific enterprise works and be able to make clear judgments regarding their roles in the today's technological and competitive world; and 4) learn the fundamental facts, concepts, and laboratory and reasoning skills which are basic to further formal study in the individual scientific disciplines.

# BIOLOGY

U4020601 and U4020602

Full-credit, graded course

- Required of Form IX students enrolled in Algebra I and not enrolled in Honors Biology.
- Prerequisites: None
- Full year, 1 credit

This course is designed to develop understanding of the essentials of living systems at a variety of scales, from biochemical reactions and cellular metabolism to evolutionary biology and global ecology. Emphasis is placed on connecting new knowledge to past work in science classes and on connecting biology to their own lives. Classwork takes many forms, including lecture, video, student presentations, games, and laboratory experiments and simulations. All laboratory work includes safe use of materials and appropriate laboratory techniques. Students will also use the course content, experiences, and online textbook to develop study and organization skills essential to academic success in science and beyond.

# HONORS BIOLOGY

U4020651 and U4020652

Full-credit, graded course

- Required of Form IX students not enrolled in Biology
- Prerequisites: Recommendation of Middle School faculty
- Full year, 1 credit

This course is designed to develop understanding of and respect for the vast array of life processes and the interconnectedness of all life. In addition to science as a process, this course emphasizes the diversity and unity of all life through topics such as evolution, ecology, genetic inheritance and expression, and cellular processes and functions including energy conversion, growth, and development. The course emphasizes the

#### Honors Biology (cont.)

relation of biological concepts directly to the students' life experience, while developing the organization skills necessary to sort and assimilate concepts. Class work includes incorporating electronic textbooks, inquirybased simulations, variety of laboratory experiences as well as projects and assessments. Students are expected to learn both traditional laboratory skills and computer-based skills. This laboratory work includes safe use of materials and appropriate laboratory techniques.

# ADVANCED PLACEMENT BIOLOGY

U4040201 and U4040202

- Full-credit, graded course
   Open to Forms XI and X
  - Open to Forms XI and XII
    Prerequisites: Successful completion of Honors Biology or Biology with a grade average of B+ or better and successful completion of either Honors Chemistry or Chemistry with a test grade average of B+ or
    - better or AP Chemistry with a test grade average of B or better; departmental signature required.
  - Full year, 1 credit
  - A final graded assessment is required; taken during an academic day in April, it will count as a CSG Semester 2 examination or a major portion of the student's semester grade.

This is a college-level survey course that follows the Advanced Placement syllabus in preparation for the AP Biology examination. Major areas of study are centered around four Big Ideas: 1) the process of evolution drives diversity and unity of life; 2) biological systems utilize free energy and molecular building blocks to grow, reproduce, and maintain homeostasis; 3) living systems receive, transmit, and respond to information; and 4) biological systems interact. This fast-paced course has a significant laboratory component with long- and short-term experiments, allowing students to develop scientific research skills and present their results through papers, poster sessions, and discussion. Students will also be guided as they read professional scientific papers and relate them to their own experimental work.

# HUMAN ANATOMY AND PHYSIOLOGY

U4020801 and U4020802

#### Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of Biology or Honors Biology and Chemistry or Honors Chemistry
   Full year 4 and t
- Full year, 1 credit
- Offered this year; offered during odd-numbered graduation years.

Human Anatomy and Physiology is a course that investigates the structure and function of the human body. Topics covered will include the basic organization of the body, its biochemical composition, and the major body systems, along with the impact of diseases on certain systems. From biochemistry and anatomical terminology to the large-scale details of each of the major body systems, students will learn through print and digital reading materials, digital and kinesthetic activities, group work, projects, and labs. Students will reinforce their study using Anatomy in Clay MANIKEN models throughout the year to sculpt the muscles, organs, nerves, arteries, veins, and other structures of the human body in clay.

# CHEMISTRY

#### U4031001 and U4031002

#### Full-credit, graded course

- · Required of Form X students not enrolled in Honors Chemistry.
- Prerequisites: Successful completion of Biology or Honors Biology
- Full year, 1 credit

Chemistry is a laboratory and inquiry-based course. This course covers the major concepts of chemistry, placing more emphasis on the fundamentals of chemistry and how they impact our daily lives and less emphasis on the mathematics of chemistry than is taught in Honors Chemistry. Each unit in Chemistry includes laboratory exercises, engaging group activities, assessments and problem-solving exercises. Student will learn through class lectures, labs, activities and independent work that includes digital and print media, interactive digital media giving students the ability to explore different styles of learning.

### Chemistry (cont.)

This course is not designed to prepare the student for the College Board SAT II test in Chemistry, but does fulfill the prerequisite for AP Biology and Organic Chemistry.

