



HIGH SCHOOL OF ART    DESIGN



COURSE CATALOG



2023-2024

# ART & DESIGN COURSE CATALOG

## ART / CTE DEPARTMENT

### FRESHMAN ART FOUNDATION

The Art Foundation course is a fundamental program that exposes freshman students to the basics of art production and exposes them to the various other disciplines with an emphasis on illustration. Students are offered a comprehensive approach to understanding the principle and elements of art and design. Further, the objective of this fundamental program is to strengthen the students' visual acuity and to enhance conceptual thinking.

### FRESHMAN COMPUTER TECHNOLOGY DESIGN

All 9th grade students will take this one-year comprehensive course which primarily focuses on the latest Adobe Photoshop Creative Cloud software. This industry standard application is essential to all disciplines in visual art and will be taught in labs with professional-level Mac or PC workstations. Students will practice their newly developed technical skills in creative projects in which they will be able to choose many of their own images and express their own viewpoints. By the end, students will have a print and digital website portfolio as well as a first draft resume to be eligible for a summer internship. Additionally, students will take the Certiport ACA Photoshop technical assessment in April. This will qualify them for a CTE diploma and advanced college credit for this course. The culminating project will be in partnership with the School of Interactive Arts, teaching computer science through the lens of game design utilizing Unity and C# (C-Sharp) programming

### SOPHOMORE ART HISTORY

Art history is a one-year survey course taken in combination with students' first year of their Art / CTE majors, designed to introduce students to western and nonwestern art from prehistoric times to the present day. Students will analyze imagery from a variety of cultures, times, and artists for formal properties, function, content, and context. Students will develop artistic understanding and reflect upon their art practice through writing and discussion in order to gain a better appreciation of art and its role in history. Through study and direct experiences, students will reflect on how knowing the contexts, histories, and traditions of art forms helps us create works of art and design.

## ANIMATION

### ANIMATION I: SOPHOMORES

The first part of the year focuses on concept and designing characters for an animation studio environment. The second semester is geared toward an introduction and implementation of the 12 principles of animation in Adobe Animate.

### ANIMATION II JUNIORS

This year is focused on what makes a compelling story. We

dissect classics and create stories using the hero's journey and 3 act structure. Students deepen their understanding of storyboarding and the production part of animation and learn how to create short free standing animations of their own. Portfolio and college prep are introduced

### ANIMATION III SENIORS

The goal of this year is to make the student competent motion graphics artists in After Effects. This year is a culmination of all the previous years and gives the students professional level After Effects skills to work in industry/internships. College Prep is emphasised along with large scale personal projects and contests.

## ARCHITECTURE

### ARCHITECTURE DESIGN - SOPHOMORE

#### Introduction to Architecture & Interior Design in Residential Buildings

Architectural Design Studio Level I is a one-semester course that gives insight into how designers think and work, and the proper way to hand draft they learn the process of developing architectural residential construction documents, which include floor plans, elevations, sections, interior design and 3D model making.. We begin with observation drawings through pen & ink vignettes of architectural studies of building details, cityscapes, landscapes and industrial design hardware. while they learn the process of developing architectural construction documents. Design projects include stairs, kitchen design, geodesic dome and color theory. Students are introduced to a variety of architectural styles from traditional to modern trends so that they can survey and document using their own built environment. Readings are technical to support construction document drafting. Student's use design analysis to improve and create higher level projects. An introduction to interior design, industrial design and residential design.

### ARCHITECTURE - JUNIOR

#### Ordering Principles and Formal Systems with the Design of Public Buildings

By junior year students investigate ordering principles and how they relate to architecture and design as well as learning about design trends and how they influence all other industries. The second unit is the study of Ordering Principles of Architecture, to understand how building forms and plans are assembled and designed. The third unit is the study of the classical order of columns while designing a colonnade for a landscape or building. The fourth unit is the study of site planning. The students follow up by reviewing all the basic architectural drafting skills and integrate site design by understanding topography and compass orientation for green design considerations in landscape architecture. They will design by selecting a site and a building type plan for the landscape. Following this



unit will be the futuristic World's Fair , Flushing, NY site. the students will work in groups to research, document, design and develop a futuristic master plan and build a site model. The students continue to research great buildings for their formal systems project by focusing on circulation, structural, spatial and enclosure with the modern Corbusier's Five Points of Architecture used in the Villa Savoye house as the motivation for this three story abstract structure. A multi-unit residential apartments complex or college dormitory apartments uses the illuminated alphabet as inspiration from Johann David Steingruber's Architectural Alphabet buildings whose floor plans form letters. The student's projects are also applied to their AutoCAD 3D rendering training. Art history and frequent visits to the Metropolitan Museum of Art, MOMA and the Frick

## **ARCHITECTURE - SENIOR**

### **Portfolio Development, Skyscraper Design, Neighborhood, Planning Design and Thesis Project**

Students understand how to further develop their portfolios. Students will learn how to read and create maps, draw from observation, develop confidence in creating their own style, make presentations and building designs. The portfolio projects will involve personal maps, famous buildings, self-portraits, still life and three dimensional assemblages. Building with toothpicks and creating a tower is an exercise that Buckminster Fuller inspired for this project. The Skyscraper design project is an intense research and design project that includes a developed building form, core and shell to elevation, with a strong emphasis on concept development and the ability to speak and defend original designs. Lastly students will be looking at and studying their neighborhood and others around NYC, and the application and design of construction detailed drawings. They will learn and reinforce their knowledge about design development, visual presentation and verbal presentation skills, model making, hand drafting, scaling, and working together on the base site model at 1'=64'. This course is a college preparatory course for students that are considering studying Architecture, Landscape Architecture, Engineering, Interior Design, and Industrial design at the university level.

## **JUNIOR AUTOCAD**

AutoCAD 2D Drafting and Annotation This Junior course is designed to give you a solid understanding of AutoCAD features and capabilities. This course covers Starting with Sketching, Layers, Dimension Styles, Dynamic Blocks and A360. Autodesk AutoCAD is a powerful CAD software helping professionals create 2D drawings faster and with more precision. Its simplified 2D drafting allows teams to work more efficiently by sharing drawings across connected desktop, cloud, and mobile solutions.

## **SENIOR REVIT**

This class is designed to teach you the Autodesk Revit functionality as you would work with it throughout the design process. You begin by learning about the user interface and

basic drawing, editing, and viewing tools. Then you learn design development tools including how to model walls, doors, windows, floors, ceilings, stairs and more. Finally, you learn the processes that take the model to the construction documentation phase.

# **CARTOONING**

## **CARTOONING I and II - SOPHOMORE**

During the sophomore year, students build upon and relate their prior knowledge from their foundation classes to cartooning since cartooning is about taking the realistic and exaggerating and abstracting it with their imagination. Students learn critical skills such as character design, traditional facial and full body anatomy, traditional inking tools and techniques. Projects range from observational drawing, character model sheets and sculpture. Students learn how to draw characters of different cultures based on their studies of multi-cultural artists.

