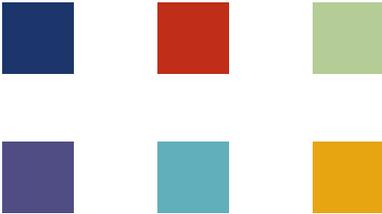




**Curriculum  
Guide**  
2020-2021



Meeting students  
where they are,  
and taking them  
beyond where  
they imagined.



CHESHIRE  
ACADEMY

1794



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# The Academic Program

## The Academic Vision

Cheshire Academy students grow increasingly capable of independently observing, questioning, explaining, interpreting, and analyzing the world. Our academic process begins with what students know and want to know, and develops active learners who reflect on their growth and the implications of their learning.

Our academic vision is the Academy’s mission statement in action. We believe all students are unique individuals, with their own academic interests, styles, and needs. We also believe in helping our students become rationally autonomous individuals. And while we strive to pass on knowledge, skills, and values—including those that will help students find college and career paths—we also are keen to ensure students have an active role and voice in their learning, and take ownership over creating work which reflects their passions and their evolving world views.

## Graduation Requirements

The distribution requirements listed are minimums, and, in general, it is work done beyond them that qualifies a student for acceptance to colleges. Students are required to take a minimum of five credits for letter grades per semester. The basic requirements, completed from the start of the student’s 9th-grade year, are as follows:

- 4 credits of English, including both semesters of the senior and postgraduate year
- 4 credits in mathematics, including both semesters of the senior and postgraduate year
- 2 credits in lab sciences

- 2 credits in foreign languages (must reflect second year proficiency in one language)
- 3 credits in history or social science
- 1 credit in fine or performing arts
- 3-4 elective credits
- Successful completion of three seasons of the afternoon program (athletics, arts, service) each year
- Ninth grade students must complete one semester of Health and Wellness
- Seniors and postgraduate students must complete a senior declamation

A minimum of 20 academic credits are required for graduation; of these credits, five must be earned in the senior year, including one in English and one in math. The Academic Office must approve credits not earned at Cheshire Academy and submitted for graduation requirements. In addition, seniors and postgraduates must pass all courses, both semester and year long, in order to qualify for either a diploma or certificate.

Any student whose work is incomplete in a course at the end of the year will be deemed to have finished the course in question with a failing grade and will receive no credit for that course. A senior or postgraduate who fails a course required for graduation will receive his/her diploma upon successful completion of an online or other course, at the student’s expense, which has been approved by the Academic Office.

## Grade Point Average Scale

Grade Point Averages are based on all academic credits earned at Cheshire Academy.

A+	4.33	100-97.0	B+	3.33	89.9-87.0	C+	2.33	79.9-77.0	D+	1.33	69.9-67.0	P	Pass
A	4.00	96.9-93.0	B	3.00	86.9-83.0	C	2.00	76.9-73.0	D	1.00	66.9-63.0	INC	Incomplete
A-	3.67	92.9-90.0	B-	2.67	82.9-80.0	C-	1.67	72.9-70.0	D-	0.67	62.9-60.0	WD	Withdrawn
									F	0.00	59.9-0		

## Examinations

Students sit for exams in most courses at the end of the second semester. Students in AP or IB courses who have taken the AP or IB exam may be exempt from the second semester exam at the discretion of the teacher.

## Report Cards and Comments

Cheshire Academy's academic year is divided into two semesters. Grades are reported by the faculty to the Academic Office at the end of each semester. Report cards are available through the portal as soon as all grades are recorded, verified, and averages are determined. Parents of students whose grades change significantly during the semester will receive an official note, email, or phone call from the teacher or Academic Office.

## Academic Honors and Awards

**Academic Honor Roll:** An academic honor roll is published after each semester for students who have attained first or second honors. Students earn first honors by recording a GPA of at least 3.67 (A-) with no grade below a 3.0 (B). Students earn second honors by recording a GPA of at least 3.33 (B+) with no grade below 2.33 (C+). A student receiving an "Incomplete" in any course at the end of the semester will not be eligible for academic honors unless the incomplete was due to illness or extenuating circumstances and is approved by the Academic Office.

**Academic Awards:** The Academy recognizes outstanding effort and achievement by naming recipients of various academic awards for excellence in academic fields of study at the end of the year. Awards and prizes fall into three categories: major school prizes, named academic awards, and book prizes.

## Honors, IB, and AP Offerings

Cheshire Academy students, with the permission of the department chair and academic dean, may elect Honors, Advanced Placement (AP), or Higher Level International Baccalaureate (IB) courses. All AP and IB students must complete the AP or IB exam designated for that course.

## Roxbury Academic Support Program

The Roxbury Academic Support Program offers a range of services dedicated to enhancing student performance. This fee-based service includes the incorporation of individualized education plans based on student strengths and weaknesses, the provision of one-on-one direct student support, and the recommendation of specific subject area tutoring services.

Roxbury instructors partner with parents, classroom teachers, health services, and outside professionals to support students in all their academic endeavors, and serve as advocates for students. Using an individualized educational program based upon testing and observation, these trained professionals focus on the strengths and needs of their students, working with them to establish reachable short and long-term goals. Students are taught time management and organizational skills, as well as listening and note-taking strategies. Improved reading comprehension, test-taking strategies, and use of assistive technology are all components of the Roxbury Program.

In the role of advocate and academic coach, Roxbury instructors assist classroom teachers with appropriate classroom strategies for each student involved in the program. Parents are updated regularly on their children's progress.

## Postgraduate Course of Study Certificate Requirements

The full course of study for the Postgraduate Certificate includes a minimum of five classes per semester for a total of at least 10 credits. Required courses include College English, Global Issues, the Postgraduate Seminar, and a mathematics course. Postgraduate students then complete their choice of classes for the year from the following subject areas:

- Science, strongly recommended; course of appropriate level
- Fine and Performing Arts elective (including Visual Arts, Design Thinking, Music, and Dramatic Arts) that fits within the PG program schedule
- Social Science elective, such as AP Psychology or Economics, that fits within the PG program schedule

Postgraduate students are required to participate in two seasons of afternoon activities and must complete a senior declamation. Postgraduate students must pass all courses, both semester and year long, to qualify for a certificate.

# The International Baccalaureate® Diploma Programme

Cheshire Academy became an IB World School in 2011. Recognized as the leader in international education, the International Baccalaureate® (IB) Diploma Programme cultivates the knowledge, skills, and attitudes that enable students to excel at the university level. The Academy adopted the IB because it is truly student-centered, interdisciplinary, and multi-modal in its provided learning experience, and because the philosophy and pedagogical approaches behind it fit perfectly with the Academy's mission. The Academy didn't have to radically change in order to become an IB World School; rather, Cheshire has successfully integrated the IB into our existing ethos, with an emphasis on providing each student the exact right level of challenge with the exact right level of support.

Students at Cheshire Academy may choose to pursue the full IB Diploma, or, as most students do, take some IB courses based on their own interests and the level of rigor and challenge they find appropriate. While placement in Higher Level IB courses is by department chair approval only, Standard Level IB courses are accessible, meaning all students at Cheshire Academy can succeed in them. The more IB courses students take, the more interdisciplinary connections they will experience.

Through the full IB Diploma Programme, students gain rigorous and balanced academic preparation, an ability to draw on knowledge and understanding of various cultures and histories, and the experience of learning how to think critically and apply what they have learned in different contexts and across disciplines.

The IB Diploma Programme understands that success in higher education and beyond involves thinking critically and creatively. The challenging curriculum educates the whole student, developing the capacity for inquiry, research, and problem solving as well as essential skills for communication and collaboration.

Success in the 21st century requires intercultural understanding and respect. At its heart, the IB is motivated by a desire to create a better world through education, as embodied in the IB mission statement:

*"The International Baccalaureate aims to develop inquiring, knowledgeable, and caring young people who help to create a better and more peaceful world through intercultural understanding and respect."*

To this end, the organization works with schools, governments, and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate, and lifelong learners who understand that other people, with their differences, can also be right.

## What is the Diploma Programme?

The IB Diploma Programme is an academically challenging and balanced program of education with final examinations that prepares students, in grades 11 and 12, for success at the university level and life beyond. It has been designed to address the intellectual, social, emotional, and physical well-being of students. The Programme has gained recognition and respect from the world's leading universities.