# HONORS CHEMISTRY

# U4037251 and U4037252

Full-credit, graded course

- Required of Form X students not enrolled in Chemistry.
- Prerequisites: Successful completion of Biology with a grade of B+ or better, or Honors Biology with a grade of B or better; departmental signature required.
- Full year, 1 credit

The emphasis of this course is on the experimental approach and the development of unifying concepts. Understanding and application of chemical principles is stressed while memorization of factual material is minimized. Concepts discussed are generally related to laboratory experiences or to demonstrations. Topics include: laboratory techniques, quantitative problem-solving strategies, chemical formulas and equations, stoichiometry and the mole concept, atomic structure, the periodic law, bond formation and molecular geometry, kinetic theory and gas laws, enthalpy and entropy, chemical kinetics, solutions, equilibria, acid- base theories, oxidation-reduction, electrochemistry, and the important role of chemistry in our society. Classroom methods include demonstrations, discussions, small group problem-solving exercises, and lectures. Online computer links are available for drill and enrichment. This course is designed to prepare the student for the SAT II test in Chemistry.

#### **ORGANIC CHEMISTRY**

U4030211

Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of Chemistry or Honors Chemistry
- Semester 1 course, 0.5 credit
- <u>Offered this year;</u> offered during Semester 1 of even-numbered graduation years.

This course provides a conceptually-based treatment of the fundamentals of organic chemistry and serves as a good introduction to basic principles used in the medical and pharmaceutical fields. Students will cover concepts of naming compounds, basic molecular structure and geometry, organic functional groups, structural and stereoisomers, and basic organic chemical reactions. We will also discuss analysis of organic compounds by interpreting infrared and nuclear magnetic resonance spectroscopy as well as mass spectroscopy. The laboratory component will look at separation and analysis of organic compounds in a mixture.

#### ADVANCED PLACEMENT CHEMISTRY

U4030201 and U4030202

Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of Honors Chemistry with a grade average of A- or better; concurrent enrollment in or successful completion of Pre-calculus; departmental signature required.
- Full year, 1 credit
- A final graded assessment is required; taken during an academic day in April, it will count as a CSG Semester 2 examination or a major portion of the student's semester grade.

This is a college-level course that follows the Advanced Placement curriculum set forth by the College Board. Major topics covered in the course are the electromagnetic spectrum, chemical bonding and geometries, intermolecular attraction, stoichiometric relationships, chemical reactions and trends, gas laws, solutions, chemical equilibria, solubility, chemical kinetics, acid-base chemistry, oxidation-reduction, electrochemistry, and basic organic chemistry. An emphasis is placed on critical analysis, laboratory procedures, and technology in science. Laboratory material reinforces the principles and concepts covered in the lecture class. Textbook and laboratory examples will be covered in preparation for the Advanced Placement Chemistry examination.

# PHYSICS

U4046301 and U4046302

# Full-credit, graded course

- · Required of Form XI students not enrolled in Honors Physics.
- Prerequisites: Successful completion of Chemistry or Honors Chemistry
- Full year, 1 credit

This course provides a conceptually-based treatment of the fundamental principles and processes of the physical world. With the use of basic algebra skills, topics such as motion, forces, energy, sound, light, electricity and magnetism will be covered. Upon completion, students should be able to describe the principles studied with the use of examples and applications. Laboratory investigations, films and computer-based models will be used to strengthen the understanding of concepts. In addition to providing students with a clearer understanding of their physical world, this course seeks to enhance their natural curiosity and strengthen their ability to reason clearly and effectively. This course is not designed to prepare the student for the SAT II test in physics.

# HONORS PHYSICS

# U4046401 and U4046402

Full-credit, graded course

- Required of Form XI students not enrolled in Physics.
- Prerequisites: Successful completion of Chemistry with a B+ or better or Honors Chemistry with a grade of B or better; concurrent enrollment in or successful completion of Precalculus; departmental signature required.
- · Full year, 1 credit

Honors Physics challenges the student both to conceptualize and to resolve problems in Newtonian mechanics and dynamic. Topics include: 1D/2D motion, forces and Newton's Laws, circular motion, rotational motion, torque, rolling motion, momentum and collisions as well as energy and work, and as times allows, oscillations, sound and basic circuits. Lectures, discussions and laboratory exercises are used to explore these topics. The course is supplemented with films, demonstrations, and computer simulations. In addition to providing students with a clearer understanding of their physical world, this course seeks to enhance their natural curiosity and strengthen their ability to reason clearly and effectively. This course is not designed to prepare the student for the SAT II test in physics.

# ADVANCED PLACEMENT PHYSICS C: MECHANICS

# U4046501 and U4046502

Full-credit, graded course

- Open to Form XII
- Prerequisites: Successful completion of Honors Physics with a test grade average of B+ or better; concurrent enrollment in or successful completion of AP Calculus; departmental signature required.
- · Full year, 1 credit
- A final graded assessment is required; taken during an academic day in April, it will count as a CSG Semester 2 examination or a major portion of the student's semester grade.

The AP Physics C – Mechanics course is calculus-based and follows the AP course description as provided by the College Board. This college-level physics course challenges the student both to conceptualize and to resolve problems in kinematics, Newton's laws of motion, work, energy and power, impulse and momentum, circular motion and rotation, oscillations and gravitation. If time permits, some topics not included on the AP Physics C Mechanics test such as waves, sound, optics and electrostatics, and electric circuits might also be covered. The laboratory component will have a strong emphasis on "open-ended" labs in which the student makes careful observations of physical phenomena. The course is supplemented with films, demonstrations and computer modeling. In addition to providing students with a clearer understanding of their physical world, this course seeks to enhance their natural curiosity and strengthen their ability to reason clearly and effectively. Textbook and laboratory examples will be covered in preparation for the Advanced Placement Physics C: Mechanics examination.