## **CARTOONING III and IV**

Utilizing their skills and knowledge from last year's cartooning class and their computer technology class, students explore new media and various forms of storytelling and narrative in the junior cartooning class. Students explore responding to the world around them with their art, storyboarding, art history as well as learning how to craft and pace a narrative with different camera shots and transitions. Mediums include digital painting, ink-wash, watercolor and sculpture. Students read excerpts from different graphic novels exploring different experiences from a wide range of cultures.

## **AP STUDIO ART 2D**

The Senior Cartooning class brings real world applications and industry opportunities into the classroom by selling, marketing and self-promoting themselves through tabling at New York City Comic Con, MoCCA Fest and Comic Arts Brooklyn as well as the school wide comic convention, Fan Faire. The Senior class builds an AP portfolio for College Board which includes a 15-piece portfolio concentration to earn 3 credits for college. Throughout the Senior class, students craft their own stories and explore themes, narrative and genres in sequential art while choosing their own process and art mediums. In preparation for the Visual Arts Commencement Exam, students analyze all different cultures and art throughout time

# **FASHION DESIGN**

## **FASHION DESIGN/ SOPHOMORES**

Students are introduced to the world of fashion design by developing a visual index and fashion industry language & terminology. Students will practice life drawing for fashion designers. They create a variety of proportionately and industry correct croquis as they develop personal style via inspirational

garment design based on silhouette and color story using a variety of rendering techniques. Students will learn fundamental draping skills, basic garment construction, as well as basic hand and machine sewing techniques. They gain insight into fabrications by sourcing and purchasing fabric for creating a garment.

### **FASHION DESIGN/ JUNIORS**

Students conceptualize cohesive collections of ready-to-wear pieces. Through a variety of challenging projects and competitions, students explore different markets and segments of the fashion design world. Students will learn how the cycle of fashion, seasons of fashion and customer profiles are essential to fashion design teams and fashion merchandisers. Students develop intermediate garment construction skills as they build on the basics. Advanced projects use Adobe Illustrator to render technical flats. Students create tech packs and learn about manufacturing practices. They participate in a collaborative fashion styling unit in conjunction with photography students with a professional student-led fashion editorial photoshoot.

### **FASHION DESIGN/ SENIORS**

Students delve deeper into the world of garment construction as they explore the field of costume design and theatrical wardrobe careers by designing for the Roundabout Theatre. Using advanced sewing skills and a diverse, socially and environmental awareness lens, students create designs and produce their own fashion show. Students will learn the basics of establishing a brand and explore the paths of entrepreneurs and marketing a collection. They complete their portfolio development and application to college programs and careers. Eligible students will apply and participate in industry based internships. Students will take the Nocti and NYC Comprehensive Art regents exam.

## **FILM**

### **SOPHOMORE YEAR: Introduction to Film/Video I & II:**

In this two-term, production-based studio course, students are taken through the entire filmmaking process from Development and Preproduction, through Production, and Postproduction. The lessons cover the technical practice as well as the theoretical background. Working in small groups, students produce five short films over the course of the school year, including Music Videos, Product Commercials, Public Service Announcements and more. Each film is entirely student-produced, from inception to final cut, with each student participating in all aspects of production, and with each student creating his/her own individual edit of their group's footage. Topics covered include: Digital Video Camera, Shotgun Microphone, 3-Point Lighting, Shot Lists, Storyboards, Groundplans, Shot-to-Shot Continuity, Visual Storytelling, and extensive use of Adobe Premiere Pro for editing.

### **JUNIOR YEAR: Advanced Film/Video I & II:**

In this advanced two-term, production-based course, students build upon the foundation they have attained in the introductory course. It is assumed that all students taking this course have gone through the entire filmmaking production process many times and are proficient in both the operation of the digital video camera, mics, and lights, as well as editing in Adobe Premiere Pro. This course will focus on using a more advanced camera, more advanced audio recording equipment and advanced formal, technical and theoretical knowledge and its application. Students will populate their portfolios with substantial short films of various genres that represent their unique voice, including Aesthetic Films, 3-Act-Play Narrative Films, Documentaries, and more. Topics covered include: operation of the DSLR Camera in Manual Mode, adjusting exposure, pulling focus, varying the depth of field, Digital Audio Recorder, Mise-en-scène and Aesthetics, graphic, rhythmic, spatial, and temporal relationships, Screenwriting, the 3-Act Play structure, advanced editing in Adobe Premiere Pro, Color Correction, Keyframing, introduction to film history and careers in filmmaking.

### **SENIOR YEAR: Senior Thesis Film/Video Studio I & II:**

In this culminating two-term, studio based course, students have created enough films and have had enough experience with the production process to feel comfortable working on projects in smaller groups. A greater emphasis will be placed on developing one's unique voice as a filmmaker and applying advanced production techniques through more complex projects including advanced Independent Films, Parodies with a social message, Remaking Scenes from professional movies, individual film reels, and more. Students will be spending significant amounts of time analyzing and deconstructing films. Students will also finish compiling their portfolios and Vimeo pages for college, and prepare for the end-of-year Certipoint Examination to become Adobe Certified Associates in Adobe Premiere Pro CC. Topics covered include: rigorous technical and theoretical instruction, including advanced production skills, advanced editing in Adobe Premiere Pro, advanced film history, and deeper exploration into careers in filmmaking.

## **GRAPHIC DESIGN**

### **SOPHOMORE GRAPHIC DESIGN**

The Sophomore Graphic Design course provides students with the foundation to communicate a message by combining the use of text and images. Projects are designed to prepare students with traditional hands-on studio skills (drawing, collage, photography) and digital skills (Adobe Photoshop, Illustrator and InDesign) while learning composition, the Principles and Elements of Design, Gestalt Principles, typography, color theory, logos and page layout. Each project will draw art historical references from various cultural origins as students learn the proper work flow,

design process, and the importance of following a project brief.

### **JUNIOR GRAPHIC DESIGN**

The intention of the Junior Graphic Design course is to scaffold from the foundation skills learned in sophomore year by bringing an authentic design experience through industry-based projects while also preparing them for internship opportunities through our Work Based Learning program. The complexity of the projects increase as they are required to not only create the final design and layout but they are responsible for creating the visual and verbal content as well. Students are encouraged to explore any medium they choose including traditional illustration techniques, digital photography, and digital manipulation as well as drawing personal and cultural connections. Students will advance their skills as they follow the protocols of using Adobe Photoshop, Illustrator and InDesign on visual communication scenarios that include: advertising campaigns, résumé building, editorial layout, web design, package design, and branding and identity.