The Diploma Programme prepares students for effective participation in a rapidly evolving and increasingly global society as they:

- develop physically, intellectually, emotionally, and ethically;
- acquire breadth, depth of knowledge, and understanding, studying courses from six subject groups;
- develop the skills and a positive attitude toward learning that will prepare them for higher education;
- study at least two languages and increase understanding of cultures, including their own;
- make connections across traditional academic disciplines and explore the nature of knowledge through the Programme's unique Theory of Knowledge course;
- undertake in-depth research into an area of interest through the lens of one or more academic disciplines in the Extended Essay;
- and enhance their personal and interpersonal development through creativity, action, and service

## The Curriculum

IB Diploma Programme students must choose one subject from each of five groups (1 to 5), ensuring breadth of knowledge and understanding in their best language, additional language(s), the social sciences, the experimental sciences, and mathematics. Student may choose either an arts subject from group 6, or a second subject from groups 2 to 5.

Students are required to take three or four subjects at Higher Level (HL) (240 teaching hours), while the other subjects are taken at Standard Level (SL) (150 teaching hours).

In addition to disciplinary and interdisciplinary study, the Diploma Programme features three core elements that broaden students' educational experience and challenge them to apply their knowledge and skills.

A student taking all six IB subject courses and the three core requirements is considered a full Diploma Programme candidate.

If a student does not choose to be a full Diploma Programme student, she/he can take individual IB courses, including the core requirements, to earn IB course certificates.

## The Diploma Programme Core Requirements

The Extended Essay asks students to engage in an independent, self-directed piece of research through an in-depth study of a question relating to one of the Diploma Programme subjects they are studying. The research culminates in a 4,000-word paper. As a required component, the Extended Essay provides practical preparation for the kinds of undergraduate research required at the tertiary level and provides an opportunity for students to engage in an in-depth study of a topic of interest.

"Theory of Knowledge" develops a coherent approach to learning that unifies the academic disciplines. In this course on critical thinking, students inquire into the nature of knowing and deepen their understanding of knowledge as a human construction.

"Creativity, Activity, Service" (CAS) involves students in a range of activities alongside their academic studies throughout the Diploma Programme. Creativity encourages students to engage in the arts and creative thinking. Activity seeks to develop a healthy lifestyle through physical activity. Service with the community offers a vehicle for a new learning with academic value. The three strands of CAS enhance students' personal and interpersonal development through experiential learning and enable journeys of self-discovery.

# The Diploma Programme

## Subject Groups

### **GROUP 1: STUDIES IN LANGUAGE & LITERATURE**

Language A: English Language & Literature SL / HL

Language A: English Literature SL / HL

Literature & Performance SL

### **GROUP 2: LANGUAGE ACQUISITION**

Language B: French SL; French HL year 2 (2020-2021 only); Spanish SL; Spanish HL year 2 (2020-2021 only); Mandarin SL year 2 (2020-2021 only)

Language ab initio: French ab initio SL; Spanish ab initio SL; Mandarin ab initio SL year 2 (2020-2021 only)

### **GROUP 3: INDIVIDUALS & SOCIETIES**

Economics SL

History SL / HL

### **GROUP 4: SCIENCES**

Biology SL / HL

Chemistry SL / HL

Physics SL; Physics HL year 2 (2020-2021 only)

Sports, Exercise & Health Science SL

Computer Science SL

### **GROUP 5: MATHEMATICS**

IB Mathematics: Applications and Interpretation SL

IB Mathematics: Analysis and Approaches SL

IB Mathematics: Analysis and Approaches HL

### **GROUP 6: THE ARTS**

Theatre SL / HL

Visual Arts SL / HL

Literature & Performance SL

Music SL / HL

## Assessment

Students take written examinations at the end of the programme, which are marked by external IB examiners. Students also complete assessment tasks in the school, which are either initially marked by teachers and then moderated by external moderators, or sent directly to external examiners.

The marks awarded for each course range from 1 (lowest) to 7 (highest). Students can also be awarded up to three additional points for their combined results on Theory of Knowledge and the Extended Essay. The diploma is awarded to students who gain at least 24 points, subject to certain minimum levels of performance across the whole programme and to satisfactory participation in the creativity, action, service requirement. The highest total that a Diploma Programme student can be awarded is 45 points.

Assessment is criterion-related, which means student performance is measured against pre-specified assessment criteria based on the aims and objectives of each subject curriculum, rather than the performance of other students taking the same examinations. The range of scores that students have attained remains statistically stable, and universities value the rigor and consistency of Diploma Programme assessment practice.

# Departments & Courses

## ENGLISH

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*The English Department is the hub of critical thinking, cultural conversations, and creative writing at Cheshire Academy. From poetry to prose, from timeless classics to contemporary works, our students find meaning and create connections through the power of ideas and words. Challenging all assumptions, norms, and biases, we read diversely, converse deeply, and write passionately.*

### American Literature

In this course, students focus on the fundamentals of studying literature—reading closely and actively, writing analytically, thinking deeply, and discussing broadly. Students develop these skills through engagement with a curriculum which focuses on the many different voices of American Literature, from multiple regions and time periods. Students wrestle with these fundamental questions: What makes a literary voice uniquely American? How have generations of American writers influenced each other? How does American literature reflect American culture? How is the American dream reflected in American literature? Students master the basics of strong analytical writing, including crafting and defending a strong central claim. This course is heavily discussion-based, and includes both oral and written assessments.

#### Freshman course

### American Literature (Honors)

This is the honors-level version of the American Literature course, and is for students recommended for it by the Department Chair. Students survey the genres, literary movements, and themes that dominate American Literature: freedom and independence, westward expansion, war and conflict, justice, religion, immigration, race relations, and the American Dream, among others. Students write traditional literary analyses, but also think about texts more creatively, producing writing in which they might adopt the voice of a literary character, reproduce a part of a text in the author's voice, or superimpose one literary genre over another. Students master the basics of strong analytical writing, including crafting and defending a strong central claim. This course is heavily discussion-based and includes both oral and written assessments.

#### Freshman course

### English I

This course is for international students who have previously studied literature and the English language, and serves as a cultural introduction to the process of discussion-based critical examination of literature at the ninth-grade level. Students acquire new vocabulary, discuss key points of literature in class, write essays and creative pieces, and create interactive projects to promote a deeper understanding of literature. Students examine numerous themes throughout the year and explore a variety of texts from American authors and perspectives including short novels, graphic novels, and short stories. This course is heavily discussion-based and includes both written and oral assessments.

#### Freshman course

### World Literature

This course introduces students to a range of literature from various time periods and regions of the world. Students explore universal themes such as war, national identity, and coming-of-age journeys that have fascinated writers of poetry, novels, short fiction, and drama for centuries. While giving time and attention to some classic writers, this course emphasizes more contemporary writers and texts as well. Students use these texts as vehicles for the important work of close readings, identifying and understanding literary devices and their effect on a written work. Students search for and create deeper symbolic meanings and contextualize those meanings within their own worlds. In concert with active reading skills, students work toward clear and effective communication of their ideas in their own writing. This course is heavily discussion-based and includes both oral and written assessments.

#### Sophomore course

## World Literature (Honors)

This is the honors-level version of the World Literature course for students who are recommended for it by the Department Chair. Students focus on texts written by global authors on subjects of international significance. Students explore universality of themes such as: triumph over adversity, hope and courage, relationships and emotions, jealousy, revenge, love, friendship, loyalty, free will versus duty, perspective and the danger of the single story/narrative, and culture and its influence in society.

Students learn about writing and the world around them by examining the texts chosen for their mechanics of storytelling as well as for their cultural-historical contexts. This course is heavily discussion-based and includes both oral and written assessments.

**Sophomore course**

## English II

This course is for international students who have previously studied literature and the English language, and serves as a cultural introduction to the process of discussion-based critical examination of literature at the tenth-grade level. Students acquire new vocabulary, discuss key points of literature in class, write essays and creative pieces, and create interactive projects to promote a deeper understanding of literature. Students examine numerous themes throughout the year and explore a variety of texts from global authors and perspectives including short novels, graphic novels, and short stories. This course is heavily discussion-based and includes both written and oral assessments.