# **ASTRONOMY I**

U4030301

Full-credit, graded course

- Open to Form XII
- · Prerequisites: None
- Semester 1 course, 0.5 credit

Astronomy I is a descriptive introduction to the foundational principles of astronomy with a focus on our astronomical neighborhood, the solar system. Topics covered include the history of astronomy, ancient and modern astronomical tools, interactions of the Earth, Moon, and Sun, gravitation and the motion of the planets, the formation of the solar system, and comparative planetology. The course also reviews some basic concepts from biology, chemistry, and physics. While not math-intensive, this course will use mathematical equations (density, velocity, momentum, etc.) to describe observed phenomena where appropriate. Class work is supplemented by laboratory activities and research projects.

# ASTRONOMY II: COSMOLOGY

U4030302 Full-credit, graded course

- · Open to Form XII
- Prerequisites: None
- Semester 2 course, 0.5 credit

Astronomy II: Cosmology focuses on the study of the origin of the universe and the largest objects in it. Topics covered include the life and death of stars, special relativity and black holes, the formation and types of galaxies, and the Big Bang Theory. Students in the course will also be able to use what we know about the universe today to predict its ultimate fate. This course reviews some basic concepts from biology, chemistry, and physics. While not math-intensive, this course will use mathematical equations to describe observed phenomena where appropriate. Class work is supplemented by laboratory activities and research projects. This course can be taken independently of or in sequence with Astronomy I.

#### **ROBOTICS TEAM LEADERSHIP (Team Captains and CDT Leads)**

#### U4067721 and U4067722

Partial-credit, pass/fail

- Required of Team Captains; strongly recommended for all team members in a leadership position; open to any team member; this course may be taken more than once, each time for credit.
- Prerequisites: Completion of one full year of team membership; Robotics Team Advisor signature required; concurrent enrollment in Robotics Team.
- Full year course; 0.4 credits

This class will provide team leaders with the opportunity to build their leadership, planning, and management skills while developing Fall Labs, build-season activities, educational field trips, fundraising and outreach activities, team policies, and competition strategies. This class will meet one time each rotation. Semester enrollment is an option for all but captains; Team Advisor's signature required.

#### **ROBOTICS TEAM (Team Members)**

#### U4067702

#### Partial credit, pass/fail

- · Required of all team members, including leadership; this course may be taken more than once, each time for credit.
- Prerequisites: Team Advisor signature required
- · Semester 2, 0.5 credit

The *FIRST* Robotics program at CSG is designed to build self-confidence, knowledge and life skills while motivating girls to consider opportunities in science, technology, engineering and math. In addition to specific skill-sets, the students gain self-confidence, earn valuable experience in teamwork, problem-solving, and have

#### Robotics/Team Members (cont.)

to deal with open-ended design problems where systems thinking and a holistic approach are necessary. Some meetings will occur during the school day at CSG, but most of the activity will require evening and weekend attendance at Ohio State's Center for Automotive Research. Girls will be responsible for their own transportation arrangements to and from that facility. The team will also travel to one or two regional or national competitions in the early spring. The requirement for a passing grade in this course will be the same for earning the right to travel with the team to the first competition, which would include reaching the minimum number of precompetition hours (130).

# DESIGN: THE INTERSECTION OF ART AND ENGINEERING

#### U4041231

Full-credit, graded course, co-listed science and art departments

- · Open to students in Forms X, XI, and XII
- Prerequisites: None
- Full year, 1 credit

This course will introduce students to the world of design as seen through the eyes of engineering and applied arts, building on students' abilities in math and science while applying fundamental principles taken from the fields of engineering and art. The design process, (i.e. the process of applying creative skills in the development of a solution to a defined problem), will be presented via project-based instruction. The approach will reflect the present interdisciplinary one used by many leading design companies. Various methodologies used in the execution of this process will be introduced, practiced and applied to actual problems. The course will have an emphasis on hands-on learning, allowing students to develop critical thinking and problem-solving skills. The students will learn to collaborate, innovate, and communicate. Special emphasis will be put on how to express ideas to others through both two-dimensional representations (sketches, drawings) and three-dimensional models. Students will create individual portfolios to document the process, from ideation phase to prototyping to final product. The application of the design process to the worlds of industrial design, product design, and the visual and fine arts will emphasize the interdisciplinary nature of design. Additional activities in this course will include discussions, guest speakers, class exercises, case studies, off-site field trips, and student presentations.

# SOCIAL/EMOTIONAL LEARNING

# EXPLORING DIVERSITY THROUGH INQUIRY

U3835301 or U3835302 Partial-credit, pass/fail course

- Open to Forms X, XI, and XII
- Prerequisites: None
- Semester course (offered each semester based upon course enrollment), 0.25 credit

This course is designed to help students tackle the issues of race, class, gender, religion, and other core identifiers. The course will encourage conversation along with personal reflection which will allow students to think creatively rather than stereotypically about differences. Using the Transformational Inquiry model, our students will learn to explore their own identities, learn through reading and research and take personal and collaborative action within their own community. Students will cultivate valuable communication skills while engaging in critical thinking. This course will weave in current events, historical perspectives, intersectionality, social justice and anti-bias perspectives.

