

Upper School Course Catalog

2024-2025



This course catalog details the courses offered at Glenelg Country School for the **2024-2025 academic year**. Please note that courses marked with an asterisk may be taken with a recommendation of the instructor.

Unless otherwise stated, courses are year-long.

Table of Contents

COURSE SELECTION

Core Courses Required for Graduation	3
Elective Courses	4
Trimester Course Offerings	6
Upper School Four-Year Course Planner	7

COURSE DESCRIPTIONS

Business & Economics	10
Computer Science	10
Engineering	11
Fine Arts	12
Music	12
Theatre	14
Visual Arts	15
Humanities	18
Mathematics	22
Physical Education/Health	24
Science	25
World and Classical Languages	28

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.

HUMANITIES

Grade 9 Requirement

Ancient Studies (2 credits)

- Ancient Studies

Grade 10 Requirement

World Studies (2 credits)

- The West and the World (OL or Honors)

Grade 11 Requirement

American Studies (2 credits)

- American Literature (OL or Honors)
- United States History (OL or Honors)

Grade 12 Requirement

Senior Studies (2 credits)

- Integrative Seminar (Honors)
 - Modern World History
-

MATHEMATICS

Four years of high school math required

- Algebra I
 - Algebra II (OL or Honors)
 - AP Calculus AB*
 - AP Calculus BC*
 - AP Statistics*
 - Calculus (Honors)
 - Geometry (OL or Honors)
 - Multivariable Calculus*
 - Pre-Calculus with Trigonometry (OL or Honors)*
 - Statistical Analysis Honors
-

PHYSICAL EDUCATION

Grade 9 Requirement

- Health and Wellness (one trimester)
- Physical Education (two trimesters)
Students must complete at least two trimesters in grade 9. The final trimester must be completed by the end of grade 10.

Grade 10 Requirement

- Participation in one season of a school sport or
Participation in an outside physical activity approved by the department

Grades 11-12 Option

- Strength and Conditioning
Students in grades 11-12 who wish to enroll in a fitness class may do so. The course will focus on weight training.
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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.

- AP Chinese Language and Culture
 - 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*
 - 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*
-

* Course may be taken with the recommendation of instructor

† Elective course

ELECTIVE COURSES

BUSINESS & ECONOMICS

Year-Long Courses

- Marketing (H)*

Fall Trimester

- Business Management (H)*

Winter Trimester

- AP Macro Economics (Two Trimesters)*
- Financial Literacy†

COMPUTER SCIENCE

Fall Trimester

- Explorations of Software Development†

Winter Trimester

- Explorations of Video Game Development†

Spring Trimester

- Explorations of Artificial Intelligence†

ENGINEERING

Year-Long Courses

- Advanced 3D Modeling and Artistic Rendering
- Civil Engineering and Architecture (H)
- Digital Electronics Honors
- Introduction to Engineering Design†
- The Manual Arts: Tools, Materials, and Methods
- The Organic Arts: Farming, Food, and Sustainability

Winter Trimester

- Robotics†

FINE ARTS

Music

Year-Long Courses

- AP Music Theory
- Choir†
- Choir (Advanced)
- Choir/Instrumental Music Practicum†
- Instrumental Music†
- Music Theory I

Theatre

Year-Long Courses

- Advanced Acting*
- Introduction to Acting†
- Stagecraft†
- Stagecraft (Advanced)

Fall Trimester

- Introduction to Movement†

Winter Trimester

- Introduction to Public Speaking†

Spring Trimester

- The Art of Improvisational Comedy†

Visual Arts

Year-Long Courses

- AP Studio Art*
- Digital Media†
- Digital Photography
- Digital Photography (Advanced)
- Pottery I†
- Pottery II
- Pottery III: Independent Study
- Studio Art I: Introduction to Art†
- Studio Art II: Drawing, Painting, and Two-Dimensional Art
- Studio Art III: Directed Art Studies
- Studio Art IV: Senior Studio Art
- Video Production†
- Video Production (Advanced)