**Sophomore course**

## IB Literature & Performance SL1/SL2

This two-year interdisciplinary course incorporates essential elements of literature and performance, and aims to explore the relationship between the two. Students approach literary and dramatic texts as readers, actors, and directors in order to develop their imagination, confidence, and creativity. At the heart of the course is this interaction between a conventional literary emphasis on close reading, critical writing and discussion, and the practical theatrical elements of performance. In this dynamic process, literary texts are viewed from different angles in a way that goes beyond what is characteristic of either literary or theater studies as single disciplines. Among other

assessments, students complete a performance of a portion of a play accompanied by written analysis and reflection of a transformation of literary work, an original performance, a written examination of poetry, and a written explanation exploring a literary work and its potential for adaptation into a theatrical performance.

**Junior/Senior two-year course**

## IB English Language & Literature SL1/SL2 & HL1/HL2

This two-year course, offered at both standard and, by recommendation, higher level, course draws student focus to a critical study of language in all of its many forms and the cultural contexts that produce and consume it. Students study non-fiction texts—including essays, speeches, journalism, and advertising—and examine the impact that evolving cultures have on the uses of language as a means of communication within and among those cultures. Students also read novels, short stories, poetry, and drama from a wide array of regions and time periods, allowing them to closely examine the relationship between a literary text and its cultural context. Assessments include close reading analyses, reading responses, formal literary criticism, oral presentations, and other creative projects.

**Junior/Senior two-year course**

## IB English Literature SL1/SL2 & HL1/HL2

In this two-year course, offered at both standard and, by recommendation, higher level, students appreciate the artistry of literature and develop an ability to reflect critically on their reading. Works are studied in their literary and cultural contexts, through close study of individual texts and passages, and by considering a range of critical approaches. The study of literature enables an exploration of one of the more enduring fields of human creativity, and provides opportunities for encouraging independent, original, critical, and clear thinking. It also promotes respect for the imagination and a perceptive approach to the understanding and interpretation of literary works. Assessments include close reading analyses, reading responses, formal literary criticism, oral presentations, and other creative projects.

**Junior/Senior two-year course**

## Language & Literature A

This course, co-seated with IB Language & Literature SL1, is designed for one-year seniors, and aims to draw student focus to a critical study of language and literature in each of their many forms, and the cultural contexts that produce and consume them. Students study non-fiction texts—including essays, speeches, journalism, and advertising—and examine the impact evolving cultures have on language as a means of communication within and among those cultures. Students also incorporate fictional literary works into their curriculum, studying novels, short stories, poetry, and drama from a wide array of regions and time periods, allowing them to closely examine the relationship between a literary text and its cultural context.

**Senior course**

## Creative Writing (Fall & Spring)

This semester elective immerses students in the written and spoken word, develops their writing skills, and produces a variety of work that reflects exposure to short stories, plays, poetry, memoirs, and experimental genres. The work that students produce is grounded in imagination or based upon personal experience. Self-examination, reflection, and observation are essential to the craft of writing. Through free-writing exercises and journaling, students articulate and explore their feelings in response to prompts that touch upon a wide range of beliefs and experiences. While the self is essential for writing, it is the sharing of the self that allows stories to impact others. Workshopping completed works facilitates feedback as students share their style choices and gather insight into the writing process. Students have the opportunity to participate in author visits and are encouraged to submit their work to Juxtaposition, Cheshire Academy's literary magazine.

**Junior/Senior elective**

## College English

This course is required for postgraduate students who seek to increase and refine their communication, reading, and writing skills. Students plan, draft, and complete written compositions in response to readings and oral discourse. They edit papers for clarity, engaging language, and the correct use of the conventions and the mechanics of written English, with the goal of producing compelling, error-free prose. Students are expected to read critically, think analytically, and communicate clearly in both writing and speech. They respond to the readings with the appropriate lexicon as they interpret the possible influences of historical and social context on literary works. This is a heavily discussion-based course and includes both oral and written assessments.

**Postgraduate course**

## ELL: Writing, Composition, & Expression

Cheshire Academy's Writing, Composition, and Expression courses offer an intensive, context-based, genre-focused sequence of study in writing for academic purposes. The courses are for students whose home/comfort language is not English.

**Intermediate Level:** Students enhance grammatical, mechanical, and lexical control. The course focuses on improving writing styles such as memoirs, scientific articles, short stories, analytical responses, and research papers. Students explore how academic writing presents problems, poses questions, gives feedback, and supports discussion in all disciplines. Rhetorical modes include: analysis, description, chronology, process, argument, cause and effect, classification, comparison and contrast, and opinion.

**Proficient Level:** Students focus on models of academic genres in all disciplines and develop an understanding of the purpose of each genre, how each genre is organized, argumentative patterns, and specific language features of each genre. They develop tools to critique academic texts, understand conventions, link audience and purpose, and revise papers with structural accuracy, lexical and syntactic mastery, clarity, and coherence.

**Freshman – Senior courses**

# FINE & PERFORMING ARTS

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*The purpose of art is to discover, unearth, and enhance various ways of engaging with the world and the human experience.*

*We do that in the Fine & Performing Arts Department through performance and creative acts which become the instruments of personal expression, and which are meaningful in their relationship to the larger world.*

## Drawing (Fall/Spring)

This introductory class focuses on drawing as a means of visual inquiry. Students learn about gesture, contour line, positive and negative space, visual space, shadow and light, composition, and perspective. They use these methods to render still-life, landscape, live model, and self-portrait. Students manipulate pencil, ink, pastel, oil pastel, colored pencil, and charcoal to complete various projects. This class does not require any previous experience, only a willingness to explore and work hard.

**All grades elective**

## Painting (Fall/Spring)

In this introductory class, students learn to accurately discern relationships of shape, form, color, and value, and to interpret this information through various paint mediums. Through a series of projects, students explore various approaches to the use of watercolor, acrylic, and tempera paint. Students develop disciplined technical skills such as paint handling and application, as well as the exploration of painting's potential as a medium of communication and creative visual expression. There is no prerequisite for this class, though knowledge of how to draw is helpful. Students taking this class should come with a willingness to explore and work hard.

**All grades elective**

## Ceramics (Fall/Spring)

This introductory course consists of hand, wheel, and mold methods of construction. Students examine special hand building and wheel techniques, glaze and decoration methods, and firing processes. Students learn to successfully throw a bowl and cup on the wheel, as well as build a pot using the pinch, coil, and slab methods. The course introduces contemporary artists and their work as it relates to ceramics. Students create both

functional and decorative pieces. This class does not require any previous experience, only a willingness to explore and work hard.

**All grades elective**

## Printmaking (Fall)

In this course, students are exposed to a variety of printing processes such as monoprint, lithography, transfer, woodcut, linoleum, and drypoint. With these methods, students learn to mix various elements to achieve the correct viscosity of ink, to apply just the right amount of ink to whatever surface they are working on, and master the ability of wiping a plate so as to achieve a good print without under or over wiping. Students are expected to use the basic elements of art and principles of design to create two-dimensional works. This course is a structured, yet spontaneous environment that encourages involvement and commitment to originality and self-expression. Students are introduced to work of past and present artists who have used various printing methods to great effect as a way to inspire creative imagination.

**All grades elective**

## Digital Photography (Fall /Spring)

This course explores digital photography in relation to the fine arts. Students are introduced to digital photography technology and software. Emphasis is placed on the production and analysis of expressive and thoughtful artwork, as students learn to edit and print their photos. Students learn Adobe Bridge as a tool for organization and storage, and Photoshop CC as the central tool for editing. Compositional tools such as framing, "rule of thirds," light, texture, pattern, lines, symmetry, depth of field, distance, perspective, space, and balance are the center of projects and discussions. Students are assigned practical projects using school-issued Canon DSLR cameras. The course introduces the work of photographers, digital artists, and various sophisticated techniques to create work that reveals each student's spirit and vision. By exploring photography and digital media, students develop a body of work that reflects a range of ideation and technical versatility. Independent research, art journals, individual and class critiques, and artistic dialogues inspire students as they work toward creating a final photographic portfolio. Projects are open-ended enough to allow students to develop their own style and mode of expression, showcasing a high level of thought, skill, and artistic vision. Interested students may repeat this course and work on more independent projects while exploring their own photographic interests and further developing their digital media skill sets.