### **SENIOR GRAPHIC DESIGN**

In Senior Graphic Design the bar of excellence is raised even higher. Projects become more complex and meaningful as students learn more about the expectations of industry and prepare their portfolios for college. Students continue to refine their design and layout skills, while expanding on design thinking solutions, career and financial management, and exploring interactive environments and user experience and interface (UX and UI). By the end of their Senior year, students will have completed certification in Adobe Photoshop (sophomore year), Illustrator (junior year), and InDesign along with SkillsUSA industry-approved Design Certification both in their senior year.

## **ILLUSTRATION**

### **SOPHOMORE FALL: INTRO TO ILLUSTRATION: METHODS, MATERIAL & TECHNIQUES**

The Sophomore year's objective is to review, refine, and enhance through scaffolding the basic technical skills introduced during the Foundation year. Daily studio classes are supplemented by daily Technology classes, which include Photoshop and Digital Image building techniques. Upon reviewing the Elements of Design, these are then applied to more complicated visual problems in several mediums, including conceptual and sequential art projects. The Fall begins with BW drawing, while the Spring introduces Color.

### **SOPHOMORE SPRING: DEVELOPING IMAGES FOR ILLUSTRATION**

The Spring semester focuses on visual communication and developing concepts while exercising and enhancing technical skills in using Color. Materials introduced include, but are not

limited to, pastel, watercolor, oil and/or acrylic paint, and digital media. Technology classes continue training in Photoshop and students are encouraged to utilize and integrate Digital programs such as InDesign to their projects. At the end of the Sophomore year, students take their first technical assessment in with the Photoshop certification exam.

### **JUNIOR FALL: APPLIED ILLUSTRATION TECHNIQUES:**

The Junior Illustration program encourages more in-depth study through a double period of Studio Art. Students develop a deeper familiarity and handling of a broad range of media while working towards the development of a personal style. Students are encouraged to work extensively from life in and out of class while using a variety of dry and wet media, and supplemental homework assignments increasingly challenge Conceptual Development. Classes include regular critiques, written investigations and analyses of Art, oral discussions, and Art History studies designed to prepare for the New York City Comprehensive Art Exam, our third program assessment.

### **JUNIOR SPRING: (ADVANCED) DESIGN AND CONCEPT DEVELOPMENT:**

During the Spring, students begin choosing & creating either "Concentration" themes (a series of related images) or a "Sustained Investigation," (developed works that originate from Independent inquiry and in-depth research). These extended projects encourage the development of personal style while building towards a portfolio, which includes sketchbook documentation of artistic process. Technology skills get reinforced through creative projects as well as the establishment of online portfolios, in preparation for College Readiness. Structured classroom critiques, written analyses of Art, oral discussions, and Art History studies continue, all as preparation for the New York City Comprehensive Art Exam, our third program assessment.

### **SENIOR FALL: DEVELOPING A PERSONAL STYLE:**

Double-period studio illustration classes concentrate on portfolio development, finding personal voice, and style. Sample projects include, but are not limited to, sample publication covers, Poster illustration, Advertising illustration, Spot illustrations, and Editorial illustrations. Students reinforce all traditional and digital skills, as well as literacy and Analytical skills. Career opportunities are further explored, investigated, and discussed as students continue preparing for College Readiness.

### **SENIOR SPRING: CAREER READINESS:**

Illustration Portfolio and Presentation The double-period studio course culminates with developing skills in designing, organizing, and presentation of traditional and digital portfolios, along with Career and Financial Management exercises such as how to maintain a studio, invoicing, and cataloguing. The successfully completed Illustration portfolio that began in Junior

year and emphasized during Senior year demonstrates a range of competencies in both digital and traditional media, higher conceptual thinking, and reflects a personal voice and/or style. As the students ready for college and career, field studies and internship opportunities are further explored, along with encouragement to participate in a scholarship program offered by the Art Students League of New York.

## PHOTOGRAPHY

### PHOTOGRAPHY I

In the sophomore year, students have one period of an introduction to studio photography and one period of technology, which introduces them to Adobe Photoshop, Adobe Lightroom and Adobe InDesign the industry standard digital image editing and design programs. During the course of their first year of study, students will learn the basic mechanics of the DSLR camera, shooting both in a professionally-equipped studio as well as on-location. They will learn how to navigate and use Adobe Photoshop, Adobe Lightroom and Adobe InDesign in a photography studio setting. These skills are further expounded upon and developed in their junior and senior course of study. A diverse group of artists and photographers, both as guest artists and in the course of study, are selected to engage students in practice and ideas.

### PHOTOGRAPHY II

During the course of the students second year of study, junior students are given industry-based assignments to produce skills in selling an idea and telling a story. Each unit provides a block of individual assignments followed by assessments which build skills and context in the History of Photography and Art, History of the Industry, Technical/Creative assignments, Photoshop and Post-Production assignments to produce a final display and Portfolio. A diverse group of professional artists and photographers, both as guest artists and in the course of study, are selected to engage students in practice and ideas.

### PHOTOGRAPHY III

The third year of course study is focused on college prep and planning. Students will be expected to produce a mission statement, business cards and stationary, an advertisement and a brochure to promote their business. Students learn to work as part of a collective, and learn to work with and service the needs of a client, which prepares them for future industry experiences. The CFM is brought into the curriculum as part of the business model. Students will be expected to produce a 15-20 image portfolio and a PDF book. Students will take the Skills USA exam and the Commencement Arts Regents exam to achieve an advanced regents diploma. A diverse group of professional artists and photographers, both as guest artists and in the course of study, are selected to engage students in practice and ideas.

## SENIOR ELECTIVES

### CERAMICS

Ceramics is an introductory level full-year course designed to provide students with a foundation of knowledge and experience in the use of clay as an expressive medium. Students will explore the properties and characteristics of clay by learning various construction hand-building techniques such as coiling, pinching, and slab building. Students will learn about surface and form design in addition to glazing and firing. They will explore the fundamentals of aesthetic perception, creative expression, and historical/cultural aesthetics.

### DIGITAL ILLUSTRATION

Digital Illustration is a great elective for all senior and junior illustration majors but is open to all. It will allow for experimentation in different styles, guiding the students through finding their personal voice and expanding your college portfolio. The course will begin with an in-depth technical study of Adobe Illustrator and the creation of vector art, the industry-standard in digital art, and a crucial entry-level job skill; then advancing to digital painting techniques in Photoshop, 3D rendering and animation. Projects include digital life drawing on iPad, line art illustration, character design, pattern design, product design and editorial illustration.

### DOCUMENTARY FILMMAKING / VIDEO JOURNALISM

If you want to get your hands on a camera to tell stories about the world around you or your own life, you will find this elective fulfilling. If you watch video essays on youtube and have noticed that the world of non-fiction visual storytelling has exploded into the social media world this elective will also be interesting to you. Throughout the year, students will be introduced to multiple genres of documentary filmmaking - poetic, expository, reflexive, observational, performative, and participatory through viewing, writing about, and creating their own work. Students will learn that genres often overlap and certain subject matters fit better with specific genres. Students will be introduced to video journalism outlets and encouraged to create a short-form doc with a specific outlet in mind. Working in teams and alone, students will explore social issues and how to craft a personal voice through the art of filmmaking.