Fall Trimester

- Sculpture: Plaster, Found Objects, Wood†

Winter Trimester

- Sculpture: Wire, Paper, Clay†

Fall Trimester

- Sculpture: Installations, Mixed Media, and Contemporary Art†

* Course may be taken with the recommendation of instructor

† Elective course

AP: Advanced Placement | OL: On Level

ELECTIVE COURSES

HUMANITIES

Year-Long Courses

- Advanced Broadcast Journalism Honors
- African American Studies (H)
- AP Art History
- AP Comparative Government and Politics
- AP English Literature* (Seniors only)
- AP Psychology*
- Broadcast Journalism
- Creative Writing
- Fantasy and Science Fiction (H)
- Psychology
- Western Philosophy (H)

Winter Trimester

- Personal Leadership†
-

SCIENCE

Year-Long Courses

- Anatomy and Physiology Honors*
- AP Biology*
- AP Chemistry*
- AP Environmental Science*
- AP Physics C: Electricity and Magnetism*
- AP Physics C: Mechanics*
- Forensic Science

Fall Trimester

- Observational Astronomy†
- Rocketry: Past and Present†

Spring Trimester

- Space Science and Technology†
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* Course may be taken with the recommendation of instructor

† Elective course

TRIMESTER COURSE OFFERINGS

	Trimester 1	Trimester 2	Trimester 3
Communication and Expression	Rocketry: Past and Present	Introduction to Public Speaking	Improvisational Comedy
Quantitative Reasoning	Explorations of Software Development	Explorations of Video Game Development	Explorations of Artificial Intelligence*
		Financial Literacy	
	Observational Astronomy	Robotics	Space Science and Technology
Health and the Human Condition	Strength and Conditioning/ Team Sports/Wellness and Nutrition	Strength and Conditioning/ Team Sports/Wellness and Nutrition	Strength and Conditioning/ Team Sports/Wellness and Nutrition
	Introduction to Movement	Personal Leadership	
Aesthetics and Design	Sculpture: Plaster, Found Objects, and Wood	Sculpture: Wire, Paper, and Clay	Sculpture: Pop Art, Soft Sculpture, and Installation

UPPER SCHOOL FOUR-YEAR COURSE PLAN

	GRADE 9	GRADE 10	GRADE 11	GRADE 12
Humanities	Ancient Studies	The West and the World (OL or Honors)	American Literature (OL or Honors)	Integrative Seminar (Honors)
			United States History (OL or Honors)	Modern World History
Mathematics				
Physical Education	One trimester of Health and Wellness and two trimesters of Physical Education			
Science	Biology I	Chemistry I (OL or Honors)	Physics I (OL or Honors)	
World Language				
Electives	<i>Grade 9 may select electives denoted with † only. Grades 10-12 may select any elective course for which requirements are met.</i>			
Trimester 1				
Trimester 2				
Trimester 3				

Student Name _____ Grade _____

Advisor Name _____

Course Descriptions

Course descriptions are subject to change. Please visit [myGCS](#) for updates.

BUSINESS & ECONOMICS

AP Macro Economics (Two Trimesters)

Acceptance to the course is by instructor permission only.

AP Macro Economics will prepare students to take the AP exam in May. Students will gain a basic understanding of how households and firms interact in the economy. Special emphasis will be placed on broader economic phenomena such as economic growth, inflation, and unemployment. Supply & Demand analysis along with other economic models will be covered. In addition, we will study capital, labor, and international markets as well as the role of government policymaking. At the end of this course, students should have a basic understanding of how the overall economy functions.

Business Management (H) (One Trimester)

Acceptance to the course is by instructor permission only

Through project-based learning, the class will appreciate how to manage group dynamics and resource allocation. The class will have ownership of several projects during the term and will need to work as a group for successful delivery. Acceptance of accountability, ability to be creative, willingness to work hard, and possessing a positive attitude are all positives for this heavily group work-oriented class! This course is meant for students that want to learn how to run a business by applying concepts learned in class to real-world projects.

Financial Literacy (One Trimester)

Financial Literacy is designed as a one trimester course available to interested ninth and tenth graders. The course will introduce students to basic financial literacy skills to help them make responsible financial decisions. Subjects covered include market structures, budgeting, net worth statements, taxation, banking and credit, insurance, basic finance, investing, retirement planning, and management of financial goals. At the completion of the course, students will have the tools needed to get a head start on their personal finances.

