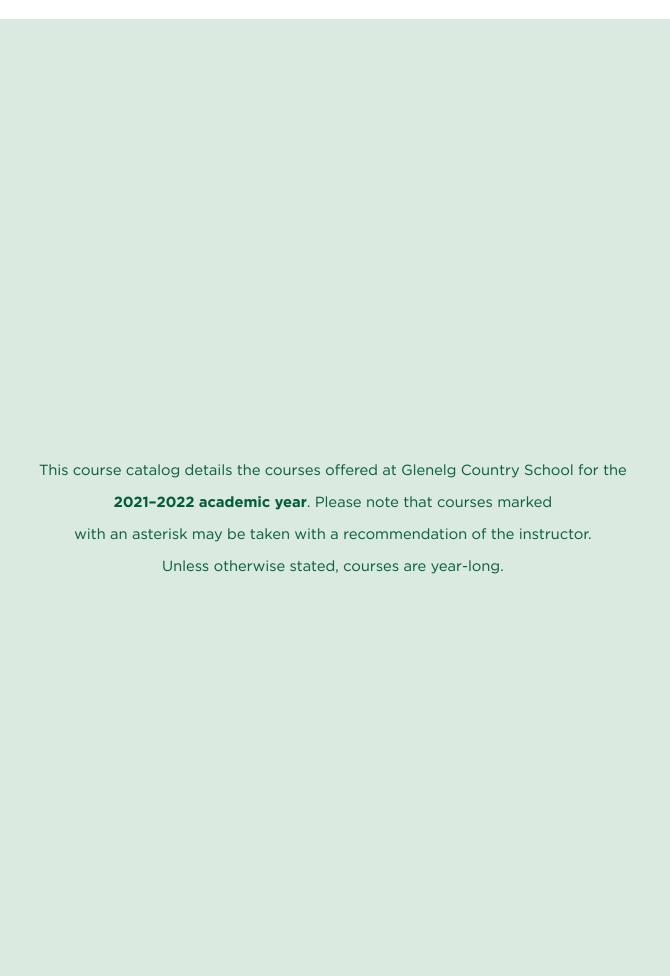


2021-2022 | UPPER SCHOOL

Course Catalog



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### CORE COURSES REQUIRED FOR GRADUATION

FINE ARTS					
To meet graduation requirements, students must take					
one full year of fine arts. Students may take one or					
more courses in the arts each year, as schedule allows.					
FOUNDATIONS PROGRAM					
Freshman Year Requirement					
Foundations (1 credit)					
☐ Foundations 9					
Sophomore Year Requirement					
Foundations (1 credit)					
☐ Foundations 10					
HUMANITIES					
Freshman Year Requirement					
Ancient Studies (2 credits)					
☐ Ancient Studies					
Afficient Studies					
Sophomore Year Requirement					
Western Studies (2 credits)					
☐ Western Studies (OL or Honors)					
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Junior Year Requirement					
American Studies (2 credits)					
☐ American Literature (OL or Honors)					
☐ United States History (OL or Honors)					
,					
Senior Year Requirement					
Senior Studies (2 credits)					
☐ Integrative Seminar (Honors)					
☐ Modern World History					
MATHEMATICS					
MATHEMATICS					
Four years of high school math required					

### **PHYSICAL EDUCATION**

Freshman Year Requirement

☐ A full year of physical education

Sophomore Year Requirement

☐ Fitness

or

Participation in one season of a school sport

Participation in an outside physical activity approved by the department

Junior and Senior Year Option

☐ Strength and Conditioning
Juniors and seniors who wish to enroll
in a fitness class may do so. The course for
upperclassmen will focus on weight training.

### SCIENCE

- □ Biology I
- ☐ Chemistry I (OL or Honors)
- ☐ Physics I (OL or Honors)

### **WORLD AND CLASSICAL LANGUAGES**

At least two years, through Level 3 of one language.

- ☐ Chinese I
- ☐ Chinese II Honors
- ☐ Chinese III Honors
- ☐ Chinese IV Honors
- ☐ French I
- ☐ French II (OL or Honors)
- ☐ French III (OL or Honors)
- ☐ French IV Honors
- ☐ French V: AP French Language and Culture\*
- □ Latin I
- ☐ Latin II (OL or Honors)
- ☐ Latin III (OL or Honors)
- ☐ Latin IV Honors
- □ Latin V: AP Latin Vergil\*
- ☐ Spanish I
- ☐ Spanish II (OL or Honors)
- ☐ Spanish III (OL or Honors)
- ☐ Spanish IV Honors
- ☐ Spanish V: AP Spanish Language and Culture\*
- ☐ Spanish VI: AP Spanish Literature and Culture\*

☐ AP Calculus AB\*

☐ AP Calculus BC\*

☐ Calculus (Honors)

☐ Algebra II (OL or Honors)

☐ Geometry (OL or Honors)

☐ Pre-Calculus with Trigonometry (OL or Honors)

■ AP Statistics\*

☐ Algebra I

<sup>\*</sup> Course may be taken with the recommendation of instructor

AP: Advanced Placement | OL: On Level

### **ELECTIVE COURSES**

BUSINESS & ECONOMICS  Year-Long Courses  □ Financial Accounting Honors  Fall Trimester □ Finance Honors  Winter Trimester □ AP Micro-Economics (Two Trimesters)	<ul> <li>□ Sculpture II</li> <li>□ Sculpture III</li> <li>□ Studio Art I: Introduction to Art†</li> <li>□ Studio Art II: Drawing, Painting, and Two-Dimensional Art</li> <li>□ Studio Art III: Directed Art Studies</li> <li>□ Studio Art IV: Senior Studio Art</li> <li>□ Video Production†</li> </ul>
COMPUTER SCIENCE Year-Long Courses	Fall Trimester ☐ Individual Studies in Music Theory ☐ Props and Costumes Construction†
<ul> <li>□ AP Computer Science</li> <li>□ Introduction to Software Development and Web Design<sup>†</sup></li> </ul>	Winter Trimester ☐ Individual Studies in Music Theory ☐ Props, Costume Design, and Construction†
ENGINEERING  Year-Long Courses  Advanced 3D Modeling and Artistic Rendering	Spring Trimester ☐ Individual Studies in Music Theory ☐ Fashion Sewing†
<ul> <li>□ Civil Engineering and Architecture Honors</li> <li>□ Digital Electronics Honors</li> <li>□ Engineering Design and Development Honors</li> <li>□ Introduction to Engineering Honors</li> <li>□ The Manual Arts: Tools, Materials, and Methods</li> </ul>	HUMANITIES  Year-Long Courses  AP English Literature* (Seniors only)  AP European History*  AP Psychology*
FINE ARTS  Year-Long Courses  Music  AP Music Theory  Choir†	<ul> <li>□ AP United States Government and Politics*</li> <li>□ Creative Writing</li> <li>□ Film Appreciation</li> <li>□ Psychology</li> <li>□ Video Journalism*</li> </ul>
☐ Choir/Instrumental Music/Theatre Practicum† ☐ Instrumental Music† ☐ Music Theory I	Fall Trimester ☐ African History and Culture ☐ Islamic Studies
Drama  ☐ Advanced Stagecraft ☐ Advanced Theatre ☐ Stagecraft <sup>†</sup> ☐ Theatre I <sup>†</sup>	Winter Trimester ☐ Inter-cultural Leadership  Spring Trimester ☐ Global Diplomacy
Visual Arts  ☐ Advanced Digital Photography ☐ Advanced Video Production ☐ AP 3D Art and Design* ☐ AP Studio Art* ☐ Digital Photography ☐ Photography ☐ Pottery I† ☐ Pottery II ☐ Pottery III: Independent Study ☐ Sculpture I†	SCIENCE  Year-Long Courses  Anatomy and Physiology Honors*  AP Biology*  AP Environmental Science*  AP Chemistry*  AP Physics C: Mechanics*  AP Physics Electricity and Magnetism*  Astronomy  Forensic Science

AP: Advanced Placement | OL: On Level

 $<sup>\</sup>ensuremath{^{*}}$  Course may be taken with the recommendation of instructor

 $<sup>^{\</sup>dagger}$  Elective course available to Grade 9 students

### **UPPER SCHOOL FOUR-YEAR COURSE PLAN**

	GRADE 9	GRADE 10	GRADE 11	GRADE 12
Foundations	Foundations 9	Foundations 10		
Humanities	Ancient Studies	Western Studies (OL or Honors)	American Literature (OL or Honors)  United States History (OL or Honors)	Integrative Seminar (Honors) Modern World History
Mathematics				
Physical Education	Physical Education			
Science	Biology	Chemistry (OL or Honors)	Physics (OL or Honors)	
World Language				
Electives	Grade 9 may select electives denoted with <sup>†</sup> only.	Grades 10-12 may select any	quirements are met.	
Trimester 1				
Trimester 2				
Trimester 3				
Student Name				Grade
Advisor Name				

# Course descriptions are subject to change. Please visit myGCS for updates.

### **BUSINESS & ECONOMICS**

### **AP Micro Economics** (Two Trimesters)

Acceptance to the course is by instructor permission only.