**All grades elective**

## Art Major (Honors)

This class is geared for students who are interested in applying to art and design programs for college, although any student with a strong interest and background in the arts would certainly feel at home. In this year-long course, students work to develop their portfolios by first completing a series of intensive drawing assignments. As the year progresses, the students begin working on a body of work for the end of year Art Major Show. This work should represent each student's passion in the arts and the best of his or her abilities. Any area of art and medium is allowable, ranging from oil paint to film to architectural models, making for a lively time. Students are assessed on the quality of their work, and for the scope and enthusiasm of their efforts. This is an honors-level class and students are expected to produce their best work.

**Senior elective**

## IB Visual Arts SL1/SL2 & HL1/HL2

This course engages students in a two-year program that provides a wholly creative experience. By going through the proven steps and procedures most artists embrace as a vital part of the creative process, each student discovers the artist within and develops a body of work that is both personal and relevant to the current times we live in. Beginning with carefully guided assignments that rely on specific research and investigation, students create work that is the result of this inquiry. Each student keeps their thoughts and ideas in an Investigation Notebook, which becomes an invaluable tool in the creative process. As a culmination of the program, each student has a formal showing of his or her work at the end of the second year. Students may focus more on their notebook than on studio work, or they may focus more on studio work. Studio work involves practical exploration and artistic production. Investigation work involves independent contextual, visual, and critical investigation and reflection, both visual and written.

**Junior/Senior two-year course**

## Music Skills and Performance (Fall/Spring)

In this comprehensive music course, students at any level improve their technique, write songs, form ensembles, and, most importantly, play music. This class is open to both beginners and experienced musicians. Each student practices and rehearses

music, and motivated students may choose to participate in one of the many performance opportunities available on campus throughout the year. Music theory lessons prepare students for Music Theory and IB Music. Students may take this class more than once with a more challenging curriculum; advanced musicians can continue to study their main instrument or explore a secondary instrument.

**All grades elective**

## Songwriting (Fall)

Musicians of all levels are encouraged to take this class in order to build their skills in songwriting. The course focuses on popular music, and students explore new genres of music. Students learn musical concepts such as harmonization, chord progressions, and structure. Also studied are the literary aspects of writing lyrics, such as the effects of rhyme scheme and imagery. Most importantly, students implement the important artistic process of editing and revising. Students do not need to know how to read music to succeed in this class, but it is helpful to know some fundamentals. Students who complete this class are encouraged to use their new skills in the second semester's Music Technology class.

**All grades elective**

## Music Technology (Spring)

Music technology students gain experience using computers to record, process, and mix audio. The course focuses on the fundamental skills that help musicians in any genre of music. Among those skills are recording and editing audio, understanding and using MIDI, and using loops and digital signal processing for effects. Some familiarity with playing an instrument is recommended but not required. Students who are already comfortable with music technology will work on more advanced assignments. As a culmination to the course, each student creates recordings to be included in an end-of-semester album. It is strongly suggested that students take the Songwriting class in the fall as an appropriate lead-in to Music Technology.

**All grades elective**

## IB Music SL1/SL2

In this two-year course, students choose one of three options to pursue for an internal assessment: creating music, solo performing, or group performing. Students submit a Listening Paper (musical perception questions), and a Musical Links Investigation (a written media script investigating the significant musical links between two or more pieces from distinct musical cultures). A student with little to no knowledge of music theory or experience may sign up for this course.

**Junior/Senior two-year course**

## IB Music HL1/HL2

This two-year course explores musical perception, and students generate music and a solo performance. Students compose a Listening Paper (musical perception questions) and a Musical Links Investigation (a written media script investigating the significant musical links between two or more pieces from distinct musical cultures). It is recommended that a student enrolled in this course have some experience with music theory and performance, including reading music.

**Junior/Senior two-year course**

## Dramatic Arts (Fall/Spring)

This semester elective, designed for all levels, exposes students to multiple aspects of creating theater, including acting, staging, designing, and directing. The course is an introduction to theater through games and other activities, and individual student interests and experience shape much of the content. Students who choose to focus on acting explore the use of voice, body, emotion, and imagination in scenes and monologues. Students can also focus on elements of technical theater, including lighting, sound, and stage design. Advanced students gain experience as drama coaches, dramaturgs, and directors. Attendance at plays throughout the year enhances the course, allowing for a critical review of the various components of theatrical production. This course is appropriate for beginning theater students and is recommended for those preparing for the IB Theatre course. Students can take the course multiple times for credit, each time tackling more advanced material or working on different aspects of dramatic arts.

**All grades elective**

## IB Theater SL1/SL2 & HL1/HL2

This two-year, multi-faceted theater-making course gives students the opportunity to make theater as creators, designers, directors, and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble, and offers the opportunity to engage actively in the creative process, transforming ideas and research into action and dramatic arts. The syllabus comprises three equal, interrelated areas: theater in context, theater in process, and theater presentation. All students will complete a director's notebook, chronicling ideas on the staging of a specific play; a research presentation, outlining and physically demonstrating the research into a convention of a theater tradition; and a collaborative theater project, an original piece of theater collaboratively created and presented by a class ensemble. HL students complete a solo theater piece, in which students research a drama theorist, identify an aspect of their theory, and create/present a short solo theater performance.

**Junior/Senior two-year course**

## Design Thinking (Fall/Spring)

In this semester-long course, students are introduced to the world of product design and development, and what it means to bring an idea to the marketplace. Each assignment addresses an area of possible consumer need, leaving students with a problem to solve in the most effective way possible given the realities of demographics, markets, and technology. These problems will be solved in two proven steps: research and development. Research determines the need for a certain product and how to best produce it. Ideation takes place in the form of working sketches with ideas tested out in group critiques. A finished presentation board that demonstrates the legitimacy of a student's product idea will be presented for approval before the next phase of developing an actual prototype. Working in Cheshire Academy's Maker Space, students construct prototypes of their product for display and demonstration purposes. A variety of materials are used, including foam, wood, and styrene. Students are given demonstrations in hand tool and basic power tool usage and safety. Upon completion of the model, each student will give a final sales presentation to the class before grading is to take place. The course provides each student a firm understanding of the nature of entrepreneurship and the critical importance of creative thinking in this kind of endeavor. All materials, within reason, will be provided.

**Postgraduate semester course**

# HISTORY & SOCIAL SCIENCE

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*The History & Social Science Department is where the humanities comes alive at Cheshire Academy. This is the place where we answer the deep questions about what the world is like, how it got to be this way, and how it might be different if we made it better. We start with what we know and, critically, what we think we know, and build to a larger understanding of the ways in which we are all connected.*

## U.S. History

This course examines the social, political, and economic transformation of the United States. Students explore a thematic, rather than chronological, story of the evolution of the United States, from the founding of the British Colonies, through the Civil War, to the Great Depression, the Civil Rights Movement, to near present day. Through the examination of primary and secondary sources, students have the opportunity to enhance their knowledge and understanding of the events and people that have shaped this nation. By the conclusion of the year, students should have further developed their reading, writing, and critical thinking skills that are necessary for connecting the past to the present. This is a heavily discussion-based course, including both oral and written assessments of various kinds.

**Freshman course**

## U.S. History (Honors)

This is the honors-level version of the U.S. History course, and is for students who receive a recommendation for it from the Department Chair. Students do a deep dive into the history of this nation through a thematic exploration of its evolution from the Revolutionary era to contemporary times. Students explore themes like immigration, race relations, the role of government, international relations, competing political philosophies, and the idea of the American Dream. Throughout the course, students develop their ability to think and write critically, to analyze a range of primary and secondary sources, and to express their ideas in a logical, concise manner. This is a heavily discussion-based course, including both oral and written assessments of various kinds.

**Freshman course**

## U.S. Cultures

This course is designed to acclimate international students into an American-style, discussion-based history classroom and to instill an enduring curiosity about the history and culture of the United States. The course traces the development of the nation from revolutionary times to contemporary issues. After first developing a working vocabulary to discuss culture and history, students explore the major themes of the American story. The course emphasizes active learning in the classroom through group discussion, note-taking on short lectures, individual and group presentations, and hands-on projects that culminate in both written and oral assessments. Daily classroom participation and the active development of critical thinking and writing are integral to success in the course.

**Freshman course**

## 9th Grade Health & Wellness (Fall or Spring)

The Health & Wellness course addresses issues relating to physical, mental, emotional, and social health. Topics covered include the terminology and stigma associated with mental health, stress management, digital citizenship, healthy relationships, hygiene, exercise, nutrition, human development, and drugs and alcohol. Throughout the course, students engage in group projects, debates, role-playing, labs, reflective journaling, presentations, and written assessments. This class allow students to understand their bodies, healthy practices, and develop the ability to live a balanced life as global citizens.

