

Branson School

Curriculum Guide 2017-2018

Course Catalog

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The Branson School

The Branson School is a coeducational, non-denominational, non-profit, college preparatory school with an enrollment of 320, approximately evenly divided between boys and girls.

The Mission Statement

The Branson School inspires excellence in a nurturing, vibrant educational community based on personal and intellectual integrity. At the heart of Branson is the trusting, dynamic relationship between dedicated teachers and students. Through the vitality, breadth, and rigor of its programs, Branson encourages students to think critically, communicate clearly, develop their individual talents and interests, and pursue a lifelong passion for learning. Branson believes that diversity of people and thought enriches us all and promotes responsible leadership in the global community.

Requirements for Graduation

The minimum requirement for graduation from The Branson School is a total of fifty-four (54) units of academic credit. Unless otherwise indicated, yearlong courses receive three units of credit; term-long courses, one unit. In the senior year, a grade of **F** in a spring term course, or a grade of **F** in any yearlong course, will prevent graduation, even though extra units may have been accumulated. **Each student must be enrolled in at least five courses each term.** In order to remain competitive in college admissions, the School strongly recommends that sophomores and juniors carry a minimum of five academic courses.

Scheduling change or doubling up

We recommend that students arrange their academic schedules each year with classes representing the six major disciplines: English, Science, Mathematics, History, Language and Arts.

If a student wants to take more than one course in a department (we call it doubling-up), s/he must submit a petition to double-up with his/her registration materials. Upon approval by the appropriate class dean, department chair and the assistant head of school for academic affairs, the student will be allowed to double-up if there is adequate space in the requested class.

Should a student need to make a schedule change, s/he should fill out a “Schedule Change Request Form” and gather the required signatures. Students have a two-week period for term-long classes and until the first narrative report for yearlong classes during which, after consultation with the Assistant Head of School for Academic Affairs, they may drop a class and no record of the class will appear on the transcript. After this grace period, a W/P (withdraw/passing) or a W/F (withdraw/failing) will appear on the transcript.

Advanced Courses and AP Credit

Each department offers advanced courses, which give students the opportunity to study a rigorous curriculum in depth. Some courses are designated AP or Advanced Placement. We offer AP courses when the AP curriculum follows and builds upon the solid curricular foundations we support as a school. (Advanced Placement is a trademark owned by the College Board, and Advanced Placement curriculum guidelines are controlled and approved by the College Board.) Each department also offers rigorous courses without the AP label. These courses build upon our curriculum, draw on the expertise of our teachers, and allow students to do advanced work in a variety of fields. These courses are on par with or exceed the rigors of the AP program.

All students enrolled in AP courses must take the AP exam in order to receive AP credit designation on their transcript.

We will order and proctor AP exams if students wish to take a particular AP exam for a corresponding AP course we do not offer.

College Counseling and Class Recommendations

Most college websites have a list of their required and/or recommended classes. Please keep in mind that a college's required or recommended courses are not a comprehensive list of what they expect of applicants. Many selective colleges admit students who exceed the official requirements. The College Counseling office recommends that each student challenge him/herself appropriately and enjoy the process of learning. During the registration process each spring, students receive guidance from department chairs, teachers, advisors, and the assistant head of school for academic affairs.

Singletons

While we value the depth and breadth of our course offerings, which give our students a rich educational experience and the opportunity to delve deeply into subjects they love, we sometimes can offer only one section of some courses. We call such courses singletons. We cannot always accommodate the desires of a student who registers for multiple singletons. Often students will have to choose between or among singleton courses. Each department has designated the singleton courses it will offer during the 2017-2018 school year. As you look through the Curriculum Guide and select your courses, please make sure you are aware of the singletons, which we've marked with a diamond symbol (◊) on the summary page of each department.

Course Availability

If there are insufficient sign-ups in a given year, some courses may not be offered.

Below are departmental minimum requirements for graduation established for grades 9 through 12.

Arts

6 units

The courses may be taken at any grade level, although we advise junior or senior status for AP Art History. All arts courses have a studio component and an academic component. We emphasize production as well as historical and critical awareness in every course.

English

12 units

Students study English I and II, and The Composing Process, and in the junior and senior years an additional five electives, one taken each term. Of the five electives, students must take at least one from each of the two strands of the curriculum: the American strand or the Global strand. Seniors must have completed electives from both strands before the spring term of their senior year.

History

9 units

Students at Branson fulfill a three-year history requirement. Grade 9 students take Roots of Civilization, grade 10 students take Modern World History, and grade 11 students take U.S. History.

Language

**9 units of one language or
6 units in each of two languages**

Note: Some colleges require four years of the same language.

Mathematics

9 units

The minimum graduation requirement is three years of mathematics and completion of Algebra II. Most Branson students take four years of mathematics. Most entering freshmen enroll in Algebra I, Geometry or Geometry Honors, depending upon their score on the Branson Algebra Placement Test.

Note: The TI-84 graphing calculator is required in all math courses.

Science

9 units

Classes of 2018 and beyond: Students fulfill a three-year science requirement. The three required science courses are Physics, Chemistry, and Biology.

Physical Education

4 units of nonacademic credit

Students in grades 9, 10, 11 and 12 must participate in one of the following options to complete their PE requirement each year: Interscholastic sports, Dance or an Alternate Activity Program (AAP).

If a student **does not** complete his or her physical education requirement during the school year, he or she **must complete that requirement over the summer** in order **to be promoted** to the next grade level.

Seniors doing an Alternate Activity Program must do so by the end of the **second term**. Students who choose to use a term of Dance to fulfill a PE requirement must inform the instructor at the beginning of the term.

Wellness

2 units

Classes of 2020 and beyond: Students in grades 9 and 10 will meet one block per week in the fall term and winter term respectively.

The Arts Department Curriculum

Six units of Arts are required for graduation. We emphasize production as well as historical and critical awareness in every course. Students may take courses in all the areas of the arts or specialize as they choose. The courses may be taken at any grade level, although we advise junior or senior status for AP Art History. Upper Level courses require instructor approval.

Music	Dance	Theatre	Visual Arts
Chorus	Dance I	Beginning Acting	Survey of Visual Arts
Chamber Singers Honors *	Dance II	Intermediate Acting	Intermediate Sculpture Advanced Sculpture
Music and Performance	Dance III	Advanced Acting	Intermediate Drawing and Painting Advanced Drawing and Painting
Performance Seminar: Jazz	Dance IV: Intermediate	Acting Performance Honors	Intermediate Photography Advanced Photography
Performance Seminar: Rock	Dance IV: Advanced		Portfolio Review Honors *
Performance Seminar: Classical	Dance Performance Ensemble		AP Art History (Not offered 2017-18)
	Athletic Dance for Men		Design Thinking Workshop**
	Athletic Dance for Men II or III**		

* Honors status not approved by UC

** Pending UC approval.

With the exception of Survey of Visual Arts, all Fine Arts classes are singletons.

Note: UC Visual and Performing Arts requirement is one sequential year of study in an approved course.

Arts Department Homework Philosophy

Although arts students do the great majority of their work in class, we do require some outside of class time for preparation, reflection, and practice. Art classes also rely upon students to prepare for the creative process in class by practicing technique, planning, researching, and experimenting. Ensemble performing classes, such as dance, acting, and music, depend upon students' readiness to engage in the collaborative process of rehearsing and performing. We also require students to attend performances and exhibits, both on and off campus, to provide perspective and inspiration.

Dance Courses

Notable for their comprehensive and professional approach to dance, Branson's dancers learn Bill Evans Laban-based modern technique, jazz, hip-hop, ethnic dance, improvisation and basic ballet technique. Students develop self-confidence, self-discipline, and perseverance. All dance levels are exposed to the choreographic process and create choreography under the guidance of the teacher. Utilizing the techniques learned in classroom studies and from guest artists, the dancers present two concerts per year, performances of non-stop energy and creativity. Other performing opportunities include the musical and The Branson Dance Performance Ensemble. As a member of the National Dance Education Organization and California Dance Education Organization, the Branson dance program honors those students who achieve artistically and academically by induction into the National Honor Society for Dance Arts.

Note: If a student chooses to use a term of dance to fulfill a PE requirement, he/she must inform the instructor at the start of the class.

Dance I (*Lab requirement*) 3 units/full year

Dance is for everyone. This yearlong course teaches the fundamental ideas and techniques of dance with fun, energetic music, and an emphasis on athleticism. Students develop an understanding of body alignment while increasing strength, flexibility, co-ordination, and musicality. Students are introduced to hip-hop, jazz, modern, ethnic dance styles and basic ballet skills. No previous dance experience is necessary.

Dance II (*Lab requirement*) 3 units/full year

Prerequisite: By audition or approval of the instructor.

This yearlong course is for students with previous dance experience. Students are introduced to Bill Evans Laban-based modern dance technique, jazz and ballet technique, improvisation, and beginning choreography principles. Introduction to dance history, a review of vocabulary and anatomy, and attendance at professional level dance concerts serve as the written portion of this course.

Dance III (*Lab requirement*) 3 units/full year

Prerequisite: Dance I or II or approval of the instructor.

This yearlong course strengthens and challenges the intermediate dance student and builds on the concepts and skills learned in Dance I and II. The class will emphasize increased technical ability, more complex combinations, weight changes, level and floor patterns, use of momentum, use and understanding of classical and contemporary dance vocabulary, understanding of performance skills and the ability to choreograph dance phrases to music. Dance history and dance reviews of professional level dance companies serve as the written portion of this course.

Dance IV: Intermediate

(Lab requirement)

3 units/full year

Prerequisite: Dance II or III with approval of the instructor.

This yearlong course is for the intermediate-advanced dance student and emphasizes the Bill Evans Laban-based modern dance technique. Students will develop the ability to shape transitions, self-correct in various dance styles and techniques, collaborate and use improvisation as a choreographic method. The study of dance history, self-inquiry essays, and dance reviews of professional level dance companies serve as the written portion of this course.

Dance IV: Advanced

(Lab requirement)

3 units/full year

Prerequisite: Dance IV Intermediate or approval of the instructor.

This course is the most advanced dance course offered without extra-curricular performance requirements. Students continue to increase their understanding and ability to dance to a variety of complex rhythms, timings, and patterns with technical proficiency while relating to other dancers. They will also acquire the ability to choreograph an entire dance that has form, structure, and transitions using a wide range of choreographic methods. Self-inquiry essays, the study of contemporary choreographers, and dance reviews of professional level companies serve as the written portion of this course.

Dance Performance Ensemble

(Lab requirement)

3 units/full year

Prerequisite: By audition only.

This course is geared toward the advanced dancer who has an interest in extra-curricular performance opportunities (including experiences on and off campus) throughout the school year. Dance Performance is by audition only and has after school class and rehearsal requirements as scheduled by the teacher. The dance ensemble is a pre-professional dance company that explores the students' ability to communicate through the medium of dance. Along with the development of advanced performance and choreographic skills, dance students will be expected to develop individual styles and qualities in their dancing and are required to choreograph at least one work outside of their regularly scheduled class period. In addition, dancers acquire the skills needed to audition for a college dance program. Dance reviews of professional level dance companies serve as the written portion of this course.

NOTE: The Dance Performance Ensemble course has a variety of on and off campus commitments and students' attendance at these events will be included in the course grade.

Athletic Dance for Men

3 units/full year

Prerequisite: None

For grades 9 – 12

This yearlong course offers an introduction to dance training to develop strength, flexibility, co-ordination, and musicality. With an emphasis on athleticism and physicality, male students will learn popular dance styles, dance history, as well as improvisation and traditional techniques. This course provides an opportunity to dance in Branson's Body Talk and FAB dance concerts or create a video-based final project.

Athletic Dance for Men II/III

3 units/full year

Prerequisite: ADM, II or approval of instructor.

For grades 10 – 12

This yearlong course builds on the dance skills learned in Athletic Dance for Men. With an emphasis on athleticism and physicality, male students learn to execute more complex rhythms and patterns, retain more complex choreography and use improvisation as a choreographic method. This course provides an opportunity to dance in Branson's Body Talk and FAB dance concerts or create a video-based final project.

Instrumental and Choral Music

Music is a constant focus of energy and excitement at Branson. Student instrumentalists have the opportunity to participate in a variety of ensembles including various classical chamber music combinations, a full orchestra, intimate jazz combos, and a jazz big band. There are also learning and performance opportunities for students interested in rock. Many Branson instrumental ensembles have performed in high-level concerts at such places as the San Francisco Conservatory of Music, The White House, and The Fillmore Auditorium.

Branson also has four vocal ensembles. The Branson Chamber Singers have sung at the White House on four different occasions, and the boys' and girls' a cappella groups have sung on Main Street at Disneyland and produced a total of four CDs. The Branson Chorus studies and performs a wide range of works from Bach to Sondheim.

Branson musicians are showcased at three major concerts during the school year in addition to many ad hoc performances outside the school. The chamber ensembles, Chorus, Orchestra, and Chamber Singers are featured in our traditional Winter Concert performed in a major hall off campus. Major works for chorus and orchestra highlight the concert (Bernstein's *Chichester Psalms*, Vivaldi's *Gloria*, and Duke Ellington's *Sacred Pieces* are recent selections). The jazz ensembles and a cappella groups are featured in our popular Jazz Show, our rock musicians perform their own show in the spring at a local club, and all of our musical groups are prominently represented in our two-day Fine Arts at Branson Festival in the spring.

Chorus

3 units/full year

The chorus will study and perform selected vocal works of varied periods and styles and develop the techniques for good singing. Singers will be instructed in fundamentals such as pitch, rhythm, reading and sight singing. There will also be an academic component to the course that will seek to develop singers' knowledge of history, style and repertoire. The chorus will perform in the annual winter and spring concerts, and, as other opportunities arise, both on and off campus.

Chamber Singers Honors

(Lab requirement)

3 units/full year

Prerequisite: Admission by audition to be held in May.

Note: This class will make periodic use of a lab period.

This small performance group is for advanced singers who wish to explore challenging repertoire of various periods and styles and to investigate the mechanics of good vocal production. There will be an academic component to this course, which will consist of work on musicianship, sight singing and knowledge of history, style and repertoire. The Chamber Singers will combine with the Chorus for the annual concerts as well as perform extensively on their own for on and off campus events.

Music and Performance

3 units/full year

This course is designed for the student with an average instrumental background who would like to develop the skills and knowledge required for participation in the Jazz, Classical, or Rock Performance Seminars. Course content includes instruction in musicianship skills such as music reading, rhythmic training, theory, and ensemble techniques. The specific mix of instruction and assignments will be geared to the individual needs of the student. Instrumentalists will have the opportunity to rehearse with a small ensemble and prepare musical works for performance. All participating students will sing in the chorus for certain productions as determined by the music department. Because the focus of the class is on developing general musicianship and ensemble skills, not specific instrument instruction, all students should be studying with a private teacher. The Branson music faculty can assist the student in finding an appropriate teacher if needed.

Performance Seminar: Jazz

(Lab requirement)

3 units/full year

Prerequisite: Music and Performance or equivalent. By audition only. All students who take this course must take private instruction simultaneously. Woodwind players may be studying either saxophone or an appropriate double, e.g. flute, clarinet, oboe, bassoon.

Note: This class will make periodic use of a lab period.

This course is an opportunity for students to experience and develop the specialized knowledge, musicianship and instrumental skills required of jazz musicians. Ensembles range from small combos to a traditional big band. Students will be grouped and regrouped for specific purposes and/or according to common levels of interest and achievement. Rhythm, improvisation, and ensemble playing are equally important to all facets of the program. Music is selected primarily from the vast mainstream repertoire from the mid 20th century on. All students are expected to work on their own to maintain instrumental skills and learn the assigned music. Additional individualized assignments may be given to meet specific needs. Jazz students are expected to work towards meeting the college jazz ensemble audition requirements for entering freshmen.

Performance Seminar: Rock

(Lab requirement)

3 units/full year

Prerequisite: Music and Performance or equivalent. All students who take this course are strongly encouraged to take private instruction simultaneously.

Note: This class will make periodic use of a lab period.

This course creates a full rock band that, over the course of the year, masters two 90-minute repertoires (approximately 50 songs) drawn from the rock 'n' roll canon to perform in January and May as midterm and final exam concerts. Students will continue to develop expertise on their individual instruments as well as learn how to play in the context of a full band, with special emphasis on collaborative, close listening. In addition to weekly performance labs, students will also learn the history of rock music from 1930s blues through the present day, continue to master the principles of tonal harmony (with special focus on the classic chord and scale building blocks of rock music), and will learn to construct their own charts from recordings. Homework includes focused listening of canonical material as directed by the instructor, and nightly instrumental practice. This course is not designed for beginning players, and moves at a challenging, focused pace. Students who have not taken Music and Performance may be admitted only at the discretion of instructor or department chair.

Performance Seminar: Classical

(Lab requirement)

3 units/full year

Prerequisite: Music and Performance or equivalent. By audition only. All students who take this course must take private instruction simultaneously.

Note: This class will make periodic use of a lab period.

All students taking this course will play chamber music, ranging from duos to larger ensembles. They will also study relevant theory, structural analysis, and history. Selected students will have the opportunity to participate in The Winter Concert, FAB, and other performances both in school and in the community. Students will be grouped and regrouped for specific purposes and/or according to common levels of achievement. All students will participate in normal orchestral and big band projects as assigned.

Theatre Arts

Branson's theatre program strives to challenge students both artistically and intellectually so that they may become critical and creative thinkers while developing professional skills and attitudes. Each course is designed to nurture the student to develop stronger physical, vocal, and emotional expression, while gaining self-awareness and self-confidence. The spring Festival of Arts at Branson (FAB) festival culminates the year with a weekend of classic and contemporary plays by the theatre students, in collaboration with students from each of the other visual and performing arts.

There are many opportunities to perform at Branson: the fall musical, the Theatersports Competition, the Winter Festival play, the spring play, and at the Fine Arts at Branson festival. Branson has produced such varied Broadway musicals as *Into the Woods*, *Urinetown*, *Anything Goes*, and *The Drowsy Chaperone*. The cast of actors, singers and dancers work alongside an orchestra comprised of both professional musicians and Branson students. The spring play scripts range from *A Midsummer Night's Dream* to contemporary classics like A. R. Guery's *The Dining Room*, David Ives's *All in the Timing*, and Mary Zimmerman's *Metamorphoses*. Under the supervision of professional technical theatre artists, students help build and run all shows.

Beginning Acting: Improvisation 3 units/full year

This entry-level class introduces students to acting through improvisation. The class offers several opportunities for performance based on two schools of improvisatory theatre: Theatresports and Commedia dell'Arte. The course is designed for students interested in exploring Theatre as a means of personal development and expression as well as for those who wish to begin to study the craft of acting.

Intermediate Acting: Technique (Lab requirement) 3 units/full year

Prerequisite: Beginning Acting or approval of the instructor.

This course is designed for students with prior experience wishing to explore the different techniques of acting. The class will study such twentieth century masters as Stanislavski, Strasberg, Hagen, Adler, Meisner and Bogart. We will look at the history of acting from the turn of the 20th century until the present and explore the fundamental skills of text analysis and characterization. The class will culminate in the performance of a contemporary play at FAB.

Advanced Acting: Rehearsal (Lab requirement) 3 units/full year

Prerequisite: Intermediate Acting or approval of the instructor.

Advanced Acting is intended for students with extensive prior experience wishing to challenge themselves with a conservatory-style acting class. Course work will include textual analysis, development of the actor's body and voice, scansion, creating a character and working with the camera. Students will analyze and perform a Shakespearean monologue, and rehearse scenes from classic, modern, and contemporary plays. The class will focus on rehearsal technique and will culminate in the performance of an original play at FAB.

Acting Performance Honors

(Lab requirement)

3 units/full year

Prerequisite: Invitation of the instructor.

Acting Performance brings together all the techniques learned in Beginning, Intermediate, and Advanced Acting and applies them to performance. Members of this class form the core ensemble of the spring play. Members of the Acting Performance ensemble learn professional rehearsal techniques, work on audition material, and translate the skills they have acquired in the acting program to other disciplines. The class comes full circle and explores the most challenging style of improvisation – the long-form format. The class will culminate in a fully improvised one-act play at FAB.

Visual Arts

The visual arts program seeks to foster effective studio habits, collaboration, process, technique, understanding of context, as well as self-reflection that culminates in creative awareness and understanding. The curriculum and projects develop the creative process through active engagement, perseverance, individual expression and the ability to transform the abstract into the concrete.

**Survey of Visual Arts:
Introduction to Visual Culture,
Communication & Expression**
3 units/full year

This course is a pre-requisite to all intermediate visual arts classes.

Survey of Visual Arts puts a pen, a paintbrush, a camera and a hammer in a student's hand. This beginning course allows each student to experiment with a variety of media while developing his or her own answer to the question "What is art?" Students will explore and compare many styles--including the whimsy of Calder's circus, the compositions of Bresson's travels, and the emotional power of Matisse's line. Through a series of projects based on specific artistic themes and techniques, students will gain deeper insight into our visual culture and develop an individual creative voice as painter, sculptor and photographer. Students will also work in Digital Media. Students will explore the many possibilities of art-making while gaining the necessary fundamental practices of each discipline. Upon completion of the Survey of Visual Arts course, students may continue their visual arts studies in Intermediate Photography, Intermediate Drawing & Painting, or Intermediate Sculpture.

Intermediate Photography
3 units/full year

Prerequisite: Survey of Visual Arts and/or instructor permission.

Fall term will focus on conceptually based assignments that push students to think about the function of photography as an art form. At this level, students will have the opportunity to work with medium format cameras and experiment with print size. Winter term will focus on collaborative work with an eye towards interacting with the larger world. For the final project of the year, each student will work with the teacher to create an assignment that directly engages individual concerns and interests. Discussions, class work, projects, critiques, and technical skills are the main focus for Intermediate Photography.

Intermediate Drawing and Painting
3 units/full year

Prerequisite: Survey of Visual Arts and/or instructor.