### FIGURE DRAWING

The Observant Eye is a two-semester course that meets for forty-six minutes, five days per week. The underlying unifying concept of the class is observation: learning to see and describe. This course will give students the opportunity to create life drawings and paintings for their portfolios and to develop the practice of working from life on a regular basis. We will also do some writing about and basic research about art to help students prepare for the Spring NYC Comprehensive Art Exam that all seniors take for their art endorsed diploma. Most of the time

would be studio-based activity, but observing and discussing art would be a vital part of the class. Instructional Philosophy: Drawing is considered the foundation skill of all art and design disciplines. The coordination of eye, hand, and brain is at the core of the way artists and designers create. Taught through the observation of the clothed figure, the portrait, still life and cityscape, drawing disciplines the eye and brain, refines judgment, and makes the hand responsive. Working from life, students translate the three-dimensional to the two-dimensional, compelling them to think in terms of line, shape, value, and color, and their organizing principles. The result is visually perceptive students with a proficiency in the visual language.

### **FINANCIAL LITERACY**

#### **Prerequisite: Algebra. Full year math course**

The financial literacy course is designed to expose students to real-world financial questions, tying in foundational Algebra concepts. We cover topics such as banking, credit, paying for college, budgeting, investing, taxes, insurance and entrepreneurial skills. The course consists of 11 units and several mini-units. They are designed such that each unit is not a prerequisite for the next. The easier, more fundamental content appears earlier and more complex topics appear later. Filled with engaging resources, activities and more, this course will leave students feeling confident and financially capable!

### **INTERNSHIPS & CAREERS IN MEDIA DESIGN**

This elective course is designed to help seniors navigate fieldwork/study situations at internship sites such as an advertising agency, graphic design firm, corporate design office, publications art department, photography or illustration studio, TV or multimedia production company. Students will be required to keep a learning journal of their internship in the form of a Google Classroom. A portion of the class will be devoted to presenting and sharing experiences with classmates. Students will learn how to assess their talents, update their resume, and promote themselves and their work through social networks. Students will be required to set up and maintain at least two social media networks such as: Facebook, LinkedIn, Twitter, Instagram, and Pinterest.

### **INTRODUCTION TO PHOTOGRAPHY**

The Introduction to Photography elective is designed to provide 12th grade high school students with a comprehensive introduction to the art and techniques of photography. This course aims to develop students' visual literacy and their ability to express themselves through the medium of photography. Students will gain a strong foundation in both the technical and creative aspects of photography, enabling them to capture and create compelling images.

### **PHOTOGRAPHY ACROSS THE MAJORS**

Photography Across the Majors explores how photographic

principles affect the message of images. Through image analysis and image making students learn to manipulate light to communicate with their audience. Projects are assigned to help build understanding of the camera as a tool and the effects of lighting on an image. The work we analyze and create allows the class to discuss topics such as identity, belonging, history, and more. Students are encouraged to bring the skills they have learned and their own passions into the projects using photography as another tool for artistic expression.

### **WATERCOLOR TECHNIQUES APS21-01**

This semester-long intensive, seniors-only workshop is for students wanting to enrich their portfolio with observational and expressive artwork in color. As an ideal and economical material for career, hobby, and/or luxury, watercolor is a bridge material between drawing and painting. Students will explore questions like, "When is watercolor enough as a fine-art medium," or, "how can watercolor be helpful in exploring complex issues as preparation for even more complex projects?" Watercolor's fluid nature invites experimentation, risk, chance, flirting with the unknown, and even self-expression-- but it also offers opportunities for meditation, empathy, learning greater patience, and compassion.... Beginning with a series of warm-up activities to build confidence, follow-up projects will be from direct observation and use still lifes, models, and some photo references while simultaneously practicing composition, storytelling, and learning how to investigate deeper into a subject. Sample artists will range from traditional old masters to present day working professionals, and analytical conversations will help prepare for the Visual Art Comprehensive Regents in June. Final portfolio projects will be self-directed and demonstrate the learned techniques, exercise conceptual thinking, and also apply design skills to create a meaningful, personal portfolio-quality artwork for show.

### **YEARBOOK ELECTIVE**

This course would be open to all seniors from all majors interested in participating in the design of their yearbook. The students will have the opportunity to collaborate together to create the yearbook that will memorialize their experiences at Art and Design. At the end of the year the entire class will have the opportunity to take the Certipoint InDesign exam since the design and layout of the yearbook is done completely in this application.

# 2023 - 2024 Academic Classes

## **MATH DEPARTMENT**

ADVANCED PLACEMENT CALCULUS  
PRE-CALCULUS  
ALGEBRA II  
GEOMETRY  
ALGEBRA 1  
COLLEGE PRE-CALCULUS  
FINANCIAL LITERACY

## **ENGLISH DEPARTMENT**

9th GRADE ENGLISH: THE FOUNDATIONS OF LITERARY  
ANALYSIS, ARGUMENTATION, AND WRITING  
10th GRADE ENGLISH  
10th GRADE HONORS ENGLISH  
11th GRADE ENGLISH  
AFRICAN AMERICAN LITERATURE  
AP ENGLISH LANGUAGE AND COMPOSITION  
CREATIVE WRITING  
COLLEGE WOMEN WRITERS (partnership with Monroe  
College, 3 college credits)  
LGBTQ LITERATURE  
LATINX LITERATURE  
AP LITERATURE & COMPOSITION  
AP PSYCHOLOGY

## **SOCIAL STUDIES DEPARTMENT**

9th GRADE GLOBAL HISTORY  
10th GRADE GLOBAL HISTORY  
AP WORLD HISTORY  
11th GRADE US HISTORY  
AP US HISTORY  
GOVERNMENT/ECONOMICS  
AP GOVERNMENT & POLITICS  
AP PSYCHOLOGY  
PSYCHOLOGY

## **SCIENCE DEPARTMENT**

SLS21/SLS22- LIVING ENVIRONMENT  
SCS21/SCS22- CHEMISTRY  
SES21/SES22-EARTH SCIENCE  
SPS21/SPS22- PHYSICS  
SLS21X/SLS22X- AP BIOLOGY  
SCS21X/SCS22X- AP CHEMISTRY  
SWS21/SWS22- FORENSICS  
COLLEGE BIOLOGY (3 college credits with Monroe College)  
COLLEGE ENVIRONMENTAL SCIENCE (3 college credits with  
Monroe College)  
AP PSYCHOLOGY

## **LOTE DEPARTMENT**

SPANISH & FRENCH



## MATH DEPARTMENT

### **ADVANCES PLACEMENT CALCULUS – MCS21X, MCS22X**

This is a year-long elective honors course for students who wish to have the opportunity to receive college credit from a high school class. Students can take the Advanced Placement exam after completing the course and receive college credit, if they do well enough on the exam. This is considered the course of higher-level mathematics.