**Freshman required course**

## Modern World History

In this course, survey modern world history from the high middle ages to the turn of the 20th century, focusing on various aspects of politics, economics, society, and culture. The primary objective of the course is to develop study skills such as annotation, note-taking, time management, and organization through the lens of the entire globe. In addition, students learn to identify common themes in world history, as well as make connections from different eras and cultures. Moreover, the course strengthens analytical and interpretive skills specifically applied to source evaluation. This is a heavily discussion-based course, including both oral and written assessments of various kinds.

**Sophomore course**

## Modern World History (Honors)

This is the honors-level version of the Modern World History course, and is for students who receive a recommendation for it from the Department Chair. Students survey world history from the high middle ages to the turn of the 20th century, with a focus on various aspects of politics, economics, societies, and culture. Students develop advanced critical thinking skills through more rigorous primary source readings and with an emphasis on student-driven discussions. Moreover, students are challenged with a “non-western” approach to world history, evaluating the perspectives of different cultures on politics, religion, empire, and war. This is a heavily discussion-based course, including both oral and written assessments of various kinds.

**Sophomore course**

## World Cultures

World Cultures is designed to acclimate international students into an English-speaking history classroom and to instill an enduring curiosity about and love for history and culture. The course traces the development of modern human culture from the Renaissance through contemporary times. Regions studied include the Near and Middle East, Africa, Asia, and Europe. After first developing a working vocabulary to discuss culture and history, students study overarching trends and themes in modern world history. The course emphasizes active learning in the classroom through group discussion, note-taking on short lectures, individual and group presentations, and hands-on projects that culminate in both written and oral assessments. Daily classroom participation and the active development of critical thinking and writing are integral to success in the course.

**Sophomore course**

## American Government & the Constitution

This year-long elective course is designed for students interested in further study of the United States, its history, and its system of governance. Students explore the classical foundations of the American system from Ancient Greece and Rome, the contextual debates around the substance of the Constitution, the development of the American two-party political system, the evolution of American law and justice, and broader themes of civics, rights, and the ideals and realities of American governance. This course is recommended for students who have

not previously taken a high school American or U.S. History course. This is a heavily discussion-based course, including both oral and written assessments of various kinds.

**Junior/Senior course**

## IB History SL1/SL2 & HL1/HL2

This two-year course, offered at both standard and, with recommendation, higher level, is a world history course based on a comprehensive and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social, and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills, as well as gaining factual knowledge. It puts a premium on developing critical thinking skills and on developing an understanding of multiple interpretations of history. In this way, the course involves an engaging and critical exploration of the past. This course focuses on six key concepts as the lenses through which students view history: change, continuity, causation, consequence, significance, and perspectives. The standard level of this course is accessible to all students.

**Junior/Senior two-year course**

## IB Economics SL1/SL2

In this a two-year course, students explore Economics as a dynamic social science. The study of economics is essentially about dealing with scarcity, resource allocation, and the methods and processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements. This course emphasizes the economic theories of microeconomics—which deal with economic variables affecting individuals, firms, and markets—and of macroeconomics—which deal with economic variables affecting countries, governments, and societies. This course encourages students to develop international perspectives, fosters a concern for global issues, and raises students’ awareness of their own responsibilities at a local, national, and international level.

**Junior/Senior two-year course**

## Economics (Fall or Spring)

In this semester elective, students learn how to “think like an economist” and see the importance of economics, not only in sectors of business and government, but also in their day-to-day lives. Students are introduced to major economic concepts, examine the many interconnected components of the economy, and study major economists and their theories. Topics covered over the course of the semester include scarcity, choice, opportunity cost, supply, demand, externalities, and much more. At the conclusion of this course students should be confident in their ability to read, watch and understand economic news, and make applications to their daily lives. This is a heavily discussion-based course, with both oral and written assessments of various kinds.

**Junior – Postgraduate elective**

## AP Psychology

AP Psychology is a year-long course designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological principles, facts, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. The aim of the course is to provide the student with a learning experience equivalent to that obtained in most college introductory psychology courses. The major content areas covered by the AP Psychology exam are history and approaches, research methods, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders, and social psychology. In addition to a variety of in- and out-of-class assessments, students end the course taking the AP exam.

**Junior – Postgraduate course  
(with departmental permission)**

## Psychology I (Fall)

This one semester introductory elective course gives students the opportunity to explore major topics of interest in psychology, the science of behavior and mental processes. This course lays the groundwork for understanding how the brain works, the origins of human behavior and mental processes, and human development. The course explores consciousness, how drugs affect the brain, and the benefits of sleep. Students explore their own interests within these subjects via a discussion-based classroom, research projects, and both oral and written assessments of various kinds.

**Junior – Postgraduate elective**

## Psychology II (Spring)

This one semester introductory elective course gives students the opportunity to explore major topics in psychology, the science of behavior and mental processes. Psychology I and II can be taken separately or consecutively. A short review of the workings of the brain and the origins of behavior and mental processes will benefit those students who choose to start their exploration of psychology by taking Psychology II. This course explores memory, intelligence, and psychological disorders. Students explore their own interests within these subjects via a discussion-based classroom, research projects, and both oral and written assessments of various kinds.

**Junior – Postgraduate elective**

## Global Issues

The overall concept of this course is to explore a series of broad contemporary issues in an interdisciplinary, unit-based manner. The course may include some team-teaching, guest speakers, and field trips. This course offers a range of intellectual inquiry—from economics and physical science to moral philosophy and literature—and features a high degree of independent investigation and group sharing. Possible units of study include: Climate Change, Global Terrorism, Global Poverty and Genetic Engineering. Students will be challenged and assessed in a variety of ways, including class discussion, tests, research papers, and presentations. This course is a required part of the postgraduate year.

**Postgraduate course**

# LANGUAGE

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*Language classes exist to open students' minds not just to other linguistic systems, but also other ways to categorize and explain realities, other ways of viewing and interpreting the world, other cultural norms, and other perspectives on life and its priorities. Our language classes establish floors of knowledge on which students build higher and higher structures of understanding.*

## French I

This introductory language acquisition course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively in a range of situations, understand and use accurately the basic structures of French, understand and use an appropriate range of vocabulary. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, French I is a novice level language course.

**Freshman – Postgraduate course**

## French II

This introductory language acquisition course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively in a range of situations, understand and use accurately the basic structures of French, and understand and use an appropriate range of vocabulary. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, French II is a novice/novice mid-level language course.

**Freshman – Postgraduate course**

## French III

This intermediate language acquisition course may be co-seated with IB French SL1 depending upon enrollment. Students continue to focus on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Students communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent and convincing manner, understand, analyze and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in French. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, French III is a novice high/intermediate low-level language course.

**Sophomore – Postgraduate course**

## IB French *ab initio* 1 & 2

This two-year introductory language acquisition course may be co-seated with French I and II depending upon enrollment. The course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively in a range of situations, understand and use accurately the basic structures of French, understand and use an appropriate range of vocabulary. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, French *ab initio* is a novice mid-level language course.

**Junior/Senior two-year course**

## IB French SL1/SL2

This two-year, intermediate-to-advanced language acquisition course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Objectives for this course challenge the students to communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent and convincing manner, understand, analyze and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in French. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, IB French Standard Level is a novice high/intermediate low mid-level language course.

**Junior/Senior two-year course**

## IB French HL2

This two-year advanced language acquisition course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Objectives for this course challenge the students to communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent and convincing manner, understand, analyze and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in French. Literary works may include works by Saint-Exupéry, Camus, Sartre, Schmidt, and Maupassant. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, IB French High Level is an intermediate low high-level language course.

**Junior/Senior two-year course**

## Spanish I

Spanish I is an introductory language acquisition course that focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively in a range of situations, understand and use accurately the basic structures of Spanish, and understand and use an appropriate range of vocabulary. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, Spanish I is a novice level language course.

**Freshman – Postgraduate course**

## Spanish II

Spanish II is an introductory language acquisition course that focus on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively in a range of situations, understand and use accurately the basic structures of French, and understand and use an appropriate range of vocabulary. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, Spanish II is a novice/novice mid-level language course.