Building upon the basic tenets of two-dimensional design and the aesthetic principles introduced in Survey of Visual Arts, students will further their study in the mediums of drawing, water color, acrylic painting, and printmaking. Students will be assigned a variety of related projects asking them to consider the broader question "What does it mean to think like an artist?" Along the way, students will further their technical ability and expand their aesthetic knowledge while developing a deeper sense of their own artistic voice. Projects will be based on contemporary approaches to traditional subjects including still life, landscape, and the figure. Projects will also help students further their understanding of the roles of abstraction, expression, and contemporary media as they work to communicate their intentions through visual means.

Intermediate Sculpture

3 units/full year

Prerequisite: Survey of Visual Arts and/or instructor permission.

By employing both traditional and new media, students expand and refine their understanding of what it means to think and work like a sculptor. Open-ended, studio-based projects allow students to become more fluent in the language of visual art: aesthetics, craftsmanship, and expression. The variety of projects will deepen artistic understanding as students employ digital tools (graphics software, laser cutter) and traditional tools (woodworking, clay, and mold-making) to create three-dimensional forms. Projects include: *Psychological Moment*, studying the human body and the emotional power of art; *Absurd Tool*, employing found objects; and *INSide/OUT*, utilizing multi media to create an immersive installation space.

Advanced Photography

3 units/full year

Prerequisite: Intermediate Photography and/or instructor permission.

This course challenges the serious student photographer to create a cohesive and articulate body of work. Primary concerns in this course are craftsmanship, aesthetics and concept. Projects are designed to engage in a dialogue with contemporary art while also addressing individual student concerns. Students will have the freedom to develop assignments under the guidance of the teacher. Students will also spend more time than at previous levels in the critique process in an attempt to be more articulate and constructive with their creative process. Students may also have the opportunity to engage in dialogue with advanced level peers outside of their discipline to further an articulate understanding of art.

Advanced Drawing and Painting

3 units/full year

Prerequisite: Intermediate Drawing and Painting and/or instructor.

Advanced Drawing and Painting is intended for the most dedicated students committed to further development of their own personal expression. Projects will become increasingly self-directed, requiring further independent study and development. After careful consideration and experimentation, each student will work to prepare her/his own artist's statement, which will guide the production of a personal portfolio of work. Daily sketchbook work will be required as a part of the year's final portfolio review.

Advanced Sculpture

3 units/full year

Prerequisite: Intermediate Sculpture

This class is designed to further refine the student’s artistic voice while developing the skills and knowledge associated with the medium of sculpture. Guided by the central questions “What does it mean to be an artist?” and “What is the artist’s role in our culture?” students of Advanced Sculpture will be afforded greater creative leeway as they tackle thematically based projects. Through the creation of a cohesive portfolio of work, students will assess their own artistic strengths, interests and tendencies in order to create a personal artist’s statement. Students will participate in the annual Advanced Student Show in December and work on a project along side our artist-in-residence. Students will be expected to develop a strong professional bond with fellow classmates, who will provide support and critical feedback.

Portfolio Review Honors

3 units/full year

Prerequisite: Seniors only. Advanced Visual Art & teacher recommendation.

Portfolio Review challenges the committed fourth-year visual arts student to step outside of the role of student and into the role of artist. Primary interests in this course are the development of individual creative voice, an understanding and deftness with conceptual concerns, and willingness to take risks and experiment. All projects are generated collaboratively between student and teacher using the throughline of “Who am I as an Artist?” As well as covering the creative endeavors of the artist, this course also provides extensive guidance in the more practical elements of working as an artist. In the fall term, students will learn to document their work in a precise and professional manner, polish the ever-evolving artist statement and use both of these elements to build an artist’s website. In winter and spring terms, students will construct a physical portfolio, dissect what writers have to say about art and artists, and learn how to write about visual art. Throughout the year, students will further their creative portfolio as well as engage in a dialogue with professional artists and peers outside of their discipline.

Art History AP

(Not offered in 2017-18)

3 units/full year

Prerequisite: Juniors and seniors only.

In recent years Art History has come to play an important role in the increasingly interdisciplinary study of the arts and humanities, and the internet age has made visual literacy an ever more crucial skill. This AP course will consider the significance of art and art making, asking critical questions that will allow us insight into human culture—its social and power structures, its devastating failures, and its inspiring endurance—and, ultimately, into our own experiences. The course will examine a variety of cultures, images, and media, from ancient civilizations to the present, and, thanks to a completely redesigned and much more flexible AP exam, it will also feature exciting opportunities for in-depth study. Students will learn to discuss and analyze visual material, hone their descriptive and critical writing skills, and further their research skills and their individual passions through interdisciplinary projects and opportunities to engage with works of art in local museums and galleries.

Design Thinking Workshop

1 unit

Offered: fall, winter and spring

Prerequisite: Juniors and seniors only. Must have two-year art requirement completed.

Are you curious about meaningful innovation and product design? This term-long course provides students with the opportunity to practice the Design Thinking process: understand, observe, define, ideate, prototype and test. Students will practice idea generation, collaboration and communication as they work in teams to solve design challenges. Through idea iterations and prototyping, students will strengthen habits of perseverance and discover the power of creative collaboration.

The English Department Curriculum

The English curriculum introduces students to the world of literary expression with its great potential for illuminating human experience. Its vertical structure is designed to develop in all students over four years the knowledge and skills needed to perform well on the Advanced Placement exams in both language and literature. As a result, every text in every class is part of a vertical AP curriculum, and the most demanding literary works appear in courses throughout the program. All courses develop students' attentiveness to language and meaning, capacity for self-expression in essay and narrative, and the ability to justify interpretations with reference to a text and its context.

English Course Sequence:

English I (Required grade 9 yearlong course)

English II (Required grade 10 yearlong course)

Six term-long courses (Required grade 11 & 12), three in junior year and three in senior year. Juniors and seniors choose six term-long courses from the American and Global strands of the program. Students must complete at least one term course from each of the program's two strands before spring of the senior year. Juniors must complete American Literature V: The Composing Process.

Students receive **AP standing in the junior** year by completing a yearlong sequence of Branson electives approved by the College Board including the Composing Process, by committing to course work in critical terminology, close reading, and written analysis, and by sitting in May for the Advanced Placement Exam in Language and Composition. Students who wish to sit for the AP Literature and Composition exam at the end of the senior year are encouraged to seek help from their English teachers.

English Department Homework Philosophy

In the English classroom we work collaboratively, sharing purposeful talk about literature and ideas and developing skills and understandings that will serve students as life-long learners. Homework assignments, on the other hand, focus on individual acts of reading and writing.

Reading is a skill that develops with practice, much like driving. Students need hours “at the wheel” to develop fluency with a variety of texts and tasks. Through regular practice at home, reading at their own pace, students develop independence as readers and the ability to animate characters, scenes, and voices in a text. Autopilot does not forge good practice. Rather, the critical element for successful reading is active engagement—observing, noting, connecting, and raising questions in response to an author’s views. Nightly reading then entails finding at least thirty minutes of quiet, focused time with a pen or pencil in hand. Above all reading is not a passive activity done as one is relaxing or falling asleep.

Writing, like reading, requires time and concentration. The English Department assigns essays of analysis or reflection or exercises in writing narrative or poetry. Teachers guide students in breaking down these varied writing tasks into manageable stages—brainstorming, gathering evidence, developing a thesis, forming an outline or structure, drafting, seeking critiques from others, revising, and finally proofing and polishing--over a series of classes and evenings. Teachers make time in class for collaboration through workshops and peer critiques and offer students opportunities to bring their ideas and drafts in for paper conferences. Finally, teachers specify resources students may consult for any given assignment and require accurate citation of all sources.

Students gain writing skills best by beginning tasks in a timely manner and setting aside thirty to forty minutes of focused time over two or three evenings, rather than postponing and struggling with a writing task late into a single evening. Procrastination is particularly harmful because it inhibits true engagement with the subject and fosters reliance on old writing strategies, bad habits, and “rules,” rather than development of new and original thinking.

English courses at a glance

Term-long Courses for Grades 11 and 12

Prerequisite for all courses: Completion of English I and English II.

**Term-Long Courses in:
The American Strand:**

American Literature I
 American Literature II
 American Literature III
 American Literature IV
 American Literature V

African-American Literature I
 African-American Literature II

Twentieth Century Literature II
 Twentieth Century Literature III
 Twentieth Century Literature IV

**Term-Long Courses in:
The Global Strand:**

British Literature I
 British Literature II
 British Literature III
 British Literature IV
 British Literature V

World Literature I
 World Literature II
 World Literature III

European Literature I
 European Literature II
 European Literature III

Fall Electives	Winter Electives	Spring Electives
African American Lit I	African American Lit II	
American Lit I American Lit V -- Composing	American Lit II American Lit IV American Lit V -- Composing	American Lit III American Lit IV American Lit V -- Composing
British Lit I British Lit IV	British Lit II	British Lit III British Lit V
European Lit I	European Lit II	European Lit III
Twentieth Century Lit II		Twentieth Century Lit II Twentieth Century Lit III Twentieth Century Lit IV
World Lit I	World Lit II	World Lit III

◇ With the exception of The Composing Process (American Literature V), most upper-division English electives are singletons. If student demand is high, we may run multiple sections of a course. English electives are open to juniors and seniors; students who aren't able to enroll in their first-choice electives during their junior year have a second chance to take these courses during their senior year.

English

Grade 9 English **English I**

3 units/full year

English I, a literature-based course, introduces first-year students to the demands of high school reading and writing. The course emphasizes the development of the active reading skills needed for high school work, and the development of proficiency in writing about reading. Readings familiarize students with genres, conventions, and concepts essential to understanding great works of the imagination. Readings are arranged thematically around stories of the individual as an outsider and as a member of a community and include *Ms. Marvel*, *The Odyssey*, *1984*, *Antigone*, *Macbeth*, selected poetry, and other short fiction. Summer reading is required.

Grade 10 English **English II**

3 units/full year

Prerequisite: English I

English II continues the development of students' reading and writing skills and the study of genres, themes, and concepts begun in the first year. Students strengthen their abilities to support, test, and complicate conclusions drawn from reading and discussion. Fall work introduces the theme of the dangers and rewards of self-assertion through readings in foundation works of Western literature including biblical stories common to both Jewish and Christian traditions and a Shakespeare play. Winter and spring work develops these themes as expressed in works by American writers such as Whitman, Dickinson, Douglass, MacLeish, Fitzgerald, Williams, Cisneros and Alexie. Summer reading is required.

Grade 11 English

Juniors select a fall, winter, and spring course from among the American and Global literature offerings below. These term-long courses require daily reading, active participation in discussion, and regular writing about the meaning and significance of major works. Juniors must take American Literature V, The Composing Process, as one segment of their junior program. Juniors who complete the Branson course sequence and take the exam receive AP standing for their junior year. Fall term courses require summer reading.

Grade 12 English

Seniors are required to select three of the term-long courses listed below. Students are expected not only to read well, but also to take a leading role in class discussion, to raise questions about authors' intentions and aesthetic choices, to make presentations, and to find significant topics to write about. Fall term courses require summer reading.

American Strand of English Electives

American Literature I Honors: Defining American Selves

1 unit
Offered: fall

This term-long course focuses on one of the common themes in American literature: defining the American self with particular attention to the role of Transcendentalism in American culture. The works studied deal with the struggle to be independent of society while maintaining its acceptance and respect. Texts include *Into the Wild*, *Their Eyes Were Watching God*, *Self-Reliance*, *Civil Disobedience*, *Bartleby the Scrivener*, "The Story of an Hour," and *The Scarlet Letter*. In addition to written texts, students consider paintings by Thomas Cole and other American landscape artists. The course develops students' writing skills through frequent compositions and regular study of grammar, usage, and vocabulary.

American Literature II Honors: Race and Space

1 unit
Offered: winter

This term-long course explores the construction of race in American culture in the seventy-five years following the Civil War. The texts focus on ways that individuals create, maintain, and protect unique racial and moral spaces for themselves and the conflicts inherent in doing so within a broader hegemonic framework. Students begin by briefly examining in texts both visual and literary two dominant visions for American society that emerge from the Civil War. The course continues with a study of Twain's *Adventures of Huckleberry Finn* and Ralph Ellison's *Invisible Man*. Throughout the course, students analyze and discuss poetry, music, and works of art by such figures as Paul Lawrence Dunbar, Langston Hughes, Aaron Douglas, and others. The course develops students' writing skills through frequent compositions and regular study of grammar, usage, and vocabulary.

American Literature III Honors: The Weight of History

1 unit
Offered: spring

This term-long course focuses on themes central to the changes in American society in the twentieth century, and examines the lasting and lingering effects of the past on the present and future, particularly the corruption and reformation of the family as the core of society. We consider the pressures of "larger" histories (social, racial, religious, etc.) upon individual lives, and individuals' varied attempts to make sense and meaning of these histories. Readings include David Bradley's *The Chaneyville Incident*, Julia Alvarez's *How the Garcia Girls Lost Their Accents*, a graphic memoir by Maira Kalman, and *Lone Star*, a film by John Sayles. The course develops students' writing skills through frequent compositions and regular study of grammar, usage, and vocabulary.

**American Literature IV Honors:
20th Century American Poetry: A
Tradition of Innovation and
Experimentation**

1 unit

Offered: winter & spring

This course, a survey of American poetry in the 20th century, exposes students to a full variety of styles that compose the American tradition. We will pay particular attention to innovation and experimentation within the tradition and read a wide array of voices. Poets will range from the Imagists and Harlem Renaissance poets of the early century, to the beats and language poets of the later half of the century. The course sharpens students' analytical reading and writing skills in relation to poetry, but will also provide a space for students to explore their own creative work. Though there will be shorter, more focused writing assignments throughout the course, it will culminate with a project requiring students to read one poet of their choosing widely and thoroughly. While the students' own creative work will play an important role in the course, the assessments are primarily analytical.

**American Literature V Honors:
The Composing Process**

1 unit

Offered: fall, winter & spring

American Literature V: The Composing Process is a writing course required of all juniors. With almost daily in-class writing and coaching from their teachers, students work on: thinking reflectively, finding a subject, developing and expressing ideas, supporting with detail, using language effectively, applying conventions, and developing a voice. Through discussion and critiques students develop a conscious sense of their own "composing process" and learn to assess the strengths and weaknesses of their own and others' writing.

The course calls attention to key genres and terms covered by the Advanced Placement Exam in Language and Composition.

**African-American Literature I
Honors: The Autobiographical
Form**

1 unit

Offered: fall

This course introduces autobiography as the genesis of the African-American literary canon. Building upon the English II study of Frederick Douglass, the course examines how the tensions between design and truth, text and document, memory and narrative inform the creation of works that serve both literary and historical purpose. Starting with *Incidents in the Life of a Slave Girl*, the course traces the growth of the form through Washington, DuBois and *The Autobiography of Malcolm X*. It closes with a reading of Toni Morrison's *Song of Solomon* that reveals how the expectations of autobiography are also present in African-American fiction. The course develops students' writing skills through frequent composition and regular study of grammar, usage, and vocabulary.

**African-American Literature II
Honors: Inter-racialism**

1 unit

Offered: winter

This term focuses on issues illuminated by lives lived close to the national color-line. The course looks at personal and social definitions of race, and also tackles class issues and issues of intra-racial prejudice (both black and white). The readings cover topics such as American legal history, race and pop culture, interracial marriages and friendships, mixed-race individuals and families, and racial “passing.” Texts range from tragic to comic: Charles Chesnutt's short story collections *The Conjure Tales* and *The Wife of His Youth*, Nella Larsen's *Passing*, Henry Louis Gates' *The Passing of Anatole Broyard*, and Dorothy West's *The Wedding*. The course concludes with a close look at the history of race relations in Los Angeles through Anna Devere Smith's *Twilight*, the Academy-Award winning documentary, *OJ: Made in America*, and a student-designed final project. The course develops students' writing skills through frequent composition and regular study of grammar, usage, and vocabulary.

**Twentieth Century Literature II
Honors: The Art of the Short Story**

1 unit

Offered: fall, spring

Dramatic tension, setting, cause and effect, surprise, compelling characters—these are only some of the key ingredients that writers have used to create effective and memorable fiction. Throughout the term, students read short stories and discuss the various elements that go into crafting a short story. Discussions will help students extract devices, narrative tools, and structural possibilities to incorporate into their own stories as well as develop the necessary vocabulary for critiquing literature. A portion of the class will be dedicated to peer-editing student fiction and finding solutions that help each writer develop his or her story to its completion. Students learn to read critically through the lens of a writer and to compose short stories of their own. The course develops students' writing skills through frequent composition and regular study of grammar, usage, and vocabulary.

**Twentieth Century Literature III
Honors: Reframing the Literary-visual Narrative**

1 unit

Offered: spring

Long derided as being neither literature nor art, the medium of comics and the graphic novel, with its complex juxtapositions of word and image, is increasingly esteemed by modern scholars as a sophisticated mode of communication and expression. This course will simultaneously explore the aesthetic and historical parameters of the medium as well as the unique ability of this medium to express the experience of the outsider, and it will be necessarily interdisciplinary in its scope. We will consider the flexibility of the medium by looking broadly at its form -- superheroes, satire, autobiography -- as well as experimental and underground iterations and its crossover with the medium of film. Readings may include two longer novels by Art Spiegelman and Alison Bechdel, and Gene Yang, and many shorter works and excerpts by comic and graphic artists. Students will learn to analyze and deconstruct visual images and narratives in conjunction with text through analytical writing and discussion.

Twentieth Century Literature IV
Honors: Opportunities and
Anxieties of Science

1 unit

Offered: spring

The 20th century's groundbreaking and life changing scientific advances, like the ability to harness the atom, manipulation of genes, space travel, and the internet, have created benefits-but also raised a host of new anxieties as people come to terms with the potential dangers and abuses of new technologies. As a genre, Science Fiction provides some of the most reflective, provocative, and critical assessments of society's hopes and fears regarding scientific advances. This course will study seminal texts in Science Fiction writing and examine the social, moral, and political questions the texts raise. A film viewing and online collaboration examining "sci-fi" themes in popular culture will supplement our texts. Student essays will require close analysis of texts and attention to matters of grammar and style. Works may include *Brave New World*, *The Left Hand of Darkness*, *The Windup Girl*, the film *Dr. Strangelove*, and additional texts chosen by the class for group study.

Global Strand of English Electives

British Literature I Honors: Colonialism & Post-Colonialism

1 unit
Offered: fall

In British Literature I, we will explore texts that highlight and critique the notion of colonialism, especially the immediate and subsequent effects of colonial expansion and occupation from the 17th century onwards. Among other topics, we will consider what is meant by the concept of “civilization,” and how differing perspectives alter the definition of “civilization.” In reading predominantly white, British authors, we will attempt as much as possible to read “against the grain,” analyzing and critiquing moments when the authors make assumptions and generalizations with which we can choose to agree or disagree. Finally, we will attempt to understand colonialism from the point of view of “the colonized” and analyze how this experience differs from the experience of the occupying force. Readings include *Heart of Darkness*, Shakespeare's *The Tempest*, a short story, and a viewing of the film *Dirty Pretty Thing*.

British Literature II Honors: The Space Between: Navigating Identity within a Liminal Space

1 unit
Offered: winter

Starting with a sense of how a text can explore the tension between socially constructed binary oppositions, students will study how characters negotiate a liminal space between identities through storytelling, interpersonal relationships, and questioning the value of constructing one’s selfhood. Readings will include *Hamlet*, Kazuo Ishiguro’s *The Remains of the Day*, and Ian McEwan’s *Atonement*. Ultimately students’ knowledge of Shakespeare’s most famous creation becomes a tool in their understanding of the human psyche. Essays require close analysis of reading and attention to matters of grammar and style. Students also lead class presentations and discussions.

British Literature III Honors: Love and Society

1 unit
Offered: spring

The focus of the course is one of the oldest themes in literature: love. Using Emily Dickinson’s poem, “That Love is all there is,/ Is all we know of Love” as one lens through which to view love’s relationship to the human condition, we will examine whether love can (or should) survive human conventions – and whether love really is all there is. Readings will include E.M. Forster's *Maurice*, and Jane Austen's *Pride and Prejudice*, as well as incorporate art and film to augment our study of characters who find—or fail to find—love. This course develops students' writing skills through frequent compositions and regular study of grammar, usage, and vocabulary. Students also lead class presentations and discussions.

**British Literature IV Honors:
Poetry**

1 unit

Offered: fall

British Literature IV introduces students to British and other English-language poetry through a structured study of classic and contemporary poets. Students learn to ask questions of a poem, to answer those questions, to recognize poetic forms and devices, and to read poetry with skill and confidence. Units chronologically follow selections of poems grouped around common themes, including love, death, nature and the metaphysical. In addition to writing analytical essays that require close textual analysis and attention to poetic elements such as form, syntax, and language, students will have opportunities to express themselves creatively by writing their own poetry.

**British Literature V Honors:
Shakespeare's Comedies**

1 unit

Offered: spring

In this course students study Shakespeare's comedies, focusing on the nature of comedy, Shakespeare's obsession with the outsider, tensions between order and chaos, love and madness, and marriage and political unrest. Plays studied include: *A Midsummer Night's Dream*, *Measure For Measure* (or an equivalent "problem" comedy), *Much Ado About Nothing*, and *Twelfth Night*. Attention to matters of grammar, diction, and style is required. Students can also expect to perform scenes from the plays on a regular basis.

**World Literature I Honors: The
Forces of Change**

1 unit

Offered: fall

The works studied focus on points of major cultural shifts and the impact of those shifts on the individual. Students will consider characters who find themselves outside their comfort zone, and in unfamiliar territory, emotionally and physically. How to navigate, to adapt, or to master that new environment are questions important for their survival. We will consider the choices they make and what drives those choices. Works include: Chinua Achebe's *No Longer at Ease*, V.S. Naipaul's *A Bend in the River*, and Zeina Abirached's *A Game for Swallows*. Writings require analysis, reflection, and attention to matters of grammar and style.

**World Literature II Honors:
Unraveling the Self**

1 unit

Offered: winter

In this course students explore the formation of identity through family, culture, and politics. We will examine the role of each of these forces both independently and together in shaping characters' approach to the world and understanding of self. Readings will include Gabriel Garcia Marquez's *Chronicle of a Death Foretold*, Earl Lovelace's *The Wine of Astonishment*, and Fabio Moon and Gabriel Ba's *Two Brothers*. Essay assignments require close reading and attention to matters of grammar and style.