### **PRE-CALCULUS – MPS21, MPS22**

This is a year-long non-Regents elective course for students who have completed their high school and Regents math requirements. This course is an introduction to higher-level math and complex reasoning, culminating in the exploration of limits and derivatives.

### **ALGEBRA II MRS21, MRS22**

This is the capstone course of the three units of credit required for a Regents diploma. This course develops the algebraic techniques required to continue higher-level study of mathematics. This course will guide students through a study of linear equations, inequalities, graphs, matrices, polynomials and radical expressions, quadratic equations, functions, exponential and logarithmic expressions, sequences and series, probability and trigonometry. Students take a Regents exam at the end of this course.

### **GEOMETRY - MGS21-22; MGS41, 42, 43, 44**

This is intended to be the second course in mathematics in high school. There is no other school mathematics course that offers students the opportunity to act as mathematicians. Within this course, students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusions follow logically from their hypothesis. This course is meant to employ an integrated approach to the study of geometric relationships. Students take a Regents exam at the end of this course.

### **ALGEBRA 1 – MES21-22, MES41-44**

Most students will take this as their first mathematics course in high school. Algebra provides tools and ways of thinking that are necessary for solving problems in a wide variety of disciplines, such as science, business, social sciences, fine arts and technology. This course develops the understanding of numbers, the use of equations, functions and graphs to describe relations between numbers, and studies real-world applications of equations, functions and their graphs. Students develop skills in mathematical inquiry, critical-thinking, reasoning skills and using evidence to make completing argument supporting their conclusions. Students take a Regents exam at the end of the course.

## FINANCIAL LITERACY

The Financial Literacy Full Year Course offers detailed lesson to expose students to the finer points of a wide range of personal finance concepts.

## ENGLISH DEPARTMENT

### **9th GRADE ENGLISH: THE FOUNDATIONS OF LITERARY ANALYSIS, ARGUMENTATION, AND WRITING**

Short stories, poetry, and texts of all genres and time periods comprise this first year of English class at the High School of Art and Design. During your 9th grade year, you will learn foundational literary analysis and argumentation skills by working towards mastery of the school's Literacy Initiative: you will learn how to annotate fiction, nonfiction, and poetry, productively and critically; to write thoughtfully about the significance of literary devices within and across texts from different eras; and to craft strong, well organized argument essays in response to global issues that connect to the literature you study including the completion of an English research paper. You will learn how to analyze and connect evidence to texts' central ideas; to synthesize information into concise and elegant writing; and to articulate your ideas elegantly during small group and whole class discussions. This class will provide you with exposure to literature and writing as both art and science through studying texts that include, but are not limited to *Catcher in the Rye*, *Maus*, *The Odyssey*, *How The Garcia Girls Lost Their Accents*, *Falling Leaves*, *Aristotle and Dante Discover the Secrets of the Universe*, and excerpts from *Between the World and Me*. Through close reading and analysis of these texts, and through your writing and research about topics related to them, you will become strong English scholars with the skills to succeed in your next three years of English class at Art and Design.

### **10th GRADE ENGLISH:**

Sophomore English exposes students to global narratives that explore our desire to persevere despite humanity's struggles with war, genocide, and human rights violations. Building on the skills from Freshman year, the focus of Sophomore English is to advance critical analysis, writing skills, and discussion skills. Students engage in group projects to build their argumentative skills and use technology to build presentations that enable them to make text to self connections. To promote interdisciplinary learning, they also complete a research paper where they synthesize the content they learned in class and engage in scholarly discussion. Major texts for Sophomore English include but are not limited to: "The Universal Declaration of Human Rights," *Persepolis*, *A Thousand Splendid Suns*, and *Born a Crime*. Students also have an opportunity to create a collection of podcasts that allow them to capture how the global narratives they are exposed to impact themselves and the people around them. By the end of the year, Sophomores demonstrate their

analysis of information and literary texts by taking the ELA Regents in June.

### **10th GRADE HONORS ENGLISH:**

Sophomore Honors English exposes students to global narratives that explore our desire to persevere despite humanity's struggles with war, genocide, and human rights violations. The focus of Sophomore English is to advance critical analysis and writing skills, building on the skills from Freshman year. Sophomore English continues with Art and Design's group collaboration initiative, which requires honors students to engage in complex group discussions, projects, and analysis of informational and literary text. To promote interdisciplinary learning, Sophomore English students complete a research paper related to the Global History course, wherein students synthesize English and Global Studies writing skills. Major texts for Sophomore English include but are not limited to: "The Universal Declaration of Human Rights," *Persepolis*, *A Thousand Splendid Suns*, and various Shakespeare Plays. To make way for advanced analysis of literature, Sophomore Honors English students have the opportunity to take the ELA Regents in January, and spend the rest of the school year delving into the art of advanced cultural, historical, and literary textual analysis.

### **11th GRADE ENGLISH:**

Students will study American Literature and explore various versions of the American Experience through the lens of Criticality, which will allow students to question and reckon with their intersectional identities as current residents of the U.S. They will explore a range of equitable texts that illuminate diverse cultures and experiences; develop their reading and writing skills; and increase their fluency of writing and rigor of thought. These texts include but are not limited to: *The Crucible*, *If Beale Street Could Talk*, *The Great Gatsby*, *The Poet X*, and *Girl in Translation*. Students are pushed to delve into their creative sides and enhance their mastery of vocabulary, organization, tone, and voice when writing and speaking. The course culminates with Socratic seminars, presentations, a research paper on social issues that impact an individual's American dream/experience, and a completed draft of their College Essay in June to help with their preparation for the first unit of their senior year English classes, job and internship applications, and résumé-building, and scholarship applications.

### **AFRICAN AMERICAN LITERATURE**

African American Literature is a year-long exploration of the history, development, and impact of Black culture in the United States. It will survey the impact of the loss of roots through the African Diaspora, the search for new home during the Great Migration, the development and celebration of Black voices during the Harlem Renaissance, and the shifting representation of the Black community through the present. Through the lens

of authors, speakers, and artists who represent the span of the African American experience, this course will consider the importance of maintaining traditions, celebrating unique and creative voices, cultural depictions and representations, and the influence of African American culture on broader segments of society. The works examined throughout this course of study will also tackle themes of generational trauma, gender expectations, social pressures, and racial conflicts, both facing the African American community and within the community itself. Students in this course will develop their analytical, research, and discussion skills to examine the diversity of African American culture and why its meaningful representation matters.

