



HIGH SCHOOL OF ART    DESIGN



COURSE CATALOG



2021-2022



# ART & DESIGN COURSE CATALOG

## ART DEPARTMENT

### FRESHMEN ART HISTORY - AHS21

Art history is a one year survey course taken in combination with foundation design 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 help us create works of art and design.

### FRESHMEN DESIGN FOUNDATION

The Design 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.

### SOPHOMORE COMPUTER ART TECHNOLOGY

All 10th grade students (except for Architecture majors taking AutoCAD) 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 expressing 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# programming.

## ANIMATION

### ANIMATION I: SOPHOMORES AQS83T

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 AQS85T

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 AQS87

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 ARS83T

**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 ART85

**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 ATR87

**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.

## CARTOONING

### CARTOONING I and II - SOPHOMORE AZS83T-01

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 - AZS85T-01

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 - AZS87X-01

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 lense, 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 (AKS83T-01/02, AKS84T-01/02):**

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 (AKS85T-01/02, AKS86T-01/02):**

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 (AKS87T-01/02, AKS88T-01/02):**

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 - AGS83T-02**

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 AGS85T-02**

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 AGS87T-02**

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

### 21st CENTURY ART & IDEAS COURSE AQS21

This course will consider the practice and theory of visual art in the late twentieth and twenty-first centuries. Students will analyze visual art from a variety of artists and cultures for formal properties, function, content, and context. Students will examine the history of visual art as it relates to contemporary visual art, the artists who make it and the global, social and multi-cultural influences of the visual arts in our world. Throughout the year we will explore different exhibition venues and primary sources to help students understand contemporary art and its relationship to art history. Students will gain confidence as they increase their use of visual arts vocabulary (spoken, read and written) allowing them to communicate ideas about art beyond their own technical studio skill set. Professional artists are empowered when they are able to speak about their own work and the work of others.

### THE OBSERVANT EYE: SENIOR ELECTIVE

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 working from life on a regular basis. Observing and discussing art is a vital part of the class. 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. 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.

### WATERCOLOR TECHNIQUES APS21-01

An elective class for on-track seniors wanting to enrich their portfolio while practicing and improving their watercolor skills.

As an ideal and economical material for career, hobby, and/or luxury, the very nature of watercolor invites experimentation and risk. This year-long portfolio class builds on those opportunities while asking the questions, “When is watercolor enough as a fine-art medium,” or, “how can it be helpful in exploring complex issues as preparation for even more complex projects?” Using as inspiration the work and techniques of master artists from various backgrounds and careers, students then create self-directed projects based on prompts designed to encourage conceptual thinking and application of design skills-- all in a safe studio environment. By the year’s end, the student should be able to confidently use watercolor for personal or professional use, as well as have a portfolio of work that reflects a variety of real-world challenges.

### CERAMICS

#### Full-year art elective

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

#### Prerequisite: 10th grade tech classes. Full year course

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.

### LIFE DRAWING

A class focused on drawing and painting from observation in a variety of media. Life drawing is the foundation skill or most visual art disciplines. All college portfolios require some observational drawing or painting, including the NYC Comprehensive Art Exam. Here is a perfect opportunity to develop that aspect of your portfolio.

### 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!

### PHOTOGRAPHY ACROSS THE MAJORS

#### No prerequisites. Full year

A photography elective at Art and Design is essential. As a visual arts school with an emphasis on design and media, it is imperative students experience different methods of visual expression. Photography in particular cultivates observation skills; moments, light, life, interaction, inter and intrapersonal relationships. The skills you have developed in your art major can be strengthened through learning the photographic process. Photography Across the Majors explores the act of picture making and builds on your knowledge of visual thinking strategies learned in all of the majors. We explore ideas of identity, belonging, marketing, history and more through a photographic lens.

Project aims will include understanding camera and lighting functions, selling an idea, telling a story, art and protest, music photography, among others.

### INTRODUCTION TO PUBLISHING

#### No prerequisites. Full year art course.

What does it mean to work in publishing?

This class provides students with an overview of the industry, including its history, the different types of publishing, and the various jobs associated with the field. Students will acquire hands-on experience in many of the skills involved in publishing, such as writing for news (interviews/reviews); page design

(print/digital); photography; illustration; sales and advertising; marketing and promotion; and art directing. The class will create their own publication for the school, and have some responsibility for content in the yearbook.

### SMALL BUSINESS PLANNING AND DEVELOPMENT

#### No prerequisites. Full year art course.

Do you have an artistic product you would like to sell but don’t know how to do it? Have you always wanted to own your own business and make money from your art? In this practical, hands-on class, students will learn how to structure and run every aspect of their artistic business from concept through shipping. The goal in this class is for students to open their own shops using the Etsy platform and get their businesses up and running. This class is open to Juniors and Seniors.