**World Literature III Honors:
Facing the Past, Forming the Future**

1 unit

Offered: spring

In this course students consider the forces which shape our lives, and the unintended consequences of our choices. In each of the readings the main character is looking back, trying to understand how s/he has arrived at this point in life and decide how to move forward. Works include Dai Sijie's *Balzac and the Little Chinese Seamstress*, Kazuo Ishiguro's *A Pale View of Hills*, and Arundhati Roy's *The God of Small Things*. Essay assignments require close reading and attention to matters of grammar and style.

**European Literature I Honors:
Man's Fall and Redemption**

1 unit

Offered: fall

Students will examine man's moral responsibility through the eyes of Milton in *Paradise Lost*, living actual life in *The Decameron*, and life after death in *The Inferno*. While we will examine each work for its intrinsic literary merit, we will also consider those aspects of the works which address the particular issues of their time or timeless issues in a particular way. Students are expected to be committed and eager readers. Essays require close reading and attention to matters of grammar and style.

**European Literature II Honors:
The Soul's Dream**

1 unit

Offered: winter

With the nineteenth century the European novel turned from stories in which the hero sets forth on a journey across a vast open space to stories of interior journeys of the soul, particularly the journeys of dreamers and searchers resisting the social boundaries around them. Writers like Flaubert and Dostoyevsky took as their protagonists the adulteress and the murderer, and in the fictional world allowed readers on the one hand to judge, condemn, and cast out the offender, and on the other to understand, forgive, and accommodate him or her. Novels like *Madame Bovary* and *Crime and Punishment* ask readers to look into our hearts and defer judgment until we come to understanding. Essays require close reading and attention to matters of grammar and style.

**European Literature III Honors:
Existentialist Literature**

1 unit

Offered: spring

This course focuses on the development, tenets, and consequences of existentialism through its presentation in literature. This course takes existentialism's central claim—that existence precedes essence, or that actions define the self - and examines the ways in which this position has been supported and critiqued. Students start by reading texts that seek to define the existentialist position, move on to readings that foreshadow the development of the philosophy, and end with texts that reexamine or revise the position. Texts include *No Exit*, *The Stranger*, *The Unbearable Lightness of Being*, and selected essays. Essays require close reading and attention to matters of grammar and style.

The History Department Curriculum

The History Department offers a diverse curriculum that challenges students to engage the past critically in order better to understand and affect the world we live in today. Through a sequenced program of integrated skill building, students are encouraged to formulate their own questions about the past, analyze primary and secondary sources, design research plans and write papers from a variety of perspectives. The goal is to deepen students’ understanding of how the world has come to be what it is and to sharpen their sense of responsibility as global citizens. The History Department believes that the study of the past fosters the compassion, humility and moral vision that Branson strives to impart.

Students at Branson must fulfill a three-year history requirement. In grade 9, all students take Roots of Civilization, a yearlong introduction to world civilizations that develops basic historical skills and knowledge. This course is followed by Modern World History Honors in grade 10. Students complete the third year requirement by taking United States History Honors.

History Course Sequence

Students at Branson fulfill a three-year history requirement.

Roots of Civilization (Required grade 9 yearlong course)

Modern World History Honors (Required grade 10 yearlong course)

United States History Honors (Required grade 11 yearlong course)

Senior Seminar (Electives in which students may take in Grade 12)

Senior Seminar Electives

STRAND	FALL ELECTIVES	WINTER ELECTIVES	SPRING ELECTIVES
Historical Survival Stories	The Constitution and its Controversies*	History of Hip-Hop Culture*	History of the English Language*
Choices and Conflicts	History of the Modern Middle East	Issues in Islam*	Introduction to Ethics
Culture and History of East Asia	History of Modern China	Screening Modern China Cultural Revolution in Literature and Film	Modern Asia Research Colloquium*
Economics	Principles of Microeconomics	Principles of Macroeconomics	Current Topics in Economics
Dictatorships and Democracies	20 th -Century Latin America Dictatorships and Democracies*	Russia, from Peter to Putin*	World War II*
			Social Entrepreneurship

* - Not UC approved.

History Department Homework Philosophy

The written source is the essential tool of any historian, and thus the Branson History Department strives to imbue a deep appreciation for historical texts in each of our students. A strong command of critical reading provides a factual foundation for the student to participate in our collective analysis of historical events, trends, personalities and systems of power during each history class meeting. Our homework philosophy stems from this fundamental belief in the power of the source for historians and for the student of history and the importance of document analysis as one of the key elements needed to create a robust classroom discussion. When assigning reading in preparation for class, we encourage our students to actively read and annotate the text, to seek out thematic trends and connections to past readings, and to retain a critical skepticism of any source that might drift from the author's perspective into polemics.

Invariably students will be required to do some reading prior to the meeting of a history class. While this reading is most often in the form of a textbook in our freshman, sophomore and junior survey classes or more detailed monographs in our senior seminars, the reading might also be a primary source or scholarly article. Regardless, students are expected to come to class with a working knowledge of the assigned reading. Members of the History Department assess this knowledge in class using a number of different techniques, but all strive to ensure that each student masters the content of the reading on a nightly basis. Some techniques for assessment include collecting a written summary of the reading, requiring notes in the margins of the text, occasionally presenting pop quizzes on the material or asking that students to complete a series of analytical questions based on the reading.

While our homework philosophy focuses most consistently on the importance of critical reading in preparation for discussion, the History Department also requires students to complete written assignments outside of class. Occasionally, members of the department might require minor assignments such as completing data charts or discussion questions, but the most consistent written homework assignment is the analytical essay. The History Department strives to assign essays that can be tackled over a series of evenings, thus allowing the opportunity for in-class discussion and reflection throughout the course of the writing process. We believe that, like critical reading, analytical writing is best done carefully and deliberately, and thus we strongly encourage our students to manage their time outside of class to the best of their ability. It is through deliberate, focused effort and careful use of time that students best prepare for class discussions and generate the most thoughtful written work.

Grade 9 History

World I: Roots of Civilization
3 units/full year

This course is an introduction to the discipline of history. Roots examines a number of civilizations that continue to shape our lives in profound ways. We begin with the Ancient Near East and investigate the civilizations of China, Europe, India, Africa, Southwest Asia, and Mesoamerica through the 15th century. The questions we consider include the following: What causes civilizations to rise and fall? Why do some societies remain stable over thousands of years while others change rapidly? Who maintains power and why? What accounts for the development of different religions and value systems? In addition to these core questions, the course addresses themes of comparative historical interest, including forms of art and literature, patterns of cultural interaction, influence of geography, social diversity, and the roles of economy and technology. In our examination of these themes, students will learn to formulate meaningful historical questions, distinguish between primary and secondary sources, interpret primary sources critically and develop the skills necessary to complete a variety of historical research projects during the year.

Grade 10 History

World II: Modern World History Honors
3 units/full year

This course provides a study of the world from around 1500 (Age of Conquest) to the present. The course will introduce students to patterns of development in the world's major civilizations and the consequences of the interactions among them. Topics include: European colonialism and its global consequences, revolutionary movements of the modern era, modern ideologies and their historical roots (Enlightenment, Nationalism, Capitalism, Romanticism, Communism, Imperialism), and the modern Middle East. Themes of the course include cultural and intellectual trends, developments of political culture and organization, the impact of technology, and systems of social and gender structure.

Grade 11 History

United States History Honors
3 units/full year

This course, a comprehensive survey of American history, introduces students to the political, economic, social, intellectual, diplomatic, and cultural developments that have led to the creation of a modern democratic society. Stretching from the study of the earliest European visits to the New World and the first colonial settlements to an examination of Cold War policies and the Reagan Revolution, the course emphasizes the analysis of primary documents and frequent writing of analytic essays. Through class discussions, extensive primary and secondary readings, and the writing of historical essays, students master the ability to communicate their ideas clearly and effectively, to think critically, and to interpret and analyze issues fundamental to an understanding of the American past. Texts include Eric Foner, *Give me Liberty*.

Grade 12 History Elective Courses

Historical Survival Stories: This strand explores the historical arcs of significant literary, linguistic, and cultural institutions that have had both national and international significance. The historical foci of these courses also share common historical trajectories: from uncertain regional importance (or tenuous permanence) to massive, world-historical significance.

The Constitution and its Controversies

1 unit
Offered: fall

Upon the conclusion of the Philadelphia Convention of 1787, a woman on the street supposedly asked Benjamin Franklin, “What have you given us?” Franklin’s reply: “A republic, if you can keep it.” Franklin’s statement suggests that the durability and feasibility of the American Constitution were anything but the surety we assume today. This seminar will begin with a study the colonial/revolutionary roots of the Constitution and a careful examination of its language and its significance. The course will closely examine the federal system of checks and balances. Finally, the class will consider exactly what constitutes a constitutional controversy and examine a variety of forms, including deficiencies and blind spots in the original Constitution. Some of these issues the Founders considered partially or insufficiently; others were unimaginable to them at the time: race and equality, gender and equality, political parties, weapons and drugs, voting rights, corporate power and labor relations, intellectual property, and privacy. Ultimately, the course uses the language of the Constitution as a particular literary lens to examine American history, government, and culture.

History of Hip-Hop Culture

1 unit
Offered: winter

This seminar covers the landscape and evolution of hip-hop culture over the span of four decades, as it moved from an urban informal counterculture to a multi-billion dollar industry and globally transformative cultural movement. The class will address the various socio-economic, political, artistic, and cultural antecedents that gave birth to the movement in its particular time and place (mid-1970s New York City), then trace and analyze its viral expansion as it spread nationally and globally, assuming various distinct forms and expressions. As the course intends to survey the breadth of hip-hop culture, it will be interdisciplinary in nature, blending social and political history with cultural anthropology and demography, film study, poetics, and basic introductions to the formal elements of hip-hop’s “pillars”: DJ-ing/beat-making, rapping & poetics, graffiti/visual art, dance, and fashion. The course will consider a number of the hot-button issues pertaining to race, class, gender, language, and sexuality that have attended hip-hop’s spread and commercialization. In the final weeks of the course, students will collaborate with researchers from the University of Colorado’s laboratory on Race & Popular Culture and converse with pioneering scholars of hip-hop studies to explore recent trends in the academic study of hip-hop. Ultimately, the course intends to convey an understanding and appreciation of the causes, course, and consequences of hip-hop’s trajectory as an artistic movement that has transformed global culture.

History of the English Language

1 unit
Offered: spring

History of the English Language traces the origins and development of English, from its fifth century vernacular origins through the beginning of its recorded life in the ninth century and up to the present day. Above all, we will immerse ourselves in the various *whys* and *hows* of the English language’s movement from a demeaned language considered sub-literary to the predominant bridge language of our time, with over two billion people being fluent, functional, or studying speakers. Along the way, the course will consider cycles of mutual causation, as the English language was influenced by, and subsequently influenced, a number of factors, including: military history, politics and diplomacy, demographic (race, gender, class) shifts, economic and technological changes, and global expansion. Students will also engage in a focused self-study of their own use of English and other languages. Through historical, contemporary, and personal study, the course intends to show that the significance of this language that many English speakers take for granted is in reality the product of a number of fascinating events and trends.

Choices and Conflicts: This strand of elective courses looks at challenges and ethical dilemmas in the contemporary world through lenses both personal and political.

History of the Modern Middle East

1 unit
Offered: fall

This course looks at the recent conflicts in the Middle East—the war in Syria, the Israeli/Palestinian conflict, the aftermath of the Arab Spring, and the conflict between reformers and hard-liners in Iran—through both historical and ethical lenses. We will start with the world in 1945 and the way in which the process of decolonization in the Middle East has shaped current conflicts, then look in more detail at the last two decades in the region, moving back and forth between historical questions (what are the roots of this problem?) and contemporary political ones (what can the actors in this conflict do now? what should they do?).

Issues in Islam

1 unit
Offered: winter

Who are Muslims and what do they believe? Does Islam oppress women? Does it require its adherents to wage war or make peace? Do Muslims want to impose Sharia law on the world? These days, the news seems full of competing claims about Islam. This course is intended to give students a deeper background to these conflicts and provide them with enough information to make up their own minds about the people behind the headlines. We will begin with a brief overview of Islam’s core beliefs and an exploration of the diversity of the Muslim community today, then focus on the following issues: spirituality, Sufism, and the changing role of ritual; authority, law, and the Sunni-Shia split; the role of women in Islam; and war, peace, struggle and jihad. We will look at each topic within a historical framework, exploring the role of context and events in shaping Islamic teachings, and then examine a range of contemporary voices from scholars and the Muslim community to understand the results of those historical processes and their implications for the practice of Islam today.

Introduction to Ethics

1 unit
Offered: spring

How do I live a happy, meaningful, “good” life? Sages in Eastern and Western traditions hold that the “good life” is not necessarily the easy life, but the one lived well, according to ethical principles. In this course, students will think hard about this assertion, and consider some of the most fascinating – and challenging – issues of the human condition. What makes a dilemma an *ethical* dilemma? Do consequences or intention matter most when deciding how to act? Is it more important to *act* ethically, or to *be* the sort of person who makes ethical choices? Are ethical values relative, or are there some truly universal values? Is there a relation between our happiness and the ethical values we hold? Students will study the ideas of the great writers in philosophical ethics such as Plato, Aristotle, Kant, and Mill. Students will apply these ideas to ethical dilemmas facing our society today. The goal is to become more sensitive to the moral aspects of our every day life and develop the critical thinking skills and vocabulary to address them.

Culture and History of East Asia: This strand equips students with a deep understanding of China and Modern Asia. Students will explore the history and the culture of China through the study of the history, film, and literature.

History of Modern China

1 unit

Offered: fall

In this course students will examine China's dramatic 20th century transformation and its changing role in the world. The course will begin with a brief review of modern Chinese history starting with the Qing dynasty and its dissolution in 1911. The course will quickly move to 20th century China, studying the communist takeover in 1949, the Mao era, and post-Mao to the present (From Mao to Now!). Students will examine the political, economic and social policies that have shaped this communist country that is increasingly capitalist. The course address the effects of China's rapid growth on the environment, urban and rural development (the Tri-Agri), human rights, and international relations. Ultimately, the goal is to gain a greater understanding of China today through the lens of her modern history.

**Screening Modern China -
Cultural Revolution in
Literature & Film**

1 unit

Offered: winter

In this course students will study the decade-long experiment known as the Great Proletariat Cultural Revolution in China. We will read selected examples of Chinese literature and screen several films to explore a variety of perspectives on Mao's Cultural Revolution. The course will focus on studying both the historical events and their expression through memoir and film. The memoirs and films were produced to reflect on a period of unprecedented upheaval that itself has been a battleground for political, cultural, and aesthetic issues. Students will approach these works in their historical context and ask what they can tell us about the experience of living through political and social change.

**Modern Asia Research
Colloquium**

1 unit

Offered: spring

In this course, students will explore some aspect of Modern Asia that particularly interests them. Topics will be drawn from the 20th Century to the current day and from China, Japan, Taiwan, Korea (North or South), India, Nepal or Sri Lanka. Each topic must have a historical dimension to it—students will explore the historical antecedents of a current issue or event or topic or reflect on a cultural change over time—and resources on the topic must be available. The course will take students through the steps in the process of researching and writing, following specific guidelines. This course will provide a forum for students to pursue historical topics of passionate interest in depth and learn valuable historical skills as they produce essays that reflect on issues in Modern Asia.

Introduction to Economics: This strand looks broadly at economic principles and problems with an eye to current applications in the world.

Principles of Microeconomics

1 unit

Prerequisite: Successful completion of Algebra II
Offered: fall

Microeconomics is the study of how individuals and societies choose to use the scarce resources that nature and previous generations have provided. While studying different economic models, we'll answer core questions. What are these scarce resources and how are they distributed? What is a monopoly? Can monopolies charge any price they want for their products? What is game theory? How does it play a role in economic decision making? Students will be expected to participate actively in class discussions, apply qualitative and quantitative reasoning, and think critically.

Principles of Macroeconomics

1 unit

Prerequisite: Successful completion of Microeconomics
Offered: winter

Macroeconomics is the study of how countries function from an economic perspective. This course will explore the role of the Federal Government and the Federal Reserve in affecting unemployment, inflation, interest rates, national debt and the global economy. How is a federal budget created? How are tax and spending decisions made on a federal level? Should we care about inflation and unemployment? What is the debt ceiling and what role does it play in the economy? Students will be expected to participate actively in class discussions, apply qualitative and quantitative reasoning, and think critically.

Current Topics in Economics

1 unit

Prerequisite: Successful completion of Microeconomics and Macroeconomics
Offered: spring

Having studied microeconomics and macroeconomics as prerequisites, students will apply these concepts to both actual and simulated economic situations. Group projects as well as an individual project of the topic of their choice will be the centerpieces of this course. The intent of the course is to challenge students' thinking about both economics and the interrelationship between economics and politics.

Social Entrepreneurship

1 unit

Offered: spring

This interdisciplinary trimester course will explore how businesses create social change for the common good, how entrepreneurial thinking and behavior solve global problems, and what makes entrepreneurs and their ventures most effective. Students will investigate and participate in the rapidly emerging field of social entrepreneurship. Through hands-on exploration, research, meetings with local entrepreneurs, guest speakers, and case studies, students will build business plans and create an enterprise that makes a positive difference in our community and in the world. To connect directly with our local Bay Area community, student business plans will address issues of *Poverty Alleviation*, *Environmental Remediation*, *Public Health Improvement*, *Education*, *Arts and Community Building*. The course will culminate in a final “Pitch Competition” to a panel of local entrepreneurs.

Dictatorships and Democracies: These courses examine questions of democracy and dictatorship through three lenses: the Latin American political crises in the post colonial world, the tendency in Russian history to favor autocratic rule, and the military and ideological crisis of World War II.

20th- century Latin American Dictatorships and Democracies
1 unit
Offered: fall

Why, during the 20th century, did Latin American societies experience a cascade of dictatorships and human rights abuses? What explains the shift from burgeoning democratic movements in the early postcolonial era to repressive, radical, and totalitarian control in mid to late 20th centuries? While the course will begin with an examination of the 19th century independence movements, the bulk of the course will be devoted to 20th century crises in Latin America, beginning with the Mexican Revolution of 1910-20 and ending with an exploration of the aftermath of the Brazilian military dictatorship. The course will ask students to closely examine the narratives of several dictatorships and accompanying resistances movements, and will culminate in students completing an original research paper on the dictatorship of their choosing. The goal of the course is to provide students with both a deepening understanding and appreciation of Latin American societies and cultures and to place Latin American history and politics in a prominent global position.

Russia, from Peter to Putin
1 unit
Offered: winter

What better time to study frigid and rigid Russian political systems than in the winter? We will be strapping on our winter boots and marching through the various unforgiving revolutionary movements from the imperial Romanov period through the present day attempts to reassert autocratic control by Vladimir Putin. The course will briefly look at the Romanov consolidation of Russia, and swiftly move to the imperial despotic control of Peter the Great and Catherine the Great. This will provide early examples of the tensions between democratic movements and autocratic control that face the Russian people through the twentieth century. A study of the constitutional and industrial reforms of the mid 19th century, the reactionary movements taken by the Romanov government, the Russian Revolution will provide a base for our more lengthy examination of Stalin's regime. A major theme will be the cycle of reform and reaction that marked 20th century Russia. The course will culminate in an examination of Putin's regime in light of Russian history from the 19th century onward. The goal of the course is to push students' to look for the historical antecedents of our current world and to continue honing independent research skills.

World War II
1 unit
Offered: spring

This course will tackle questions of the tensions between democratic and dictatorial movements at a single point in time. The course will cover the chronology of the war, the military actions taken, the war at home, but will return frequently to the reasons and rationales behind the war. We will be looking closely at pieces of political propaganda published by various sides of the conflict, asking what foundational beliefs grounded the conflict and how those beliefs shaped the course of the war. The course will culminate in a research project around two wartime policies and their ideological bases.

The Language Department Curriculum

The Language Department has as its main goal the development of responsible and committed global citizens. Accelerating growth in technology is making the world ever smaller and enabling expanding connections between people and communities around the planet. Our goal is to develop our students' capacities to their fullest so that they can make the most of the technology available to them in order to communicate meaningfully across communities and cultures, and to do so ultimately in the service of positive change.

As we understand it, global citizens not only intellectually comprehend and appreciate a variety of cultural perspectives but are fundamentally committed to being present to and engaging in communities other than their own. Through the study of a new language and of the culture(s) of the countries where the language is spoken, students are able to look at the world and the social and historical experiences of others through different and particular lenses. Such an exercise in consistently immersing themselves in different perspectives builds a mental, emotional and psychological dexterity and openness that allows students to see themselves as part of a greater whole, in which they understand that they always exist in relation to others and never in isolation. Out of this grounded understanding of self as embedded in a larger whole flow the abilities to listen deeply and to feel empathy, compassion, and ultimately a sense of responsibility and a desire to act on that sense.

We believe that linguistic and cultural fluency are essential preconditions for becoming responsible and committed global citizens. To achieve the desired level of fluency, we work with our students on the four basic language skills: reading, writing, speaking and listening. In our classrooms, we communicate only in the target language, and whenever possible, we enhance this linguistically rich classroom environment with the immersive experiences of international travel and connection with local communities. At the end of our program, students will feel confident communicating with native speakers both orally and in writing, reading literature and other authentic texts such as newspapers and magazine articles in the target language, and interpreting a culture different from their own through the variegated lenses of the arts, literature, history, politics and geography of the regions where the language is spoken.

Requirements

Students can enter the language program as novices and, with conscientious study, enroll in three or four years of their language of choice. For those taking Spanish, Italian and Mandarin, the fourth year includes the AP Language exam. Entering students who have previously studied a language may take a placement test in the spring in order to be placed in the appropriate level of the language. Although the language requirement can be satisfied by completing three years of one language or two years of two different languages, it is highly recommended that a student study four years of one language in order to receive the full benefit of the program.

Language Course Sequence

Nine units of one language or six units in each of two languages are required for graduation. The language department strongly recommends that a student study four years of one language in order to receive the full benefit of the program.