AP Micro Economics will prepare students to take the AP in May. Students will gain a basic understanding of how households and firms interact in the economy. Supply and demand analysis along with other economic models will be covered. The course will introduce the economic system and analysis with emphasis on how firms and industries form and how individuals within these systems make choices.

### Finance Honors (One Trimester)

Acceptance to the course is by instructor permission only.

Students will learn about the fundamentals of financial planning and how the capital markets operate. There will be an emphasis on asset and debt structure, tax mitigation, insurance planning, asset allocation, retirement and estate planning. Case studies and current events pertaining to personal finance issues will be discussed. At the end of this course students will understand how to get a head start on their finances.

### **Financial Accounting Honors**

This course covers the components of a company's balance sheet, income and cash flow statements. In addition to the textbook students will work on business projects throughout the year and apply the accounting process to their projects. Students will also review and analyze annual reports of several Fortune 500 companies. Upon completion of the course students will be able to understand financial statements.

### Off-Campus Mentorships (Juniors and Seniors)

Any student wishing to complete an off-campus mentorship will need to complete a questionnaire and interview. Once the necessary forms and interview are completed the final approval will be determined by the Upper School division head or other delegate.

### **COMPUTER SCIENCE**

### **AP Computer Science**

Prerequisite: Introduction to Software Development and Web Design or instructor's approval

This AP course focuses on object-oriented programming methodology with an emphasis on problem solving strategies and developing algorithms. This course is designed to be the equivalent of a first-semester college-level course in computer science.

### Introduction to Software Development and Web Design

This course is an introduction to the current techniques and technologies used in website design, game design, databases, and programming. Emphasis is placed on the variety of web site design elements including HTML, XHTML, JavaScript, Cascading Style Sheets, and PHP. Students also explore graphics manipulation with Photoshop. Students learn the syntax, structure and flow of object-oriented programming using Python and C#. Students will obtain the skills necessary to create applications and games in the Windows environment, mobile platforms, and for the web.

### DRAMA

#### Theatre I

The student is introduced to aspects of acting, directing, oral interpretation and playwriting. Improvisation is used as a class tool to develop the imagination and the fundamental tool of risk-taking in performance. In the first semester, students participate in a class performance project. Theatre I is introduced to a survey of theatre history. The spring Evening of the Arts gives students the opportunity to share works developed in class. The year concludes with a performance final. Text: various texts and scripts.

### Theatre Practicum

Permission of the Instructor is required.

This course is open to students grades 9-12 who wish to take part in two of Choir, Instrumental Music and Theatre courses but due to scheduling limitations, must do so within a single class period. These students will attend both Choir and Instrumental classes, and Choir/Instrumental Lab during Tuesday Enrichment, on a rotating schedule as determined by the instructors. Practicum students will be also responsible for scheduled rehearsals and performances for both disciplines.

### **Advanced Theatre**

Prerequisite: Theatre I

Advanced levels of theatre work in common space and on mutual projects. The student continues to explore a deeper investigation of character development seeking to extend his range of emotional, psychological, and presentational choices. Various styles of theatrical presentation and study of theatre in society is researched. Skills are honed by exploring various methods of "telling the story" in acting, directing, oral interpretation and playwriting. Text: various texts and scripts including *The Essential Theatre* by Oscar Brockett.

### Stagecraft

Stagecraft is a three trimester, hands-on course designed to challenge students in a fast-pace, STEAM environment. Students will become immersed in the technical aspects of performing arts in the areas of scenic design, lighting and sound, painting techniques, and construction. Students will develop a practical knowledge of tools, material, and building principles in addition to the elements and engineering process of design. The texts used are *Theatrical Design and Production* by Gillette, *The Backstage Handbook* by Paul Carter, and the operating manuals for the ETC Element, Yamaha TF5 Digital Mixer, and Lincoln MIG Welder.

Because the Mulitz Theatre is an active Performing Arts complex, students gain firsthand experience with artistic collaboration, real-word deadlines, and producing a product for invested patrons. Students will learn how to make adaptive, deliberate, and impactful decisions associated within each divisions scheduled performance. Utilizing the activity-project/problem-based teaching and learning pedagogy, this course applies and concurrently develops secondary level knowledge and skills in mathematics, technology, art, and artisanship.

### **Advanced Stagecraft**

Prerequisite: Stagecraft

Advanced Stagecraft: In-depth study of scenic design and theatrical engineering during the first trimester. Expanding on the principles, elements, and engineering process studied in Stagecraft, students will analyze the script chosen for the Upper School Musical and create a fully realized scenic design. Project leadership skills such a budgeting, vertical collaboration, effective scheduling, and artistic ownership will be key developments in producing a successful product for invested patrons. The texts and digital software used are Theatrical Design and Production by Gillette, The Backstage Handbook by Paul Carter, and SketchUp Suit by Trimble. Utilizing the activity-project/problem-based teaching and learning pedagogy, this course applies and concurrently develops secondary level knowledge and skills in mathematics, technology, art, and artisanship.

### **Props and Costumes Construction** (One Trimester)

In Props and Costumes, students will learn the basics of Costume and Prop construction. In the Costume Unit, students will learn the "in's and out's" of sewing with a basic sewing machine, a Serger machine, and will learn to hand sew and decorate completed costumes. In the Prop Unit, students will learn basic prop making techniques: wire work, decorative painting, sculpting with fabric, papier-mâché, and Styrofoam, and mask making. Students will explore creating special effects such as "blood packets" and "weeping wounds." Students will also learn basic design and application techniques for Stage Make-up and Wigs. Students will be responsible for creative projects and writing assignments based on in-class lectures.

### **Props, Costumes Design, and Construction** (One Trimester)

In the Props and Costumes Winter class, students will design, make, and finish props, costumes, make-up, and wigs for the Upper School musical. Students are expected to serve as crew members, and will need to be available to assist actors during show week. Students will be responsible for creative projects and writing assignments based on in-class lectures.

## **Fashion Sewing** (One Trimester) Prerequisite: Props, Costumes Design, and Construction and permission of the instructor

Students in Fashion Sewing will look at fashion trends, and learn skills: marking fabric, cutting fabric, setting a zipper, proper hemming techniques, including creative exercises like accessory design and construction. This class is appropriate for beginning sewers as well as returning students.

### **ENGINEERING**

### Advanced 3D Modeling and Artistic Rendering. Prerequisites are IED, or CEA, or 3D Sculpture

In this advanced digital CAD (Computer-Aided Design) class students will take their 3D modeling skills to a new level. Working with various digital 3D modeling software packages, students will learn the intricacies of 3D modeling, artistic renderings, video game elements, and 3D printing. Students will be exposed to a variety of tools, materials, and techniques to fabricate their designs. At the end of the class students, will be given the opportunity to sit for a professional certification in their area of interest.

### **Civil Engineering and Architecture Honors**

This course is only available to Grades 10-12 students Prerequisite IED or DE.

Civil Engineering and Architecture is an introductory study of design and construction of residential and commercial building projects. This course introduces students to the art of architecture as well as the varied factors and components involved in structural design and fabrication. We will take a broad view of how the spaces that people utilize daily help shape human behavior, culture, and sustainability. In addition, they will analyzing the careers, mechanics and standards that make up architecture as an industry. The major focus of this course is to expose students to the design and construction of building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation.

Utilizing the activity-project-problem-based teaching and learning pedagogy, students will analyze, design, and build electronic and physical models of residential and commercial facilities. This range of drawing and model-making skills will advance the students seeing, understanding, and presenting the CEA concepts. As well, a writing section will concentrate on conceptualizing and articulating architectural and engineering elements.