**Freshman – Postgraduate course**

## Spanish III

Students continue to focus on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Objectives for this course challenge the students to communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent and convincing manner, understand, analyze and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in Spanish. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, Spanish III is a novice high/intermediate low-level language course.

**Freshman – Postgraduate course**

## IB Spanish SL1/SL2

International Baccalaureate Spanish Language Standard Level (SL) is a two-year intermediate-to-advanced language acquisition course. The course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Objectives for this course challenge the students to communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent, and convincing manner, understand, analyze, and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in Spanish. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, IB Spanish Standard Level is a novice high/intermediate low mid-level language course.

**Junior/Senior two-year course**

## IB Spanish HL2

International Baccalaureate Spanish Language High Level (HL) is a two-year advanced language acquisition course. The course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Objectives for this course challenge the students to communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent, and convincing manner, understand, analyze, and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in Spanish. Literary works may include works by Federico García Lorca, Laura Esquivel, Jordi Sierra i Fabra, or Ana María Matute, among others. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, IB Spanish High Level is an intermediate low high-level language course.

**Junior/Senior two-year course**

## Mandarin II

Students in Mandarin II, an introductory language acquisition course that is co-seated with IB Mandarin *ab initio* 2, focus on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively in a range of situations, understand and use accurately the basic structures of Mandarin, understand and use an appropriate range of vocabulary. By the end of the course students can recognize 300 new characters and write 150 characters. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, Mandarin I is a novice language course.

**Freshman – Postgraduate course**

## IB Mandarin *ab initio* 2

This second year of a two-year introductory language acquisition course is co-seated with Mandarin II. The course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the fundamental lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Assessment objectives for this course include the following: demonstrate an awareness and understanding of the intercultural elements related to the topics studied, communicate clearly and effectively

in a range of situations, understand and use accurately the basic structures of Mandarin, understand and use an appropriate range of vocabulary. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, IB Mandarin *ab initio* 2 is a novice language course.

### Junior/Senior two-year course

## IB Mandarin SL2

This second year of a two-year intermediate-to-advanced language acquisition course is co-seated with Mandarin III and IV. The course focuses on five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Students learn the advanced lexicon and grammar necessary to communicate through speaking, listening, reading, and writing. Objectives for this course challenge the students to communicate clearly and effectively in a range of situations, demonstrate linguistic competence and intercultural understanding, use language appropriate to a range of interpersonal and cultural contexts, understand and use language to express and to respond to a range of ideas in a clear, coherent and convincing manner, understand, analyze and respond to a range of written and spoken sources, and understand and use written texts and works of literature written in Mandarin Chinese. Students respond to visual stimuli, present orally, role play, and write emails, blogs, articles, letters, creative stories, and advertisements. Following the guidelines of the American Council for the Teaching of Foreign Languages, IB Mandarin Standard Level is a Novice high/Intermediate low/Intermediate mid-level language course.

### Junior/Senior two-year course

# MATHEMATICS & COMPUTER SCIENCE

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*The Mathematics & Computer Science Department encourages each student to comprehend and execute the study of mathematics. Committed to supporting and assisting each student in their efforts, we believe students should be active learners who take risks and work collaboratively, enjoying the core concepts of mathematics and how it helps us to better understand the world around us.*

## Integrated Math I

This course is the first year of a three-year integrated math sequence exploring the topics traditionally covered in Algebra I, Algebra II, Geometry, and Precalculus. This course uses an integrated approach to lay the conceptual and technical groundwork for the study of further algebra, geometry, statistics, and discrete mathematics. It is appropriate for students who have completed Pre-Algebra. Topics from the traditional Algebra I curriculum include algebraic operations with variable expressions, solving and graphing linear equations and inequalities, and solving quadratic equations. Foundational concepts from geometry and statistics include transformations and similarity, right triangles and the Pythagorean theorem, calculating area, theoretical probability, and quantitative statistics.

**Freshman course**

## Integrated Math II (Standard/Accelerated/Honors)

This course is the second year of a three-year integrated math sequence covering the topics traditionally covered in Algebra I, Algebra II, Geometry, and Precalculus. The goal of this course is to extend and apply the topics studied previously and to introduce higher-level topics. This course is appropriate for students who have completed Pre-Algebra and Algebra I (Integrated Math I). Throughout the course, there is a focus on developing problem-solving skills, evaluating the potential uses of technology in mathematics, and communicating methods and solutions. Students learn to model, and may present or produce projects incorporating content from throughout the course.

Topics in the Standard Level include linear equations, inequalities and systems, graphing and analyzing functions, exponents and radicals, and quadratic functions. Concepts from geometry include parallel lines and transversals, polygon angles, triangle congruence and basic proofs, properties of quadrilaterals and circles, and 3D geometry. Additional topics in the Accelerated Level include exponential functions, and right triangle and unit circle trigonometry. The Honors Level involves deeper explorations, extensions, and applications of all topics and includes further proofs and trigonometric functions on the coordinate plane.

**Freshman – Senior course**

## Integrated Math III (Standard/Accelerated/Honors)

Algebra I, Algebra II, Geometry, and Precalculus. The goal of this course is to integrate all previously learned math content, solidify retention of technical skills, and lead students into the questions that can be answered with a higher-level study of mathematics including calculus and statistics. This course is appropriate for students who have completed Algebra I, Geometry, and Algebra II (Integrated Math II). Throughout the course, there is a focus on problem solving, comparison of methods and solutions, and self-reflection on both conceptual and technical mastery.

Topics in the Standard Level include an integrated look at linear, quadratic, polynomial, exponential, logarithmic, radical and rational functions, an introduction to complex numbers, equations of circles, and an in-depth study of trigonometry. Non-algebraic concepts include one-variable data analysis, graphical representations of two-variable statistics, and area and volume calculations. Additional topics in the Accelerated Level include sketching parent functions and their transformations without technology as well as sequences and series. Further additional topics in the Honors Level include two-dimensional vectors, theoretical probability, and an introduction to limits and basic differential calculus.

**Sophomore – Postgraduate course**

## Discrete Math

This course first provides an integrated review of the concepts in algebra and geometry that are traditionally covered in the first three or four years of a secondary math curriculum. The majority of the course then turns to probability, statistics, advanced algebraic functions, sequences and series, and the financial applications of these content areas. Through creative projects and presentations, each unit is designed to promote the ability to think and reason mathematically, collaborate creatively, and confidently apply mathematics to solve realistic industry-driven challenges. Problem solving and critical thinking are emphasized in each topic, along with the real-life applications of quantitative reasoning.

**Senior/Postgraduate course**

## AP Statistics

This is a non-calculus-based college-level introductory statistics class. This course uses technology extensively and explores problems in many fields, including business, science, sports, and public policy. AP Statistics is great preparation for success in the specialized college statistics courses required for many majors. Students should be confident with high school math through Algebra II or its equivalent, and department approval is required to enroll in this course. Of the four main topics covered in the AP Statistics curriculum, data analysis, data collection, and probability are all taught during the first half of the course. These topics are combined to discuss inference during the second half of the course. Concepts covered include independence, standard scores, statistical significance, normal models, and T-distributions. Students will also understand the conditions and assumptions necessary to use particular statistical tools, construct confidence intervals, and perform hypothesis tests. Students complete the course by taking the AP exam in May.

**Senior/Postgraduate course**

## IB Mathematics: Applications and Interpretation SL1/SL2

This two-year course is designed for students with varied backgrounds and abilities in mathematics. Students develop practical mathematical skills for describing our world, modeling and solving real-world problems using the power of technology. Students study scientific notation, approximation and error, sequences and series and their financial applications, and basic exponentials and logarithms. Students learn to create and use models with linear, exponential, natural logarithmic, cubic, and simple trigonometric functions. Students learn right-angled and non-right-angled trigonometry, bearings, surface area and volume of 3D figures, and methods for collecting, displaying, and analyzing one- and two-variable data sets. The first year of the course sequence will focus primarily on functions and seeing them applied to real world contexts, though algebraic and geometric applications will also be featured. The second year of the course covers statistical analysis and will also introduce students to calculus.