Italian I	Latin I	Mandarin I	Spanish I	Spanish for Native and Heritage Speakers
Italian II	Latin II	Mandarin II	Spanish II	Spanish for Native and Heritage Speakers Advanced
Italian III	Latin III	Mandarin III	Spanish III Honors	Spanish for Native and Heritage Speakers III: AP Spanish Language and Culture
AP Italian Language and Culture	Latin IV Honors	AP Chinese Language and Culture	AP Spanish Language and Culture	Spanish for Native and Heritage Speakers IV
		Mandarin V (not offered in 2017-18)	Spanish V	

◇ All language courses, with the exception of the Spanish courses, are singletons.

Language Department Homework Philosophy

The Language Department believes that learning a foreign language is a continuous process that requires dedication and daily practice. The cumulative nature of our academic subject matter and the need to master four fundamental skills (speaking, listening, writing and reading) demand sustained effort both inside and outside the classroom.

We assign up to approximately 30 minutes of daily homework in Levels I and II so that students can reinforce what they have learned in class. Our homework aims to achieve the following goals in the four languages we offer (Italian, Latin, Mandarin and Spanish).

- Memorization of vocabulary
- Correct use of verb tenses
- Understanding of sentence structure in the target language
- Reinforcement of reading and writing skills
- Providing the necessary time students need to process the information they have learned in the classroom

The Department assigns a combination of exercises that range from drills aimed at memorizing vocabulary and grammar to free writing, where students need to combine their basic language skills with their creativity. We also assign short readings and subsequent questions that check for understanding. Taking into account the wide array of reading speeds among students in a class, it is more efficient to assign these kinds of exercises for homework in order to allow students to work at their own pace without adding the pressure of a timed class activity.

In Levels III and IV we assign up to approximately 30-40 minutes of daily homework. The goal continues to be to improve the four basic language skills. In these two levels, homework is entirely related to class preparation. Students work on readings, “thought questions” or do research about a particular topic. Their preparation and acquired knowledge of the topic will make them feel confident to participate actively in our class discussions. For those students who may not be as talkative as others in class, these kinds of assignments are an excellent opportunity to process the material at their own pace and feel better about self-expression. Other assignments are designed to help students organize and prepare for an upcoming longer assessment by breaking the assignment up into smaller and more manageable segments. Finally, some assignments will engage students in a reflection at the end of a unit so that they can process and consolidate what they have learned.

In Level V, the daily homework may take students up to 40 minutes. At this level, our classes are seminar style and we adopt a collegiate approach to daily preparation. On the one hand, homework is considered daily preparation for class, achieved through reading, acquisition of sophisticated vocabulary and thought questions about the material. On the other hand, homework is also an excellent opportunity to perfect analytical skills, the most challenging ones to master in a foreign language. Homework also aids in students’ preparation to lead class discussion at a high level. Finally, homework may provide students the necessary mastery of a topic to act as a teacher for his/her classmates. On these occasions, students have to explain the material they have mastered, perfect their public speaking and presentation skills, and finally add their personal touch and creativity to their lesson.

Italian I

3 units/full year

Italian I is an introduction to the fundamentals of the Italian language. Students of Italian I will acquire a basic proficiency in the four language skills: speaking, reading, listening and writing. They will be introduced to the vocabulary, grammar and syntax of beginning Italian and will demonstrate their command of this material via spoken and written exercises, projects and activities. Readings, music and videos will be used to present Italian culture. The interactive audio program will reinforce weekly grammar lessons and allow students to improve their accents and listening comprehension skills.

Italian II

3 units/full year

Prerequisite: Completion of Italian I with a C- or above, or equivalent score on the placement test.

Italian II is a continuation of Italian I and emphasizes precision in intermediate grammar and language usage. Students will read authentic Italian texts, write compositions, and give oral presentations. They will continue to study Italian culture via films, magazines and newspapers. The interactive audio program will continue to be used to reinforce the oral component of the course.

Italian III

3 units/full year

Prerequisite: Completion of Italian II with C or above, or consent of instructor and/or Department Chair.

Students in Italian III will further develop their listening, speaking, reading and writing skills. While this course includes a review of grammatical structures and usage, linguistic competency will be achieved primarily through the study of Italian culture. Students will thus enhance their communicative proficiency through the use of authentic materials including literary texts, news clippings, film, music and websites. Students in Italian III will respond to what they read and hear by writing frequent compositions and by completing projects on various aspects of Italian culture. Students in Italian III will be expected to perform these tasks with grammatical precision in an accent that approaches native Italian pronunciation.

AP Italian Language and Culture

3 units/full year

Prerequisite: Completion of Italian III with a B- or above, or consent of instructor and/or Department Chair.

This course aims to develop the students' reading, writing, listening and speaking skills within a framework that reflects the richness of Italian literature, culture, and language. Students in Italian IV will read a survey of Italian literature from the first examples of Italian poetry, including St. Francis and Dante, to the short stories, plays and novels of writers such as Ignazio Silone, Alberto Moravia, Italo Calvino and Luigi Pirandello. The Italian IV curriculum also includes seminal films that track our readings, including directors such as Rossellini, De Sica and Visconti. This course also offers a review of Italian grammar within the context of our literary and cultural readings. Students will hone their skills by writing critical essays on the readings, and by giving oral presentations on cultural topics. Students will be expected to write with grammatical precision and to perform their spoken tasks with good grammar in an accent that approaches native Italian pronunciation. **All students in this course are required to take the AP examination in May to receive AP designation on their transcript.**

Latin I

3 units/full year

In Latin I, students are introduced to the fundamentals of the Latin language and grammatical concepts, such as the noun/adjective declensions and case system, pronouns, conjugations, and personal verb endings. Because the ultimate goal of the Latin program is for students to be able to read Latin "fluently" (*i.e.*, without having to translate), both vocabulary and grammar are introduced in a way that is cumulative and context-based. Progress is carefully assessed, with each new grammatical concept building upon the earlier ones, while older vocabulary and syntactical elements are constantly reinforced as the new material is introduced. Students engage in regular practice in reading and writing in Latin. Activities include as much active use of the language as is possible in the context of the classroom setting.

Latin II

3 units/full year

Prerequisite: Completion of Latin I with a C- or above, or equivalent score on the placement test.

Latin II continues the text begun in Latin I, covering about Chapters 14-26 of Hans Ørberg's *Lingua Latina per se Illustrata*. In addition to a comprehensive review of the vocabulary and noun forms from the first year, students learn the Latin verb systems, including participles and past and future tenses, as well as extending their vocabulary to over 2,000 words. Continued emphasis is placed on fluent reading, with accompanying work in the attendant skills of Latin composition, translation, discussion and aural comprehension. Cultural topics include the number system, syllabification, coinage, ancient myth (Theseus and Ariadne, Daedalus and Icarus), and everyday life: Roman schools, the farm, and seafaring.

Latin III

3 units/full year

Prerequisite: Completion of Latin II with a C or above, or consent of instructor and/or Department Chair.

In the first part of the year, students will concentrate on the more complex sentence structures involving subordinate clauses in the subjunctive, such as purpose and result clauses, the syntax of hypothetical conditional statements, the Gerundive, and further uses of the Subjunctive Mood. Students will then begin a gradual transition towards reading original Latin prose. In addition to the readings, the course will provide a comprehensive review of the Latin verb system and will include assignments in free Latin composition as well as grammar and syntax review in the form of exercises in translation from English to Latin. By the end of the course, the student should be able to approach Latin prose at sight and with confidence.

Latin IV Honors

3 units/full year

Prerequisite: Completion of Latin III with a C or above, or consent of instructor and/or Department Chair.

Latin IV Honors presents selections from the epic and lyric poetry of the Roman poets Ovid and Catullus. Students begin with epic, reading some of the best-known myths in Ovid's *Metamorphoses*. Turning to lyric, students will study Ovid's *Amores* and a wide array of poems by Catullus. Our work will focus not only on details of grammar and translation, but also on the poetic techniques and the artistic values of classical Roman poets, with a primary focus of the course being close reading of poetry. In addition, students will practice literal translation of the text, continue to build their Latin vocabulary, develop familiarity with the differences in style and purpose of epic and lyric poetry, learn to scan dactylic hexameter, elegiac couplet, hendecasyllabic, and choliambic verse, and recognize and identify an array of poetic devices and literary figures. The course will include at least one project in which students recast the poetic subjects using their own artistic voice and medium.

Branson Mandarin Program Philosophy

In the fall of 2008, Branson began offering Mandarin I and building a program which now includes levels I, II, III, AP Chinese, and Mandarin V. When we started our program, we decided to teach Traditional characters, as many schools were doing at the time. To keep pace with the rapid changes in Mandarin instruction, including the trend toward more instruction in Simplified characters, we will shift our emphasis from Traditional to Simplified starting with our Mandarin I curriculum in 2016-2017.

Some context is helpful in understanding the relationship between Traditional and Simplified characters. The Chinese government introduced Simplified characters starting in the mid-1950, simplifying about 2,000 of the most commonly used Chinese characters. Our instructional approach will provide students with a solid grounding in Simplified characters and then extend their knowledge into Traditional characters, which will give them intellectual access to culture, literature, and the arts from the pre-Simplified era as well as preparing them for communication across Chinese speaking countries, some of which have not adopted the Simplified system.

Mandarin I

3 units/full year

The first year is an introductory course, and students will practice their communication skills, learn to read and write Chinese characters as well as learn to type Chinese characters using various techniques. In order to allow students to learn to think in a foreign language as well as develop pronunciation, tones and conversation skills, this class is taught only in Mandarin. Daily lessons are presented through various media. During each class period, every student practices sentence structure, pinyin, and reading characters through engaging activities. Students reinforce all skills through daily assignments, partner work and laboratory practice with the use of laptops, audio CDs and workbooks. The course evaluates the four language skills throughout the year and uses Integrated Chinese Level 1 Part 1 as the primary text.

Mandarin II

3 units/full year

Prerequisite: Completion of Mandarin I with a C- or above, or equivalent score on the placement test.

This second year course builds on the foundation of Mandarin I and asks students to go beyond the basic level in each of the four basic language skills. Students will continue to read and write sentences in pinyin and Chinese characters, using a broader vocabulary and more complex grammatical structures to better express their ideas. They will participate in authentic conversations in a growing variety of contexts and they will learn about various aspects of Chinese culture. Students will actively participate in class through group discussions, partner work, and an interactive audio program. The course evaluates the four language skills throughout the year and uses Integrated Chinese Level 1, Part 2 as the primary text.

Mandarin III

3 units/full year

Prerequisite: Completion of Mandarin II with C or above, or consent of instructor and/or Department Chair.

The third year of study continues to build on the basic oral and written skills the students needs to communicate effectively in Chinese. Students will continue to improve their reading comprehension and writing composition skills with daily lessons and nightly assignments. Students are expected to use only Mandarin and are always welcome to ask questions during discussion. This stage of Mandarin learning enables students to develop their communicative competence and provides them with a daily opportunity to gain a deeper understanding of Chinese culture. This course uses Integrated Chinese Level 2, Part 1 as the primary text.

AP Chinese Language and Culture

3 units/full year

Prerequisite: Completion of Mandarin III with B- or above, or consent of instructor and/or Department Chair

This advanced course builds upon the skills learned in Mandarin III, focusing on students' ability to present and interpret language in spoken and written form. Films, videos, and podcasts are used to provide students with the opportunity to listen to various accents from native speakers and enhance students' listening skills. Students are expected to speak only in Mandarin and practice speaking skills through class conversations, partner discussions and laboratory exercises. Social, cultural, and historical themes are explored through literature, newspaper articles, films and current events. Students integrate the vocabulary and grammar learned in the classroom by completing projects, writing essays and participating in discussions and debates. **All students in this course are required to take the AP examination in May to receive AP designation on their transcript.**

Mandarin V

3 units/full year

(not offered in 2017-2018)

Prerequisite: Completion of AP Chinese Language and Culture with B- or above, or consent of instructor and/or Department Chair

This course will continue to build on the skills that students developed in Mandarin IV. The main focus of this course is to engage students deeply in their own language learning process by evaluating what they have learned and what they need to improve in order to engage in conversations with native Mandarin speakers as well as apply the skills they have learned to real world situations. Students will study current events, read works of literature, create projects and investigate issues facing the Mandarin-speaking world. They will shape the course by choosing various texts to analyze and deciding on themes they would like to study. Students will apply their language skills by designing and developing an exchange program with teachers and students in Hualien, Taiwan. They will communicate with a school, host a student, and create a curriculum for the exchange.

Spanish I

3 units/full year

Spanish I is an introduction to the fundamentals of the Spanish language. Students of Spanish I will acquire a basic proficiency in the four language skills: listening, speaking, reading and writing. Students learn to use these skills meaningfully in the context of the Spanish-speaking world. Spanish I is an immersive class, and students speak the target language at all times. An active learning method is used to teach grammar and vocabulary as students begin to express themselves with confidence both in oral and written work. Students are exposed to the culture of Spanish-speaking people through authentic readings, music, and videos that introduce them to the different accents, geography and history of countries where Spanish is spoken. Students will reinforce skills through the use of a workbook, on-line activities, and a textbook. All four skills are tested regularly throughout the year.

Spanish II

3 units/full year

Prerequisite: Completion of Spanish I with a C- or above, or equivalent score on the placement test.

Spanish II completes the introduction of all of the major grammar points of the Spanish language. Students work to build their vocabulary and to incorporate all the material learned in both written and oral self-expression. A variety of visual and audio materials on-line, PowerPoint presentations, videos and songs are used to help introduce cultural topics and improve oral and aural comprehension. An emphasis is placed on oral presentations and original writing assignments. The cultural emphasis is on Latin America.

Spanish III Honors

3 units/full year

Prerequisite: Completion of Spanish II with a C or above, or consent of instructor and/or Department Chair.

Spanish III is a comprehensive grammar review course as well as an introduction to Latin American societies and their cultures. In the fall, emphasis is placed on the study of the U.S. - Mexico border and the politics, culture and literature that emerge from the immigrant experience. This unit is followed by the study of various Latin American countries and their cultures. An emphasis is placed on the usage of vocabulary and grammar in context. The students develop a high level of proficiency in Spanish and increase their abilities by discussing current cultural topics, studying geography, reading poetry and short stories, studying contemporary art, debating, and writing essays on films and on brief literary works of moderate difficulty.

AP Spanish Language and Culture

3 units/full year

Prerequisite: Completion of Spanish III Honors with a B- or above, or consent of instructor and/or Department Chair.

Spanish IV AP builds upon the integration of grammar and vocabulary achieved in Spanish III, aiming for greater communicative fluency in both speech and writing. The course reviews the most challenging grammar structures, paying close attention to patterns of errors common to native English speakers. Through the reading of short stories and the logical grouping of idiomatic expressions, the course also introduces and practices a rich variety of vocabulary. The emphasis is on deepening students' understanding and active use of complex grammatical structures and significantly expanding their vocabulary base so that they can express themselves with increasing ease and confidence. Social, cultural and historical themes pertaining to the Spanish-speaking world are explored through the study of films, music, dance, art and current events. These cultural units also provide extended opportunities for putting into active use the grammatical concepts and vocabulary studied in the textbook, through discussions, debates, oral and written projects, essays and creative writing assignments. Spanish IV students will also prepare for the Advanced Placement test offered in May.

All students in this course are required to take the AP examination in May to receive AP designation on their transcript.

Spanish V: History, Culture and Literature of the Spanish-speaking World

3 units/full year

Prerequisite: Completion of Spanish IV with a B- or above, or consent of instructor and/or Department Chair.

This course will explore diverse cultural aspects of the modern Spanish-speaking world through a variety of perspectives and media. The main objective of the course is to engage students as deeply and honestly as possible in their own language-learning experience. It will do so by challenging students to reexamine constantly both what they have learned and what they need to hone in order to: 1) engage in conversation with a native Spanish speaker with ease and confidence; 2) speak knowledgeably about the cultures of the Spanish-speaking world. The materials we will work with will vary, depending on the particular interests of any given group of students. We cannot hope to cover all the rich diversity of the Spanish-speaking universe, but, by capitalizing on students' curiosity and passions, we can delve seriously into specific corners and gain a more complex understanding of cultural traditions and values, as well as of contemporary political, economic and social issues facing Spanish-speaking countries today.

Spanish for Native and Heritage Speakers

3 units/full year

Prerequisite: Consent or recommendation of Department Chair

This course is designed specifically for native or heritage speakers of Spanish. Generally, the term “heritage speaker” refers to students who have a home background in the language and therefore some oral/aural proficiency. Given the wide range of proficiency levels among heritage speakers, the course is structured to accommodate students with varying backgrounds, from those who are minimally functional (can comprehend Spanish but are not able to speak fluently, read or write) to those who are more proficient and/or literate in Spanish. The linguistic and cultural objectives of the course work in tandem. The class builds on the language base students already possess, capitalizing on the wealth of knowledge students bring to the table in order to develop communicative competence in all of the four language skills (listening, speaking, reading and writing). These linguistic goals are achieved by working with a range of materials, specifically focused on Hispanic cultures and the experiences of Spanish heritage speakers in the United States. The dual linguistic and cultural focus allows the course to become a space in which to validate and deepen students' understanding and appreciation of their rich heritage.

Spanish for Native and Heritage Speakers Advanced

3 units/full year

Prerequisite: Completion of Spanish for Native and Heritage Speakers with a C- or above, or equivalent score on the placement test.

This advanced course builds upon the skills and concepts covered in **Spanish for Native and Heritage Speakers**. Given the wide range of proficiency levels among heritage speakers, the course and instruction will continue to accommodate students of varied backgrounds and competencies. The linguistic and cultural objectives of the course work in tandem. Students will continue to learn grammar concepts while being exposed to the richness of Latino and Latin American culture via expository readings, videos, literature, current events, and familial stories. Linguistically, the class covers active/passive voice, future, conditional, present subjunctive, and imperfect subjunctive. The class fosters a sense of camaraderie that helps students share their personal experiences and their cultural heritage. Communicative competence continues to be the focal point; students work on all language skills (listening, speaking, reading and writing). These skills are enhanced by actively engaging in oral and visual presentations, daily discussions, debates, daily-writing activities in their diaries and/or in homework assignments.

Native and Heritage Speakers III: AP Spanish Language and Culture

3 units/full year

Prerequisite: Completion of Spanish for Native and Heritage Speakers Advance with a C or above, or equivalent score on the placement test.

This course will build upon grammar concepts and vocabulary covered in the Spanish for Native and Heritage Speakers Advanced. The course reviews the most challenging grammar structures, considering patterns of errors common to students who have had a formal and informal background with Spanish. Through the reading of short stories, novels and the logical grouping of idiomatic expressions, the course also introduces and practices a rich variety of vocabulary. The reading of novels, or more extensive readings, affords these students the opportunity to delve deeper into the nuances of their native language. The emphasis is on honing students' understanding and active use of complex grammatical structures and significantly expanding their vocabulary base so that they can speak with sophistication, ease and confidence in any situation. Social, cultural and historical themes pertaining to the Spanish-speaking world, specifically countries represented by the students enrolled in the course, are explored through the study of films, music, dance, art and current events. These cultural units also provide extended opportunities for putting into active use the grammatical structures and vocabulary studied in the textbook, through discussions, debates, oral and written projects, essays and creative writing assignments. This course will also prepare students for the Advanced Placement test offered in May.

All students in this course are required to take the AP examination in May to receive AP designation on their transcript.

Spanish for Native and Heritage Speakers IV

3 units/full year

Prerequisite: Completion of Spanish for Native and Heritage Speakers III with a B- or above, or consent of instructor and/or Department Chair.

This course will explore diverse cultural aspects of the modern Spanish-speaking world and the United States through a variety of perspectives and media as it relates to Latino students and their families. The main objective of the course is to engage students as deeply and honestly as possible in their own language-learning and cultural experience as a means of empowerment while exploring the overarching theme of identity. It will do so by challenging students to reexamine constantly both what they have learned, experienced and what they need to hone in order to: 1) engage in conversation with a native Spanish speaker or their own next of kin with ease and confidence; 2) speak knowledgeably about the cultures of the Spanish-speaking world and issues that directly and indirectly affect Latinos in the US. The materials we will work with will vary, depending on the particular interests of any given group of students. We will work with literature from Latino and Spanish authors as well as study art, history, and current events of various Spanish-speaking countries around the world. We cannot hope to cover all the rich diversity of the Spanish-speaking universe,

including the US, but, by capitalizing on students' curiosity and passions, we can delve seriously into specific corners and gain a more complex understanding of cultural traditions and values, as well as of contemporary political, economic and social issues that bring about the duality of the Spanish/heritage speaker in the contemporary United States.

The Mathematics Department Curriculum

Mindful of the importance of mathematics, the mathematics department is dedicated to maintaining a curriculum that offers students the opportunity to:

- master mathematical skills, understand mathematical concepts, and prepare for continued study of mathematics;
- develop the ability to think logically;
- develop the ability to conceptualize, to generalize, to visualize and to solve problems creatively;
- build self confidence, persevere and experience a sense of accomplishment;
- appreciate and enjoy the study of mathematics;
- explore the relationship between mathematics and other disciplines.

At the conclusion of each year, a student's mathematics teacher will advise him or her on future math course options and make a recommendation for the next year's course.

The mathematics department also offers a robust selection of computer science electives. See the end of this section for information about those offerings.

Mathematics Course Sequence

The Branson graduation requirement for mathematics is three full years of study and completion of Algebra II. Most Branson students take four years of mathematics.

The table below indicates the most common course sequences that students follow. The table does not show all possible course sequences, and it is always possible to tailor a student’s course sequence to meet his or her individual needs.

Each course in the Mathematics curriculum has a course and/or grade prerequisite. Please see individual course descriptions for prerequisite information.

Initial placement into the Branson Mathematics program is based on performance on one or more applicable placement tests, given in late spring. All incoming students must take the Branson Algebra Placement Test regardless of what level math they wish to take. The Algebra Placement Test assesses basic algebra competency, and is used to determine placement into Algebra I, Geometry or Geometry Honors. Students wishing to place into Algebra II or Algebra II Honors must also pass the Branson Geometry Placement Test. Students wishing to place into Precalculus or Calculus should consult the Chair of Mathematics for further guidance.