Marketing (H)

Acceptance to the course is by instructor permission only.

This course will teach students marketing and business skills that they will apply during a series of hands-on projects throughout the year. The textbook will allow students to comprehend marketing terms and concepts. Using case studies, students will apply Microsoft Excel as an estimating tool & Microsoft PowerPoint as a presentation tool. In addition, case studies will allow students to learn how managers deal with conflicts between employees, consumers and other stakeholders. Current business news will be integrated within the curriculum where possible.

COMPUTER SCIENCE

AP Computer Science

Pre-requisite: Explorations of Software Development or Explorations of Video Game Development 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 and prepares students to take the AP CS Exam.

Explorations of Software Development

(One Trimester)

This course is an introduction to the current techniques and technologies used in software development. Students will obtain the skills necessary to create applications for Windows, mobile platforms, and the web. Students will learn about the software development lifecycle and modern software development frameworks. They will explore fundamental programming principles and foundations of design, testing, and deployment.

COURSE DESCRIPTIONS

Explorations of Video Game Development

(One Trimester)

This course is an introduction to the primary concepts of video game design focusing on gameplay mechanics, artificial intelligence, user events, and the overall gameplay experience. Students will gain foundational knowledge of the video game development process including developing game assets including art, animation, and sound. In this course, you will learn how to take an idea from concept to a finished game ready to be deployed to various game consoles and devices. Students will apply concepts from object-oriented programming and physics game engines to develop games of their choice. No previous programming experience is required.

Explorations of Artificial Intelligence (One Trimester)

In this course, we will explore the foundations of machine learning and investigate different applications of machine learning models. In the first half of the course, students learn AI's core technologies including applications, foundational concepts, and programming tools through lectures and hands on coding labs. Students will not only learn about different types of machine learning models, but also apply those models to real data sets. In the second half of the course, students will complete an instructor-led group project applying AI to a discipline of their choice (e.g., music, healthcare, astrophysics, finance, etc.), utilizing the programming skills they developed in the first half.

ENGINEERING

3D Modeling and Artistic Rendering (Advanced)

Prerequisites are Introduction to Engineering Design, or Civil Engineering and Architecture Honors, or 3D Sculpture

In this advanced digital Computer-Aided Design (CAD) 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 Introduction to Engineering Design or Digital Electronics Honors.*

Civil Engineering and Architecture (CEA) 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.

COURSE DESCRIPTIONS

Introduction to Engineering Design

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

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, re-sawing, 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.

The Organic Arts: Farming, Food, and Sustainability

This thoroughly hands-on course aims to foster the skills of gardening and horticultural, working primarily out of doors in our school garden. Learning by doing, students will create growing spaces (hoop greenhouse, hügelkultur, raised beds, indoor hydroponic garden towers) and grow a variety of edible plants using a host of propagation techniques (from seed propagation, grafting, cutting, division, and layering). Beyond the garden, students will grow indoors during cold months, designing aeroponic and hydroponic systems. They will also learn about plants-especially useful ones-across our campus. Local agricultural efforts, such as Mary Land Farm, Living Lettuce, or Clark Elioak Farm

will provide opportunities for students to understand the larger system of food production. This course is also deeply interdisciplinary. The garden, so essential to simply living ("No farms No food"), will demand students to learn about chemistry, economics, local history, national policy, health, culture, meteorology, literature, etc. Students will read some of the seminal writing in the agricultural arts from Jefferson to Thoreau to Pollan and research contemporary issues defined by agricultural concerns.

Robotics (One Trimester)

Unleash your inner engineer and delve into the world of robotics! This course blends real-world applications with the fundamentals of mechanics, electronics, sensors, and programming. Design, build, and code your own robots through hands-on projects and collaborative challenges. Gain practical coding experience, technical knowledge, and problem-solving skills as you bring your robotic creations to life.

FINE ARTS

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*.

COURSE DESCRIPTIONS

Choir

Permission of the Instructor is required.