### WORLD BUILDING

#### No prerequisites. Full-year science elective

We don’t all live in the world that we want but we can develop it in our one year World Building elective course. In virtually every piece of science fiction, fantasy and creative writing, authors and creators have expanded upon our world or created their own. Sometimes these worlds are just like earth, and frequently, we see imaginative and wild interpretations of what could be. This class will give you remarkable flexibility to use and interpret your understanding of sciences, social studies, written expression and even math to shape a universe for your characters and content.

Understanding how worlds are created, both scientifically and figuratively is the core of this course. Once you have a planet, how does life form? How does life become more complex and organize itself? How does this life communicate and interact? By the time World Building is done, you will be the proud creator of a world that represents your individual, incredible artistic vision.



## 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.

## 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, poetry, and plays 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. You will also complete a research paper in conjunction with your Science class. 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, Oedipus the King, Julius Caesar, Fahrenheit 451, Kindred, How the Garcia Girls Lost their Accents, Aristotle and Dante Discover the Secrets of the Universe, and The Curious Incident of the Dog in the Night-time. 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. 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; students will engage in group projects to build their argumentative skills. To promote interdisciplinary learning, Sophomore English students complete a research paper related to the Global History course, wherein students synthesize the skills from English and Global Studies. Major texts for Sophomore English include but are not limited to: “The Universal Declaration of Human Rights,” Night, Animal Farm, Things Fall Apart, A Long Way Gone, Persepolis, The Kite Runner, In the Time of the Butterflies, and Drown. The course ends with an opportunity for students who have mastered the skills necessary to take the NYS ELA Regents Exam.

Sophomore English include but are not limited to: “The Universal Declaration of Human Rights,” Night, Animal Farm, Things Fall Apart, A Long Way Gone, Persepolis, The Kite Runner, In the Time of the Butterflies, and Drown. The course ends with an opportunity for students who have mastered the skills necessary to take the NYS ELA Regents Exam.

### 10th GRADE HONORS ENGLISH:

Sophomore Honors English is a reading- and writing-intensive course that exposes students to challenging global narratives that explore our desire to persevere despite humanity’s struggles with war, genocide, and human rights violations. The focus of 10th grade Honors English is to demonstrate critical analysis and writing, building on the skills from Freshman year and preparing students for their junior year of English. Sophomore English continues with Art and Design’s group collaboration initiative; students will engage in group projects to build their argumentative writing skills and will engage in seminar discussions to develop their speaking and language skills. To promote interdisciplinary learning, 10th grade Honors English students complete a research paper related to the Global History course, wherein students synthesize the skills from English and Global Studies. Major texts for Honors English include but are not limited to: “The Universal Declaration of Human Rights,” Maus, Brave New World, Things Fall Apart, A Long Way Gone, Persepolis, The Kite Runner, Macbeth, and Drown.

### 11th GRADE ENGLISH:

Students study American literature and question what it means to be an American. They explore an equitable range of texts that illuminates diverse cultures and experiences. Students finesse their reading and writing skills, increasing fluency of writing and rigor of thought. Students are pushed to delve into creative interpretations and achieve mastery of vocabulary, structure, transition, and tone of writing. Students complete their college essay in anticipation for their senior year. The course culminates in the NYS Regents exam. Texts include but are not limited to multicultural short stories and poetry, The Crucible, The Spoon River Anthology, If Beale Street Could Talk, A Streetcar Named Desire, The Great Gatsby, and The Things They Carried.

### AP ENGLISH LANGUAGE AND COMPOSITION

At HSAD, the The AP English Language and Composition course continues the work of the school-wide literacy initiative. Students registered for AP English Language and Composition are also registered for the AP US History course. The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts—including images as forms of text— from a range of disciplines and historical periods. Texts include (but are not limited to): The Immortal Life of Henrietta Lacks and In Cold Blood (Collegeboard.com)

### 12th GRADE ENGLISH:

Students in Senior English deepen the skills they have acquired from their previous English experience by focusing on extended research projects and also the analysis of non-fiction texts.

Students will be expected to conduct Socratic Seminars and explore the questions of man’s existence. Topics in Senior Literature range from psychology to philosophy. The skills that will be sharpened range from forming and finalizing a college admissions essay, synthesizing multiple sources into an analysis, advancing their research skills, and participating in self-directed study. Books include, but are not limited to: Hamlet/Othello, The Stranger, Beloved, Fences, and Equus.

### AP ENGLISH LITERATURE AND COMPOSITION:

A college-level course, students take a critical approach to literature through a variety of lenses such as feminist, queer, race, or Marxist. They are expected to read and respond to criticism surrounding the texts of study. The course is modeled heavily like a college course and students will be expected to read independently and come prepared to class for many socratic discussions. The students will write college-level papers every semester and focus on the process of revision and improvement. The course culminates in the AP exam, which may qualify for college credit.