### **Digital Electronics Honors**

This course is only available to Grades 10–12 students Co-requisite: Algebra II or higher.

Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras, and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation. Students use computer simulations to learn about the logic of electronics while they design, test, and actually construct circuit and devices.

### **Engineering Design & Development Honors**

This course is only available to Grades 10-12 students Prerequisites: Stagecraft or IED and one of the following PLTW classes (POE, DE, or CEA).

This capstone course allows students to design a solution to a technical problem of their choosing. This is an engineering research course in which students will work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development lifecycle and a design process are used to guide and help the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous Project Lead The Way courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in time management and teamwork skills, a valuable asset to students in the future.

### **Introduction to Engineering Design Honors**

This course is only available to Grades 10-12 students.

The focus of IED is the engineering design process and its application. Through hands-on and computer projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

### The Manual Arts: Tools, Materials, and Methods

Prerequisite: Foundations 9

This thoroughly hands-on course will explore a wide variety of tools and methods of working in wood and metal. This course is focused on developing the skills that will give students confidence in working with their hands and making their abstract plans into concrete reality. From hand tools like the axe, adze, froe, spoke shave, drawknife, plane to powered shop tools like the band saw, jigsaw, router, table saw, planer, lathe, joiner, the exposure to tools will be wide. Students will become introduced to the multitude of ways that materials can be wrought: splitting, resawing, joinery, carving, book matching, steaming, finish planing, inlay, turning, marquetry, welding, casting, soldering, and forging are just some. While the main emphasis will be on manual/hand tools computer design and modeling tools (such as CNC cutting and 3D printing) will be introduced for the purpose of planning and prototyping. Skill acquisition will be won while completing personal building projects.

### **FOUNDATIONS**

#### Foundations 9

Required for all Grade 9 students.

Students will build foundational 21st Century skills that will support their current academic pursuits and inspire their future development and exploration. Through hands-on and engaging projects centered on real-world problems, students will explore the engineering design process; coding and 3D printing; data analysis and visualization; and, information processing and analysis. Throughout the course, students will collaborate, think critically and creatively, and communicate their findings.

### Foundations 10

Required for all Grade 10 students.

The Tenth Grade Foundations program includes six units of study: Public Speaking, Art for Social Change, Environmental Awareness, Financial Literacy, Career Exploration, and Global Education. These topics form an important foundation of 21st Century skills that expose our students to ideas they may wish to pursue further in their academic coursework and co-curricular activities. At the end of the year, each student presents work from one of the six units to fellow students, parents and other community members. Through fostering collaborative decisionmaking, character development and effective presentation skills to promote global awareness, civic responsibility and personal integrity, Foundations 10 enables students to be productive contributors within the GCS community and beyond.

### **HUMANITIES**

In Grades 10-11, students will be recommended for On Level or Honors required courses. This recommendation takes into account reading efficiency and comprehension, frequency of contributions to class discussion, abstract thinking skills, and level of enthusiasm for the Humanities.

### African History & Culture (One Trimester)

Africa, a continent that holds approximately 20% of the world's land area and nearly that much of its population, is often underrepresented in history courses. This course serves to help shed some light on the "Dark Continent" and to provide a survey of the major historical events and civilizations that have left their mark on Africa and the world at large. Combining studies in history, geography, art, anthropology, politics, and literature, students will have a come away with a better understanding of the evolution of the origins of traditional African society and the impacts of European colonialism and modern globalism on society today.

### American Literature/American Literature Honors Required for all Grade 11 students.

This course synchronizes with U.S. History by exploring American heritage through a chronological view of its literature. Beginning with a brief view of colonial literature and moving through the Enlightenment and the Romantic periods, students are directed to consider the worldviews that underpin and define the form and content of the literary endeavors. Students will consider the process of American writers' adopting and adapting of European intellectual and literary traditions, and the way that they make those traditions particularly American. In addition, students will attempt to define the emerging American culture and character. In the second trimester, the course delves into the Transcendental and Anti-Transcendental movements. culminating in an in-depth study of Melville's Moby Dick. The year winds up with a close look at the emerging American voice in poetry with Whitman and Dickinson. After a brief look at Realism and Naturalism, The Great Gatsby becomes the focus of the study of the Modern period. The course will emphasize skill reinforcement in the areas of reading fluency and basic composition. Students may elect to prepare for the Advanced Placement English Language and Composition exam.

### **Ancient Studies** (2 credits)

Required for all Grade 9 students.

This course aims to give all ninth graders the historical perspective and literary tools that will empower them to examine the foundations of different world civilizations. Class members will look closely at the formation of government in early civilizations including Mesopotamia, China, India, Greece, Rome, Nubia, and Egypt, and the Arabian Peninsula as well as the development of several early religions. To better understand the dilemmas human civilizations have encountered, students will study a diverse body of literature—both ancient and modern—that will shed light on what it means to be human. In addition to the religious and philosophical documents used in the study of history, students will read selections of poetry, one of Shakespeare's plays, and several works of fiction.

The central goals of the class are to teach ninth graders how to think critically about historical events and literature and how to express ideas effectively orally and in writing. Students will write extensively in a variety of compositional styles throughout the year to enhance the clarity, precision and organization of their writing. By joining the study of history and literature, the course will not only help students develop the skills required to study, think, and write about history and literature, but it will also require them to question how ancient history relates to their place in the present world.

An Honors program is not offered in the ninth grade.

### **AP English Literature**

Limited to seniors, this course requires the permission of the instructor.

This course will prepare students for the Advanced Placement Exam in Literature and Composition. Students will train for the exam as they cultivate advanced reading practices through the careful study of great works, by learning and applying the terms of literary discourse, and by refining their ability to compose logical, coherent, and thoughtful timed essays. In short, students will develop more meaningful habits of reading and writing. The course will continue the study of American Literature from the 11th grade

course, focusing on 20th Century American literature. Texts will include *In Our Time, The Grapes of Wrath, All the Pretty Horses, The Ghost Writer, On the Road,* and Norton's *Anthology of American Literature* (shorter 7th ed.) A year long life writing project will also be a component that will help students understand the choices authors make by confronting those same decisions in their own writing.

### **AP European History**

This course requires the permission of the instructor.

This class provides a college-level introduction to European history from the late Middle Ages to the fall of the Berlin Wall. Students will explore the cultural, social, economic, and political developments of the region and their effects on current events and trends. This class will also prepare students for the Advanced Placement European History examination. Students will be expected to complete extensive nightly readings and to participate actively in class discussions.

### **AP Psychology**

This course requires the permission of the instructor or department chairperson.

This course is the scientific study of behavior and mental processes. In AP Psychology, you will learn to think about your thinking and to reason through your actions (and the actions of others). We will also analyze contemporary and historical psychological studies and examine the extant roles of psychologists in society. This class conforms to the College Board topics for the Advanced Placement Psychology Examination, a list of which will be provided in the syllabus. The objectives of this course are to:

- Gain general knowledge of psychological concepts
- Apply and utilize psychology for self-improvement
- 3. Promote self-understanding, and
- 4. Foster interest in the professional field of psychology.

#### AP U.S. Government and Politics

This course requires permission of the instructor.

AP U.S. Government and Politics is a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project.

### **Creative Writing**

This workshop-based course is a year-long introduction to the theory and practice of writing creatively. Students will examine the mechanics of various forms of diverse and contemporary creative writing, including but not limited to short story, poetry, song lyrics, and the graphic novel. Throughout the year, students will workshop their writing with their peers, and finish the year with a portfolio of their own writing.

### Film Appreciation

This class will introduce students to the film industry and history of cinema through the study of classic and contemporary films. Emphasis will be placed on exposing the class to a wide variety of styles and genres as well as formulating and justifying criticisms of the works. Participation in class discussions, journal responses and written analyses will be requirements for successful completion of the course.

### **Global Diplomacy** (One Trimester)

To become an effective diplomat for international development, business, and peacekeeping necessitates a fundamental understanding of the nature of culture and its influence in inter-cultural communication. This course is designed to provide a framework that stems from personal leadership development to inter-

cultural collaboration on global issues of importance. Case studies in literature and film will help students to understand effective negotiation for mutual advantage in mediating inter-cultural differences. A culminating inter-cultural project will have students learn about the Mega-Diplomacy players and how an individual can partner with one or more of them in addressing a global issue of importance.