### **ASIAN AMERICAN PACIFIC ISLANDER LITERATURE**

The purpose of the AAPI (Asian American Pacific Islander) Literature class is to introduce you to the philosophy, art/aesthetic, literature, and cultural nuances of the AAPI community. Through the platform of traditional narrative, science fiction, multimedia content, comic books, and cultural theory in a technocratic world, we will study the hopes and dreams of the AAPI community. AAPI interdisciplinary literature encompasses the stories of Chinese, Japanese, Koreans, Burmese (or Myanmar), Vietnamese, Malaysian, Indonesian, the Filipinos, the Pacific Islanders, Cambodians, Laos', Thailanders, Indians, Bangladeshians, or Pakistanians. Each ethnic group and the stories they represent contain masterful language, otherworldly places, mystical forces, and beautiful plateaus. Themes of racial conflict, familial and societal pressure, mental health, and gender expectations in AAPI literature speak to a unique ethnic navigational process often hidden within mainstream discourse. In order to embrace and study this content, you will perfect textual, analytical, and research skills to understand why this representation exists, why it matters, and how it impacts your life.

### **AP ENGLISH LANGUAGE AND COMPOSITION:**

AP Language and Composition is an advanced course designed to challenge and engage high school students in the study of language, rhetoric, and composition. The course focuses on developing students' abilities to analyze and interpret a variety of complex texts including fiction and non-fiction. Throughout the course, students will learn to read actively, annotate effectively, engage in close reading strategies to understand the rhetorical devices and techniques used by writers to convey their message. They will also develop their writing skills by composing various types of essays, including synthesis, argumentative, and rhetorical analysis. Students will learn to write clear and compelling arguments, and will receive feedback from their teacher and peers to help them refine their writing. In addition to writing and reading, the course emphasizes critical thinking and analysis, as students are expected to evaluate the effectiveness of different types of arguments, identify logical fallacies, and analyze rhetorical strategies used by writers to persuade their

audience. The course covers research skills and requires students to conduct research and incorporate outside sources to their writing. Overall, AP Language and Composition prepares students for college-level reading and writing, as well as for success in a variety of careers that require strong communication skills. Students will take the AP exam in May, and upon successful completion of the course, students can earn college credit depending on the policies of the college or university.

### **AP ENGLISH LITERATURE AND COMPOSITION:**

The Art and Design Senior Advanced Placement English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Students will take the AP exam in early May, a grade of 3, 4, or 5 may result in college credits.

### **CREATIVE WRITING**

Creative Writing is designed to provide students with the opportunity to find and express their ideas through various writing styles. Students are encouraged to embrace the writing process and find their voice. Students will study the craft of multiple genres, (college essays, short story, satire, poetry) and will gain understanding of the ways writers use language to provide both meaning and enjoyment for their readers. Students will learn a variety of writing techniques reinforced by intense writing practice and self-evaluation, Skills focus on literary elements and devices, modeled by authors through content that, in some way, addresses identity and cultural and social awareness. Students will engage in research to deepen their understanding of subjects they write about and how the creative mind works.

### **WOMEN WRITERS**

In partnership with Monroe College, this is a college level year long course that concludes with 3 college credits. In the fall, students will be exploring adolescence under a patriarchal society shifting into various cultural women's roles leading to women's liberation. Students will proceed with research in the winter followed by Spring semester where students will dive into women in media, women in power and finally, the influence of women on self- Matriarchy. Students will produce a short story as well where they will have the opportunity to share personal stories. Writers of focus include but not limited to: Margaret Atwood, Toni Morrison, Betty Friedan, Elizabeth Sandra

Cinsceros, ZZ Packer, Charlotte Perkins Gilman, Judith Butler, Arundhati Roy, Joan Didion, Zadie Smith and Michelle Zauner.

### **LGBTQ LITERATURE**

As the country becomes increasingly divided over the rights and lives of LGBTQ people, it is more important now than before to ensure that these narratives are told and studied. LGBTQ Literature is a survey of LGBTQ history, narratives about LGBTQ characters, and exploration of LGBTQ writers and people. Throughout the year, we develop a lens that explores the way that LGBTQ people have been depicted and how their stories have been shaped by media, disease, and marginalisation. The Fall semester begins with the college essay, aiding students in creating personal narratives for their college applications before focusing on Gay men, Lesbians, and Trans-People in narratives, while also exploring Queer history. Students will read a diverse blend of texts ranging from Baldwin's *Giovanni's Room*, Bechdel graphic memoir *Fun Home*, and a collection of stories about Trans people, including Johnson's *All Boys Aren't Blue*. The Spring Semester opens with an exploration of *Communities of Color*, examining the history of The Harlem Ballroom Scene. We explore the impact of AIDS on LGBTQ narrative by reading *Like a Love Story* and Sontag's "AIDS as Metaphor." Mid-spring is met with our research paper and senior presentations to faculty. The year finishes out with an exploration of "Straight Washing" and "Queer Baiting," in which students will rewrite Queer-versions of Fairy Tales. Ultimately, LGBTQ Literature is a preparation for life after high school and participation in college-level English classes. Socratic-driven discussions are a major part of our class; reading is essential. This class welcomes all, no matter how they identify.

### **LATINX LITERATURE**

¡Bienvenidos to Latinx Literature! Latinx Literature will focus on the importance of embracing our history, cultures, traditions, and experiences and its impact in shaping our identities. This course will encourage students to share the parts of their culture that have shaped their past, and the parts they want to carry with them into the future. The beginning of the course will focus on the unvarnished truth of what happened to the Latinx people of the Americas in the last 3,000 years. By critically analyzing works from a range of genres and cultural expressions including poetry, fiction, memoirs, podcast, film, stories, and performance, along with recent literary and cultural theory works, the course will explore major themes and issues such as colonialism, immigration, gender, machismo/marianismo, sexuality, beauty standards, assimilation, cultural apartheid, societal expectations, and generational trauma. Authors whose work students will read and analyze include but are not limited to: Elizabeth Acevedo, Mark Oshiro, Margarita Engle, Yamile Saied Mendez, Junot Diaz, Saracicia J. Fennell, Julian Randall, and Kahlil Haywood. The course culminates with projects that enhance students' skills

in discussion, presentation, and research and prepares them to be successful after high school. Students will participate in seminars, present information gathered in relation to themes and topics discussed in class, and write a research paper on social issues that impact Latinx communities. In addition, students will continue to embrace their culture by writing and sharing their narratives which will focus on their identities and experiences and always embrace their history and who they are. "Allow yourself to be the main character of your narrative. Become both the window and the mirror for those who read your work. Lean into fear. Write the hard poem." — Elizabeth Acevedo.