# **COMPUTER SCIENCE & TECHNOLOGY**

The primary goal of CSG's technology department is to introduce students to current and emerging technologies and to help them develop the fluency necessary to be users of an ever-changing list of devices, programs, and literacies. The department offers both technology courses and computer science courses. "Technology" courses focus on applications and what, how, when, and why to use specific technologies for a specific problem. "Computer Science" courses focus on problem solving and understanding the properties of the hardware, software, and/or networking used in a given technology.

# INTRODUCTION TO COMPUTER SCIENCE 1a

U7017701 or U7017702

Full-credit, graded course

- Required of all students in Form IX, Elective for Classes of 2021 and 2022
- Prerequisites: None
- Semester course (offered each semester), 0.5 credit

This course is an introduction to computer science principles, technology, coding and various software tools and is based on the principle that learning about programming and computer science should be fun and engaging. The course is made up, in large part, of a curriculum developed by Carnegie Mellon University Computer Science Department. This required course teaches skills in coding, problem solving, collaboration and perseverance through problem solving. Students develop these skills through the use of coding to solve problems and work collaboratively. Grades are based largely on perseverance, completion and creative projects using code.

# INTRODUCTION TO COMPUTER SCIENCE 1b

U7017801 or U7017802

Full-credit, graded course

- · Elective
- Prerequisites: Introduction to Computer Science 1a
- Semester course (offered each semester), 0.5 credit

Introduction to Computer Science 1b is a continuation of Introduction of Computer Science 1a which covered Units 1-7; this course covers Units 8-12. Like Computer Science 1a, this course is a pilot from Carnegie Mellon University.

Students are first exposed to graphical problems in the prerequisite course (Computer Science 1a); in the sequel course, students build on that foundation. Computational problem solving is the core of computer science, and to keep the curriculum interesting and engaging, it is important to have interesting problems to solve. The problems posed are visually engaging, allow for multiple correct solutions, and provide visual cues to aid students when a solution goes awry.

The best way to learn this material is through a hands-on approach; so each Unit provides: content for the topic to be investigated, example problems with solutions included to illustrate and let students explore the topic, a set of exercises to hone their mastery of the topic, some end-of-unit exercises that require students to use and synthesize all of the topics found in that Unit, and a creative task that allows them to further explore the topics in the Unit in a manner driven by their interests.

# ONE LAPTOP PER CHILD SERVICE LEARNING COURSE

U7090111 and U7090112

Partial-credit, pass/fail course

- Open to students in Forms X, XI, and XII
- Prerequisites: None
- Full-year course, Independent Study format, 0.4 credits
- Options available for both traveling and non-traveling students.

## One Laptop per Child (cont.)

The primary purpose of this course is computer science through service. In this class, Upper School students share digital skills with underserved populations. Students acquire, refurbish, deliver, and teach about laptop computers. Students learn about open source software, how to network the computers with one another and with the Internet, and how to troubleshoot hardware and software. They each take apart (and put back together) a computer, develop a curriculum, research existing curricula and activities, and plan and prepare lessons for the delivery period. The culminating project is the trip during May Program. Since this timeframe conflicts with Senior May Program, Form XII students may not be able to travel with this class. All hours spent in service while on the trip count toward the minimum number of service hours required for graduation. Non-traveling students develop curricula to be used worldwide by underserved populations.

# AP COMPUTER SCIENCE PRINCIPLES

U7030311 and U7030312 Full-credit, graded course

- Open to students in Forms X, XI, and XII
- Prerequisites: Algebra I
- Full-year course, 1.0 credit
- · Offered this year.

AP Computer Science Principles is a relatively new AP course from the College Board that was offered for the first time in 2016-17. The course offers a multidisciplinary approach to the underlying principles of computation. It will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. The AP test consists of two projects to be completed during the school year and a 90-minute multiple choice conceptual test in May.

# World Languages

The main objective of the modern and classical languages program is to enable students to communicate effectively and accurately in a second language. More specifically, the program is designed to facilitate the learners' ability to write and speak the target language, as well as to encourage appreciation and understanding of the culture and literature of the countries in which the language is spoken. The department utilizes computer technology to foster learning; students, for example, visit web sites in other countries, create digital stories, present their information using PowerPoint presentations, and design animated vocabulary words, etc.

# LATIN

# LATIN I

U5410101 and U5410102 Full-credit, graded course

- Open to Forms IX, X, XI and XII (<u>scheduling priority is given to students in Form IX</u>); seniors may take a first-year language only as a sixth course and are given last priority in scheduling.
- Prerequisites: Forms IX, X, and XI none; Form XII the student must be enrolled in five other full-credit courses each semester.
- · Full year, 1 credit

Formal introduction to the classical language is accomplished through a blend of the reading and grammar approaches using *Lingua Latina*. The textbook is supplemented with Latin readings from *Colloquia Personarum*.