This year-long course is open to all students 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 (Advanced)

Successful completion of at least one year of choir and teacher recommendation

This year-long course is a fully auditioned ensemble that rehearses together during the school day and frequently performs at school and community events. The group primarily consists of eleventh and twelfth grade students that have successfully completed one year of choir and a simple audition process in the first two weeks of April. Students that are invited to join the ensemble should expect to learn challenging music quickly, perform for the school and community often, as well as rehearse and perform with the GCS non-auditioned choir during Tuesday Enrichment and at various concerts and competitions outlined at the beginning of the academic year.

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.

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

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.

THEATRE

The Art of Improvisational Comedy (One Trimester)

Welcome to The Art of Improvisational Comedy! This dynamic and interactive course is designed to unlock students' creativity, sharpen their comedic instincts, and develop their skills as versatile performers. Whether they have had some acting in the past or are newcomers, eager to explore the world of comedy, this class offers a supportive environment where students can learn and grow. Through a series of engaging exercises, games, and scene work, students will delve into the fundamentals of improvisation, learning how to think on their feet, trust their instincts, and collaborate effectively with others. From spontaneous storytelling to quick-witted character creation, students will discover the keys to crafting hilarious scenes and captivating audiences, building self-confidence along the way.

Advanced Acting

Prerequisite: Introduction to Acting

Advanced Acting deepens student mastery of the performance. This course is designed for those who have a passion for acting and a desire to push the boundaries of their skills. Throughout this year-long exploration, students will delve into advanced acting techniques, character development, script analysis, and performance styles. They will refine their acting abilities through intensive exercises and practical application. They will also learn to embody characters with authenticity, delve into the nuances of emotional expression, honing their ability to connect with their ensemble. Through games, scene work, vocal exercises, students will develop a deeper understanding of the collaborative nature of theater and the importance of ensemble dynamics in creating compelling performances. Students will be encouraged to take risks, challenge themselves, and explore new avenues of creativity. They will develop confidence, self-awareness, and a deeper appreciation for the art of acting. In the last trimester, students will work on their own production, creating their own work including the writing, direction, and production of a given piece.

Introduction to Acting

Welcome to Introduction to Acting, where students embark on an exciting journey into the world of performance. Whether students are novices with a passion for storytelling or have experience acting, this course will empower them to explore the art of acting with confidence and creativity. Throughout this course, students will delve into various aspects of acting, including character development, script analysis, improvisation, and stage presence. We will explore different acting techniques through scene work. We will build skills and confidence through hands-on activities, vocal work, and ensemble exercises. Students will learn to embody characters authentically, cultivate emotional depth, and connect with audiences and their scene partners.

Introduction to Movement (One Trimester)

Welcome to Introduction to Movement, a 12-week beginner dance class designed to introduce students to dance and movement. Whether students are novice or have some experience, this class will provide them with the fundamentals of movement, rhythm, coordination, and expression through various dance styles. Students will embark on a journey of self-discovery, creativity, and physical expression. Each week, we will explore different dance techniques and styles, fostering both individual growth and teamwork within a supportive and inclusive environment. Each class session will begin with a warm-up focusing on stretching, strengthening, and preparing the body for movement. The main portion of each class will be dedicated to exploring different dance styles, including but not limited to ballet, jazz, contemporary, and hip-hop. (Cross-listed with Physical Education/Health)

COURSE DESCRIPTIONS

Introduction to Public Speaking (One Trimester)

Introduction to Public Speaking is designed to equip students with essential communication skills to navigate presentations, collaborate effectively, and express themselves confidently in various contexts. Whether they are interacting with peers, teachers, family members, or future colleagues, strong interpersonal communication skills are crucial for success both personally and professionally. By the end of this course, students emerge as more confident, empathetic, and skilled communicators, equipped with the tools and techniques to give strong presentations before groups, build meaningful relationships, resolve conflicts, and thrive in their personal and academic pursuits. Get ready to unlock the power of effective communication with Introduction to Public Speaking!

Stagecraft

Embark on an enriching journey into the vibrant world of stagecraft! Designed for beginners eager to explore the realms of set construction, audio engineering, and lighting design, this course provides an overview of the essential skills and techniques needed for live event production. From mastering shop tool usage and safety, to understanding the intricacies of audio and lighting for both stage and video. Participants will gain hands-on experience and practical knowledge that can be applied in real-world settings. Participants will emerge with a solid foundation equipped with the skills and knowledge to effectively contribute to live events and theatrical production teams. This course will require work outside the classroom.