### **Intercultural Leadership** (One Trimester)

To be a successful leader in this age of globalization necessitates cultural competence. This competence includes the knowledge, skills and dispositions needed to effectively interact with people from other cultures. Understanding the interconnectedness of global issues is essential to successfully address challenges especially in times of crisis. Through literature, film, guest speakers, field trips, and class discussions students will learn about different cultural traditions and world views as well as the importance of leadership in community development. The fundamentals of intercultural leadership will be discussed and students will apply these fundamentals in an independent inquiry project on a topic of global significance.

### **Integrative Seminar Honors**

Required for all Grade 12 students.

Integrative Seminar intends to train students in interdisciplinary study as well as in seminar-style learning. Students consider a topic throughout the year from a variety of disciplinary perspectives drawn from both the sciences and the humanities. During the first trimester, students examine and discuss a series of common readings that reflect the history and development of the most persistent ideas and perspectives bearing on the topic. Faculty presentations and hands-on activities supplement the seminar skills. During the second and third trimesters, each student undertakes an extended research project in a tutorial relationship with a faculty member, orally presents their findings in the middle of the process, prepares a major paper or project, and submits himself or herself to an oral examination of their work before a faculty committee. All students receive honors credit for their enrollment in this challenging course.

#### **Islamic Studies** (One Trimester)

Knowledge and learning flowered in Islamic culture while Europe was in its Dark Ages. How did the Muslims from the 7th-15th century use knowledge and promote learning in their culture and how did this culture contribute to the European Renaissance? These essential questions orient this study of Islamic culture from the teachings of Muhammad to the Christian conquest of Islamic Granada in Spain. Prior to addressing these questions, students will engage in a discussion of contemporary perspectives on Islam in the wake of the terrorist attacks of September 11, 2001.

To more clearly understand the roots of fundamentalism leading to extremism, students will learn the choices confronted by those struggling to withstand an assault on their faith and culture with a case study of an Islamic family during the Christian reconquest of Spain in the 15th century. Students will then be introduced to the origin and fundamentals of Islam. Variations in the practice of Islam in the countries of the Middle East will be studied and discussed to further gain insight into the relationship between Islamic extremism and contemporary terrorism.

The relationship between Christianity, Judaism and Islam will be studied in the context of the Crusades and 15th century Spanish culture. Attention will be given to the Sufi movement and its literature and an artistic project will be undertaken to demonstrate the Islamic integration of spirituality, art and science.

### **Modern World History**

Required for all Grade 12 students.

In this class students will explore the history of the post-World War II era and gain a framework for understanding the forces that shape the modern world. Each section will study the far reaching changes begun after World War II from the rise of superpowers, the decline of colonialism, and the growth of new countries throughout the world. Students will study the effects of the Cold War, technological transformations, and emergence of a global economy. While this class is a forum to discuss current events, the chronological coursework will conclude with a look at the causes and effects of 9/11.

### **Psychology**

This course is a brief introduction to the field of psychology: the study of behavior and mental processes. The course provides a broad overview of the field and introduces the different aspects and subfields of psychology. Topics of study include, but are not limited to: Biological Bases of Behavior, Motivation, Learning, Cognition, Sensation and Perception, Memory, Language, Social Behavior, Personality Development, Intelligence, Therapies, and Psychological Disorders. The course will include the history of the discipline as well as its recent developments and conflicts.

### United States History/United States History Honors Required for all Grade 11 students.

In this course, students study the origins and development of the United States through a detailed exploration of its social, constitutional, economic, and political history. The class delves into a chronological study starting with the colonial, revolutionary, and critical periods and a detailed look at the working of the U.S. Constitution during the first trimester. The focus then shifts to cover the expansion of the nation and the attendant regional struggles culminating in the Civil War. This leads students to the eras of post-war reconstruction, industrialism, imperialism, populism, and progressivism. Finally, students will study the first half of the 20th century—both its international and domestic conflicts. Throughout the course, students will examine primary documents, study works of art, engage in class discussions and debates, write analytical essays, and complete an independent research paper on a topic in United States history. Students may elect to prepare for the AP US History exam, but students who elect to do so will have to do much independent study with guidance from the instructor. They will not receive credit for taking an AP course nor will their AP work directly affect their course grade.

**Western Studies/Western Studies Honors** (2 credits) *Required for all Grade 10 students.* 

The Western Studies course is a double period introduction to the art, history, and literature of the Western World. It explores the connections between the creations, events, and the underlying or essential ideas of these cultures. Through fundamental questions that examine the relationship between the structure of power and authority as well as changing beliefs in any given society, students search for answers not only in historical events but also through visual arts, music, architecture, drama, and literature. Tenth grade students will emerge from this class with a deeper understanding of the Western World from the Middle Ages to World War II and with improved writing, speaking, reading, and rhetorical skills.

#### Video Journalism

Prerequisite: Video Production or recommendation from instructor.

This course is designed for the study and practice of the basic elements of broadcast journalism. The course will emphasize news-gathering, writing, video recording, editing, and the study of mass media. Students will learn the basic elements of news value and vocabulary specific to broadcasting They will also identify various news sources and use interview skills to create stories using video and editing software. Students will use learn on professional grade equipment. Students work individually and in collaborative teams to produce news packages, projects using cameras, while learning the basics of studio and field production, lighting and sound. Completed work will be broadcast to the school community in the form of a newscast. Students will need to show a proficiency to work with Adobe Premiere before enrolling in the course.

### **MATHEMATICS**

All students are required to have a TI-84 Plus or TI-84 Plus CE graphing calculator for use in class every day. Students may not use calculators that have computer algebra systems.

### Advancing a Level in Mathematics

The usual progression of Math classes for students in the College Preparatory sequence begins with either Algebra I or Geometry in grade 9, and continues through Algebra II, Precalculus, and Calculus. Honors students begin in 9th grade Honors Geometry or Honors Algebra II, and then continue with Honors Precalculus, AP Calculus AB, followed by AP Calculus BC, with AP Statistics as an option in junior or senior year. Multivariable Calculus is offered in years in which there are enough students to form a class.

Students who wish to accelerate their math progress by summer work should consider the difficulty of mastering a year's work in a few hours during the summer. The Mathematics Department believes classroom participation is essential to allow students the opportunity to learn through exploration of mathematical concepts, to communicate ideas by participating in group activities, and to investigate the many applications of their skills to science and engineering fields. Therefore, the Mathematics Department discourages placing out of classes through testing, except in unusual circumstances. But for the student who appropriately desires to advance, the procedure and requirements follow.

Students must have earned an A each trimester in their current math placement, as well as A in the midterm and final exam.

Students are permitted to test out of only one class during their GCS education.

Students entering grade 9 are not permitted to test out of classes beyond Geometry. Testing out of Honors Algebra II or Honors Precalculus will not be approved.

Students obtain a request form from the Math department chair, and obtain signatures from parents, current Math teacher, Math department chair and the Director of Academic Counseling. This form includes a description of the course or tutoring they will use during the summer. A minimum of 100 hours of combined instruction and homework is expected (completed course or minimum 25 hours of tutoring).

Students will be provided with the name and publisher of the textbook and the chapters that will be evaluated.

Students are required to take an exam in the subject on a date in August specified on their application. Students must achieve an 85% average on this exam in order to advance.

#### AP Calculus AB

Prerequisite: Precalculus Honors and recommendation from instructor.

This course presents techniques and applications of derivatives of functions, which include polynomial, trigonometric, logarithmic, and exponential functions. Applications include, but are not limited to, problems involving related rates, velocity and acceleration, graphing, and maximization and minimization. Additionally, students will learn methods of integration and use them to calculate areas between graphs and volumes of solids of revolution. Students will become familiar with the format of the AP exam and learn strategies to optimize his/her score. The use of a graphing calculator is an integral part of this course.

### AP Calculus BC

Prerequisite: Calculus AB and recommendation of instructor.