Note: The TI-84 graphing calculator is required in all mathematics courses

Year 1	Year 2	Year 3	Year 4
Algebra I	Geometry	Algebra II	Precalculus I Precalculus II
Geometry	Algebra II	Precalculus I Precalculus II	Calculus Calculus AB AP
Geometry Honors	Algebra II Algebra II Honors	Precalculus II Precalculus Honors	Calculus AB AP Calculus BC AP ◇
Algebra II Algebra II Honors	Precalculus II Precalculus Honors	Calculus AB AP Calculus BC AP ◇	<i>Electives</i>

Mathematics Elective Offerings:

- ◇ Statistics AP
- ◇ Linear Algebra
- ◇ Multivariable Calculus (Not offered in 2017-18)
- ◇ Unless demand is unusually high, BC Calculus and all mathematics electives are singletons

Please see the end of this section for offerings in Computer Science.

Mathematics Department Homework Philosophy

The Branson Mathematics Department considers homework to be an indispensable opportunity for students to practice the skills they have learned in class, deepen their understanding of the course material, and build overall mastery in Mathematics. In its most basic form, homework asks students to work with the concepts and skills presented in class one more time, which serves to promote retention and understanding. Effective homework also stimulates students to think and make connections, develop a deep understanding of concepts and skills, build confidence, and establish an enduring mastery that facilitates success in all future endeavors.

The Mathematics Department does its best to honor the homework time allotment policy of the school, which stipulates that freshmen should have, on average, approximately 30 minutes of homework per night per subject, and sophomores through seniors should have, on average, approximately 40 minutes of homework per night per subject. We also recognize, however, that the same assignment might take different students different amounts of time to complete, so it is impossible to guarantee that every student will finish every assignment in the allotted time. As a result, the Mathematics Department generally gives students permission to stop working on their homework if they have not completed it during the allotted time frame, particularly if they feel they must devote their time to other subjects. Students are still responsible for that material, and they are encouraged to finish their assignment at another time. They are also encouraged to meet with their teacher if they have an ongoing problem with completing their assignments in a reasonable amount of time.

In order to help students get the most out of their homework and complete it in the allotted frame, the Mathematics Department strongly encourages students to do their homework in an environment that is conducive to sustained concentration. A work environment that is quiet, comfortable, and free from interruption or distraction is best, although some students can work effectively with music playing. Texting, using the Internet, watching TV, or talking on the phone all greatly interfere with concentration, and are strongly discouraged.

Some students find that working together with a classmate can be helpful in developing a mastery of new material, and such collaboration is generally permitted. Indeed, good problem solving skills and a deep understanding can be gained from discussing problems, comparing strategies, summarizing concepts and collaborating in general. Unless otherwise prohibited, students are permitted to work together on their homework assignments, provided each does his/her own work and does not simply give others answers. Students also need to be mindful of maintaining their focus and productivity as they work together, and not inadvertently relying too heavily on each other for support. If students have any doubts or questions about whether their collaboration is acceptable or effective, they should ask their teacher.

Algebra I

3 units/full year

Algebra I offers a comprehensive exploration of the major skills and concepts of elementary algebra, and provides an excellent foundation for the continued study of mathematics at Branson. Topics studied in depth include operations on real numbers, manipulation of variables, and solving equations and inequalities; straight lines, linear inequalities and systems of linear equations; exponents, polynomials and factoring polynomials; rational expressions and equations; square roots and higher index radicals; and solving quadratic equations by completing the square and the quadratic formula. In addition to these core topics, students will receive an introduction to functions, parabolas, and operations on the TI-84 graphing calculator. Most units include applications of the skills under consideration, and an emphasis is placed on developing independent problem-solving skills.

Geometry

3 units/full year

Prerequisite: Algebra I with a C- or better and a passing score on the Algebra I final exam, or demonstration of mastery of Algebra I concepts on the Branson Algebra Placement Test.

This course consists of the study of Euclidean Geometry. After learning the fundamental concepts of point, line and plane, students investigate properties of intersecting and parallel lines, congruent and similar triangles, quadrilaterals, other polygons and circles. Area and volume of plane and space figures are covered in depth, and students receive an introduction to right triangle trigonometry. Formal proofs are stressed throughout the course, along with the development of analytical reasoning skills. Algebra is reviewed and reinforced throughout the year.

Geometry Honors

3 units/full year

Prerequisite: Excellent performance on the Branson Algebra Placement Test.

This course consists of a rigorous study of Euclidean geometry. After learning the fundamental concepts of point, line and plane, students investigate properties of intersecting and parallel lines, congruent and similar triangles, quadrilaterals, other polygons and circles. Area and volume of plane and space figures are covered in depth, and students receive an introduction to right triangle trigonometry. Students in the honors course learn to prove theorems using coordinate geometry methods. Formal 2-column proofs are stressed throughout the course, along with the development of analytical reasoning skills. Algebra is reviewed and reinforced throughout the year.

Algebra II

3 units/full year

Prerequisite: Geometry with a C- or better, or Algebra I with an A or better and concurrent enrollment in Geometry.

This intermediate algebra course begins by reinforcing and advancing the core skills of algebra proficiency. As the year progresses, the course shifts from an emphasis on algebra skills in isolation to training students how to apply these skills and begin doing the kind of mathematical analysis that will be the focus of Precalculus the following year. The transition begins with the concept of functions, which is introduced early in the year. This concept is then applied continually throughout the year as students proceed to study linear equations, polynomials, rational expressions, conic sections, exponential and logarithmic functions, and sequences and series. Matrices are also covered if time permits.

Algebra II Honors

3 units/full year

Prerequisite: Geometry Honors with a B+ or better, or Geometry Honors with a B and permission of the department chair, or excellent performance in Geometry and permission of the department chair.

This intermediate algebra course begins by reinforcing and advancing the core algebra skills that students learned in Algebra I and reviewed in Geometry Honors. It then quickly shifts from an emphasis on algebra skills in isolation to training students how to apply these skills and do the kind of mathematical analysis that will be the focus of Precalculus the following year. The transition begins with the concept of the function, after which specific families of functions are studied in depth – linear, polynomial, rational, exponential and logarithmic. The course then moves on to consider several additional topics, including sequences and series, and conic sections. Real world applications of skills being taught are integrated throughout the year, and statistical applications are integrated where appropriate.

Precalculus I

3 units/full year

Prerequisite: Algebra II with a B- or better, or Algebra II Honors with a C- or better. Students earning a C or C+ in Algebra II may take Precalculus I with permission of the department chair and successful completion of summer work as demonstrated on a proficiency test at the end of the summer.

Precalculus I begins with an in-depth review of the skills and functions studied in Algebra II, with the goal of reinforcing and deepening students' understanding of these topics. Polynomial, rational, exponential and logarithmic functions are covered in depth, followed by an exploration of trigonometry. Trigonometry topics include unit circle values, graphs of trigonometric functions, trigonometric inverses and equations, basic trigonometric identities, right triangle trigonometry, and the laws of sine and cosine. If time permits, the course will finish with an exploration of probability. Emphasis is placed on developing a deep understanding of the concepts underlying each skill and topic.

Precalculus II

3 units/full year

Prerequisite: Algebra II with a B+ or better or Algebra II Honors with a B- or better.

Precalculus II begins by reviewing and extending the main topics of Algebra II and Algebra II Honors, with special emphasis placed on functions and their properties and the development of students' problem-solving skills. Polynomial, rational, exponential and logarithmic functions are covered in depth, followed by a thorough treatment of trigonometry. Toward the end of the course, students will be introduced to several additional topics, including polar coordinates and probability and statistics. The course concludes with a study of limits – the foundation of calculus. Applications are interwoven throughout the course.

Precalculus Honors

3 units/full year

Prerequisite: Algebra II Honors with an A- or better, or permission of the department chair.

This demanding and fast-paced course covers all the topics listed under Precalculus II, with a rigorous analysis of functions in preparation for calculus. Matrices, matrix equations and parametric equations are also covered. Problem solving beyond the scope of the text is emphasized throughout the year.

Calculus

3 units/full year

Prerequisite: Precalculus I with a C+ or better, or Precalculus II with a C- or better and permission of the department chair.

Calculus will introduce students to the concepts and practical applications of calculus, and lay the foundation for taking a regular calculus course in college. The course will begin with a review and extension of the trigonometry topics covered in Precalculus, and continue with a study of limits and continuity. Next, the course will explore the derivative, and students will apply and use derivatives in abstract and real-world scenarios. Finally, the course will cover definite and indefinite integrals, and students will use integrals to solve a variety of abstract and real-world problems.

Calculus AB AP

3 units/full year

Prerequisite: Precalculus II with a B+ or better, or Precalculus Honors with a B- or better and permission of the department chair.

This yearlong course is a college-level introduction to the theory and applications of calculus. Topics covered include limits, continuity, differentiation, integration, and applications thereof. **All students in this course are required to take the AP Calculus AB examination in May.**

Calculus BC AP

(Lab requirement)

3 units/full year

Prerequisite: Precalculus Honors with an A- or better.

Note: This class will have one lab period each week.

This yearlong course is a college-level introduction to the theory and applications of the Calculus. All of the topics in the Calculus AB course will be covered. Additional topics include advanced integration techniques, improper integrals, convergence tests, power series, Taylor series, and the calculus of parametric curves and vector-valued functions. **All students in this course are required to take the AP Calculus BC examination in May.**

Mathematics Electives

Statistics AP

3 units/full year

Prerequisite: Algebra II with a B+ or better, or Algebra II Honors with a B- or better.

This course is a college-level introduction to the concepts and techniques of statistical analysis. Topics covered include probability, linear and non-linear regression, confidence intervals and hypothesis testing using binomial, normal, student-t and chi-square distributions. Students will plan surveys, experiments and simulations. They will also learn how to summarize and interpret the results in a meaningful manner. The TI-84 graphing calculator is used extensively throughout the course as a tool for simulation, discovery and analysis. This course is equivalent to one semester of first year non-calculus based college Statistics. **All students in this course are required to take the AP Statistics examination in May.**

Linear Algebra

3 units/full year

Prerequisite: Completion of Calculus AB or Calculus BC, or concurrent enrollment in Calculus BC.

This yearlong course is designed for Branson's most advanced mathematics students. It covers the core skills and concepts of linear algebra, including matrix arithmetic, determinants, vector spaces, inner product spaces, eigenvectors and eigenvalues, and linear transformations. During the year students will also have the opportunity to explore various applications of linear algebra. Proof-writing and abstract reasoning are significant components of this course, and students finish the year with a culminating independent research project.

Multivariable Calculus

(Lab requirement)

(not offered in 2017-18)

3 units/full year

Prerequisite: BC Calculus with a B or better, or excellent performance in AB Calculus and permission of the department chair. Note: This class will make periodic use of a lab period.

This yearlong course is designed for students who have successfully completed BC Calculus. It will cover the full curriculum of differential multivariable calculus and explore topics of integral multivariable calculus as time permits. The course will begin with an investigation into three-dimensional space and vectors, followed by a consideration of vector-valued functions and partial derivatives. Integral multivariable topics that may be covered include integrals of more than one variable and topics in vector calculus.

Independent Study in Mathematics

1 unit or 3 units/full year

Prerequisite: Permission of the department chair.

A student may design and pursue a term-long or yearlong independent study program in order to explore an area of mathematics not covered in the department curriculum. Any such program will require a mathematics teacher from the department who will be available to oversee the program, provide guidance, and assess student progress. All independent study programs will be graded on a pass/fail basis.

Computer Science Course Sequence

Branson offers a variety of Computer Science electives that are intended to give students multiple ways to explore the subject. Students may take one or more of the term electives, or the yearlong Object-Oriented Programming in Java elective. Interested students are also welcome to design their own term or yearlong independent study program in consultation with the Mathematics Department Chair.

For scheduling purposes, term electives are organized into loose sequences that will meet during the same block throughout the year. Students need not feel bound to follow a particular sequence, however. With the exception of Web Page Design with Database Programming, all electives have no content prerequisite and are open to all students. Students are welcome to take any course from either sequence provided that it fits into their schedule.

SEQUENCE	FALL ELECTIVES	WINTER ELECTIVES	SPRING ELECTIVES
1	Introduction to the Arduino Platform and C Programming	Responsive Web Page Design	Web Page Design with Database Programming
2	Programming in Python	Introduction to the Arduino Platform and C Programming	Mobile Application Development in iOS

SEQUENCE	YEARLONG ELECTIVE
1	Object-Oriented Programming in Java

Computer Science Electives

Introduction to the Arduino Platform and C Programming

1 unit

Offered: fall and winter term

Prerequisite: Freshmen and sophomores need approval of their advisor to enroll in this course.

This course will give students the opportunity to use the Arduino platform and learn basic C programming. The Arduino platform is an open-source computer hardware/software platform for building digital devices and interactive objects that can sense and control the physical world around them. Students will learn how the Arduino platform works in terms of the physical board and libraries and the IDE (integrated development environment). Students will also learn about shields, which are smaller boards that plug into the main Arduino board to perform other functions such as sensing light, heat, GPS tracking, or providing a user interface display. The course will cover programming the Arduino using C code and accessing the pins on the board via the software to control external devices. The course is project oriented with periodic quizzes and short homework assignments designed to give students the opportunity to extend their knowledge and demonstrate understanding. All hardware will be provided as part of the course.

Responsive Web Page Design

1 unit

Offered: winter term

Prerequisite: Freshmen and sophomores need approval of their advisor to enroll in this course.

This course will cover the essential elements of responsive web page design, from user interface design to front end coding in HTML, CSS and Javascript. Students will learn how to use CSS libraries such as Bootstrap to create responsive layouts. They will also learn how to use Javascript variables and functions, and respond to user input using Javascript. Students will get hands on experience developing web applications such as photo gallery and text editor. Emphasis will be placed on the project development life cycle and the importance of testing. The course is project oriented with periodic quizzes and short homework assignments designed to give students the opportunity to extend their knowledge and demonstrate understanding.

Web Page Design with Database Programming

1 unit

Offered: spring term

Prerequisite: Responsive Web Design, or proficiency in HTML, CSS and Javascript and permission of the Department Chair

This course will build on the topics covered in the Responsive Web Page Design course. The course will begin with an exploration of web-based user authentication, security features, reactive templates and routing. Students will then use the MongoDB programming language to perform key database operations such as inserting, removing and updating data as well as sorting and filtering. Students will subsequently use the Meteor.js platform to write templates that reactively display database contents. Students will get hands on experience with developing web applications such as a social website aggregator and an advanced photo gallery. Emphasis will be placed on the project development life cycle and the importance of testing. The course is project oriented with periodic quizzes and short homework assignments designed to give students the opportunity to extend their knowledge and demonstrate understanding.

Programming in Python

1 unit

Offered: fall term

Prerequisite: Freshmen and sophomores need approval of their advisor to enroll in this course.

This course will give students an introduction to the Python programming language. Students will learn how to use data types, variables, selection, and iteration techniques. The course will then introduce the concepts of tuples and lists, before covering basic file and error handling. Python has the advantage of being platform independent and is widely used in industry to create everything from web sites to computer games. Python can also be integrated into other languages such as C++ and Java. Emphasis will be placed on developing the resilience and problem solving skills necessary to become an effective computer programmer. The course is project based with periodic quizzes and short homework assignments designed to develop students' understanding of the key programming concepts.

Mobile Application Development in iOS

1 unit

Offered: spring term

Prerequisite: Freshmen and sophomores need approval of their advisor to enroll in this course.

This course will give students an introduction to the powerful Swift programming language, now widely used to develop mobile applications for Apple products such as the iPhone and iPad. Students will gain the skills necessary to develop an iOS app from scratch. By the end of the course students will be able to demonstrate a completed app, and will have basic understanding of object oriented principles and memory management. Emphasis will also be placed on user interface design principles and user acceptance testing. The course is project based with periodic quizzes and short homework assignments designed to give students the opportunity to extend their knowledge and demonstrate an understanding of the key principles.

Object-Oriented Programming in Java

3 units/full year

Prerequisite: Geometry with a B+ or better, or Geometry Honors with a B- or better, or permission of the department chair.

This yearlong course will give students a comprehensive introduction to object-oriented computer programming and the fundamental concepts and practices of Computer Science. Using the Java programming language, and modeled after the Advanced Placement Computer Science A curriculum, the course will begin with an introduction to primitive data types, basic control structures, basic data structures and the principles of object design. Students will get hands-on experience implementing a number of standard algorithms for searching, sorting, manipulating strings, and managing compound data structures. Emphasis will be placed on the principles of structured program design, designing elegant solutions to computable problems, and learning to test and debug computer code effectively. The course is project-oriented, with periodic quizzes and short homework assignments designed to give feedback and reinforce understanding. Prior knowledge of computer programming is not required. Note: Students taking this course may take the AP Computer Science A examination in May with some modest additional preparation. Those interested in pursuing this option should consult their course instructor for additional guidance.

Independent Study in Computer Science

1 unit or 3 units/full year

Prerequisite: Permission of the department chair.

A student may design and pursue a term-long or yearlong independent study program in order to explore an area of Computer Science not covered in the department curriculum. Any such program will require a teacher from the department who will be available to oversee the program, provide guidance, and assess student progress. All independent study programs will be graded on a pass/fail basis.

The Physical Education Curriculum

Physical activity, exercise, and wellness are essential to the Branson School experience. Whether through physical education, participation on an interscholastic sport or club team, or an alternate activity, the goal is for each student to develop an appreciation for an active lifestyle, good character, and a positive self-image. While the program offers diverse opportunities, an emphasis is placed on:

- Lifelong habits that contribute to being a part of something bigger than one's self;
- Team building and sportsmanship;
- Development of leadership skills;
- Cooperation among peers.

The program also challenges students to raise their fitness levels and develop an understanding of the relationship between fitness and lifelong physical and mental wellness. Some students will choose to participate on an interscholastic sport or club team. Others will choose to fulfill their requirement through physical education, alternate activity and/or dance.

Grading

All physical education classes are graded on a pass/fail basis, including Dance classes that are selected to fulfill the Physical Education requirement.

Physical Education Course Sequence

Students must participate in one term of Physical Education each year. Seniors participating in an alternate activity must complete 36 hours by the end of winter term.

1. Interscholastic Athletics or Club Sports Team
2. Alternative Activity Program (AAP)
3. Physical Training
4. Dance

Breakdown of Course offerings Complete one per academic year			
Course offerings	Fall Term	Winter Term	Spring Term
Interscholastic Athletics	Boys Football Cross Country Girls Volleyball Girls Tennis Girls Golf	Girls Soccer Girls Basketball Boys Soccer Boy Basketball	Swim & Dive Track & Field Girls Lacrosse Boys Lacrosse Boys Golf Boys Tennis Boys Baseball
Club Sports	Sailing Crew Mountain Biking	Sailing Crew Mountain Biking	Sailing Crew Mountain Biking
Physical Training	Performance Training Fitness Training	Performance Training Fitness Training	Performance Training Fitness Training
Alternative Activity Options	Ballet/Dance Yoga Martial Arts/Boxing Fencing Other - by departmental approval only	Ballet/Dance Yoga Martial Arts/Boxing Fencing Other - by departmental approval only	Ballet/Dance Yoga Martial Arts/Boxing Fencing Other - by departmental approval only
Dance	Dance at Branson	Dance at Branson	Dance at Branson

Interscholastic Athletics or Club Sports Team

1 unit
Offered: fall, winter and spring

Participation on one of Branson's interscholastic athletic or club sports teams. In order to earn credit students are required to attend all games and practices as outlined by the Head Coach and Athletic Department. Leaving or being dismissed from an athletic team may result in Physical Education credit not being given for that term. Practice times shall not exceed two-and-a-half hours on weekdays and two hours on Saturdays. There is NO practice on Sundays. Fall athletes are expected to attend practices during August; winter and spring athletes are expected to attend practices and games scheduled during school breaks in their seasons. Athletes should note that, in many cases, full participation includes a commitment to the sport beyond the term of the regular season.

Alternative Activity Program (AAP)

1 unit
Offered: fall, winter and spring

The Alternative Activity Program (AAP) is an independent study program, designed to provide students opportunity to pursue organized classes of instruction outside of the School. For example ballet, equestrian, martial arts, competitive dance, etc. Students must select their AAP during the normal class registration period. AAP's must be approved and monitored by the Physical Education Coordinator. Students will be required to submit a letter of agreement signed by their instructor and a log of the hours spent during the respective AAP. This course requires 36 hours.

Physical Training

Offered: fall, winter and spring
1 unit

Our Performance Coach offers Physical training. Students can elect to follow the Athletic Performance Training Track, which focuses on developing strength, explosiveness, speed and quickness needed in athletic competition or Physical Fitness program which provides general full body workouts to promote healthy and fit lifestyles. This course is 36 hours.

Dance

Offered: fall, winter and spring
1 unit

Students may elect Dance to fulfill the Physical Education requirement but cannot earn Arts credit simultaneously. If a student chooses to use a term of Dance to fulfill a PE requirement, he/she must inform the instructor before the start of the term.

The Science Department Curriculum

The world is a complex place governed by laws of nature as well as the laws of politics and economics. The Science Department is dedicated to enriching students' understanding of the natural world and enabling students to have a more positive interaction with their environment. It is our fond hope that a Branson education will encourage students to pursue the study of nature while making deep and wise impacts on the occupants of this earth, our only home. Additional departmental goals include:

- Developing in students the habits of intelligent inquiry, thoughtful research, organized experimentation, and critical analysis, including the ability to express scientific ideas clearly, interpret data, and organize a diverse body of material into a coherent whole.
- Encouraging students to use these acquired skills in other academic disciplines and in everyday life.
- Fostering in students a spirit of cooperative learning.
- Developing students' enthusiasm for and confidence in all of science so as to maximize their potential for excellence in any future scientific endeavor.
- Helping students gain perspective on, and understanding of, the natural world and the students' role in it.
- Encouraging students to develop an open, yet critical mind so that they can distinguish the wonders of real science from the wishful thinking of pseudoscience.

Science Course Sequences

Nine units (three yearlong courses) of laboratory science are required for graduation. These three science courses are Physics, Chemistry, and Biology. Most Branson students take four years of Science.

If a student wishes to take AP classes in the sciences, the Science Department recommends that Biology be taken first. *Concurrent enrollment in two science classes in the junior and/or senior year is possible, subject to approval by the department chair, advisor, class dean and assistant head of school for academic affairs. Elective science courses are the courses best suited for doubling in Science.