Stagecraft (Advanced)

Prerequisite: 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 as 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.

VISUAL ARTS

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 Media

Digital Media is a year-long course that presents students an overview of the different types of digital media and how they are used in the world today. This course examines the impact that digital media has on culture and lifestyle. The course reviews the basic concepts for creating effective digital media and introduces several different career paths related to digital media. Students learn to create videos, vlogs, podcasts, and more. In this course, students explore topics such as the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students also review the ethics and laws that impact digital media use or creation.

COURSE DESCRIPTIONS

Digital Photography

Prerequisite: Photography 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.

Digital Photography (Advanced)

Prerequisite: Photography 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.

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: Plaster, Found Objects, and Wood

(One Trimester)

In this trimester-long course, students will delve into the dynamic mediums of plaster, wood, and found objects, pushing the boundaries of traditional sculptural practice to create innovative and thought-provoking works of art. Through hands-on experimentation and guided instruction, students will unlock the potential of these diverse materials, transforming ordinary objects into extraordinary sculptural masterpieces.

Sculpture: Wire, Paper, and Clay (One Trimester)

In this trimester-long course, students will embark on a creative journey exploring the versatile mediums of wire, paper, and clay. Through hands-on experimentation and guided instruction, students will learn the fundamental techniques and principles of sculptural artistry, allowing them to bring their imaginative visions to life in three-dimensional form.

COURSE DESCRIPTIONS

Sculpture: Installations, Mixed Media, and Contemporary Art (One Trimester)

In this trimester-long exploration, students will dive into the realm of soft sculpture, installations, and artist study, discovering the power of textiles, fibers, and mixed media to create engaging and experiential works of art. Through hands-on experimentation, critical inquiry, and the study of contemporary and historical artists, students will develop a deeper understanding of sculptural practice and its potential to evoke emotion, provoke thought, and inspire change.

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, hands-on introduction to all of the elements of digital film making. Students will explore the production and editing processes. From concept to execution, students will produce a series of short creative productions using specific techniques of pre- and post-production. The course will focus on the basic principles of videography, audio recording, and editing as well as the study of narrative production techniques, how to operate video cameras, Adobe Premiere Pro software, and lighting equipment.

Video Production (Honors)

Prerequisite: Video Production

Advanced Video Production is a year-long course that builds on the techniques and principles learned in Video Production. Students will expand and sharpen their abilities and techniques of video production including scripting, directing, lighting, shooting, and editing. Students will also engage in the analysis and critique of student projects. Documentary and short length features will be produced throughout the year. Students will also produce videos that may be used for marketing and commercial use at Glenelg Country School.

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 American Studies (Honors)

Open to Grades 11-12 students.

African American Studies is an interdisciplinary course that reaches into a variety of fields including history, politics, music, literature, geography, and science. In this course, students will examine the contributions and experience of African Americans spanning the course of five centuries of remarkable events that have contributed to shaping the future of the United States of America. To give students a holistic view of African American heritage, the course will simultaneously delve into a historical overview spanning the first arrival of Africans on the shores of the New World to the modern-day election of the first African American president, explore literary works and the influence these works have on contemporary pop culture, and examine the public policies that continue to define the country and influence the modern human rights movements of 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.

COURSE DESCRIPTIONS

AP Art History

This course requires the permission of the instructor.

This course provides a college-level survey of the visual arts from pre-historic times to present. Students will be introduced to a wide range of artistic practices, styles, and media, including painting, drawing, prints, photography, sculpture, installation art, performance art, and architecture. This class will examine the many major periods and movements in the history of art, from Renaissance, Baroque, and Rococo art to Impressionism, Cubism, Abstract Expressionism, and the multiple artistic currents that characterize art being created today. This class also focuses on the many rich collections of non-Western art and architecture from Asia, Africa, and Latin America. This class will prepare students for the Advanced Placement Art History examination. Students will be expected to complete extensive nightly readings and to participate actively in class discussions.

AP Comparative Government and Politics

This course requires the permission of the instructor.