This course is an extension, not an enhancement, of the AB Calculus course covering all of the topics that would be included in a second semester, college calculus class. Some topics, such as arc length of a curve, surface area, integration by parts, partial fractions and trigonometric substitution, the logistic growth differential equation, Euler's Method, and L'Hospital's Rule build directly off the ideas discussed in AB Calculus. Other topics, such as the calculus of parametric and polar functions, will have starting points that are entirely new. A large portion of the course deals with series and sequence, Taylor Polynomials and approximations and the determination of convergence/divergence through a variety of convergence tests. After the AP exam, students will complete the course by learning about hyperbolic and inverse hyperbolic functions as well as the Wallis product.

#### **AP Statistics**

Prerequisite: Precalculus and permission of instructor.

This course will follow the AP Statistics syllabus and integrate use of the TI-84 calculator, statistical capabilities of Microsoft Excel, and other statistical software packages. The themes of the course include experimental design, organizing and exploring data, linear regression and transformations, probability and simulation, and statistical inference (to include confidence intervals, significance tests, and chi-squared tests). Emphasis will be placed on both performing statistical calculations and writing concise and complete interpretations. A significant amount of reading and writing is required for this course.

### Algebra I

Prerequisite: Pre-Algebra

This course provides the foundation for further work in mathematics. Students will learn methods of simplifying and manipulating algebraic expressions and solving equations. They will graph functions and investigate patterns and relationship among them. Algebra I will emphasize problem-solving methods that require students to represent problems numerically, verbally, analytically and graphically.

### Algebra II

Prerequisite: Algebra I and Geometry
May be taken concurrently with department approval.

Students will be introduced to the properties and graphs of linear and quadratic functions, systems of equations and inequalities, rational, exponential and logarithmic functions, as well as the algebra of matrices and determinants. Probability, statistics and data modeling are also included.

### **COURSE DESCRIPTIONS**

### Algebra II Honors

Prerequisite: Algebra I and Geometry and permission of the department. May be taken concurrently with department approval.

This course covers the material described in Algebra II, above, as well as a thorough study of analytic geometry, an introduction to sequences and series, and some trigonometry. The graphing calculator is an integral part of the Algebra II curriculum.

#### Calculus Honors

Prerequisite: Precalculus and recommendation from instructor.

This content of this course is similar to that of the AB Calculus curriculum but is designed for students who have done well in Precalculus, who are capable of learning the material in Calculus, but who need extra time and practice with each concept. This is an excellent preparatory course for students planning to take Calculus in college. Concepts covered in Calculus include limits, differentiation of various functions, applications of differentiation, and an introduction to integration. The use of a graphing calculator is an integral part of this course.

### Geometry

Prerequisite: Algebra I

This course introduces the basics of geometry with an emphasis on algebraic applications of all geometric concepts. Students develop formal proof writing skills through inductive and deductive reasoning. Geometric topics include lines and angles, triangles (congruency, similarity, and special segments), direct and indirect proof, right triangle trigonometry, basic transformations, area and perimeter, volume and surface area, and properties of circles.

### **Geometry Honors**

Prerequisite: Algebra I and recommendation of the department.

This course covers all topics described in Geometry with the expectation that students are able to make connections and demonstrate a higher level of understanding through a variety of real world applications. This course also covers the introduction of vectors in a plane and space, as well as a study of tessellations and the manipulations of shapes in a plane. Students are required to complete a project, which demonstrates their understanding of geometric concepts.

### **Precalculus with Trigonometry**

Prerequisite: Algebra II

This course focuses on solving and graphing functions, including: linear, quadratic, polynomial, rational, logarithmic, and exponential functions. Half of the course is devoted to an in-depth study of trigonometry. Students learn to graph trigonometric functions, manipulate trigonometric expressions using identities, and solve right and oblique triangle problems.

### **Precalculus with Trigonometry Honors**

Prerequisite: Algebra II Honors and recommendation of the department.

Same as Precalculus above, but the class solves more difficult problems and proceeds at a quicker pace. In addition, students will study topics from Analytic Geometry in preparation for the study of Calculus.

### **MUSIC**

### **AP Music Theory**

Prerequisite: Successful completion of Music Theory 1, Independent Study and/or permission of the instructor is required.

AP Music Theory is open to students in grades 11–12 who are advanced in their grasp of music theory, are extremely self-motivated, and wish to explore concepts at an introductory collegiate level. Students will take the AP Music Theory exam in the spring, and must be prepared to have nightly homework and practice which involves written work as well as singing, listening, and using the piano. Students may receive credit for college after completion of this course. Topics studied: ear training, sight singing, dictation, four-part harmonic composition/voice leading, and score analysis. Texts required at the discretion of the instructor, in the past have used Kostka's *Tonal Harmony*, Barron's *AP Music Theory*, and Julie Johnson's *Guide to AP Music Theory*.

#### Choir

Permission of the Instructor is required.

This year-long course is open to all students grades 9–12, and is intended for students who wish to sing in an ensemble while strengthening their vocal technique and music literacy skills. The choir demonstrates these skills in various performances throughout the year, at which they present a wide variety of choral literature including pieces from around the globe and from various historic eras. Enrollment in Choir involves enrollment both in class and in our Choir Enrichment course that occurs during Tuesday Enrichment. Choir may be repeated for credit.

### Choir/Instrumental Music Practicum

Permission of the Instructor is required.

This course is open to students grades 9-12 who wish to take part in two of Choir, Instrumental Music and Theatre courses but due to scheduling limitations, must do so within a single class period. These students will attend both Choir and Instrumental classes, and Choir/Instrumental Lab during Tuesday Enrichment, on a rotating schedule as determined by the instructors. Practicum students will be also responsible for scheduled rehearsals and performances for both disciplines.

**Independent Studies in Music Theory** (One Trimester) *Permission of the Instructor is required.* 

The independent study of music theory is a course available for students in grades 9–12 who desire to improve their ability to read and understand music, and to grasp fundamental concepts of music theory. Beginning concepts include reading of the grand staff, scales, diatonic triads, intervals, chords, and simple harmonization. The instruction is based on the individual needs of the student (more advanced students could potentially begin at a more advanced level). Texts required: Alfred's *Essentials of Music Theory*, *Complete* and Julie Johnson's *Guide to AP Music Theory* (book & CD)

#### Instrumental Music

Permission of the Instructor is required.

This year-long course is open to all students in grades 9-12 and is intended for the student who enjoys playing music and is personally committed to daily practice at home. The two types of ensemble that the music department offer are The Wind and String Ensemble and the Contemporary Small Group Ensemble. Being a member of our Wind and String Ensemble also requires enrollment in our Band Enrichment course that occurs on Thursdays. Our Wind and String Ensemble performs standard Concert Band and festival repertoire while our Contemporary Small Group Ensemble focuses on a wide variety of genres and styles in addition to learning the fundamentals of basic theory and music composition. Students receive daily instruction on rehearsal techniques and practice strategies, ensemble awareness, and presentation for performances and festivals during the school year.

**Music Theory 1** (Any trimester or all year) *Permission of the Instructor is required.* 

In studying music theory, the instructor will meet students where they are in terms of understanding of fundamentals of music literacy and tonality. Basics include scales, triads, music reading, fundamentals of piano and aural skills training, and may continue into intermediate topics of harmonization and composition.

### PHYSICAL EDUCATION/ HEALTH

All ninth graders will take a year-long course in PE. Students will be engaged in an in-day Physical Education class, the primary focus of which is physical fitness and an overall approach to wellness. Approximately one quarter of the year, students will be engaged in a Red Cross First Aid and CPR certified training in addition to a wellness curriculum.

### **Fitness**

Tenth grade students must either enroll in a onetrimester course in Fitness, participate in at least one season of a school sport, or request an exemption for participation in a sport outside of school.

### Strength and Conditioning

Juniors and seniors who wish to enroll in a fitness class may do so. The course for upperclassmen will focus on weight training.

### **SCIENCE**

### **Anatomy and Physiology Honors**

Departmental permission required.

Prerequisites: Biology and Chemistry Honors

This course is directed toward students with an interest in the biomedical sciences. Students will investigate various aspects of the human body, including: anatomical terminology, body organization, and histology, as well as the integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, and digestive systems. Laboratory work includes brain, heart, and whole animal dissections.

### **AP Biology**

Departmental permission required.

Prerequisites: Biology and Chemistry Honors

This course is the equivalent of a two-semester college introductory biology course, providing students with the conceptual framework, factual knowledge, and analytical skills necessary to critically approach the rapidly changing science of biology. Course content is built upon the four Big Ideas: evolution, cellular processes, genetics and information transfer, and biological interactions. This is a rigorous curriculum that demands personal responsibility from the student and is designed to prepare students for the Biology College Board Advanced Placement® Exam.