# Latin I (cont.)

The focus of the course is on developing reading proficiency and mastery of fundamental Latin vocabulary and grammar. Systematic expansion of English vocabulary occurs through detailed study of Latin stems and modern root derivation. Students learn about Roman history and culture through a variety of English readings and creative projects.

# LATIN II

# U5420201 and U5420202

Full-credit, graded course

- · Open to Forms IX, X, XI, and XII
- Prerequisites: Successful completion of Latin I; for rising Form IX CSG students, successful completion of Latin in Form VIII with a grade of B- or better and departmental signature.
- · Full year, 1 credit

Students continue with the reading-approach in *Lingua Latina* textbook series. More complex grammar is introduced, including the subjunctive mood, participles, gerunds, gerundives, and all varieties of subordinate clauses. Students are further exposed to Roman culture and history through a variety of readings in English and lectures provided by the instructor. Introductory skills in Latin prose composition are acquired.

# LATIN III

U5430301 and U5430302 Full-credit, graded course

- Open to Forms X, XI and XII
- Prerequisites: Successful completion of Latin II
- · Full year, 1 credit

In the student's third year, coursework transitions from slightly adapted Latin to real Latin with readings drawn from authors such as Cicero, Livy, and Catullus. Grammar is renewed in depth with concentration on those forms and grammatical constructions found in standard prose authors and culminates in more advanced prose compositions based on the style of Cicero. Rhetorical devices, stylistic elements and literary tropes are discussed in depth as each author is encountered. In addition, an appreciation of classical literature is encouraged through reading various works of Greek and Roman literature.

# LATIN IV

U5440401 and U5440402

- Full-credit, graded course
- Open to Forms XI, XII
- Prerequisites: Successful completion of Latin III
- Full year, 1 credit

This course is a survey of Latin literature. In the fall, students focus on prose with Cicero, Caesar, and historians like Sallust & Tacitus. In the spring, they turn to Augustan poetry and authors like Ovid, Horace, and Vergil. Scansion of dactylic hexameter and elegiac couplets are studied in depth, with the student attaining mastery in this area by the end of the course.

# ADVANCED PLACEMENT LATIN

U5440501 and U5440502

Full-credit, graded course

- Open to Forms XI, XII
- Prerequisites: Successful completion of Latin IV with a grade of A- or better or instructor approval; a consistently strong work ethic and exceptional talent in listening, reading, speaking, or writing; departmental signature required.
- · Full year, 1 credit
- A final graded assessment is required; taken during an academic day in April, it will count as a CSG Semester 2 examination or a major portion of the student's semester grade.

### AP Latin (cont.)

The AP Latin course is designed to prepare students for undergraduate Latin translation and Classics courses as well as the Advanced Placement examination in Latin. Some class time will be spent discussing the format of the exam, its scoring, and successful test-taking strategies. Students will work on numerous practice exercises from practice AP Exams to become as familiar with the test as possible. In the course, students comprehensively read, discuss, and interpret Virgil and Caesar in preparation for the AP Latin exam, but also a variety of canonical prose authors such as Cicero, Livy, Sallust, and Seneca and canonical poets such as Ovid, Catullus, Horace, and Propertius. Students study scansion of dactylic hexameter and elegiac couplets through in-depth, accelerated study of the major poets. Students will read the relevant biographical and stylistic information for each author from Gian Biagio Conte's *Latin Literature*.

# ADVANCED READINGS IN LATIN LITERATURE

U5440511 and U5440512

- Full-credit, graded course
- Open to Forms XI, XII
- Prerequisites: Successful completion of AP Latin with a grade of B or better; a consistently strong work ethic and exceptional ability to analyze, comprehend, and translate Latin; departmental signature required.
- Full year, 1 credit

The Advanced Readings in Latin Literature course provides students who have completed AP Latin an opportunity to translate and analyze particular Latin authors not covered by the AP Latin curriculum. The course focuses on the genres of biography & philosophy. Students read and analyze authors like Cornelius Nepos, Suetonius, Seneca, Lucretius, and Apuleius.

There is also a significant research writing component to the course that emphasizes breadth of preparation and analysis.

# MANDARIN CHINESE

# **MANDARIN CHINESE I**

U5510101 and U5510102 Full-credit, graded course

- Open to Forms IX, X, XI and XII (<u>scheduling priority is given to students in Form IX</u>); seniors may take a first-year language only as a sixth course.
- Prerequisites: Forms IX, X, and XI, none; Form XII, the student must be enrolled in five other full-credit courses each semester.
- · Full year, 1 credit

Chinese I will be taught through a method called TPRS (Teaching Proficiency through Reading and Storytelling). The class will focus on providing students with lots of compelling and comprehensible input (like an immersion setting) of Chinese language and culture before requiring students to produce the language on their own. Teaching content will include funny videos, clips from selected Chinese soap operas, songs, reality television shows, and lots of patterned stories. Eventually, students will feel very comfortable speaking Chinese, without the pain of rote memorization of vocabulary lists. Reading and typing in Chinese will also be covered.