### SCRIPT WRITING:

12th Grade English Scriptwriting class is to prepare students who are interested in film making for successful college creative and academic achievement. In all of the course units, students focus on research, creative writing and analysis skills to communicate through and about stories told on film. Topics and skills studied in this class include screenwriting, screenwriting analysis, story structure, storytelling elements, college essay writing, psychology, philosophy, research skills, multiple sources in analysis and creative writing, accountable talk and discussion skills, collaborative work and self-directed independent study. The class culminates in students writing the first draft of their own original full-length screenplays. All film majors will be registered for Scriptwriting.

### CREATIVE WRITING:

In Creative Writing, students will evaluate various forms of writing, including the short story, satire, screenplays, and poetry, in preparation for learning at the college level. When focusing on the short story, students will read and analyze stories through the lens of the individual story elements (theme, setting, characterization, point of view, dialogue, tone and plot) and later write their own section of a story that exemplifies the element. We will also look at and then write in the style of the various forms of satire: travesty, burlesque, parody, caricature and cartoon. Similarly, we will read and analyze screenplays through the eyes of writers and students will have an opportunity to write their own scenes. In addition, students will explore various forms of poetry including villanelle, sonnet, haiku, ekphrasis. Students will read a variety of poetry by authors of all generations, movements and backgrounds, and write many of their own, ultimately creating a poetry portfolio. Throughout the course, students will also be writing college-level analytical responses to class readings and a research paper.

### LGBTQ+ LITERATURE:

The focus of this course is on works by and about LGBTQ+ people. We will examine how those texts represent members of the community and reflect its rich history, while also sharpening our skills and preparing ourselves for college and beyond. Because this course is a selective and aligned with the English 12 curriculum, students will still have an opportunity to work on their college entrance essays and receive feedback from the teacher. However, anchor texts will be aligned with the course's LGBTQ lens. Identifying as LGBTQ+ is not a requirement for this course. All seniors are welcome to take this class. Only through education do we begin to break the barriers of misunderstanding.

## SOCIAL STUDIES DEPARTMENT

### 9th GRADE GLOBAL HISTORY:

Global History 1 and 2 covers history from the Paleolithic Era to the Enlightenment. While you will be presented with a narrative of the major historical events, special focus will be on skill acquisition and primary and secondary source analysis. In this class, you will be explicitly taught how to annotate, develop higher level questions and how to identify point of view and bias. Other topics include contextualization and cause and effect. Special attention will be given to Enduring Issues in Global History and you will begin to prepare for the Regents exam at the end of 10th grade.

### 10th GRADE GLOBAL HISTORY:

Global History 3 and 4 is the second year of the Global History and Geography course begins approximately with 1750 C.E. and ends with a unit that covers problems and issues facing the world today. Several concepts are developed throughout the course including 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. Students will demonstrate their explicit knowledge of an enduring issue through an interdisciplinary research paper. At the end of the year, students will take a Regents examination.

### 10th GRADE AP WORLD HISTORY:

Advanced Placement World History is a college level course that is offered to sophomores with a demonstrated interest in World History. Through this course, students will develop a greater understanding of the evolution of global processes and examine interaction with different types of human societies. Focused primarily on the past thousand years of the global experience, the course builds on an understanding of cultural, institutional, and technological precedents that set the human stage prior to one thousand C.E. The course will begin in 1200 CE with a study of civilizations in Africa, the Americas, Asia, and Europe that are foundational to the modern era. Students will learn the six specific themes that form the core of world history as a field of study, and provide further organization to the course. Emphasis will be placed on writing skills, knowledge-based analytical skills, and the ability to interpret historical documents. Students will take the Advanced Placement Exam in May for college credit and the Global History Regents examination in June.

### 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.

### 11th GRADE AP US HISTORY:

Advanced Placement US History is a college level course offered to juniors. This course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and issues in United States history. The course will help students develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively through essay writing. Extensive use and analysis of document (primary and secondary sources) will be used by students in document-based essay writing. Students will take the AP exam in May for college credit and the Regents examination in United States history in June.

### GOVERNMENT/ECONOMICS:

Participation in Government/Economics will be divided up into two parts: Government in the fall and Economics in the spring. Topics will include: the principles of government, politics and law; roles and rights of citizenship; political party system; legal obligations; public policy; and political participation. Additionally, students will learn about tradeoffs, opportunity costs, and the benefits of trade; students will study how the market forces of supply and demand cause prices to be what they are. Students will focus on current events and how our government and economy are constantly changing.

### AP GOVERNMENT:

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. While this is a full-year course of government, to fulfill the Economics requirement, many economic ideas will be woven into the class. In particular, we will cover the government's role in monetary policy, financial markets, job creation, affecting supply and demand, and international trade. Students will take the Advanced Placement exam in May.

## 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.

## **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 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.