### AP Chemistry

Departmental permission required. Prerequisite: Chemistry Honors

Co-requisite: AP Calculus AB or Calculus Honors

Advanced Placement Chemistry builds on the principles of Honors Chemistry and is designed to be the equivalent of a first-year college chemistry course. This course analyzes chemical principles in great depth, emphasizes mathematical relationships, and concentrates on lab skills and inquiry-based laboratory design. The class will follow nine units as outlined by the College Board®:

- 1. Atomic Structure and Properties
- 2. Molecular and Ionic Compound Structure and Properties
- 3. Intermolecular Forces and Properties
- 4. Chemical Reactions
- 5. Kinetics

### **COURSE DESCRIPTIONS**

- 6. Thermodynamics
- 7. Equilibrium
- 8. Acids and Bases
- 9. Applications of Thermodynamics

A carbonless copy lab notebook will be required for the class.

### **AP Environmental Science**

Departmental permission required. Prerequisites: Biology and Chemistry.

Advanced Placement Environmental Science is a course that integrates various branches of science as well as topics in humanities and policy in order to develop a well-rounded understanding of the human impact on the natural world. The course focuses around four Big Ideas as outlined by College Board®: Energy Transfer; Interactions between Earth Systems; Interactions between Different Species and the Environment; and Sustainability.

Topics covered include ecosystems, biodiversity, populations, earth systems and resources, land and water use, energy resources and consumption, pollution, and global change. Students will work to develop skills in concept explanation; visual and textual analysis; experimental design; data analysis (including field work); quantitative methods; and proposing environmental solutions.

The course is designed to be the equivalent of a one-semester, introductory college course in environmental science, and students will work to prepare for the Environmental Science Biology College Board Advanced Placement® Exam.

### AP Physics: Mechanics

Department permission required. Prerequisite: Physics Honors

Co-requisite: AP Calculus AB or Calculus Honors, if not

already completed.

AP Mechanics is an in-depth exploration of topics in that branch of physics that encompasses motion, forces and energy. Often referred to as "Newtonian", the foundation of the approach is grounded in the Laws encapsulated by Sir Isaac Newton, but also relies heavily on an understanding of conservation laws and the results of observation and experimentation over the centuries before since Newton. Students will learn to apply an understanding of why objects move, and how they move to help them see the many applications of physics in their lives. They will apply calculus techniques to solve problems, or derive relationships, throughout the course. Although a corequisite, it is strongly recommended that students complete a Calculus course prior to taking this class.

### AP Physics: Electricity and Magnetism

Departmental permission required. Prerequisite: Physics Honors and AP Calculus AB or

Calculus Honors

Co-requisite: AP Calculus BC.

AP Electricity and Magnetism is an in-depth exploration of topics that are usually part of a second semester calculus-based physics course in college. Calculus techniques will be used frequently to solve problems or derive relationships. Students should have already completed a course in introductory physics and are likely to be concurrently enrolled in AP Mechanics C. The course will begin with an introduction to electrostatics, and electrical properties of materials. Electrical circuits, both DC and AC, will be covered in depth and the course will include significant lab experience in this area. Magnetic fields, magnetic properties of materials and electromagnetism will make up the final portion of the course.

### Astronomy

Co-requisite: Physics, if not already completed.

Why does the Moon have phases? How do stars shine? What are black holes? This course introduces students to the study of astronomy, including its history, basic scientific laws that govern celestial motion, and the technology that allows astronomers to explore the unknowns of the universe. Students will learn about the properties of planets, the life cycle of stars, and modern space exploration methods.

### **COURSE DESCRIPTIONS**

### Chemistry

Prerequisite: Algebra I

This introductory chemistry course focuses on the fundamental principles of chemistry and their practical applications. Topics include atomic theory, bonding, formulae and nomenclature, molecular structures, phases of matter, chemical reactions, thermochemistry, acid-base, and nuclear chemistry. Students examine topics qualitatively and quantitatively through laboratory experiments to ascertain the validity of chemical principles.

### **Chemistry Honors**

Departmental permission required. Co-requisite: Algebra II Honors

This course is designed for students with exceptional math ability and interest in science who desire a more intensive introductory chemistry course. Topics include those taught in Chemistry as well as additional focus on thermochemistry, equilibrium, and acid-base chemistry. This course explores concepts in greater depth than Chemistry, focuses on mathematical relationships, and examines exceptions to general rules in preparation for AP Chemistry. This course is required for students planning to take AP Chemistry.

### **Forensic Science**

Prerequisites: Biology and Chemistry Co-requisite: Physics, if not already completed.

Forensic Science is an interdisciplinary course designed to introduce students to the many aspects of crime scene investigation. Students will use concepts introduced in basic biology, chemistry, and physics courses to further investigate the scientific theories behind working a crime scene, fingerprinting, blood spatter analysis, toxicology, DNA fingerprinting, hair and fiber analysis, and more. Frequent laboratory work will reinforce concepts presented in class.

### **Introductory Biology**

Prerequisite: Middle School Physical Science course

This course provides an introduction to the many metabolic processes and ecological interactions that collectively contribute to the sustainability of life. Through classroom discussions, laboratory investigations, and our vast collection of living botanical and animal specimens, students are provided with the skills, strategies, and knowledge that will encourage the development of intellectual curiosity and scientific inquiry.

### **Physics**

Co-requisite: Algebra II

This course covers the major concepts in physics in an interactive, project-based curriculum. Students apply math and reasoning skills and use graphical methods to discover relationships between quantities. There is also extensive focus on developing good problemsolving strategies and making scientifically sound predictions. Students investigate kinematics, the laws of motion and energy, electricity and magnetism, and the properties of sound and light waves.

### **Physics Honors**

Departmental permission required. Co-requisite: Precalculus

This course covers the major concepts in physics in an interactive, project-based curriculum. Students apply math and reasoning skills and use graphical methods to discover relationships between quantities. There is also extensive focus on developing good problemsolving strategies and making scientifically sound predictions. Students investigate kinematics, the laws of motion and energy, the properties of sound and light waves and electricity and magnetism.

### VISUAL ARTS

### **Advanced Digital Photography**

Prerequisite: Photo II, Digital Photography, or permission of the instructor.

Students will continue to improve their skills in Adobe Photoshop, Studio Lighting, and on-location photography. They will also explore more in depth the camera RAW files. Students will work on their own projects to develop their individual portfolios for college. This can be done digitally and analog. Students are required to complete 20 11x14 matted photographs and a CD by the end of the year. The instructor will critique the finished work with each student.

### **Advanced Photography**

Prerequisite: Photo I or permission of the instructor.

Students expand photographic skills to a creative/fine art level. They explore other photographic formats. Students also learn more about different kinds of image processing, besides regular black and white photography, and some digital color. The students should be willing and extremely interested in creative/fine art photos. They must have a working condition 35mm SLR camera (old or new), lenses, if any, filters, film, 8x10 photo paper (100 or 250 sheets), and Holga camera. The class size is limited to 10 students.

### **Advanced Video Production**

Prerequisite: Video Production

Advanced Video Production is a year-long course that covers advanced techniques for digital video, including scripting, directing, lighting, shooting, editing and overall production. Students will use advanced applications of current video- and sound-editing software. The final project is a single production of substantial length within the field of narrative and/or documentary video. The course also examines advanced application of film language and production techniques.

### AP 3D Art and Design

Prerequisite: At least two years of any combination of Sculpture or Pottery.

Students will work in materials of their own choice to create a series of complex and unique sculptures based on a central theme. Students will continue to develop their skills and techniques in the language of sculptural expression with the requirements of the AP Portfolio in mind, both concentration, and breadth. There will be summer homework and some work outside of class during the school year.

### **AP Studio Art**

Prerequisite: permission of instructor. At least two years of Studio Art and strongly suggest a summer art course.

The Advanced Placement course in Studio Art is intended for highly motivated students who are seriously interested in the study of art. The course aims at preparing students to produce work to submit for evaluation in a portfolio. The scope of the work should be equivalent to that of introductory college courses in studio art. The three major concerns are:

- 1. A sense of quality in a student's work;
- 2. The student's concentration on a particular visual, interest or problem;
- 3. The student's need for breadth of experience in the formal, technical, and expressive means of the artist.