## SOCIAL STUDIES DEPARTMENT

### 9th GRADE GLOBAL HISTORY:

In 9th Grade Global History, students examine, discuss, and organize the thematic paradigms that govern human progression or stagnation. They will focus on the effects of environmental and human factors on human civilizations, engaging with texts and maps from diverse perspectives to develop a comprehensive worldview. In the process, students will develop analytical and argumentative writing and speaking skills to exhibit their knowledge and prepare them for more complex writing in their continuing education. As a running theme for the year, 9th Grade Global Studies will consider the political ideology of Niccolò Machiavelli. Using his views on leadership, students will analyze various leaders through world history in order to answer the question: "According to Machiavelli, what makes an effective leader?" This question will be the basis for the 9th Grade Research Essay, in which students will analyze a historical figure of their choice from within the content covered this year. This essay will follow MLA format, include evidence from at least 4 sources, utilize a counterclaim to strengthen the argument, and must be a minimum of 2 pages in length.

### 10th GRADE GLOBAL HISTORY:

Global History 10 is the second year of the Global History and Geography course begins approximately with the World in 1750 C.E. and ends with a unit that covers problems and issues facing the world today. Several concepts are developed throughout the course include revolution, industrialization, nationalism, imperialism, conflict, technology, and the interconnectedness of the world. The course will also focus on reading historical documents and being able to analyze these documents. Classwork will focus on Enduring Issues and how they relate to each unit of study. There will be many different modalities for students to engage in the material such as the creation of a children's book on Imperialism, many historical simulations such as trying to prevent World War I, and the Arab-Israeli conflict, dinner parties and Socratic Seminars. Students will be able to make strong connections between the

past and the present in this highly engaging course. Students will also write a research paper where they analyze a human rights violation.

### AP WORLD HISTORY:

"AP World History: Modern" is a rigorous course covering some of the most important themes and developments in world history from the 1200s up until the modern time. This class will cover the economic, political, and cultural history of this time period. A small sample of the topics covered in this class include the Silk Road, American civilizations, Middle Eastern history, the French Revolution, Industrialization, Imperialism, and the World Wars. Students participating in this class will engage in the study of history through reading sources, historical analysis, and historical writing. As part of the class students will have an opportunity to improve their historical writing skills by composing full length essays in which they make a historical argument supported by evidence. Students will take the AP exam in early May, a grade of 3, 4, or 5 may result in college credits.

### 11th GRADE US HISTORY:

US History 1 and 2 follows the development of the United States from the colonial era to the present day. Students will develop an understanding of the workings of the American government and the Constitution. A chronological approach to the events that shaped American society and culture will be used. Students will examine the economic, political, and social development of our nation. Students explore the expansion of the federal government, and the place of the United States in a globalized world. Course requirements include completing Framework aligned assessments. The course will also focus on reading historical documents and being able to analyze these documents. The U.S. History and Government Regents is the final exam for this course.

### AP US HISTORY:

APUSH is a one-year chronological survey of American history from colonial times to the 1990s. Students will read a variety of sophisticated, college-level materials, both primary and secondary sources derived from handouts, scholarly articles, and the textbook. APUSH is a challenging course that is designed to be the equivalent of a freshman college course in a high school setting. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. APUSH is considerably more demanding than regular U.S. History. The course stresses analytical thought, research and study skills, social science concepts in history, political science, geography and economics, as well as major interpretive trends and basic factual knowledge. Students will take the AP exam in early May and a score of 3, 4 or 5 may result in college credits. Students will also take the US History and Government regents exam and June



and complete a research paper in May which is a culmination of their knowledge and skills.

### **PARTICIPATION IN GOVERNMENT AND ECONOMICS**

The 12th grade social studies curriculum challenges students to grapple with their immediate political and economic environment and to foster a voice that is informed and ready to respond. This curriculum is divided into two portions. The first half of the year is dedicated towards the study of the American government and civic action. Topics include an analysis on constitutional rights, elections and campaigning procedures, and NYC local political issues to name a few. The second half of the year is dedicated towards the study of economic, entrepreneurial, and financial literacy skills. Projects include writing and delivering a personal pitch, conceptualizing and pitching a potential business or product, and creating a budget.

### **AP US GOVERNMENT & POLITICS:**

The primary focus of AP Government and Politics is a year long critique of American democracy (is the US truly a democracy?). Through primary and secondary source readings, collaborative group discussions, research and simulations we will get an "inside look" and critique our political system. We will explore the following questions: In what ways does our government still mirror the desires of the Founding Fathers in the 1700s? How can different states have different laws and rules? To what extent is the mainstream media bias? Why do special interest groups have more say in our government than the people? Why does the president have so much power? How does our government attempt to protect racial and gender discrimination? How will the new makeup of the Supreme Court impact decisions such as same-sex marriage and abortion rights? Should the police be defunded and if so, what is the alternative? And most importantly How can my voice be heard in our government? We will also explore local NYC government as well analyze the 2024 Presidential Election. Some major projects include research on the candidates running in the local elections, an argumentative paper on whether the Federal government or the states should have the ultimate control over certain issues, a critique of the mainstream media's portrayal of a particular news event, a bureaucratic organization dinner party, the designing of a campaign for a local candidate, how to utilize real money to improve our school and Joe Biden's report card. Several of these projects will employ art and other creative mediums. The class will culminate in a research project analyzing if US government official policies have helped or hurt minority groups. Students will take the AP exam in early May, a grade of 3, 4, or 5 may result in college credits.

### **AP PSYCHOLOGY**

The purpose of this AP Psychology course is to introduce students to the study of the behavior and mental processes of the human

brain. Students will explore the therapies used by professional counselors and clinical psychologists and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They will study core psychological concepts, such as the brain and sense functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Along the way, students will also investigate relevant concepts like study skills and information retention. Students will take the AP exam in early May, a grade of 3, 4, or 5 may result in college credits.

### **PSYCHOLOGY**

Psychology is the study of the human mind and behavior. The goal of the non-ap psychology curriculum is to focus on this relationship and explore how they are linked together. We will study the history of psychology, different types of therapeutic approaches as well as understanding how mindfulness, diet and self awareness plays a role in our development. We will be conducting psychological studies and attempting to modify our own behavior to empower ourselves to be happy, productive people. The emphasis will be on real life applications of psychology in our lives.

## **SCIENCE DEPARTMENT**

### **SLS21 /SLS22- LIVING ENVIRONMENT:**

Living Environment is an introductory biology course that stresses inquiry and depends upon the basic relationships of the physical sciences as well as living things. This course includes 1200 minutes of a laboratory component that must be completed for students to be eligible to take the Regents Exam at the end of the academic year. The curriculum follows the New York State Living Environment Core Curriculum Standards and is specifically designed to prepare students for the Living Environment Regents Exam. In this course, students will learn: Scientific Inquiry, Ecology, Organization and Patterns in Life, Life Processes, Genetics and Biotechnology, Reproduction and Development, Evolution, Human influences on the Environment, Homeostasis and Immunity.