Grade	Science Courses
9	Physics 1 or Physics 1 Honors
10	Chemistry or Chemistry Honors
11	Biology (required)
11 (Optional Electives)	Advanced Environmental Studies Biotechnology, Medicine and Science Research Marine Biology Microbiology and Infectious Disease Engineer Your World Astronomy and Astrophysics
12 (Electives)	Advanced Environmental Studies Biotechnology, Medicine and Science Research Marine Biology Microbiology and Infectious Disease Engineer Your World Astronomy and Astrophysics
AP Science Courses	AP Chemistry AP Physics 2

All elective and AP courses are singletons.

Science Department Homework Philosophy

To enrich students' understanding of the natural world and enable them to have a more positive interaction with our shared environment, the Science Department assigns homework that provides students with opportunities to develop habits of intelligent inquiry, to apply critical thinking and analytical skills and to practice skills introduced in the classroom.

The Science Department believes homework is meaningful when students have the opportunity to:

- Practice skills independently and at their own pace
- Read background information in preparation for discussion and interaction in the classroom
- Assimilate new information and connect ideas
- Test their knowledge by applying concepts to new scenarios
- Experience another voice (via texts, articles or journals) explaining a phenomenon
- Think abstractly
- Solve problems
- Analyze data
- Apply critical thinking
- Grapple with ideas presented in class

In the freshman year, we typically assign 20-30 minutes of homework nightly. After the freshmen year, we typically assign 40 minutes of nightly homework is assigned. Research projects, lab reports and/or problem sets are often spread out over a week or more, enabling students to receive feedback on drafts, collaborate with lab partners and actively engage in class discussions.

The Science Department monitors the effectiveness of homework through verbal check-ins, written feedback, and student performance on assessments.

The Science Department honors the value of homework by addressing homework topics in lessons, demonstrating their connections and importance to understanding the material and giving credit for some of the independent work students have done.

Physics 1 (*Lab requirement*)

3 units/full year

Physics searches for the simplest and most fundamental patterns and rules in nature, such as the law of conservation of energy and the universal gravitation law. In this ninth grade course, students will begin by studying the laws of motion, and then proceed through units on forces, momentum, energy, and other topics. Students will design experiments, gather data, and then deduce the laws of nature first-hand before applying these laws to solving problems. In one unit, students will investigate and report on the economic and environmental costs of various means of electricity generation. An additional component of the course will be a substantial original research project. Students will be guided through the complete process of posing a scientific question, investigating, and presenting their results.

Physics 1 Honors

(*Lab requirement*)

3 units/full year

Prerequisite: Consent of Science Department, and superior performance on the Algebra and Physics placements tests.

Physics searches for the simplest and most fundamental patterns and rules in nature, such as the law of conservation of energy and the universal gravitation law. In this ninth grade course, students will begin by studying the laws of motion, and then proceed through units on forces, momentum, energy, and other topics. In one unit, students will investigate and report on the economic and environmental costs of various means of electricity generation. Students will design experiments, gather data, and then deduce the laws of nature first-hand before applying these laws to solving mathematically challenging problems. An additional component of the course will be a substantial original research project. Students will be guided through the complete process of posing a scientific question, investigating, and presenting their results. Students in Physics I Honors will be expected to complete a more rigorous literature review in the completion of their science research project, and the course will move at a faster pace and will investigate each unit with somewhat greater challenge and depth.

Chemistry

(Lab requirement)

3 units/full year

Prerequisite: Completion of Physics 1 or equivalent and completion of Algebra.

In Chemistry, we will examine the composition of matter, and the changes it undergoes. In a course that emphasizes logic and analytical thinking, students will learn to understand the world on an atomic level. Students will explore atomic structure, periodicity, stoichiometry, chemical reactions, bonding, gases, thermochemistry, equilibrium, and acid-base chemistry. Additionally, there will be several opportunities to research and study the chemistry of the environment, particularly as it relates to global warming and other areas critical to the environment and scientific literacy. Students will develop their analytical abilities through lectures, discussions, and laboratory experience. At several points during the year, students will be asked to design their own protocols in order to investigate given questions. Students who perform at a high level in Chemistry will be prepared to take AP Chemistry.

Chemistry Honors

(Lab requirement)

3 units/full year

Prerequisite: Physics 1 with an A, or Physics 1 H with a A- or better, concurrent enrollment in Algebra II or a more advanced math class, and recommendation from current science teacher.

The Chemistry Honors course is ideal for the student who has a strong mathematical background and seeks to be challenged in a higher-level, faster-paced science course. Chemistry is all around us, and students will explore the atomic view of the world utilizing critical thinking skills and the scientific process as well as deductive reasoning and inferential logic. Some of the key topics include atomic structure and bonding, periodicity, stoichiometry, dynamic equilibrium, acid-base reactions and thermodynamics. Weekly experiments allow students to experience the magic of chemistry first-hand. In the laboratory, students will independently design and describe investigations in an attempt to solve open-ended questions. Students who perform at a high level in Chemistry Honors will be prepared to take AP Chemistry.

Biology

(Lab requirement)

3 units/full year

Prerequisite: Completion of Physics 1 or Physics 1 H; completion of Chemistry or Chemistry H.

Biology is the study of living things. This course focuses on biochemistry, cell biology, genetics, evolution, ecology, and human body systems. The course will also expose students to new research and ethical debates on the leading edge of modern biology. Students will participate in regular investigations where they will make observations, formulate hypotheses and critically analyze data. Students develop analytical abilities through daily activities, group discussions, laboratory experiences, formal presentations, and research projects. Students will apply their understanding using a variety of assessments during the year. Emphasis is placed on understanding how scientific information is obtained and how models and theories are formulated based on our knowledge and exploration of biological concepts.

Science Electives

Advanced Environmental Studies
(Lab requirement)
3 units/full year

Prerequisite: Completion of or concurrent enrollment in Biology.

The goal of the Advanced Environmental Studies course is to provide students with the scientific principles, concepts, and methodologies necessary to understand and critically evaluate many of the environmental problems facing the world today. This course will allow students to understand interrelationships in the natural world, identify and analyze environmental problems, evaluate the relative costs of environmental degradation and develop solutions for these environmental issues.

Environmental Science is interdisciplinary; it embraces and utilizes a variety of concepts from different areas of study, including ecology, chemistry, biology, economics and philosophy. Specific units of study include (but are not limited to) environmental ethics, agriculture, biodiversity, toxicology, resource extraction, and climate change. The course includes rigorous discussion and debate, inquiry-based and student-centered experimentation, and the reading of current environmental literature. In the last six weeks of the course, juniors will complete a Branson Science Research Project (BSRP) and participate in the Branson Science Symposium. (Seniors may choose to pursue a BSRP project as a part of their senior capstone project.)

Astronomy and Astrophysics
(Lab requirement)
3 units/full year

Prerequisites: Completion of Physics 1, Chemistry and Geometry.

We live in a 13.8 billion-year-old, expanding universe that is filled with planets. Discover what it means to exist 93,000,000 miles from a star, and how stars form the constellations that punctuate the night sky. Students will study the numerous fascinating objects that exist in the cosmos, as well as the fundamental physics models that allow us to understand them. Through experimentation, observations, and analysis of astronomical data students will study topics such as: the night sky, light and color, gravity, the solar system, electromagnetic radiation, stars, exo-planets, black holes, the Milky Way galaxy, and the Universe. Students will be involved in critical thinking and scientific practices throughout the course, including a variety of labs, research projects, and evening observations. In the last six weeks of the course, juniors will complete a Branson Science Research Project (BSRP) and participate in the Symposium.

Engineer Your World
(Lab requirement)
3 units/full year

Prerequisite: Completion of Chemistry or Physics and concurrent enrollment in Algebra II. Open to grades 11 and 12.

In this class, failure is not an option- it's mandatory! The design and construction challenges in this class, each drawn from one of the major engineering disciplines, will allow every student to experience the challenges and rewards of engineering as his or her team designs, prototypes, revises, perfects, and documents their approaches. Students will discover how engineers use creative design approaches, make data-supported design decisions, collaborate to solve complex challenges, and improve lives. Developed with funding from the National Science Foundation by a team of University of Texas faculty and NASA engineers, *Engineer Your World* engages students in authentic engineering practices in a project-based environment.

Microbiology and Infectious Disease

(Lab requirement)
3 units/full year

Prerequisite: Completion of, or concurrent with, Biology and/or equivalent.

This course is designed to cover the basic concepts in microbiology, specifically bacteria, viruses and protozoa. We will focus our studies on the pathogenic microorganisms, specifically in human infectious diseases and how our immune system responds to them. Specific examples of diseases we will study include, Influenza, HIV, Tuberculosis, MRSA, and Malaria. We will not only examine the direct cause and effects of these diseases, but also their broader implications in medical care and public health. There is a strong laboratory component to the course as well as an emphasis on independent research. In the last six weeks of the course, juniors will complete a Branson Science Research Project (BSRP) and participate in the Branson Science Symposium. (Seniors may choose to pursue a BSRP project as a part of their senior capstone project.)

Marine Biology

(Lab requirement)
3 units/full year

Prerequisite: Completion of/or concurrent enrollment in Biology.

Our earth is a *marine* planet, with oceans covering 71% of the earth's surface. Marine Biology introduces students to this fascinating realm of the world's oceans and the spectacular creatures who inhabit these waters through exploration of local field sites, laboratory investigations and related classroom studies. The Earth's oceans are filled with amazing creatures and a surprisingly large variety of habitats. In this course we will dive into this mysterious world by investigating local habitats, plate tectonics, ocean chemistry, marine ecology, several ocean ecosystems and their inhabitants, and much more. An additional goal of this course is to foster a lifelong interest in, and stewardship for, our world's oceans and their role in the health of our planet. In the last six weeks of the course, juniors will complete a Branson Science Research Project (BSRP) and participate in the Branson Science Symposium. (Seniors may choose to pursue a BSRP project as a part of their senior capstone project.)

Biotechnology, Medicine and Science Research

(Lab requirement)
3 units/full year

Prerequisite: Completion of/or concurrent enrollment in Biology and consent of instructor.

Biotechnology, Medicine and Science Research focuses on learning the process of scientific discovery. Students will engage with topics including genetic engineering, stem cell biology, cancer biology, immunology, and drug design and discovery. To peek into the scientific process, students will engage in methods-centered reading of primary research and student-driven, long-term research. Students will have the chance to use advanced research techniques and equipment including the cell and tissue culture facility at Branson and will be expected to engage and correspond with mentors in the scientific community. In the last six weeks of the course, juniors will complete a Branson Science Research Project (BSRP) and participate in the Branson Science Symposium. (Seniors may choose to pursue a BSRP project as a part of their senior capstone project.) Juniors taking Biotechnology, Medicine and Science Research are strongly encouraged to continue their research during the summer of their junior year at Branson or an outside institution.

AP Science Courses

AP Chemistry

(Lab requirement)

3 units/full year

Prerequisite: Completion of Algebra II, Physics 1 and Chemistry OR junior standing and consent of the instructor, department chair, advisor, class dean and assistant head of school for academic affairs.

AP Chemistry covers many of the same topics as Chemistry Honors but in much greater depth and breadth. Topics include: atomic and molecular structure, phases of matter, thermodynamics, reaction kinetics and equilibria, acid-base reactions, electrochemistry, and nuclear chemistry. There is an emphasis on interpreting experimental data and using analytical thought to solve problems. The course is intended to give students advanced study in chemistry, a thorough preparation for college-level chemistry, and a firm preparation for the Advanced Placement examination in May.

All students in this course are required to take the AP examination in May to receive AP designation on their transcript.

AP Physics 2

(Lab requirement)

3 units/full year

Prerequisite: Completion of Physics 1 and Chemistry, senior standing OR junior standing consent of the instructor, department chair, advisor, class dean and assistant head of school for academic affairs.

AP Physics 2 offers students the opportunity to build on the foundations they developed in Physics 1. The course is designed to be the equivalent of a semester-long Algebra-based college course for natural science majors and premedical students. The topics include fluid mechanics, thermodynamics, electricity and magnetism, circuits, optics and atomic physics. Students will compose substantial in-depth lab reports in order to deepen their understanding of the physics and improve their critical thinking and writing skills. Equal emphasis is placed on conceptual understanding and numerical problem-solving, and a constant theme of the course is the exploration of how wonderful complexity can unfold from a few simple principles and laws. Students will be well prepared for the Advanced Placement examination in May.

All students in this course are required to take the AP examination in May to receive AP designation on their transcript.

Wellness

Branson recognizes that students need to be prepared for life’s choices and challenges both in and out of the classroom. Adolescents are faced with many new issues during this time that require strong interpersonal skills, a sense of individual identity and personal values, and organizational and decision-making skills. In addition, understanding the complexities of all types of relationships—friendships, dating, parents/siblings, teachers—can be key to overall well-being as a student and in life.

The courses designed in this department seek to create safety and space to have difficult conversations that relate to the issues adolescents will be navigating throughout high school. Rooted in a developmentally appropriate approach, the topics will evolve to maintain the most relevance to present-day teenage life. While developing healthy relationships and personal integrity will remain at the core of these courses, issues of health, well-being, self-care, and stress management will be addressed in depth.

Structure of course and requirements

The scope and sequence of the wellness courses will be explored over a two-year arc of 24 classes total. The freshmen course, Personal Development, will meet in the fall term, one block per week. The sophomore course, Sexual Health and Relationships, will meet in the winter term, one block a week. Both courses are required for graduation and will be assessed on a pass/fail basis.

The wellness classes will meet in small groups and will require 100% participation and engagement during the block periods. These courses are designed to be interactive and discussion-based and attendance is required each week. All classwork will happen within the scheduled block and no homework will be assigned unless a student is absent due to illness or sports conflict.

GRADE	COURSE
9 – Fall Term	Personal Development
10 – Winter Term	Sexual Health and Relationships

Freshmen Wellness Course:

Personal Development

1 unit/fall term

Becoming a part of any new community requires time and attention to understand and move confidently through written and unwritten expectations. The Freshman Wellness Course makes these expectations visible and fosters conversation around how students maintain individuality, engage earnestly with the community, and find new avenues for personal growth. The teacher-student relationship is a cornerstone to the Branson student experience; this course deconstructs these interpersonal connections with new adults that require skill cultivation, practice, and agency. As in any high school, students are faced with new challenges that help them to define their personal values. This course offers the opportunity for students to see themselves and their choices more clearly through group discussion, individual reflection, and peer collaboration. Specific topics will include: drugs & alcohol, healthy peer relationships, organization and study habits, social media, body image, and diversity of identity.

Sophomore Wellness Course:

Sexual Health and Relationships

1 unit/winter term

The sophomore wellness class explores issues related to sexual health and identity, with the overall goal of providing accurate, current information that will foster healthy decision-making now and in the future. Topics discussed will include gender identity and expression, pornography and other media influences on sexual development, reproductive anatomy, sexually transmitted infections, and contraception. The second half of the course focuses on developing healthy relationships, starting with recognizing the early signs of attraction through break-ups and closure. The process of discovering what you need from a relationship requires much self-reflection; students will be given opportunities to ask themselves challenging and important questions to become aware of their own values and boundaries. Through this exploration of self in relationships, we will review many other wellness topics such as consent laws, sexual abuse and harassment, drugs and alcohol, mental health issues, and social media.



2017-2018 STUDENT COURSE CATALOG

AT GOA, WE LEARN DIFFERENTLY.

The GOA experience connects you to a global network of people and resources: students and teachers come from more than sixty of the best independent schools around the world. Just by taking a GOA class, you will meet and collaborate with people you might never otherwise know.

GOA courses are...

- **Interactive:** You'll log in multiple times a week to engage in discussions, collaborate on projects, and apply your knowledge in creative ways. No hours of video watching or test-taking here.
- **Challenging:** Similar to a course at your home school, you'll spend 5-7 hours a week working on your course. GOA courses are mostly asynchronous; you are not expected to show up at one place at one time every day. Instead, you'll have to become proactive about managing your schedule, asking for help when you need it, and overcoming obstacles and solving problems on your own. You'll be challenged to become a more independent learner.
- **Relevant:** GOA courses give you a chance to explore topics you care about in a way that feels creative and engaging. We design courses so you have the opportunity to curate, create, and reflect on content that helps you understand course concepts in real-world contexts.
- **Communal:** We cap our classes at 18 students so you can form strong relationships as you collaborate with both your teacher and peers.

WE'LL SEE YOU ONLINE!



DEPARTMENT DESIGNATIONS

Unless otherwise noted, courses are one semester long.

Art, Media, and Design		
Advocacy	Computer Science II: Game Design and Development	Filmmaking
Architecture	Digital Journalism	Graphic Design
Citizen Artist's Studio: From Making to Action	Digital Photography	Music Theory and Digital Composition
Creative Nonfiction	Fiction Writing	Poetry Writing

GOA Learning Studios		
Advanced Topics in Economics	Entrepreneurship in a Global Context	Water: from Inquiry to Action
Advocacy	Power: Redressing Inequity through Data	
Citizen Artist's Studio: From Making to Action	Social Psychology	

Mathematics and Technology		
Computer Science I: Computational Thinking	Computer Science II: Java	Linear Algebra
Computer Science II: Analyzing Data with Python	Game Theory	Multivariable Calculus (yearlong)
Computer Science II: Game Design and Development	iOS App Design	Number Theory





Science and Health		
Abnormal Psychology	Medical Problem Solving I	Practical Astronomy
Bioethics	Medical Problem Solving II	Social Psychology
Global Health	Neuropsychology	Water: from Inquiry to Action
Introduction to Psychology	Organic Chemistry	

Social Sciences		
9/11 in a Global Context	Entrepreneurship in a Global Context	Macroeconomics
Advanced Topics in Economics	Gender Studies	Microeconomics
Applying Philosophy to Modern Global Issues	Genocide and Human Rights	Power: Redressing Inequity through Data
Comparative Politics	Introduction to Investments	Water: from Inquiry to Action
Energy		

World Languages (yearlong)	
Arabic Language through Culture I	Japanese Language through Culture I
Arabic Language through Culture II	Japanese Language through Culture II





CONCENTRATIONS

These concentrations don't fall under traditional departments or disciplines; rather, they help you think about the kind of learning you want to do at GOA. As you explore our course catalog, you'll see our courses tagged with a concentration — many of them with more than one — so you can more easily envision the kind of work you'll be doing in the course.

1. Adopting New Modes of Thinking for Innovative Problem Solving [MoT]		
Applying Philosophy to Modern Global Issues	Entrepreneurship in a Global Context	Medical Problem Solving II
Citizen Artist's Studio: From Making to Action	Game Theory	Multivariable Calculus
Computer Science I: Computational Thinking	Introduction to Investments	Number Theory
Computer Science II: Analyzing Data with Python	iOS App Design	Power: Redressing Inequity through Data
Computer Science II: Game Design and Development	Linear Algebra	Practical Astronomy
Computer Science II: Java	Medical Problem Solving I	

2. Building Empathy by Understanding Human Behavior [EMP]		
Abnormal Psychology	Comparative Politics	Genocide and Human Rights
Advanced Topics in Economics	Creative Nonfiction	Introduction to Psychology
Advocacy	Digital Journalism	Microeconomics
Applying Philosophy to Modern Global Issues	Entrepreneurship in a Global Context	Neuropsychology
Citizen Artist's Studio: From Making to Action	Fiction Writing	Poetry Writing





Computer Science I: Computational Thinking	Game Theory	Social Psychology
Computer Science II: Game Design and Development	Gender Studies	

3. Catalyzing Change in Your Community and Beyond [CHG]

Advanced Topics in Economics	Comparative Politics	Medical Problem Solving II
Advocacy	Entrepreneurship in a Global Context	Power: Redressing Inequity with Data
Citizen Artist’s Studio: From Making to Action	Gender Studies	Water

4. Designing in a Technology-rich World [DES]

Architecture	Computer Science II: Java	Graphic Design
Citizen Artist’s Studio: From Making to Action	Digital Photography	iOS App Design
Computer Science II: Game Design and Development	Filmmaking	Music Theory and Digital Composition

5. Exploring and Applying a Diversity of Cultural Perspectives [DIV]

9/11 in a Global Context	Comparative Politics	Gender Studies
Applying Philosophy to Modern Global Issues	Creative Nonfiction	Genocide and Human Rights
Arabic Language through Culture I	Digital Journalism	Japanese Language through Culture I
Arabic Language through Culture II	Energy	Japanese Lanugage through Culture II
Architecture	Entrepreneurship in a Global Context	Poetry Writing
Bioethics	Fiction Writing	Water





6. Supporting Sustainability in the Context of Globalization [SUS]

Advanced Topics in Economics	Entrepreneurship in a Global Context	Microeconomics
Bioethics	Global Health	Organic Chemistry
Energy	Macroeconomics	Water



COURSE DESCRIPTIONS

KEY DATES

SEMESTER 1: Wednesday, September 6 - Friday, December 15, 2017

SEMESTER 2: Wednesday, January 17 – Friday, April 27, 2018

YEARLONG: Both Semesters

ART, MEDIA, AND DESIGN

SEMESTER 1

CITIZEN ARTIST’S STUDIO: FROM MAKING TO ACTION [MoT] [EMP][DES] [CHG]

[DIV]*: In this course, each student is an artist who utilizes the world of apps, memes, gifs, loops, views, posts, subs, and tweets to build an understanding of how digital art attracts audiences, affects social media platforms, sparks political activism, and transforms wherever you are into a production studio. The first half of the course is dedicated to tinkering with a plethora of software choices and media for self-expression: websites like YouTube, Giphy, Twine, and Pixlr; apps like Sketch, Paper 53, ProCreate, Boomerang, Aurasma, Prisma, Pic Collage, and Meme Generator; and social media classroom accounts on Instagram, Snapchat, and Twitter. Throughout, we’ll explore how art can aid in seeking unity, defending or defying norms, responding to opposing views, and envisioning better worlds. In the second half of the course, students use the Design Thinking model to identify a need in their community and fulfill the role of the citizen artist by addressing it through use of digital tools. Curricular content includes study of the effects of digital art on current events, lessons and tutorials on artistic techniques, and a history of citizen artwork both on and offline. Throughout the course, students engage in discussion and critique with each other, with students from other GOA classes, with their community contacts, and with professionals invited as guests of the course. *Prerequisites: Students should have daily access to a tablet or smartphone with reliable internet access.*

*Cross-listed in GOA Learning Studios

CREATIVE NONFICTION [EMP] [DIV]: This course focuses on shaping real experiences into powerful narratives. Students learn how to identify the genre of creative nonfiction both through the examination of professional examples of this genre and their own work of creative nonfiction. Students learn how to write in the genre of creative nonfiction both by exploring great stories in their lives and in



the world around them and by effectively and respectfully writing about other people and their experiences. Feedback is an essential component of this course, and students will gain experience in the workshop model, learning how to effectively critique and discuss one another's writing in a digital environment. In addition, students have the opportunity to use technology to transform written work into audio experiences.