**Junior/Senior two-year course**

## IB Mathematics: Analysis and Approaches SL1/SL2

This two-year course is for students with a solid background in algebraic and geometric thinking who enjoy mathematical problem solving and generalization. Students become fluent in the construction of mathematical arguments, strengthen their skills in mathematical thinking, and explore real and abstract applications, both with and without technology. The course covers a wide range of topics, including number sets and scientific notation, sequences and series and their financial applications, probability, one-variable statistics, linear correlation for two-variable data sets, triangle trigonometry, and analytic trigonometry. Students continue their study of functions to develop a deeper understanding of linear, quadratic, exponential, logarithmic, and rational functions, and how these can be understood analytically and graphically. Technology will be utilized throughout the course, including the use of graphing calculators for function and statistical analysis. Students learn to interpret and solve complex problems and to justify their methods and solutions in writing. The first year of the course sequence will cover algebraic and function analysis into fluid understanding of trigonometric equations. The second year will involve significant statistics, probability, and regression, along with a greater focus on kinematics and single variable calculus.

**Junior/Senior two-year course**

## IB Mathematics: Analysis and Approaches HL1/HL2

This two-year course is rigorous, fast-paced, and designed for students with a solid background in precalculus who enjoy mathematical problem solving and generalization. Students will become fluent in the construction of mathematical arguments, strengthen their skills in mathematical thinking, and explore real and abstract applications, both with and without technology. The curriculum includes an integrated review of precalculus topics, including exponential, logarithmic, rational, and polynomial functions and function operations, statistics and probability, sequences and series, and advanced trigonometry. The course moves on to methods of proof and the study of differential and integral calculus, preparing interested students to take the AP Calculus exam at the end of their junior year, if interested. The first year covers the study of complex numbers and a comprehensive treatment of limits, derivatives, integrals, and applications of differential calculus, as well as a study of vectors. The second year features vectors, complex numbers, statistical distributions, and an increased

emphasis on investigation and modeling. A graphing calculator is used extensively as students learn to work with functions presented numerically, algebraically, and graphically, and see the connections between these representations. This is a heavily discussion-based mathematics course, using both group and individual work to focus on the development of independent learners.

**Junior/Senior two-year course**

## Modeling Climate Change (Fall/Spring)

This semester elective uses current climate data as the context for making and interpreting mathematical models. It is appropriate for students who have completed Integrated Math III or the equivalent. Students develop an understanding of weather prediction and climate, then review basic data analysis techniques to look at myriad current analyses. Students explore how weather data is collected and how scientists determine what climate patterns existed in the past. The course explores how economic models and projections are affected by climate trends, the business of sustainable energy, and the role that changes in weather patterns are playing in war zones, migration and immigration, radicalism, and natural disaster clean-up and recovery. Students discuss how to communicate accurate scientific and mathematical information when that information may be inherently politically charged. The course utilizes spreadsheets and some very basic coding, but expects no background knowledge from students in either area.

**Sophomore – Postgraduate course**

## Coding (Fall)

This semester course is an introduction to the exciting, rapidly growing world of coding, and teaches structured program logic. Students discover the role computation and analysis of animation can play in solving problems. They learn the process of writing and debugging a program through algorithms and simulation. Good style and logical thinking will be emphasized throughout the semester. Integrated Math I or equivalent is a prerequisite.

**Freshman – Postgraduate course**

## Web Design (Fall)

This project-based semester course introduces students to the wide world of web design. Students learn to create websites using open-source internet resources. They use a variety of coding languages, including HTML, CSS, SASS, and Javascript to develop a foundation for creating and adding a variety of aspects to web pages. Students ranging from coding beginners to experienced programmers can take this course to learn new coding languages and broaden their understanding of how computers and webpages work.

**Freshman – Postgraduate course**

## Big Data (Fall)

Students in this course learn some of the tools that data scientists use to get value from huge amounts of data. What do Google and Amazon do with all the data they collect every day? Data science is booming. Fundamental to the course is the difference between scientific experimentation, statistics, and big data. Students complete their own research on data of interest and generate statistics using software such as Stata, R, and SQL. A unit of this semester class will also focus on managing data with Excel. Integrated Math I or equivalent is a prerequisite.

**Freshman – Postgraduate course**

## IB Computer Science SL1

This two-year course teaches computing system fundamentals, program construction using Java, systems life cycles, and software development. Students come to understand the use of computers in a variety of disciplines, learn methods to analyze problems and plan computer solutions, appreciate the technical and social consequences of developments in technology, and acquire skills which can be transferred to future problems. The development of solutions lies at the heart of the subject. The first year focuses on Java as a backdrop for designing and developing programs, whereas the second year focuses on building out personal software in Python. Although not required, it is recommended that students take the Coding semester elective class first if they intend to enroll in this course as a junior.

**Junior/Senior two-year course**

## Java and Program Design (Co-seated with IB Computer Science SL1)

This one-year course teaches computing system fundamentals, program construction using Java, and software development. Students come to understand the use of computers in a variety of disciplines, learn methods to analyze problems and plan computer solutions, and acquire skills which can be transferred to future problems. The development of solutions lies at the heart of the subject. Although not required, it is recommended that students take the Coding semester elective class first if they intend to enroll in this course.

**Sophomore – Postgraduate course**

# SCIENCE

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*The Science Department creates an environment that fosters an appreciation for the nature of science and its application in the real world. Through the presentation of facts, data collection, and experiential learning opportunities, students are immersed in the scientific method, where they explore core scientific concepts through risk-taking and hands-on experiences.*

## Biology

This course studies living organisms and their processes, from the process and function of cells, to evolution, ecological roles, structure, and function. Throughout this course, students are exposed to the scientific method, and strengthen their independent skills of observing, questioning, explaining, interpreting, analyzing, and reflecting. At the conclusion of this course, students have a better understanding of their role as global citizens, appreciate the interconnectedness of life on earth, and have a deep foundation of scientific skills..

**Freshman/Sophomore course**

## Biology (Honors)

This course explores Biology topics in more detail and at a higher conceptual level. This course studies living organisms and their processes, from the process and function of cells, to evolution, ecological roles, structure, and function. A significant emphasis is placed on practical lab skills, knowledge of fundamental lab techniques, and inquiry-based lab investigations. The vocabulary demands of this course are substantial, and a higher level of writing proficiency is required for students taking this course.

**Freshman/Sophomore course**

## Chemistry

This course comprises the study of matter and its chemical and physical interactions. Students survey the fundamental topics of an introductory inorganic chemistry course: matter, nomenclature, the mole concept, balancing and identifying chemical reactions, introductory quantitative skills, atomic theory and molecular structure, gas laws, and an introduction to acids and bases. In addition to the conceptual topics, a significant emphasis is placed on practical lab skills, knowledge of fundamental lab techniques, and inquiry-based lab investigations. Students must have successfully completed Integrated Math I (or equivalent) to enroll in this course.

**Sophomore/Junior course**

## Chemistry (Honors)

The honors chemistry course is a more quantitatively demanding course, and a high level of algebraic competence is expected. In addition, this course will include several more advanced topics including equilibrium, weak acids, electrochemistry, and organic nomenclature. As concepts receive even more emphasis than calculations, high-level written and oral language skills are desirable. Written lab reports will be expected to analyze results and evaluate error sources thoroughly. Students must have completed Integrated Math I (or equivalent) with a grade of B or better to enroll in this course.

**Sophomore/Junior course**

## Physics

Physics students investigate topics including an in-depth look into mechanics, materials, waves, electricity, and magnetism, and learn to appreciate the development of scientific principles and the people who developed them. Whether or not the student taking this course is planning on pursuing a career in physics, the problem-solving skills developed in this course can be used for tackling any type of problem. Students wishing to further their education in the sciences are provided a foundation to continue their study of physics and to develop an understanding of related science disciplines. Students are expected to have taken Integrated Math II (or equivalent) and be very comfortable applying that material.

**Junior – Postgraduate course**

## IB Biology SL

This course develops globally-minded students who understand and appreciate the world's biodiversity and interconnectedness by explaining and discussing all aspects of life. Students become independent thinkers possessing the ability to design their own experiments to test aspects of their world and knowledge to empower decision making. Students explore how molecular and biochemical components of life are essential to proper functioning of cells, which ultimately determines success of organisms in evolution and communities. Furthermore, human health and physiology, as well as plant science, are incorporated to illustrate interconnectedness within biological systems.

**Junior/Senior course**

## IB Biology HL1/HL2

This two-year course empowers students to investigate their world through a hands-on, experiment-based approach by providing them with the knowledge and skills needed for scientific inquiry. Students explore life from the molecular level through organismic evolution and its ecological role. Students design their own experiments, follow through on them, and share the results in a detailed report. The HL course includes additional units of study in human health and physiology, genetics, plant science, and photosynthesis. The HL course also meets for additional hours to perform laboratory experiments.