### **SCS21 /SCS22- CHEMISTRY:**

Why do we live in a universe of color? Is it possible to predict uses for elements that do not yet exist? What role do chemicals and their reactions play in the food we eat, the weather around us, or the art that we create? Regents Chemistry is a yearlong physical science course where students will study the atoms our world is made of, the reactions that take place between them, and the different fields of study within the realm of chemistry. Students will take part in a variety of activities, including hands-on experiments, formal lab reports, and analysis of cross-curriculum material, to better understand the role chemistry plays

in their lives. Each unit will be tied to an overall theme or topic that students will display mastery of through in class and out of class activities. This course also includes the completion of 1200 minutes of lab work to qualify students to take the Chemistry Regents in June.

### **SES21 /SES22-EARTH SCIENCE:**

Earth and Space Science is the study of the processes that shape the Earth and explain the universe. This course will explore the four main branches of Earth Science, which includes the following: geology, oceanography, meteorology, and astronomy. In this physical science course, students will learn in detail about the Earth's interior and the theory of plate tectonics. Students will learn about Earth's systems and their interactions. Students will also explore the current theories that describe the formation of Earth, our Solar System, and the universe. Students will learn about the relationship between Earth Science and technology.

### **SPS21 /SPS22- PHYSICS:**

The focus of this Regents-level class is to provide students with an understanding of the behavior of matter in motion, the nature of forces, gravity, energy, waves, electricity and magnetism, and modern physics. This course culminates in the Physics Regents exam in June and NYS requires students to complete 1200 minutes of lab work to be eligible for this exam. It is recommended students have passing grades on the Algebra 1 and Geometry Regents before enrolling in this course.

### **SLS21X /SLS22X- AP BIOLOGY:**

Advanced Placement Biology offers students the opportunity to complete an introductory course at the college level. This course is focused on building connections between biology at the cellular and molecular level and biology at the environmental level. It is important for students to understand the role biology has on society and the responsibility that students must make informed decisions about issues raised by advancements and research in biology. In this course, students will learn biochemistry, the parts of the cell and their functions and the cell communication that occurs between cells, genetics and biotechnology, evolution, plant form and function, animal form and function, and ecology. At the end of the academic year, students will be offered the opportunity to take the Advanced Placement Biology Exam. If students receive a passing score on the Advanced Placement Biology Exam, they may have the option to receive college credit for the course.

### **SCS21X /SCS22X- AP CHEMISTRY:**

AP Chemistry is designed to be the equivalent of a first year college general chemistry course and follows the College Board's AP Chemistry syllabus. The course is designed to increase students' depth of knowledge on topics previously

learned in Regents Chemistry such as Atomic Structure, the Physical Behavior of Matter, and Acids & Bases, and then to dig deeper and introduce new topics such as Thermodynamics, Equilibrium, and Stoichiometry. The advanced problem-solving strategies and time management skills developed in this course will prepare college-bound students for careers in the sciences, medicine, engineering, and other technical areas and will absolutely improve their skills in college readiness.

### **SWS21 /SWS22- FORENSICS:**

Forensics is designed to investigate, collect data and solve crimes. Forensic scientists use chemistry, physics, biology, mathematics, engineering and even psychology to help solve crimes. Forensic science incorporates both science and the law. Forensic scientist will document evidence from a crime scene, study the physical evidence, research and present evidence to detectives, police officers, lawyers and the court of law to help solve crimes. This is a guided inquiry course with problem-based learning experiences that will give students the opportunity to explore topics and concepts through investigations. The students in this course are taught the fundamentals of a criminal investigation and how it is applied in a court of law. They learn by doing; they process crime scenes, analyze lab data, conduct scientific investigations, interact with guest speakers, explore the Internet and become familiar with various texts. Students use technology to participate in activities that closely resemble those used by law enforcement personnel, forensic scientists and district attorneys. Students will learn the history of forensics, forensic methodologies and techniques, physical evidence detection and collection, forensic tools and analyze data to link evidence to the criminal. They document their findings through laboratory reports and legal briefs to ultimately be presented to a student court and jury. All of these tools are designed to engage a wide variety of learners in our school's very diverse community.

### **COLLEGE BIOLOGY (Fall Term)**

#### **Credits: 3**

#### **Pre-requisite: Living Environment and Chemistry**

This course is an introduction to the general principles of biology. It explores the fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. The course provides an introduction to the diversity of living organisms, their structure, function, and evolution. It presents a study of human genetics, development, and anatomy and physiology that enables students to relate to the chemical activities of the cell to the overall function of the human being. The course presents information that will enable the student to understand and recognize the evolutionary and environmental relationships that exist among all organisms. Topics include organization of the human body, metabolism and energy, behavior, genetics,

evolution, animal behavior, and ecology. This course is designed for non-science majors.

### **COLLEGE ENVIRONMENTAL SCIENCE (Spring Term)**

**Credits: 3**

#### **Pre-requisite: Living Environment and Chemistry**

The earth comprises a complete environmental system. Environmental science presents a study of the earth's dynamic systems – its ecosystems, its biomes, and its biosphere. Environmental Science is therefore an interdisciplinary study of problems that have been caused by human use of the natural world. To understand these complex problems and in order to devise solutions to them, three major areas of information must be understood. First, we must understand the natural processes, both physical and biological, that operate in the world. Second, we must appreciate the role of technology in society, its capacity to alter natural processes and how it can be used to solve problems caused by human impact. Third, the complex cultural and social processes of human populations must be understood and integrated with technology and natural processes in order to interpret the role of humans in the world today. Topics include composition and structure of the earth, its oceans and atmosphere; the physical processes in or on earth and interpretation of surface features. Also studied are population explosion, decline in ecosystems, atmospheric pollution, water pollution, soil pollution, and decline in biodiversity.

and personal experiences, in the past and in the present and close future. Besides learning the French language, they will also develop cultural understandings about how people in French-speaking regions live, act and think, as well as what they value. In addition, they will learn skills that will help them act independently and successfully in novel cultural situations.

## **LOTE DEPARTMENT**

### **SPANISH:**

Spanish is a comprehensive standards-based curriculum that balances grammar and communication. The course integrates the learning of the language with an appreciation for Spanish-speaking cultures around the world. Students learn simple, relevant vocabulary and grammar, including sentence formation, regular, irregular, stem-changing, and reflexive verbs. Students also learn about the use of direct and indirect objects, and begin to learn about some preterite forms of certain verbs.

### **FRENCH:**

In French, students will develop skills in listening, speaking, reading and writing in French. They will learn to perform certain tasks: introducing someone, telling what they like and don't like, ordering something to eat and to drink, choosing and purchasing items from the store, asking for and giving information, accepting and refusing invitations, saying what they need and giving directions. They will talk about various topics that interest both themselves and French-speaking teens, such as music, sports, leisure activities, food, shopping, traveling, family and school. They will also describe themselves, their friends, their family