DIGITAL JOURNALISM [EMP] [DIV]: In a time when anyone and everyone has the right to write and the ability to publish, what does it mean to be a journalist? Students in this course learn fundamentals of reporting and shaping stories in text and multimedia; they learn to implement standards for copyright and fair use; and they learn to recognize excellence and bias in journalism from professional and amateur sources. In addition, students will skills in media literacy, becoming informed and thoughtful consumers of news in an increasingly rich but fragmented information landscape. This introductory course is intended for students with little to no experience with the craft of journalism. Experienced student journalists are encouraged to take Creative Nonfiction, which focuses on longer form work.

DIGITAL PHOTOGRAPHY [DES]: In an era where everyone has become a photographer obsessed with documenting most aspects of life, we swim in a sea of images, whether posted on Instagram, Facebook, Snapchat, Pinterest, or another digital medium. Yet what does taking a powerful and persuasive photo with a 35mm digital single lens reflex (DSLR) camera require? Digital photography explores this question in a variety of ways, beginning with the technical aspects of using and taking advantage of a powerful camera then moving to a host of creative questions and opportunities. Technical topics such as aperture, shutter, white balance, and resolution get ample coverage in the first half of the course, yet each is pursued with the goal of enabling students to leverage the possibilities that come with manual image capture. Once confident about technical basics, students apply their skills when pursuing creative questions such as how to understand and use light, how to consider composition, and how to take compelling portraits. Throughout the course, students tackle projects that enable sharing their local and diverse settings, ideally creating global perspectives through doing so. Additionally, students interact with each other often through critique sessions and collaborative exploration of the work of many noteworthy professional photographers, whose images serve to inspire and suggest the diverse ways that photography tells visual stories. *Prerequisite: Students must have daily access to a DSLR camera.*

FILMMAKING [DES]: This course is for students interested in developing their skills as filmmakers and creative problem-solvers. It is also a forum for screening the work of their peers and providing



constructive feedback for revisions and future projects, while helping them to develop critical thinking skills. The course works from a set of specific exercises based on self-directed research and builds to a series of short experimental films that challenge students on both a technical and creative level. Throughout, we will increasingly focus on helping students express their personal outlooks and develop their unique styles as filmmakers. We will review and reference short films online and discuss how students might find inspiration and apply what they find to their own works. *Prerequisite: Students must have access to an HD video camera, tripod or other stabilizing equipment, and editing software such as iMovie, Premiere Pro, etc.*

POETRY WRITING [EMP] [DIV]: This poetry writing workshop explores identity and seeks to answer the question: How are you shaped (or not) by the community you live in? Our goal is to create a supportive online network of writers that uses language to discover unique and mutual understandings of what it means to be a global citizen from a local place. Students draft and revise poems, provide and receive frequent feedback, and read a range of modern and contemporary poets whose work is grounded in place. Sample assignments include audio and video recording, an online journal, study of performance poetry, peer video conferences, close reading, investigations into process and craft, collaborative poetry anthologies, and a class publication. All writers have the opportunity to send their work to international contests and publications.

SEMESTER 2

ADVOCACY [EMP] [CHG]*: This skills-based course explores the creativity, effort, and diversity of techniques required to change people's minds and motivate them to act. Students learn how to craft persuasive arguments in a variety of formats (written, oral, and multimedia) by developing a campaign for change around an issue about which they care deeply. We explore a number of relevant case studies and examples as we craft our campaigns. Units include persuasive writing, social media, public speaking, informational graphics, and more. The culminating project is a multimedia presentation delivered and recorded before a live audience.

*Cross-listed in GOA Learning Studios

ARCHITECTURE [DES] [DIV]: In this course students explore the field of architecture through a series of units covering elements of architectural design, materials and structure, architectural analysis, and 3D design. Students begin the course by learning the basic elements of architectural design and then using Google SketchUp to build models of these elements. In the second unit students will study buildings like the Stonehenge, the Parthenon in Athens, the Roman Aqueduct of Pont du Gard in



France, and the Pantheon in Rome to develop an understanding of materials and structures. At each stage students will learn how changes in materials, technology, and construction techniques lead to the evolution of architecture over time. In the third unit students will learn how to analyze structures using Ancient Greek temples as an example. The course will end with a final project in which each student will have the opportunity to design and build a sacred structure of their choice based on their new understanding of architecture, construction, and engineering.

COMPUTER SCIENCE II: GAME DESIGN AND DEVELOPMENT [MoT] [DES] [EMP]*: In this course, students practice designing and developing games through hands-on practice. Comprised of a series of "game jams," the course asks students to solve problems and create content, developing the design and technical skills necessary to build their own games. The first month of the course is dedicated to understanding game design through game designer Jesse Schell's "lenses": different ways of looking at the same problem and answering questions that provide direction and refinement of a game's theme and structure. During this time, students also learn how to use Unity, the professional game development tool they use throughout the class. They become familiar with the methodologies of constructing a game using such assets as graphics, sounds, and effects, and controlling events and behavior within the game using the C# programming language. Throughout the remainder of the course, students will work in teams to brainstorm and develop new games in response to a theme or challenge. Students will develop their skills in communication, project- and time- management, and creative problem-solving while focusing on different aspects of asset creation, design, and coding. *Prerequisites: Computer Science I: Computational Thinking or its equivalent.*

*Cross-listed in GOA Learning Studios

GRAPHIC DESIGN [DES]: What makes a message persuasive and compelling? What helps audiences and viewers sort and make sense of information? This course explores the relationship between information and influence from a graphic design perspective. Using an integrated case study and design-based approach, this course aims to deepen students' design, visual, and information literacies. Students are empowered to design and prototype communication projects about which they are passionate. Topics include: principles of design and visual communication, infographics, digital search skills, networks and social media, persuasion and storytelling with multimedia, and social activism on the Internet. Student work will include individual and collaborative group projects, graphic design, content curation, some analytical and creative writing, peer review and critiques, and online presentations.



FICTION WRITING [EMP] [DIV]: This course connects students interested in creative writing (primarily short fiction) and provides a space for supportive and constructive feedback. Students gain experience in the workshop model, learning how to effectively critique and discuss one another's writing in an online environment. In addition to developing skills as a reader within a workshop setting, students strive to develop their own writing identities through a variety of exercises. The course capitalizes on the geographic diversity of the students by eliciting stories that shed light on both the commonalities and differences of life experiences in different locations. Additionally, we read and discuss the work of authors from around the globe. Students' essential responsibilities are twofold: to engage in the class as readers and writers and to focus on their development as readers and writers. Both require participation in discussions of various formats within our online community, as well as dedicated time outside of class reading and providing feedback on one another's work and writing original pieces for the workshop.

MUSIC THEORY AND DIGITAL COMPOSITION [DES]: In Music Theory and Digital Composition, students explore the structure, writing, and recording of music as a design problem, with the intention of creating and releasing a finished piece of original music. The first half of the semester is focused on the history of music, the staff, notation, scales, intervals, chords, and harmony. In conjunction with this is the use of two pieces of software called Auralia and Musition, which quickly attune to each student's individual skill level in ear training and sight reading, respectively. This aids the student in writing an original composition, the quality and character of which is determined by personal music interests and learning more about their identified target audience. The foundation of the course is the Design Thinking model, which guides students through a process that begins with empathizing with their audience, defining their piece, iterating several design drafts, prototyping, and then releasing the finished recording for feedback and another iteration of refinement. The second half of the course is focused on performing, recording, mixing, mastering, and releasing a recording of their composition, all the while keeping key target audience members in the loop through surveys and conversations.



GOA LEARNING STUDIOS

GOA Learning Studios explore interdisciplinary topics through student-driven learning. Led by a teacher who designs the overall structure, these courses ask students to craft their own projects based on their interests and develop strong relationships with classmates through frequent conversation and feedback. Students can expect to learn how to identify relevant local and/or global issues to explore deeply, how to craft their own plans for structuring and exploring the issue, how to test new ideas both in and out of class, and how to be an active part of a community of learners. Learning Studios demand a high level of organizational and interpersonal skills, curiosity, determination, and flexibility.

SEMESTER 1

ADVANCED TOPICS IN ECONOMICS [EMP] [CHG] [SUS]*: What is the economic impact of professional sports teams on their local community? How does pollution in China affect vineyards in Italy? Why did the US financial market collapse in 2008 and how can we use this experience to predict our next global business cycle? In this course, students choose current events to explore through an economic lens. By building upon the principles discussed in microeconomics and macroeconomics, students analyze how the presence of scarcity affects the behaviors of individuals, businesses, and governments. This course reiterates the rational expectations of the principles courses while also introducing irrational behaviors to provide students a better look at their local economy. With guidance from the instructor, students choose topics related to the stock market, environment, entertainment industry, politics and more. Students research and analyze their economic issue and use their findings to formulate a solution to the problem. Through this course students will build upon their understanding of economic principles and their application. Student work will include the synthesis of data, analytical writing; peer collaboration; and a defense of their findings to a committee. *Prerequisite: Completion of an introductory courses in microeconomics OR macroeconomics (at GOA or elsewhere).*

*Cross-listed in Social Sciences

CITIZEN ARTIST'S STUDIO: FROM MAKING TO ACTION* [MOT] [EMP] [CHG] [DIV]: In this course, each student is an artist who utilizes the world of apps, memes, gifs, loops, views, posts, subs, and tweets to build an understanding of how digital art attracts audiences, affects social media platforms, sparks political activism, and transforms wherever you are into a production studio. The first half of the course is dedicated to tinkering with a plethora of software choices and mediums for self-expression: websites like YouTube, Giphy, Twine, and Pixlr; apps like Sketch, Paper 53, ProCreate, Boomerang, Aurasma, Prisma, Pic Collage, and Meme Generator; and social media classroom accounts on Instagram, Snapchat, and Twitter. Throughout, we'll explore how art can aid in seeking unity,



defending or defying norms, responding to opposing views, and envisioning better worlds. In the second half of the course, students use the Design Thinking model to identify a need in their community and fulfill the role of the citizen artist by addressing it through use of digital tools. Curricular content includes study of the effects of digital art on current events, lessons and tutorials on artistic techniques, and a history of citizen artwork both on and offline. Throughout the course, students engage in discussion and critique with each other, with students from other GOA classes, with their community contacts, and with professionals invited as guests of the course. *Prerequisites: Students should have daily access to a tablet or smartphone with reliable internet access.*

*Cross-listed in Art, Media, and Design

POWER: REDRESSING INEQUITY WITH DATA [MoT] [CHG]*: Students utilize research, data, their own sense of social justice, and the application of all three to right wrongs in our world. A collaborative track and an independent track will run concurrently throughout the semester. Collaboratively, the full class works through a unit on Power Frameworks (Nietzsche, Foucault, Weber, and French & Raven) followed by a series of inequality case studies that will provide insight into and practice with all six steps of the Power and Inequality Assessment (PIA) approach:

1. Identify specific inequality.
2. Provide and analyze data to substantiate the inequality.
3. Identify type(s) of power that created and are maintaining the inequality.
4. Provide and analyze data to substantiate power claim.
5. Present and explain specific action steps to redress inequality.
6. Identify type(s) of power necessary to implement action plan.

Independently, all students will apply the PIA approach to a specific local, national, or global inequality of their choosing. Past PIA projects have explored gender inequality in NCAA collegiate coaching; racial inequality in the American police force; and economic inequality in the treatment of immigrants, to name only a few. Regular, guided peer review will help students to hone their final products. Final PIA products will be presented in multimedia formats asynchronously online. Invited audience members will include GOA classmates; site directors and other members of home school communities; and experts from relevant fields.

*Cross-listed in Social Sciences



SOCIAL PSYCHOLOGY* [EMP] [CHG]: Social psychology examines how the thoughts, feelings, and behaviors of a person are influenced by the actual, imagined, or implied presence of others. Students design research projects that explore contemporary issues relevant to this course, including but not limited to social media, advertising, peer pressure, and social conflict. In order to equip students to do this work, the course begins with an overview of research methods in psychology as well as several historical studies by Solomon Asch, Stanley Milgram, and Philip Zimbardo. Students develop foundational knowledge of social psychology by exploring a diversity of topics, including attitudes and actions, group behavior, prejudice and discrimination, interpersonal relationships, conformity, attraction, and persuasion. The capstone project of this course is student-designed research project that will be submitted for publication, presentation to an audience, or used to catalyze change in local communities.

*Cross-listed in Science and Health

WATER [CHG] [SUS] [DIV]*: The second most common compound in the world, water is essential to life. It is also a cause of quick death. It sculpts mountains and reshapes coastlines. It gives rise to conflicts among neighbors and nations, yet it brings peace and pleasure to many. Characteristics of water can be studied in disciplines from art to zoology, and this course will touch on many of them through a set of case studies in the first five weeks. Those case studies are used to establish a pattern of questioning that shapes the rest of the course. For the next five weeks, students pursue answers to their favorite questions, choosing the disciplines on which to focus. They share their findings in a collaborative online environment and tag the connections among different areas of inquiry. They give and receive weekly critiques of each other's work, developing the skills to generate meaningful, actionable feedback. In the final month, individuals or groups design and complete projects that apply a multidisciplinary understanding of water to a specific, real world issue of their choice. These projects are submitted to relevant audiences in the public or private sector.

*Cross-listed in Science and Health, Social Sciences



SEMESTER 2

ADVOCACY [EMP] [CHG]*: This skills-based course explores the creativity, effort, and diversity of techniques required to change people's minds and motivate them to act. Students learn how to craft persuasive arguments in a variety of formats (written, oral, and multimedia) by developing a campaign for change around an issue about which they care deeply. We explore a number of relevant case studies and examples as we craft our campaigns. Units include persuasive writing, social media, public speaking, informational graphics, and more. The culminating project is a multimedia presentation delivered and recorded before a live audience.

*Cross-listed in Art, Media, and Design

ENTREPRENEURSHIP IN A GLOBAL CONTEXT [MoT] [EMP] [CHG] [DIV] [SUS]*: How does an entrepreneur think? What skills must entrepreneurs possess to remain competitive and relevant? What are some of the strategies that entrepreneurs apply to solve problems? In this experiential course students develop an understanding of entrepreneurship in today's global market; employ innovation, design, and creative solutions for building a viable business model; and learn to develop, refine, and pitch a new start-up. Units include Business Model Canvas, Customer Development vs. Design Thinking, Value Proposition, Customer Segments, Iterations & Pivots, Brand Strategy & Channels, and Funding Sources. Students will use the Business Model Canvas as a roadmap to building and developing their own team start-up, a process that will require hypothesis testing, customer research conducted in hometown markets, product design, product iterations, and entrepreneur interviews. An online start-up pitch by the student team to an entrepreneurial advisory committee will be the culminating assessment. Additional student work will include research, journaling, interviews, peer collaboration, and a case study involving real world consulting work for a current business.

*Cross-listed in Social Sciences



MATHEMATICS AND TECHNOLOGY

OFFERED IN BOTH SEMESTER 1 AND 2

COMPUTER SCIENCE I: COMPUTATIONAL THINKING [MoT] [EMP]: *This course (or its equivalent) is a prerequisite to all Computer Science II classes at GOA.* Computational thinking centers on solving problems, designing systems, and understanding human behavior. It has applications not only in computer science, but also myriad other fields of study. This introductory level course focuses on thinking like a computer scientist, especially understanding how computer scientists define and solve problems. Students begin the course by developing an understanding of what computer science is, how it can be used by people who are not programmers, and why it's a useful skill for all people to cultivate. Within this context, students are exposed to the power and limits of computational thinking. Students are introduced to entry level programming constructs that will help them apply their knowledge of computational thinking in practical ways. They will learn how to read code and pseudocode as well as begin to develop strategies for debugging programs. By developing computational thinking and programming skills, students will have the core knowledge to define and solve problems in future computer science courses. While this course would be beneficial for any student without formal training as a programmer or computer scientist, it is intended for those with no programming experience.

iOS APP DESIGN [MoT] [DES]: Learn how to design and build apps for the iPhone and iPad and prepare to publish them in the App Store. Students will work much like a small startup: collaborating as a team, sharing designs, and learning to communicate with each other throughout the course. Students will learn the valuable skills of creativity, collaboration, and communication as they create something amazing, challenging, and worthwhile. Coding experience is NOT required and does not play a significant role in this course. *Prerequisite: For this course, it is required that students have access to a computer running the most current Mac or Windows operating system (Mac OS X is necessary only if you plan to try your hand at publishing). An iOS device that can run apps (iPod Touch, iPhone, or iPad) is also highly recommended.*



SEMESTER 1

NUMBER THEORY [MoT]: Once thought of as the purest but least applicable part of mathematics, number theory is now by far the most commonly applied: every one of the millions of secure internet transmissions occurring each second is encrypted using ideas from number theory. This course covers the fundamentals of this classical, elegant, yet supremely relevant subject. It provides a foundation for further study of number theory, but even more, it develops the skills of mathematical reasoning and proof in a concrete and intuitive way, good preparation for any future course in upper-level college mathematics or theoretical computer science. We progressively develop the tools needed to understand the RSA algorithm, the most common encryption scheme used worldwide. Along the way we invent some encryption schemes of our own and discover how to play games using number theory. We also get a taste of the history of the subject, which involves the most famous mathematicians from antiquity to the present day, and we see parts of the story of Fermat's Last Theorem, a 350-year-old statement that was fully proven only twenty years ago. While most calculations will be simple enough to do by hand, we will sometimes use the computer to see how the fundamental ideas can be applied to the huge numbers needed for modern applications. *Prerequisite: A strong background in precalculus and above, as well as a desire to do rigorous mathematics and proofs.*

SEMESTER 2

COMPUTER SCIENCE II: ANALYZING DATA with PYTHON [MoT]: In this course, students utilize the Python programming language to read, manipulate and analyze data. The course emphasizes using real world datasets, which are often large, messy, and inconsistent. Because of the powerful data structures and clear syntax of Python, it is one of the most widely used programming languages in scientific computing. Students explore the multitude of practical applications of Python in fields like biology, engineering, and statistics. *Prerequisite: Completion of Computer Science I: Computational Thinking or its equivalent.*

COMPUTER SCIENCE II: GAME DESIGN AND DEVELOPMENT [MoT] [DES] [EMP]*: In this course, students practice designing and developing games through hands-on practice. Comprised of a series of "game jams," the course asks students to solve problems and create content, developing the design and technical skills necessary to build their own games. The first month of the course is dedicated to understanding game design through game designer Jesse Schell's "lenses": different ways of looking at the same problem and answering questions that provide direction and refinement of a game's theme and structure. During this time, students also learn how to use Unity, the professional game development tool



they use throughout the class. They become familiar with the methodologies of constructing a game using such assets as graphics, sounds, and effects, and controlling events and behavior within the game using the C# programming language. Throughout the remainder of the course, students will work in teams to brainstorm and develop new games in response to a theme or challenge. Students will develop their skills in communication, project- and time- management, and creative problem-solving while focusing on different aspects of asset creation, design, and coding. *Prerequisites: Computer Science I: Computational Thinking or its equivalent.*

*Cross-listed in Art, Media, and Design

COMPUTER SCIENCE II: JAVA [MoT] [DES]: This course teaches students how to write programs in the Java programming language. Java is the backbone of many web applications, especially eCommerce and government sites. It is also the foundational code of the Android operating system and many tools of the financial sector. Students learn the major syntactical elements of the Java language through objected oriented design. The emphasis in the course will be on creating intelligent systems through the fundamentals of Computer Science. Students will write working programs through short lab assignments and more extended projects that incorporate graphics and animation. *Prerequisite: Computer Science I: Computational Thinking or its equivalent.*

GAME THEORY [MoT] [EMP]: Do you play games? Do you ever wonder if you're using "the right" strategy? What makes one strategy better than another? In this course, we explore a branch of mathematics known as game theory, which answers these questions and many more. Game theory has many applications as we face dilemmas and conflicts every day, most of which we can treat as mathematical games. We consider significant global events from fields like diplomacy, political science, anthropology, philosophy, economics, and popular culture. Specific topics include two-person zero-sum games, two person non-zero-sum games, sequential games, multiplayer games, linear optimization, and voting and power theory.

LINEAR ALGEBRA [MoT]: In this course students learn about the algebra of vector spaces and matrices by looking at how images of objects in the plane and space are transformed in computer graphics. We do some paper-and-pencil calculations early in the course, but the computer software package Geogebra (free) will be used to do most calculations after the opening weeks. No prior experience with this software or linear algebra is necessary. Following the introduction to core concepts and skills, students analyze social networks using linear algebraic techniques. Students will learn how to model social networks using matrices and to discover things about the network with linear algebra as



your tool. We will consider applications like Facebook and Google. Prerequisite: completion of Geometry and Algebra 2 or the equivalents.