### **Digital Photography**

Prerequisite: Photo I or permission of the instructor.

Students will be taught the basics of digital photography. Students will take pictures and learn how to save, store, and retouch the images. They will work with Adobe Photoshop CS5 to learn how to enhance the images and prepare them for printing. We will print large format images on the classroom inkjet printer. Students will be given variety of assignments. The students must have their own digital camera, provide their own inkjet photo papers and if possible, their own laptops to work individually during the classes.

### **COURSE DESCRIPTIONS**

### **Photography**

Open to students in Grade 10, 11, and 12.

Students learn the basic technical skills of black and white photography, learn about darkroom safety, receive an introduction to the history of photography, and create a photographic portfolio with a personal voice. The students should have a working condition 35mm SLR camera (old or new), lenses, if any, and filters, film, and 8x10 photo paper (100 or 250 sheets). The class size is limited to 10 students.

### Pottery I

This class will introduce the joy of hand-made vessels and sculptural forms in clay. Beginning with very simple and basic techniques such as pinch pots, coil building and slab construction, students will construct a series of simple pots and vessels. They will advance to combining these techniques together to form more intricate pieces, such as teapots and animals. Throwing clay on the pottery wheel will be introduced.

### Pottery II

Prerequisite: Pottery I

Students will continue to use hand building techniques to create more complex and exciting forms. We will continue to explore and improve the skills necessary for wheel throwing clay. Dish sets, vases, serving platters and sculptures will be fabricated and students will be encouraged to learn about the properties of different clay and glazes.

### Pottery III: Independent Study

Prerequisite: Pottery II

Students must obtain instructor permission to take the class. Each student will decide on an area of study to focus on and make a plan with direction from the teacher. Students will include research and experimentation in their work and keep a journal and sketchbook to record their progress.

### Sculpture I

Students will work with the materials and processes available for fabricating three-dimensional objects. They will start with clay, which is the most malleable and versatile of all sculpture materials. Other projects may include bridge design, wire forms, stone carving, wood carving, and mixed media projects.

### Sculpture II

Prerequisite: Sculpture I

This class will continue to explore and combine the basic skills and principles of sculpture. Students will create recycled sculptures, kinetic sculptures in wood and wire, continue to improve skills in carving with stone or wood, and also work with clay.

### Studio Art I: Introduction to Art

This is an introductory art course designed for the student who has a general interest in art techniques and processes but not necessarily training or background in art. The course provides an opportunity to work with both two- and three-dimensional media, such as drawing, painting, printmaking, and ceramics. Students are introduced to the basic elements and principles of design, and they are encouraged to experiment with various artistic techniques and representational styles.

### Studio Art II: Drawing and Painting and Two-Dimensional Art

Prerequisite: Studio Art I or equivalent.

These courses offer further work in two-dimensional art emphasizing drawing and painting techniques and media.

### Studio Art III: Directed Art Studies

Prerequisite: Studio Art II or equivalent.

This is a directed art course designed for the student who has demonstrated the ability to work independently and has a desire to pursue studies in specific art media or techniques. With the guidance of the teacher, the student is expected to write a contract that will specify which media, techniques, or specific problems she/he will explore. The student will work closely with the teacher for artistic and technical guidance and have periodic critiques of each project.

### Studio Art IV: Senior Studio Art

Prerequisite: Studio Art III or equivalent.

This course is intended for students who have successfully completed Studio Art III and who wish to continue their work in one or more media in much greater depth. The approach that is taken is generally similar to that followed in Studio Art III. The emphasis is on development of an individual approach to student's work and in the development of a portfolio.

### Video Production

Video Production is a year-long course that introduces students to all of the elements of digital film making. Students will explore the production process; this includes the planning, making and editing of both fictional and non-fictional video pieces. Sample student projects include a PSA, a 2-person scene, a chase scene, a music video, a silent film, an animation sequence, and a short documentary.

# WORLD AND CLASSICAL LANGUAGES

Glenelg Country School offers Chinese, French, Latin, and Spanish. For Levels II and III of French, Latin, and Spanish, students have the option to obtain honors credit through supplementary work that expands their vocabulary and deepens their understanding and use of the language. Level IV of these languages is only offered as an honors course. All Chinese classes from II through IV are considered honors level.

#### Chinese I

Chinese I is the first year of a four-year course where students will learn and improve their Chinese communicative proficiency in listening, speaking, reading, and writing. Students will learn both pinyin (a 70-year-old system designed to assist foreigners in their pronunciation of Chinese characters) and Chinese characters from day one. The class will focus on real-life communication skills and introduce Chinese cultures such as: festivals, tea, traditional medicine, cooking, and calligraphy. Simultaneously, the course will learn Chinese pop culture, geography, poem, literature, and discuss relevant current events through YouTube, news, and movies. Text: *Integrated Chinese Volume 1*, 4th edition.

### **Chinese II Honors**

Prerequisite: Chinese I or equivalent.

The second year of Chinese consists of a continued improvement in the four language skills. Students will learn how to talk about school life, shopping, traffic, ordering food in a restaurant, asking and telling the directions, talking about the weather, planning a birthday party, and seeing a doctor. Also, the students will systematically study Chinese culture and history through two books, "Common Knowledge About Chinese Culture" and "Common Knowledge About Chinese History." The class will continue to learn Chinese pop culture and discuss relevant current events through YouTube, songs, news, and movies. Text: Integrated Chinese, Volume 2, 4th edition; Common Knowledge About Chinese Culture; and Common Knowledge About Chinese History.

#### Chinese III Honors

Prerequisite: Chinese II or equivalent.

This course reinforces communication skills and includes more sophisticated writing and spontaneous speaking, roughly 80% of which will be in Chinese. Events will discuss in the present, past, and future tenses. Topics include dating, renting an apartment, sports, travel, going to an airport, the first day of school, and living at a dorm. The students will read "Tao De Ching," "The Art of War," and "Three Character Classic." Reading those books will help the students better understand the context to how the modern Chinese may think. Text: Integrated Chinese, Volume 3, 4th edition; Common Knowledge About Chinese Culture; and Common Knowledge About Chinese History.

### **Chinese IV Honors**

Prerequisite: Chinese III or equivalent.

This course reinforces communication skills and includes more sophisticated writing and spontaneous speaking. Ideally the class conducts 90% of the course in Chinese. A heavy focus on improving their speaking skills over the past three years will allow the students to become relatively fluent. Events discuss in the present, past, future tenses, and passive voice. Topics include talking about ordering at a restaurant, go shopping, choosing the school courses, making friends, the internet, finding a job, and education. The students will continue reading Tao De Ching, The Art of War, and Three Character Classic. Reading those books will help the students to the general Chinese way of think. Students continue to study real-life skills through reading, literature, singing, movies, news, and cooking. Text: Integrated Chinese, Volume 3, 4th edition.

### French I

French I introduces the French language to students while placing it in the context of the vibrant global Francophone culture. Through this course, students will be able to interpret written texts and spoken communication through authentic materials (such as

newspapers, menus, songs, and videos). Additionally, students will be able to present their thoughts through both conversation and written expression. The focus of French I is on basic, real-life situations such as introducing oneself, expressing likes and dislikes, ordering in a restaurant, describing people and objects, making purchases, and talking about past events. Text: Look I Can Talk 1 and various novels

### French II and French II Honors

Prerequisite: French I or equivalent.

French II continues building upon the novice level French language skills, while placing it in the context of the vibrant global Francophone culture. Through this course, students will be able to interpret simple written texts and spoken communication through authentic materials (such as newspapers, menus, songs, and videos). Additionally, students will be able to present their thoughts through both conversation and written expression. The focus of French II is to expand on basic, real-life situations such as describing daily activities, working with the past tenses in simple sentences, expressing ideas, exploring Paris, Quebec, and Sénégal, and creating a recipe. Texts will include various short novels and other readings.

### French III and French III Honors

Prerequisite: French II or equivalent.