AP Comparative Government and Politics is an introductory college-level course in comparative government and politics. This course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students cultivate their understanding of comparative government and politics through analysis of data and text-based sources as they explore topics like power and authority, legitimacy, and stability, democratization, internal and external forces, and methods of political analysis.

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 eleventh 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 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:

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

Broadcast Journalism

Prerequisite: Video Production or approval by instructor.

This year-long 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's techniques and delivery. 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 professional grade equipment. Completed work will be broadcast to the school community through GCS News.

Broadcast Journalism (Honors)

Prerequisite: Broadcast Journalism

This year-long course will build upon the skills and techniques students learned in Broadcast Journalism. In this course, students will be encouraged to move from behind the camera to in front of the camera, gaining and demonstrating a comfort with public speaking. The students in Advanced Broadcast Journalism will take on greater leadership roles by determining who is assigned to each story and critiquing completed stories of their peers. Completed work will be broadcast to the school community through GCS News.

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.

Fantasy and Science Fiction (Honors)

While fantasy literature has a long and chequered past, science fiction has become one of the fastest-growing and most creative genres of American literature. The technological innovations of the past

century, and the fundamental changes they have wrought on the world, have sparked great interest, both in literature and film, in the nature of ourselves and the shape of the future. At the same time, the production and consumption of fantasy literature have grown apace. This class will briefly trace the history of both genres and explore how these two wildly different art forms succeed in addressing the issues that both fascinate and frighten us.

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 some of the most persistent ideas of human society as well as perspectives bearing on the topic. Faculty presentations, public speaking, and student-teaching supplement these seminar skills. During the second and third trimesters, each student undertakes an extended research or creative project in a tutorial relationship with a faculty member, orally presents findings to their class in the middle of the process, prepares a major paper or project, and engages in an oral examination of their work before a faculty committee. All students receive honors credit for their enrollment in this challenging course.

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.

COURSE DESCRIPTIONS

Personal Leadership (One Trimester)

The Personal Leadership course is an opportunity for students to work with a leadership professional. Students will be expanding their leadership potential, creating activities, and developing on-campus projects. Projects will require collaboration and organizational resilience. Students will develop as trustworthy, respectful, responsible, and fair leaders.

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 issues.

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.

The West and the World/The West and the World (Honors) (2 credits)

Required for all Grade 10 students.

The West and the World is a double-period introduction to the most significant developments, conflicts and exchanges between Western Europe and the Middle East, Africa, Asia, and Latin America over seven centuries. Interdisciplinary by nature, the course employs art, history, and literature as tools to explore cultural connections and essential ideas. 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, performing, and literary arts. Tenth grade students will emerge from this class with a deeper understanding of Western Europe's relationship with the world from the rise of the Renaissance to Decolonization with improved writing, speaking, reading, and rhetorical skills.

Western Philosophy (Honors)

This course requires the permission of the instructor.

In this class, we will explore the major developments in the history of western philosophy from Plato in Classical Athens to William James in 19th century Harvard University. We will use seminars and essays to explore issues of justice, duties of citizens and states, morality, and the good life. In a course of this nature, strong reading, thinking, and seminar skills will be required and regularly practiced

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 grade 9 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 Math 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 from 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.

COURSE DESCRIPTIONS

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.

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.

COURSE DESCRIPTIONS

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.

Multivariable Calculus*

(via Johns Hopkins Center for Talented Youth)
This course requires the permission of the Math department chair as well as the submission of educational testing to CTY.

Explore concepts typically offered in a third-semester calculus course. You'll extend your knowledge from BC Calculus and learn about the subtleties, applications, and beauty of limits, continuity, differentiation, and integration in higher dimensions. Your instructor will be available for learning support and one-on-one review sessions for graded assessments, which include quizzes, homework, discussions, projects, a cumulative midterm, and a cumulative final.

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.

Statistical Analysis Honors

The Statistical Analysis course is designed to introduce the methods used in the field of applied statistics. This course is designed to provide a fundamental understanding of descriptive and inferential statistics. Topics include the measures of central tendency, standard deviation, combinations and permutations, probability, sampling, and various distributions. Emphasis is on applications of statistical concepts. It relies extensively on real-world situations, critical analysis, and interpretation of graphs and data. Students will be expected to analyze and write detailed descriptions and interpretations about graphs, data, and procedures.