Students will learn Chinese language and culture through such activities as asking and answering personalized questions, playing language games, performing skits, watching Chinese soap operas, sampling Chinese food and drinks, celebrating Chinese holidays, participating in field trips, and/or listening to outside speakers.

The topics that will be covered in class include: Chinese greetings, self-introduction, family relationships, days of the week, telling time, daily schedules, discussing hobbies, visiting friends, ordering food and beverages, the weather, Chinese New Year, and Chinese poetry.

#### Mandarin Chinese I (cont.)

The content of Chinese I will be limited to the most essential vocabulary and language patterns. Nevertheless, by the end of the course, students will be able to express themselves on familiar topics using learned material and memorized phrases.

# MANDARIN CHINESE II

U5520201 and U5520202

- Full-credit, graded course
- Open to Forms X, XI, and XII
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- Prerequisites: Successful completion of Mandarin Chinese I
- Full year, 1 credit

Chinese II will continue to be taught through a method called TPRS (Teaching Proficiency through Reading and Storytelling). The class will focus on providing students with lots of compelling and comprehensible input (like an immersion setting), building on what the students have mastered in Chinese I. Teaching content will include funny videos, clips from selected Chinese soap operas, songs, reality television shows, and longer stories and Chinese novels than in Chinese I. Students will also engage in more sophisticated conversations and discussions, using connected sentences.

Students in Chinese II will continue to develop their skills in listening, speaking, reading, writing, and typing Chinese. The focus will be on using Chinese in real-life contexts, combining the study of both Chinese language and culture. Additional class activities will include taking field trips and interviewing native Chinese speakers. At the end of this course, students will be able to form their own sentences in order to handle a number of uncomplicated communicative tasks. These will include comparing school life in China and the U.S., going shopping, taking transportation, asking for directions, making and eating Chinese food, describing the various Chinese cuisines, and visiting other people's homes.

# MANDARIN CHINESE III

U5530301 and U5530302 Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of Mandarin Chinese II
- Full year, 1 credit

Chinese III will continue to be taught through a method called TPRS (Teaching Proficiency through Reading and Storytelling). The class will focus on providing students with lots of compelling and comprehensible input (like an immersion setting), building on what the students have mastered in Chinese I and II. Teaching content (in Chinese) will include funny videos, soap operas, movies, songs, reality television shows, and longer stories and Chinese novels than in Chinese II. Students will also engage in more sophisticated conversations and discussions, producing strings of sentences and expressing their opinions regarding large range of topics.

Students in Chinese III will continue to develop their skills in listening, speaking, reading, writing, and typing Chinese. Class activities will focus on using the language in real-life contexts, combining the study of both Chinese language and culture. In addition, students will participate in scavenger hunts, take field trips, have group discussions, write their own stories, and interview native Chinese speakers.

The topics covered will include describing locations and places, introducing the home and community environment, Chinese folk stories, the history of Chinese food, Chinese geography, travelling and transportation in various regions in China, physical features, and the philosophy of aesthetics in Asian cultures. At the end of this course, students will be able to handle a wide range of uncomplicated communicative tasks by creating their own sentences.

# **MANDARIN CHINESE IV**

U5530401 and U5530402 Full-credit, graded course

- Open to Form XII
- Prerequisites: Successful completion of Mandarin Chinese III
- Full year, 1 credit

Chinese IV will continue to be taught through a method called TPRS (Teaching Proficiency through Reading and Storytelling). Also, students will continue to develop their skills in listening, speaking, reading, writing, and typing Chinese.

Chinese IV will focus on providing students with lots of compelling and comprehensible input (like an immersion setting), building on what the students have mastered in Chinese I, II, and III. However, more emphasis will be placed on student language output in real-life simulated situations than in the earlier levels. For example, students will engage in more sophisticated conversations and discussions both among themselves and with native Chinese speakers. In addition, students will read an entire Chinese novel (*The Monkey's Paw*) and write whole paragraphs in Chinese, expressing their opinions in detail.

The topics covered will include traditional Chinese housing, the concept of Feng Shui, China's geography and landscapes, Chinese literature, and environmental protection. There will also be field trips to Columbus' CAM international market and to a Chinese restaurant.

At the end of this course, students will be able to handle a wide range of uncomplicated communicative tasks by creating their own detailed sentences. Thus, students will be at the "Intermediate Low to Mid" proficiency level designated by the American Council on the Teaching of Foreign Languages.

# MANDARIN CHINESE V

U5550501 and U5550502 Full-credit, graded course

- Open to Form XII
- Prerequisites: Successful completion of Mandarin Chinese IV
- Full year, 1 credit

This course challenges students to develop their conversational fluency in formal and informal discussions based on topics related to themselves, familiar issues in their community, and issues around the world (such as political events, historical stories, and contemporary news). An additional topic will be an historical study of doing business in China, beginning with the ancient Silk Road.

Readings will include the Chinese folk story *Meng Mu San Qian* (concerning the effect of parental influences and living environments on education) and the Chinese documentary film *Please Vote for Me* (concerning student elections in a Chinese school). In addition, students will read an entire Chinese novel (*Great Expectations*).