French III exposes students to the more advanced syntax and vocabulary of the French language in addition to concepts such as cultural relativism. Students are expected to have a good understanding of present, passé composé, and imperfect tenses as well as the use of object pronouns, reflexive verbs, and all remaining irregular verbs. The focus of French III is on more challenging, real-life situations such as talking on the phone, analyzing the role of technology, expressing hypotheticals, discussing one's ancestry, and running errands. The students will also read selections from the novel Le Petit Nicolas. Class will be conducted in French with occasional English explanations of the most challenging grammatical concepts. Texts will include various novels and other short readings.

#### French IV Honors

Prerequisite: French III or its equivalent.

French IV builds upon the past three years of study in French and introduces students to the more advanced grammatical concepts. Students are expected to have a good understanding of present, past, and future tenses, the imperative and conditional moods, and the use of pronouns in French. Like its prerequisites, French IV uses authentic materials to expose students to the grammar and vocabulary of French while placing it in its cultural context. The focus of French IV is on more advanced, real-life situations such as reviewing a film, describing the role of an artist with his art, expressing obligation, explaining the role of history on the present day, using more complex hypotheticals, and using French in the business world. The year will culminate in the reading of Le Petit Prince, discussing through written and verbal expression the themes and morals of the book as well as its social and historical context. This course is conducted entirely in French. Texts: Le Petit Prince.

### French V: AP French Language & Culture

Prerequisite: French IV or equivalent, plus permission of the instructor.

The Advanced Placement French Language and Culture Exam focuses on proving that the students can interpret written and oral French, present their ideas in both written and spoken French, and communicate on an interpersonal level both in writing and speech. Thus, the goal of this course is to provide the motivated student with proficiency in the French language such that he or she can communicate in a variety of contexts using authentic materials ranging from news websites to e-mail, from conversations on Skype to chapters of a novel, and from critical essays to podcasts. Students are expected to have a good understanding of all tenses, moods, and grammatical concepts—the focus in this class is on perfecting what they already have learned. Successful completion of this course and the exam is approximately equivalent to a third-year college course in French. This course is conducted entirely in French. Texts: Thèmes.

#### Latin I

This course offers an introduction to the grammar, syntax, vocabulary, and etymology of Latin by way of mythology. Students will begin reading mythological novels written entirely in Latin by the end of the second week and will create stories of their own throughout the year. In this course, students will also gain an appreciation of the mechanics of English grammar through the act of reading in Latin. Texts: Familia Mala: Saturnus et Juppiter, Pluto: Fabula Amoris, and Ego Polyphemus.

### **Latin II and Latin II Honors**

Prerequisite: Latin I or equivalent.

Latin II rounds out the student's introduction to the Classical Latin language and Roman culture by continuing the storybook approach presented in year one. Students in year two will be encouraged to be active participants in their own language training by giving presentations comics they have written and drawn. Texts: Via Periculosa, Labyrinthus, and Filia Regis et Monstrum Horribile.

### Latin III and Latin III Honors

Prerequisite: Latin II or equivalent.

Students in Latin III get an opportunity to both consolidate their knowledge of Latin grammar as well as begin reading longer novels written entirely in Latin. Latin prose-composition exercises will increase in complexity, requiring students to imitate the styles of various authors as they come to have a greater appreciation for the different ways in which ancient authors composed their works. Texts: *Perseus et Medusa, Perseus et Rex Malus, Leonidas*, and *Commentarii de Puero Inepto*.

### **Latin IV Honors**

Prerequisite: Latin III or equivalent.

Students in Latin IV get a chance to read many of the canonical authors of ancient Rome in a class focused primarily on the epic and lyric poetry of Catullus, Horace, and Ovid. In this course, students will be expected to give oral and written reports on topics germane to our readings. Latin prose-composition exercises will

increase in frequency, calling for students to imitate the styles of the poets of ancient Rome. At the end of year IV, students should be ready for the AP Vergil curriculum. Texts: Love and Transformation: An Ovid Reader, LaFleur, ed., Writing Passion: A Catullus Reader, Collins Gem Latin Dictionary: Second Edition

### Latin V: AP Latin Vergil

Prerequisite: Latin III/IV at the discretion of the instructor, plus permission of the instructor.

This course prepares students to take the Advanced Placement examination for Latin, with an emphasis on the epic poetry of Vergil and the historical writing of Julius Caesar. In addition to reading the works that inspired such authors as Dante, Chaucer, and Milton, students in this course will begin to think more critically about the Latin they are reading, both in terms of its content as well as the author's diction. Students in AP Latin will also become proficient in the scansion of dactylic hexameter as well as memorize sections of the poem which they will recite aloud in class. Texts: Vergil's Aeneid Reader, Pharr, ed., Caesar, Selections from Caesar's Commentarii De Bello Gallico, 2012, Bolchazy-Carducci Publishers., Collins Gem Latin Dictionary: Second Edition

### Spanish I

Spanish I is designed to be an introduction to the language and help students acquire communicative proficiency in each of the four language skills: listening, speaking, reading, and writing. The class will focus on basic communication skills and give students a working vocabulary for basic, real-life situations through comprehensible input strategies. At the same time, the course introduces Hispanic culture, geography and relevant current events. We will use online activities to reinforce concepts learned. A combination of the curriculum *Entre Culturas 1* by Wayside publishing and *Look I Can Talk* and *Brandon Brown Quiere un Perro* for reading is used as well as accompanying audio and visual activities.

### Spanish II and Spanish II Honors

Prerequisite: Spanish I or equivalent

This is the second year of the three-year sequence and is designed to build on the skills acquired in Spanish I. Grammar concepts are reviewed and then a more intense study of verb types, tenses, and object pronouns is begun. Students are expected to have a good command of the present, preterit, and imperfect tenses as well as the imperative mood by the end of the course. Concepts of grammar are reinforced with unit projects. Students will also study Hispanic cultures in the target language. We will use online activities to reinforce concepts learned. Honors students will participate in the National Spanish Exam at level II in April. The curriculum, Wayside Publishing's *Entre Culturas 2* is used as well as accompanying audio and visual activities.

### Spanish III and Spanish III Honors

Prerequisite: Spanish II or equivalent

This course is the third year of the three-year sequence in Spanish. It is designed to impart a greater awareness and understanding of the heritage and culture of the Spanish-speaking world through language, excerpts from Hispanic literature, and history. Along with a review of grammar, new structures are introduced to complete the basic Spanish grammar. In addition to structures learned in Spanish I and II, students are expected to have a good command of the imperfect vs. preterit, future, present perfect and pluperfect tenses, and the present subjunctive mood by the end of the course. We will use online activities to reinforce concepts learned. Honors students will participate in the National Spanish Exam at level III in April. The curriculum, Wayside Publishing's Entre Culturas 3 is used as well accompanying audio and visual activities.

### **COURSE DESCRIPTIONS**

### Spanish IV Honors

Prerequisite: Spanish III or equivalent

This course is designed to be a pre-AP year. It will begin with a review of all the grammar learned in Spanish I through III. At this level, however, emphasis is placed on reading in the target language while working on gaining aural/oral proficiency. Students learn the skills of gaining meaning through context clues and cognates, and inferring meaning. There are several major written and oral projects of a creative nature. Some works of twentieth century Spanish and Hispanic literature will be investigated, read, analyzed and discussed. The course is taught almost totally in the target language. We will use online activities to reinforce concepts learned. Students will participate in the National Spanish Exam at level IV in April.

#### Spanish V: AP Spanish Language and Culture

Prerequisite: Spanish IV or equivalent and permission of the instructor.

The AP course for the motivated learner is designed to prepare the student for the rigors of the exam given each May by the College Board. This exam tests the ability to do third year college work in all four areas of speaking, reading, writing, and listening. As additional preparation, students will participate in the National Spanish Exam at the end of the year. The grammar learned in levels I-IV is reentered at this advanced level. The course is taught entirely in the target language. The books include an AP Prep workbook in addition to the regular text. There are also many outside readings.

### Spanish VI: AP Spanish Literature and Culture

Prerequisite: Spanish V or equivalent, plus permission of the instructor

This AP course is designed to prepare the student for the AP Spanish Literature Exam given each May. It is designed for seniors who have already scored a 3 or above on the AP Spanish Language exam and for others at the discretion of the teacher. Students will read and discuss the entire body of literature tested by the exam as found in Azulejo, Anthology and Guide. It will be necessary to read both during class and in isolation in order to get through authors from Cervantes to Borges, the Middle Ages to the present. Some literary investigation is also required in the target language.



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