**Junior/Senior two-year course**

## IB Chemistry SL1/SL2

This is a two-year course based on a practical approach to learning chemistry through experimental work. The first year covers atomic structure, stoichiometry, periodicity, chemical bonding and structure, energetics, redox, and equilibrium. The IB Group Four project takes place during the first semester of year one. The second year covers organic chemistry, analytical techniques, acids and bases, kinetics, and biochemistry.

**Junior/Senior two-year course**

## IB Chemistry HL1/HL2

This two-year course is representative of a first-year course in college-level chemistry. Topics include standard inorganic concepts, as well as an introduction to organic nomenclature and fundamental organic chemical reactions. In addition, students complete a unit in biochemistry during the second

year of the course. The Group Four project takes place during the first semester of year one. Extensive laboratory work is conducted. Problem-solving skills are emphasized throughout the course and will be assessed regularly.

**Junior/Senior two-year course**

## IB Physics SL1/SL2 & HL2

This two-year course provides an in-depth exploration of measurements, uncertainties, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic, nuclear, and particle physics, and imaging. The course includes a number of lab experiences. This class is about the general aspects of science, the concepts and principles of physics, abstract thought, physics problem solving, and the global impacts of science on the cultures of the world. Students discover and explore the nature of science through past and present discoveries, and the direction of science in the future. Registration for IB Physics HL requires approval from the Science Department.

**Junior/Senior course**

## IB Sports/Exercise/ Health Science SL

This course incorporates the disciplines of anatomy and physiology, biomechanics, and psychology and nutrition, which are studied in the context of sport, exercise, and health. A combination of syllabus content and experimental work provides the opportunity for students to acquire the knowledge and understanding necessary to apply scientific principles and analyze human performance. This dynamic course includes international dimensions such as international sporting competition and the international bodies that regulate them. Ethical issues that exist within sporting competitions are considered. The course provides excellent preparation for university courses related to sport, sports science, or physical education.

**Junior – Postgraduate course**

## Environmental Science (Fall or Spring)

This semester course focuses on the Earth, its atmosphere and environment, and the impact of the human population. Students explore Earth/environmental systems and global change, energy sources and sustainability, human health, and population growth. There is an emphasis throughout the course on biodiversity and resource conservation. Students develop improved awareness, problem-solving, and critical-thinking skills through a focus on group work and project-based learning. Topics in this course connect to real-world issues and current data. The course emphasizes research, debate, and extended inquiry projects. Students develop a greater understanding of our Earth and environment with a focus on the impact of the human population, and what humans can do to preserve our planet and decrease our negative impact.

**Junior – Postgraduate course**

## Anatomy & Physiology I (Fall)

This semester course focuses on the many structures of the human body, how they function, and the relationships of those structures to each other. Students explore systems of the body, including the integumentary system, digestive system, cardiovascular system, muscular system, and skeletal system. Students examine everything related to these systems from the macroscopic to the microscopic, and focus on discussion, laboratory assignments, and dynamic activities and projects. Students gain an in-depth understanding of the human body and many of the different structures within us, and how these structures relate to each other while working together to provide a living organism.

**Junior – Postgraduate elective**

## Anatomy and Physiology II (Spring)

Anatomy and Physiology deepens the exploration of structures and functions of the human body, including topics that go beyond those in Anatomy and Physiology I. This course explores the roles nutrition and exercise have in the prevention and control of disease and the maintenance of good health. It comprises the key strands of nutrition, sport, and exercise science, and multidisciplinary topics related to the promotion of health and the prevention of disease.

**Junior – Postgraduate elective**

## Engineering (Spring)

This semester course introduces students to technology and engineering. Students have the opportunity to see science, mathematics, and engineering through the real-world connections made in the classroom. They see how these disciplines play a major role in their everyday world, and the importance of being scientifically and technologically literate. The course focuses on the design process and its application. Through hands-on projects, students will learn to apply engineering standards and to document their work. Topics include mechanisms, energy, statics, materials, and kinematics. Students develop problem-solving skills and apply their knowledge in research and design as they create solutions to different challenges, and then document their work and communicate their solutions to their peers.

**Junior – Postgraduate elective**

## Biotechnology and Forensic Science (Fall or Spring)

This activities-based course engages students in the scientific study of searching and processing crime scenes, as well as the proper collection and analysis of simulated physical evidence. Students experience a variety of procedures to analyze such things as fingerprints, hair and fiber, blood splatter, cybercrime, DNA analysis, and more. Prerequisites for the course include Biology and Chemistry.

**Junior – Postgraduate elective**

# Postgraduate Program

## PG Seminar

This year-long course prepares each postgraduate for college and life outside school. The fall semester focuses on the college preparation process, with dedicated time for work on applications (including essays and supplements), as well as discussions around learning styles, the recruitment process, practice for on-campus tours and interviews, and college athletics. Students participate in full-class discussions, as well as weekly written discussion posts and other homework. The semester concludes with lessons on leadership and financial literacy, culminating in a group presentation with written reflection. The second semester is defined by each student's individual passion through the Postgraduate Project. This is a multi-faceted assignment requiring design, critical thinking, problem solving, research, media literacy, organization, communication skills, and hands-on experiential learning. This project is a culminating academic and intellectual experience to prepare students for college, modern careers, and adult life.

**Required year-long postgraduate course**

# Other Courses

## IB Theory of Knowledge

Theory of Knowledge is a discussion-based course in critical thinking. Our design is to meet twice a week over a two-year period. There is a visual representation of the course; the TOK diagram, which has the “knower” in the center surrounded by the eight mental processes by which we construct knowledge—imagination, intuition, emotion, language, reason, and others—and then an outer level, presenting the academic disciplines—history, the arts, natural and human sciences, mathematics, and ethics. We explore material related to all of these categories with an emphasis on how we justify and explain what we, as individuals and groups, believe to be authentic knowledge. For homework there is a moderate amount of reading, blog writing, and occasional short essay writing.

The major assessments of the course are a 10-minute-long presentation graded by the teacher, and an essay of about 1,600 words based on an IB-prescribed title, which is graded externally.

**Required Junior/Senior course for  
IB Diploma Programme candidates**

# Mission Statement

Cheshire Academy is an internationally minded college-preparatory school that challenges its students to maximize their potential by developing the confidence, character, and critical thinking skills that enable them to thrive as global citizens.

## The Eight Pillars of Bowden

### **RESPONSIBILITY**

Cultivate “the ability to respond,” which is the action side of respect. If we respect people, we value them. If we value them, we respond to the needs of others and feel a measure of responsibility for their welfare.

### **RESPECT**

Be courteous, polite, tolerant, appreciative, and accepting of individual differences. Don’t abuse, demean, or mistreat anyone, including yourself. Don’t manipulate or take advantage of others. Respect the right of individuals to make decisions about their own lives.

### **CARING**

Show you care about others through consideration, compassion, kindness, and sharing. Live by the Golden Rule. Help others. Be sensitive to others’ feelings. Be charitable and giving of yourself.

### **CIVILITY**

Behave courteously in everything you do. Express an appreciation for community values through appropriate behavior. Acknowledge the worth of others by acting respectfully and responsibly toward them.

### **CITIZENSHIP**

Play by the rules. Obey laws. Do your share. Respect authority. Stay informed. Participate in your community. Protect those around you. Volunteer your service. Protect the environment by conserving natural resources.

### **MORALITY**

Be aware of the fundamental values of good and bad. Acknowledge your conscience, self-control, empathy, and sense of humility. Make decisions based on positive values, not desires.

### **FAIRNESS**

Treat all people fairly. Be open-minded. Listen to others and try to understand what they are saying and feeling. Make decisions that benefit everyone equally. Think win-win. Take only your fair share.

### **TRUSTWORTHINESS**

Tell the truth. Be sincere. Don’t deceive or mislead. Don’t betray a trust. In relationships of trust, share important information. Walk your talk by being your best self and by showing commitment, courage, and self-discipline.





### Mission

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### The Eight Pillars of Bowden

RESPONSIBILITY

CITIZENSHIP

RESPECT

MORALITY

CARING

FAIRNESS

CIVILITY

TRUSTWORTHINESS



Grades 9-12 and Postgraduate  
Coed, Boarding and Day

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