PHYSICAL EDUCATION/HEALTH

Ninth graders are required to take one trimester of Health & Wellness and two trimesters of Physical Education courses. Students must complete at least two trimesters of this in ninth grade. The final trimester must be completed by the end of the student's tenth grade year.

Fitness

Tenth grade students must either 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

Eleventh and twelfth graders who wish to enroll in a fitness course may take either Strength and Conditioning or Introduction to Movement.

COURSE DESCRIPTIONS

Health and Wellness (One Trimester)

In Health and Wellness, students will develop the skills and knowledge necessary in assessing one's own health, focusing on developing lifelong health habits, including avoidance of disease-causing vectors. Students will learn to assess their nutritional health and how to access information to make more informed decisions about their nutrition, helping to increase their nutritional literacy.

Introduction to Movement (One Trimester)

Welcome to Introduction to Movement, a 12-week beginner dance class designed to introduce students to dance and movement. Whether students are novice or have some experience, this class will provide them with the fundamentals of movement, rhythm, coordination, and expression through various dance styles. Students will embark on a journey of self-discovery, creativity, and physical expression. Each week, we will explore different dance techniques and styles, fostering both individual growth and teamwork within a supportive and inclusive environment. Each class session will begin with a warm-up focusing on stretching, strengthening, and preparing the body for movement. The main portion of each class will be dedicated to exploring different dance styles, including but not limited to ballet, jazz, contemporary, and hip-hop. (Cross-listed with Theatre)

Strength and Conditioning (One Trimester)

In Strength and Conditioning, students will develop their general athletic skills. Through use of the school's fitness center, students will learn the core components of physical fitness and how they interact to create athleticism. Students will develop a basic knowledge of muscle and skeletal physiology to aid in the assessing and prescription of fitness programs.

Team Sports (One Trimester)

In Team Sports, students will learn basic technical and tactical skills associated with a variety of team sports, not limited to ultimate frisbee, basketball, futsal, handball, floor hockey, soccer, kickball/wiffleball, flag football, as well as individual sports, i.e. disc golf, and pickleball. Through drills, small and large sides games, students will develop skills in the corresponding sport as well as team dynamics and sportsmanship.

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.

COURSE DESCRIPTIONS

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
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 College Board Advanced Placement® Exam.

AP Physics C: 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.

AP Physics C: 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 co-requisite, it is strongly recommended that students complete a Calculus course prior to taking this class.

COURSE DESCRIPTIONS

Biology I

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.

Chemistry I

Prerequisite: Algebra I

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

Chemistry I (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, gas laws, and acid-base chemistry. This course explores concepts in greater depth than Chemistry I, with a strong emphasis 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.

Observational Astronomy (One Trimester)

The Observational Astronomy course utilizes the Gould Observatory to introduce students to the science (and art) of stargazing. With an emphasis on the most recent discoveries, students will learn more about our Solar System, the Milky Way galaxy, and beyond! There will be opportunities for field trips, guest speakers, and fun projects.

Physics I

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 problem-solving 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.

COURSE DESCRIPTIONS

Physics I (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 problem-solving 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.

Rocketry: Past and Present

How do rockets work? How did we develop rockets? Can I build a rocket? All these questions and more will be answered if you join the Rocketry: Past and Present course to learn about designing and launching rockets, the history of space travel, and how humans left this planet! Learn through hands-on rocketry, computerized simulation, guest speakers, and more! Ad Astra!

Due to this course's connection to the American Rocketry Challenge students enrolled in the course will have to be in the rocketry club. There is no math prerequisite for this course.

Space Science and Technology (One Trimester)

What is the future of space travel? How will we grow food on Mars? Join our Space Science and Technology course to learn more about how humans will explore and survive beyond Earth! Expand your knowledge of the endless possibilities through hands-on activities, field trips, and guest speakers.

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.

AP Chinese Language and Culture

AP Chinese Language and Culture is equivalent to an intermediate-level college course in Chinese. Students cultivate their understanding of Chinese language and culture by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges.

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.

COURSE DESCRIPTIONS

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, talking about past events, and exploring Paris and French speaking countries in Africa as well as the French speaking islands. The curriculum, Carnegie Learning, T'es Branché 1 is used as well accompanying authentic audio and visual activities.