There will be field trips to visit the Columbus School of Chinese and a Chinese "Hot Pot" restaurant. Also, outside speakers (on such topics as Chinese history) will be invited to address the class.

Through extensive reading, writing and discussion, students will achieve the "Intermediate Mid" proficiency level designated by the American Council on the Teaching of Foreign Languages.

# **SPANISH**

# **SPANISH I**

U5610101 and U5610102

Full-credit, graded course

- Open to Forms IX, X, XI, and XII students who did not take Spanish in Middle School (<u>scheduling priority</u> is given to Form IX); seniors may take a first-year language only as a sixth course and are given last priority in scheduling.
- Prerequisites: Forms IX, X, and XI, none; Form XII, the student must be enrolled in five other full-credit courses each semester.
- · Full year, 1 credit

This course teaches the basics of Spanish grammar. Emphasis is placed not only on written expression and correct grammar usage, but also on proper oral expression and pronunciation. Students are encouraged to be creative with the language and speak it as much as possible in class. Daily assignments and in-class activities, such as written exercises, board work, question-answer routines, mini-plays, listening exercises, and Spanish language videos, challenge students to continually practice and improve their Spanish listening, speaking, reading, and writing skills, as well as build their vocabulary. This class is conducted primarily in Spanish, although English may be used, especially early in the year, when the students have little or no experience with the language.

# **SPANISH II**

U5610201 and U5610202 Full-credit, graded course

- Open to Forms IX, X, XI, and XII
- Prerequisites: Successful completion of Spanish I in Middle or Upper School with a grade of B or better; rising Form IX students currently enrolled at CSG must have the recommendation of the Form VIII Spanish I teacher.
- Full year, 1 credit

This course reviews and builds on the basics of Spanish grammar learned in Spanish I. It includes a detailed study of new grammar, including nearly every verb tense in the Spanish language as well as many other grammatical topics. Reading and writing skills are practiced through daily assignments and board work. There is an increased emphasis on speaking and listening skills in level II, and thus many in-class activities are geared toward working on those skills. Students speak with partners, perform skits in groups, and engage in conversation with the teacher on a daily basis. New vocabulary is learned in each unit; however, students are strongly encouraged to make use of dictionaries and to practice circumlocution whenever they can. Class is conducted primarily in Spanish, although English may occasionally be used to clarify difficult grammatical issues.

# SPANISH III

# U5620301 and U5620302

#### Full-credit, graded course

- Open to Forms IX, X, XI, and XII
- Prerequisites: Form IX: Successful completion of Spanish I in Middle School with a grade of A, rising Form IX students currently enrolled at CSG must also pass a placement test and have the recommendation of the Form VIII Spanish I teacher; Form X: Successful completion of Spanish II.
- · Full year; 1 credit

This course provides an intensive review of the grammar learned in Spanish II, and it also introduces new grammatical and literary topics in Spanish. In addition, this course focuses on the history and culture of the many Hispanic people in the United States (Hispanic Americans), Mexico, Cuba, Puerto Rico, and Spain. Historical/cultural readings from the textbook, in conjunction with literature, videos, and art, are used to foster the students' understanding of these countries. This information also serves as a source for class discussion

#### Spanish III (cont.)

and for many class assignments, such as papers, skits, projects, etc. Great emphasis is placed on speaking Spanish at all times in class, and the students are encouraged to be creative with the language. This class is taught entirely in Spanish.

# **SPANISH IV**

# U5640401 and U5640402

Full-credit, graded course

- · Open to Forms X, XI, and XII
- Prerequisites: Successful completion of Spanish III
- Full year, 1 credit

This course reviews all the more challenging and important grammatical concepts in Spanish, while also providing a greater focus on Hispanic literature, culture and history. Students will read several selections from Spanish and Latin American authors, such as Neruda, Pacheco, Matute, García Márquez, etc. They will also learn about the history and culture of Hispanic countries via articles and videos. In addition, students will watch and interpret critically acclaimed movie shorts from all over the Spanish speaking world. All of these readings, videos and movies will serve as the source for great class discussions and numerous class assignments, including papers, skits, as well as group and independent projects. The main goal for this class is to work on and improve the student's language skills while solidifying their command of the grammar. Creativity with the language will be encouraged, but a higher demand for grammatical correctness will be expected at the same time. This class is taught entirely in Spanish, and students are expected to participate daily in Spanish.

# **SPANISH V**

# U5640501 and U5640502

Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of Spanish IV
- · Full year, 1 credit

This course is open to all students who wish to study and review Spanish literature and grammar. Emphasis is placed on the reading and study of short stories and poems as well as the application of key grammatical points to written and oral language. Class discussions will be conducted in Spanish. Students will practice the spoken language, debate current political and literary topics, and also write their own dramas and poems to share with their peers. Spanish films will be used to support coursework. Students will compare and contrast the themes of the films to those encountered in the short stories we study during the school year. This student-centered course challenges each student to think in another language and to grow in understanding of other times and cultures. Spanish V prepares the students to pursue the study of Spanish literature and language at the college level.

# ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE

# U5640701 and U5640702 Full-credit, graded course

- Open to Forms XI and XII
- Prerequisites: Successful completion of Spanish IV with a grade of A- or better; a consistently strong work ethic and exceptional talent in listening, reading, speaking, or writing; departmental signature required.
- Full year, 1 credit
- A final graded assessment is required; taken during an academic day in April, it will count as a CSG Semester 2 examination or a major portion of the student's semester grade.

This course challenges students to develop a high level of fluency in spoken language, to acquire a command of vocabulary and language structure similar to that of a native speaker, and to understand complex literary and non-literary prose written by Spanish and Latin American authors. Class discussion will be conducted entirely in Spanish. This student-centered course also challenges each participant to think in another language and to grow in understanding of other times and cultures. This college-level course prepares students for the

#### AP Spanish (cont.)

Advanced Placement Spanish Language examination. Some of the class time will be spent discussing the format of the test, its scoring, and successful test-taking strategies. Students will work on numerous practice exercises from each section of the test in order to improve their skills and to become as familiar and as comfortable with the test as possible. All students enrolled in this course are required to take the AP Spanish Language examination.

# ADVANCED READINGS IN SPANISH

U5650801 and U5650802 Full-credit, graded course

- Open to Form XII
- Prerequisites: Successful completion of AP Spanish Language and Culture; a consistently strong work ethic and exceptional talent in listening, reading, speaking, or writing; departmental signature required.
- · Full year, 1 credit
- A final graded assessment is required; taken during an academic day in April, it will count as a CSG Semester 2 examination or a major portion of the student's semester grade.

This course is designed to accommodate our students who have completed all possible Spanish courses at CSG up to and including AP Spanish Language and Culture. The focus of this course will be an in depth survey of classic Spanish and/or Latin American works of literature including novels, plays, short stories and essays. Additional readings and projects may center on Ibero-American/Transatlantic studies surrounding culture, history, art, politics and media. Topics may include the Spanish Civil War, the Post War, Latin American History from Pre-Colombian times to present day, the role of the dictator in Latin America, the causes and consequences of the Mexican Revolution, among other possibilities.

This course is taught entirely in Spanish and all submitted work is in Spanish. Grading is based on participation, completion of reading selections, oral and written quizzes, submission of critical analyses, and oral project presentations.

# CSG SUMMER PROGRAMS 2019

Each credit course lasts 3 weeks (one term). **Daily attendance is mandatory**. These courses earn high school graduation credit and are offered to students who will make a commitment to the academic challenge of intensive learning. All classes must have a minimum of six participants registered for the class to run. For credit classes, space is limited to a maximum of twelve students per class. *We do expect some classes to fill very quickly, so register early!* Course descriptions and prerequisite information can be found in the Curriculum Guide and in the Summer Programs course catalog.

| CREDIT COURSES (Term 1: June | 3-28 / Term 2: July 8-26) |
|------------------------------|---------------------------|
|------------------------------|---------------------------|

| CIVICS / US GOVERNMENT<br>· Term 1, 12:30-4:30 pm<br>· 0.5 credit<br>· Fee: \$475  | PUBLIC SPEAKING           ·         Terms 1 & 2, 9:30 am-12:00 pm           ·         0.35 credit           ·         Fee: \$400 |
|--|--|
| HEALTH II<br>· Terms 1 & 2, 10:00 am-12:00 pm<br>· 0.35 credit<br>· Fee: \$350   | PE: FITNESS & WELL-BEING <ul> <li>Term 1, 7:30-9:30 am</li> <li>0.35 credit</li> <li>Fee: \$350</li> </ul>                       |
|  |  |
| PE: WATER SAFETY/SELF- DEFENSE <ul> <li>Terms 1 &amp; 2, 12:30-2:30 pm</li> <li>0.35 credit</li> <li>Fee: \$350</li> <li>Not open to Form IX students</li> </ul> | PE: LIFETIME ACTIVITIES<br>· Term 2, 7:30-9:30 am<br>· 0.35 credit<br>· Fee: \$350   |

# **NON-CREDIT COURSES**

These courses do not earn high school graduation credit. Course descriptions can be found in the online Summer Programs brochure.

| ACT/SAT PRE-PREP WORKSHOP<br>July 29-Aug. 2, 12:30 - 3:30 pm<br>Optional Proctored Exam Aug. 5<br>Fee: \$325<br>Forms X - XII | SCUBA CERTIFICATION<br>July 8 - July 12<br>8:30 am - 3:30 pm<br>Fee: \$500<br>Forms VII - XII | <ul> <li>STEMCODING PROJECT</li> <li>July 29 – Aug. 2 12:30-3:30 pm</li> <li>Fee: \$225</li> <li>Forms VIII - XII</li> </ul> |
|---|---|--|
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\*If you are planning to enroll in a course during the summer of 2019, you must register through the CSG Summer Programs. Online registration for Summer Programs will open in January at <u>www.columbusschoolforgirls.org/summer.</u> Each student will be registered for her specific class during the school year, unless she lets her advisor know that she is taking the course(s) in the summer.

# QUESTIONS MAY BE DIRECTED TO:

Mrs. Rachel Barends

Director of Summer Programs rabarends@columbusschoolforgirls.org 614.252.0781, ext. 439



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