YEARLONG

MULTIVARIABLE CALCULUS [MoT]: In this course students learn to differentiate and integrate functions of several variables. We extend the Fundamental Theorem of Calculus to multiple dimensions, and the course will culminate in Green's, Stokes' and Gauss' Theorems. We begin with a swift review of vectors, matrices, and parametric curves, with emphasis on those topics which are of value to multivariate calculus. We then move on to study partial derivatives, double and triple integrals, and vector calculus in both two and three dimensions. Students are expected to develop fluency with vector and matrix operations. Understanding of a parametric curve as a trajectory described by a position vector is an essential concept, and this allows us to break free from 1-dimensional calculus and investigate paths, velocities, and other applications of science that exist in three-dimensional space. We study derivatives in multiple dimensions, we use the ideas of the gradient and partial derivatives to explore optimization problems with multiple variables, and we consider constrained optimization problems using Lagrangians. After our study of differentials in multiple dimensions, we move to integral calculus. We use line and surface integrals to calculate physical quantities especially relevant to mechanics and electricity and magnetism, such as work and flux, and we employ volume integrals for calculations of mass and moments of inertia. We conclude with the major theorems (Green's, Stokes', Gauss') of the course, applying each to some physical applications that commonly appear in calculus-based physics. *Prerequisite: The equivalent of a college year of single-variable calculus, including integration techniques, such as trigonometric substitution, integration by parts, and partial fractions. Completion of the AP Calculus BC curriculum with a score of 4 or 5 on the AP Exam would be considered adequate preparation.*



SCIENCE AND HEALTH

OFFERED IN BOTH SEMESTER 1 AND 2

BIOETHICS [SUS] [DIV]: Ethics is the study of what one should do as an individual and as a member of society. In this course students evaluate ethical issues related to medicine and the life sciences. During the semester, students explore real-life ethical issues, including vaccination policies, organ transplantation, genetic testing, human experimentation, and animal research. Through reading, writing, and discussion, students learn basic concepts and skills in the field of bioethics, deepen their understanding of biological concepts, strengthen their critical-reasoning skills, and learn to engage in respectful dialogue with people whose views may differ from their own. In addition to journal articles and position papers, students will be required to read Rebecca Skloot's *The Immortal Life of Henrietta Lacks*.

INTRODUCTION TO PSYCHOLOGY [EMP]: What does it mean to think like a psychologist? In Introduction to Psychology, students explore three central psychological perspectives – the behavioral, the cognitive, and the sociocultural – in order to develop a multi-faceted understanding of what thinking like a psychologist encompasses. The additional question of “How do psychologists put what they know into practice?” informs study of the research methods in psychology, the ethics surrounding them, and the application of those methods to practice. During the first five units of the course, students gather essential information that they apply during a group project on the unique characteristics of adolescent psychology. Students similarly envision a case study on depression, which enables application of understandings from the first five units. The course concludes with a unit on positive psychology, which features current positive psychology research on living mentally healthy lives. Throughout the course, students collaborate on a variety of activities and assessments, which often enable learning about each other’s unique perspectives while building their research and critical thinking skills in service of understanding the complex field of psychology.

MEDICAL PROBLEM SOLVING I [MoT]: In this course students collaboratively solve medical mystery cases, similar to the approach used in many medical schools. Students enhance their critical thinking skills as they examine data, draw conclusions, diagnose, and treat patients. Students use problem-solving techniques in order to understand and appreciate relevant medical/biological facts as they confront the principles and practices of medicine. Students explore anatomy and physiology pertaining to medical scenarios and gain an understanding of the disease process, demographics of disease, and pharmacology. Additional learning experiences include studying current issues in health and



medicine, building a community-service action plan, interviewing a patient, and creating a new mystery case.

SEMESTER 1

GLOBAL HEALTH [SUS]: What makes people sick? What social and political factors lead to the health disparities we see both within our own community and on a global scale? What are the biggest challenges in global health and how might they be met? Using an interdisciplinary approach to address these two questions, this course improves students' health literacy through an examination of the most significant public-health challenges facing today's global population. Topics include the biology of infectious disease (specifically HIV and Malaria); the statistics and quantitative measures associated with health issues; the social determinants of health; and the role of organizations (public and private) in shaping the landscape of global health policy. Students use illness as a lens through which to examine social issues like poverty, gender, and race. Student work includes analytical and creative writing; research, and peer collaboration; reading and discussions of nonfiction; and online presentations.

PRACTICAL ASTRONOMY [MoT]: This course serves as a model of how modern astronomy has benefited from the digital revolution and advances in imaging technology. In the past two decades, the amount of information about our place in the universe has seen an explosive expansion. Our understanding of our own solar system has become fundamentally different in that short time. Students learn the modern techniques used by professional astronomers to gather and analyze data. The course reviews coordinate systems used in locating astronomical objects and the basics of spherical trigonometry. Students then wrestle with practical problems such as determining the orbits of newly discovered solar system objects such as minor planets and comets. Data from professional observatories is used to analyze the light curves of binary star systems and variable stars as well as to search for supernovae. These projects, given the global nature of the course, could include timing of occultations of stars by the Moon and asteroids, providing information vital to professional researchers. The Cranbrook Observatory at the Cranbrook Institute of Science in Bloomfield Hills, Michigan, USA, will be used as a source of data along with other international sources specific to each student for individual projects.

Prerequisite: successful completion of a course in trigonometry and geometry.

SOCIAL PSYCHOLOGY [EMP] [CHG]*: Social psychology examines how the thoughts, feelings, and behaviors of a person are influenced by the actual, imagined, or implied presence of others. Students design research projects that explore contemporary issues relevant to this course, including but not limited to social media, advertising, peer pressure, and social conflict. In order to equip students to do



this work, the course begins with an overview of research methods in psychology as well as several historical studies by Solomon Asch, Stanley Milgram, and Philip Zimbardo. Students develop foundational knowledge of social psychology by exploring a diversity of topics, including attitudes and actions, group behavior, prejudice and discrimination, interpersonal relationships, conformity, attraction, and persuasion. The capstone project of this course is a student-designed research project that will be submitted for publication, presentation to an audience, or used to catalyze change in local communities. This course may be taken as a continuation of Introduction to Psychology, although doing so is not required.

*Cross-listed in GOA Learning Studios

WATER [CHG] [SUS] [DIV]*: The second most common compound in the world, water is essential to life. It is also a cause of quick death. It sculpts mountains and reshapes coastlines. It gives rise to conflicts among neighbors and nations, yet it brings peace and pleasure to many. Characteristics of water can be studied in disciplines from art to zoology, and this course will touch on many of them through a set of case studies in the first five weeks. Those case studies are used to establish a pattern of questioning that shapes the rest of the course. For the next five weeks, students pursue answers to their favorite questions, choosing the disciplines on which to focus. They share their findings in a collaborative online environment and tag the connections among different areas of inquiry. They give and receive weekly critiques of each other's work, developing the skills to generate meaningful, actionable feedback. In the final month, individuals or groups design and complete projects that apply a multidisciplinary understanding of water to a specific, real world issue of their choice. These projects are submitted to relevant audiences in the public or private sector.

*Cross-listed in GOA Learning Studios, Social Sciences

SEMESTER 2

ABNORMAL PSYCHOLOGY [EMP]: This course focuses on psychiatric disorders such as schizophrenia, eating disorders, anxiety disorders, substance abuse, and depression. As students examine these and other disorders, they learn about their symptoms, diagnoses, and treatments. Students also deepen their understanding of the social stigmas associated with mental illnesses. This course may be taken as a continuation of Introduction to Psychology, although doing so is not required.

MEDICAL PROBLEM SOLVING II [MoT]: This course is an extension of the problem-based learning done in Medical Problem Solving I. While collaborative examination of medical case studies will remain the core work of the course, students will tackle more complex cases and explore new topics in medical science, such as the growing field of bioinformatics. Students in MPS II will also have



opportunities to design cases based on personal interests, discuss current topics in medicine, and apply their learning to issues in their local communities. *Prerequisite: completion of Medical Problem Solving I.*

NEUROPSYCHOLOGY [EMP]: This course is an exploration of the neurological basis of behavior. It covers basic brain anatomy and function as well as cognitive and behavioral disorders from a neurobiological perspective. Additionally, students explore current neuroscience research as well as the process of funding that research. Examples of illnesses that may be covered include: Alzheimer's disease, traumatic brain injury, and stroke. In addition, we explore diagnostic and treatment issues (including behavioral and pharmaceutical management) as well as attention, learning, memory, sleep, consciousness and emotional intelligence. Students conclude the course by developing a fundraising campaign to support research and/or patient care initiatives related to a specific neurological condition and nonprofit foundation. Neuropsychology can be taken as a continuation of Introduction to Psychology, although it is not required.

ORGANIC CHEMISTRY [SUS]: This course is designed with two goals in mind: one pragmatic, and one philosophical. Pragmatically it provides a few foundational blocks for further studies in the organic chemistry field, giving students a small window on future, more traditional organic courses. Philosophically it aims to open an infinite world of discovery of complex molecules, their properties and reactions and applications, that hold the keys to confronting and solving the world's most challenging, future scientific problems. The emphasis of the course is on stimulating interest in organic chemistry through an exploration of the molecules relevant to modern life. Students can use this course as a springboard for further learning, as the beginning of a longer journey.



SOCIAL SCIENCES

OFFERED IN BOTH SEMESTER 1 AND 2

9/11 in a GLOBAL CONTEXT [DIV]: September 11, 2001 was a tragic day that changed the world in profound ways. In this course students explore the causes of 9/11, the events of the day itself, and its aftermath locally, nationally, and around the world. In place of a standard chronological framework, students instead view these events through a series of separate lenses. Each lens represents a different way to view the attacks and allows students to understand 9/11 as an event with complex and interrelated causes and outcomes. Using a variety of technologies and activities, students work individually and with peers to evaluate each lens. Students then analyze the post-9/11 period and explore how this event affected the U.S., the Middle East, and the wider world.

SEMESTER 1

ADVANCED TOPICS IN ECONOMICS [EMP] [CHG] [SUS]*: What is the economic impact of professional sports teams on their local community? How does pollution in China affect vineyards in Italy? Why did the US financial market collapse in 2008 and how can we use this experience to predict our next global business cycle? In this course, students choose current events to explore through an economic lens. By building upon the principles discussed in microeconomics and macroeconomics, students will analyze how the presence of scarcity affects the behaviors of individuals, businesses, and governments. This course reiterates the rational expectations of the principles courses while also introducing irrational behaviors to provide students a better look at their local economy. With guidance from the instructor, students choose topics related to the stock market, environment, entertainment industry, politics, and more. Students research and analyze their economic issue and use their findings to formulate a solution to the problem. Through this course students build upon their understanding of economic principles and their application. Student work includes the synthesis of data, analytical writing, peer collaboration, and a defense of their findings to a committee. *Prerequisite: Completion of an introductory courses in microeconomics OR macroeconomics (at GOA or elsewhere).*

*Cross-listed in GOA Learning Studios

APPLYING PHILOSOPHY to MODERN GLOBAL ISSUES [MoT] [EMP] [DIV]: This is an applied philosophy course that connects pressing contemporary issues with broad-range philosophical ideas and controversies, drawn from multiple traditions and many centuries. Students use ideas from



influential philosophers to examine how thinkers have applied reason successfully, and unsuccessfully, to many social and political issues across the world. In addition to introducing students to the work of philosophers as diverse as Confucius, Kant, John Rawls and Michel Foucault, this course also aims to be richly interdisciplinary, incorporating models and methods from diverse fields including history, journalism, literary criticism, and media studies. Students learn to develop their own philosophy and then apply it to the ideological debates which surround efforts to improve their local and global communities.

GENOCIDE AND HUMAN RIGHTS [EMP] [DIV]: Students in this course study several of the major genocides of the 20th century (Armenian, the Holocaust, Cambodian, and Rwandan), analyze the role of the international community in responding to and preventing further genocides (with particular attention to the Nuremberg tribunals), and examine current human rights crises around the world. Students read primary and secondary sources, participate in both synchronous and asynchronous discussions with classmates, write brief papers, read short novels, watch documentaries, and develop a human rights report card website about a nation in the world of their choice.

INTRODUCTION TO INVESTMENTS [MoT]: In this course, students simulate the work of investors by working with the tools, theories, and decision-making practices that define smart investment. We explore concepts in finance and apply them to investment decisions in three primary contexts: portfolio management, venture capital, and social investing. After an introduction to theories about valuation and risk management, students simulate scenarios in which they must make decisions to grow an investment portfolio. They manage investments in stocks, bonds, and options to learn a range of strategies for increasing the value of their portfolios. In the second unit, they take the perspective of venture capital investors, analyzing startup companies and predicting their value before they become public. In the third unit, students examine case studies of investment funds that apply the tools of finance to power social change. Throughout the course, students learn from experts who have experience in identifying value and managing risk in global markets. They develop their own ideas about methods for taking calculated financial risks and leave this course not just with a simulated portfolio of investments, but the skills necessary to manage portfolios in the future.

MICROECONOMICS [EMP] [SUS]: In this course, students learn about how consumers and producers interact to form a market and then how and why the government may intervene in that market. Students deepen their understanding of basic microeconomic theory through class discussion and debate, problem solving, and written reflection. Students visit a local production site and write a



report using the market principals they have learned. Economic ways of thinking about the world will help them better understand their roles as consumers and workers, and someday, as voters and producers.

POWER: REDRESSING INEQUITY WITH DATA [MoT] [CHG]*: Students utilize research, data, their own sense of social justice, and the application of all three to right wrongs in our world. A collaborative track and an independent track will run concurrently throughout the semester. Collaboratively, the full class works through a unit on Power Frameworks (Nietzsche, Foucault, Weber, and French & Raven) followed by a series of inequality case studies that will provide insight into and practice with all six steps of the Power and Inequality Assessment (PIA) approach:

1. Identify specific inequality.
2. Provide and analyze data to substantiate the inequality.
3. Identify type(s) of power that created and are maintaining the inequality.
4. Provide and analyze data to substantiate power claim.
5. Present and explain specific action steps to redress inequality.
6. Identify type(s) of power necessary to implement action plan.

Independently, all students will apply the PIA approach to a specific local, national, or global inequality of their choosing. Past PIA projects have explored gender inequality in NCAA collegiate coaching; racial inequality in the American police force; and economic inequality in the treatment of immigrants, to name only a few. Regular, guided peer review will help students to hone their final products. Final PIA products will be presented in multimedia formats asynchronously online. Invited audience members will include GOA classmates; site directors and other members of home school communities; and experts from relevant fields.

*Cross-listed in GOA Learning Studios

WATER [CHG] [SUS] [DIV]*: The second most common compound in the world, water is essential to life. It is also a cause of quick death. It sculpts mountains and reshapes coastlines. It gives rise to conflicts among neighbors and nations, yet it brings peace and pleasure to many. Characteristics of water can be studied in disciplines from art to zoology, and this course will touch on many of them through a set of case studies in the first five weeks. Those case studies are used to establish a pattern of questioning that shapes the rest of the course. For the next five weeks, students pursue answers to their favorite questions, choosing the disciplines on which to focus. They share their findings in a collaborative online environment and tag the connections among different areas of inquiry. They give and receive weekly critiques of each other's work, developing the skills to generate meaningful, actionable feedback. In the



final month, individuals or groups design and complete projects that apply a multidisciplinary understanding of water to a specific, real world issue of their choice. These projects are submitted to relevant audiences in the public or private sector.

*Cross-listed in GOA Learning Studios, Science and Health

SEMESTER 2

COMPARATIVE POLITICS [EMP] [CHG] [DIV]: In 2012, the Economist issued a report entitled “Democracy at a Standstill.” This course uses the comparative model to ask students to consider whether democracy is in fact at a standstill, but more importantly, if and why we should care. By looking at current events, reading scholarly research, analyzing data, conducting personal interviews, and engaging in a series of debates, students assess the status of democracy in the world and also explore the challenges and alternatives to democratic systems. In so doing, they constantly reevaluate their own beliefs and understandings about how power should be distributed and utilized.

ENERGY [SUS] [DIV]: Energy is a topic of paramount concern to our global community today. How do we source it, how do we use it, and how do we control emissions and reduce our carbon footprint to avoid irreversible environmental damage? These are the questions that surface in the news cycle, where photos of Beijing’s lethal smog or drinking water lit by fire remind us daily of the perils of our energy mismanagement. Likewise photos of windmills set in bucolic landscapes promise a renewable energy future, which continues to elude us. This 14-week course guides students to explore how they source and use energy, how and why energy sourcing and use vary dramatically across communities, regions, and socio economic classes, and finally how we might achieve a sustainable energy future. We look closely at access to energy, at its immediate and long term impact on development everywhere in the world, and at the implications of our ever-growing appetite for energy. Will we answer this appetite through greater efficiencies or innovative technologies? Through environmentally friendly or destructive means? Throughout the semester students conduct independent and collaborative research work, share findings in varied media, and build and curate a library of resources. Students engage as both consumers and activists to educate themselves about energy options and to bring their increasing knowledge to challenge and advocate for changing energy norms.

ENTREPRENEURSHIP IN A GLOBAL CONTEXT [MoT] [EMP] [CHG] [DIV]*: How does an entrepreneur think? What skills must entrepreneurs possess to remain competitive and relevant? What are some of the strategies that entrepreneurs apply to solve problems? In this experiential course, students develop an understanding of entrepreneurship in today’s global market; employ innovation,



design, and creative solutions for building a viable business model; and learn to develop, refine, and pitch a new start-up. Units of study include Business Model Canvas, Customer Development vs. Design Thinking, Value Proposition, Customer Segments, Iterations & Pivots, Brand Strategy & Channels, and Funding Sources. Students use the Business Model Canvas as a roadmap to building and developing their own team start-up, a process that requires hypothesis testing, customer research conducted in hometown markets, product design, product iterations, and entrepreneur interviews. An online start-up pitch by the student team to an entrepreneurial advisory committee is the culminating assessment. Additional student work includes research, journaling, interviews, peer collaboration, and a case study involving real world consulting work for a current business.

*Cross-listed in GOA Learning Studios

GENDER STUDIES [EMP] [CHG] [DIV]: This course uses the concept of gender to examine a range of topics and disciplines that includes feminism, gay and lesbian studies, women's studies, popular culture, and politics. Throughout the course students examine the intersection of gender with other social identifiers: class, race, sexual orientation, culture, and ethnicity. Students read about, write about, and discuss gender issues as they simultaneously reflect on the ways that gender has manifested in and influenced their lives.

MACROECONOMICS [SUS]: Macroeconomics is the study of economic units as a whole rather than of their individual components. The aggregate unit is usually a national economy and that will be our focus in this course. Students will learn to better understand how to measure national economic activity with concepts like gross domestic product, unemployment and inflation and the strengths and weaknesses of these statistics. Students will then study theoretical methods of influencing national economic activity with monetary and fiscal policy and will learn about some of the controversy surrounding these policy tools. The advantages and disadvantages of international trade and of methods of setting exchange rates will also be introduced. The course will include an individual student investigation of a national economy other than their home country. Students will identify their economic findings and present resolutions in their final report.



WORLD LANGUAGES (YEARLONG)

ARABIC LANGUAGE THROUGH CULTURE I [DIV]: This full-year course highlights Modern Standard Arabic and some of the spoken dialect of the Levant. With an emphasis on Arabic culture, students learn commonly used expressions and phrases from the Levant area. Students develop their skills in listening, reading, writing, forming grammatically correct structured sentences, and most importantly, conversation. This is accomplished through podcasts, videos, culture circles discussions, web conferencing, and collaborations in group projects. In addition, students have direct conversations with native speakers of Arabic through a virtual club called “Shu Fe Maa Fe,” where students are required to meet online with their assigned partner and learn about a certain cultural topic every week, such as traditional food, greetings, gestures, values, history and more. Since Arabic is becoming one of the most functional languages in the world, especially in the areas of commerce, business, and trade, students participating in this course can avail themselves of the opportunity to learn the language in a highly stimulating and rich cultural context. The focus on this course is 60 percent on language and 40 percent on culture.

ARABIC LANGUAGE THROUGH CULTURE II [DIV]: This full-year course continues the work of Arabic Language Through Culture I, highlighting Modern Standard Arabic and the spoken dialect of the Levant. Grammar topics include continued exploration of the essential structures of Arabic (root/pattern systems) and verbs. Mastery of the alphabet (writing and reading) is an early goal of the course as it underlies more sophisticated work on sentence-writing skills. As in the first course, students develop their skills in listening, reading, writing, forming grammatically correct structured sentences, and, most importantly, conversation. Using these fundamental skills, students will explore and discuss current events related to cultural topics and have the opportunity to design their own inquiry projects to simultaneously build language skills and cultural understanding. The focus of this course is 60 percent on language and 40 percent on culture. *Prerequisite: Arabic Language through Culture I or permission from the instructor.*

JAPANESE LANGUAGE THROUGH CULTURE I [DIV]: This full-year course is a unique combination of Japanese culture and language, weaving cultural comparison with the study of basic Japanese language and grammar. While examining various cultural topics such as literature, art, lifestyle and economy, students learn the basics of the Japanese writing system (Hiragana and Katakana), grammar and vocabulary. Through varied synchronous and asynchronous assignments, including hands-on projects and face-to-face communications, students develop their speaking, listening, reading and



writing skills. The cultural study and discussions are conducted in English, with topics alternating every two to three weeks. The ultimate goal of this course is to raise awareness and appreciation of different cultures through learning the basics of the Japanese language. The focus of this course is 60 percent on language and 40 percent on culture. This course is appropriate for beginner-level students.

JAPANESE LANGUAGE THROUGH CULTURE II [DIV]: Through language learning, students in this course share their voices, cultivate global perspectives, and foster appreciation of self and others. Students expand their knowledge of the basic skills introduced in Japanese Language Through Culture I while further developing their speaking, listening, writing, and reading skills. Each unit follows the IPA model (Integrated Performance Assessment), blending three modes of communication: interpretation of authentic material in Japanese, synchronous and asynchronous practice in speaking and writing, and oral and written presentations. Each unit focuses on one of the following cultural topics: Design and Expression, Ecology, Entertainment, East meets West, Harmony, and Nature. In addition, students will have the opportunity to select and pursue topics of their own interest. Grammar topics will cover the essential forms that are typically introduced in the second and third year of a high school Japanese program. By learning the Dictionary Form, Nominalizer, TE form, TA form, NAI form, and Noun Modifier, students are able to add more complexity to their sentence construction. In doing so, they shift from forming simple sentences to communicating in a coherent paragraph. As online learners, students are expected to exhibit superb time management and communication skills, as well as to take ownership of their learning. While grammar instruction will be delivered through asynchronous work and face-to-face meetings, much of the course content will be curated and created by students through their research and collaboration. The focus of this course is 60 percent on language and 40 percent on culture.

Prerequisite: Japanese Language through Culture I or permission from the instructor.