COURSE DESCRIPTIONS

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 on-line news articles, 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 France, Canada, and many other French speaking countries and islands around the world. Texts will include various short novels and other readings. Honors students will participate in the National French Exam at level II in April. The curriculum, Carnegie Learning, T'es Branché 2 is used as well accompanying authentic audio and visual activities.

French III and French III (Honors)

Prerequisite: French II or equivalent.

Students in French III get the opportunity to explore 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. 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. Honors students will participate in the National French Exam at level III in April. The curriculum, Carnegie Learning, T'es Branché 3 is used as well accompanying authentic audio and visual activities.

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. Honors students will participate in the National French Exam at level IV in April. The curriculum, Carnegie Learning, T'es Branché 4 is used as well accompanying authentic audio and visual activities.

French V: AP French Language and 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 the student can communicate in a variety of contexts using authentic materials ranging from news websites to e-mail, from conversations on-line 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. The curriculum, Wayside Publishing's APrenons is used as well accompanying authentic audio and visual activities.

COURSE DESCRIPTIONS

Latin I

This course offers an introduction to the grammar, syntax, vocabulary, and etymology of the Latin language by way of mythology. Students will begin reading mythological novels written entirely in Latin by the end of the second week and will work through the vocabulary of readings by answering authentic questions about their own lives. In this course, students will also gain an appreciation of the mechanics of English grammar through the act of reading in Latin. Students will also learn about the family life, religion, and geography of an empire that lasted from 753 BCE to 1453 CE with significant reach not only in Europe, but also in Africa, and what we now call the Middle East.

Latin II and Latin II (Honors)

Prerequisite: Latin I or equivalent.

This course offers students a more thorough exploration of the grammar, syntax, vocabulary, and etymology of the Latin language by way of both history and mythology. Students will read novels written entirely in Latin and work through the vocabulary of readings by answering authentic questions about their own lives. In this course, students will also gain an appreciation of the mechanics of English grammar through the act of reading in Latin. Students will also learn about the history, politics, religion, and mythology of an empire that lasted from 753 BCE to 1453 CE with significant reach not only in Europe, but also in Africa, and what we now call the Middle East.

Latin III and Latin III (Honors)

Prerequisite: Latin II or equivalent.

This course offers students an experience of the grammar, syntax, vocabulary, and poetical forms of the Latin language that is intended to transition them into reading authentic Latin written by native speakers. Students will read novels written entirely in a Latin that is adapted from ancient source material and will be asked questions about their own lives. In the process, students will learn to bring their own experiences to bear on the analysis of stories first written thousands of years ago. In this course, students will also gain an appreciation of

the mechanics of English grammar through the act of reading in Latin. They will learn about the history, politics, religion, and mythology of an empire that lasted from 753 BCE to 1453 CE with significant reach not only in Europe, but also in Africa, and what we now call the Middle East.

Latin IV (Honors)

Prerequisite: Latin III or equivalent.

This course offers students a full introduction to Latin prose and poetry written by native speakers. By learning about the aspirations, hopes, disappointments, and joy of authors such as Cicero, Catullus, Ovid, and Horace, students will make connections between their own lives and those who lived two thousand years ago. This course will also introduce the practice of good translation to help students appreciate the complexity of Roman court speeches, letters, and poetry. Students will also learn about the history, politics, religion, and mythology of an empire that lasted from 753 BCE to 1453 CE with significant reach not only in Europe, but also in Africa, and what we now call the Middle East.

Latin V: AP Latin

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

In AP Latin, students will delve further into the vocabulary and grammar of the Latin language by reading the memoirs of Julius Caesar, *Commentarii de Bello Gallico*, and the national epic of Rome, Vergil's *Aeneid*, as well as the letters of the Roman politician Pliny the Younger. These works will also give us a chance to explore the culture, mythology, and history of the Roman people in a way that is engaging and gets at the heart of the thinking of the Romans and, in the process, teaches students about the way that they see the world. In addition, we will prepare for the May administration of the College Board AP Latin Examination.

COURSE DESCRIPTIONS

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 as accompanying audio and visual activities.

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.

COURSE DESCRIPTIONS

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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