

# HORACE GREELEY HIGH SCHOOL

## 9TH GRADE COURSE OPTIONS

### 2023-2024

#### ART

##### **9000 VISUAL DYNAMICS** (½ credit)

***(This is a prerequisite for all art courses.)*** In Visual Dynamics we will explore the interconnectedness of our visual world. Using 2-D and 3-D Design and Filmmaking, we will develop a deeper understanding of our creative process, individual and collaborative problem-solving, the work of contemporary and historical artists and designers, and our visual environment.

##### **9110 CREATIVE MAKING** (½ credit)

*(Prerequisite: Visual Dynamics)* A thematically-based course focused on the exploration of ideas and the creative process. At the heart of the course is an open studio supporting the self-directed, project-based investigation into themes such as Identity, Justice, Duality, Empathy, Love, etc. Material and media will be based on student choice and concept. Projects will be both individual and collaborative.

##### **9014(S) DRAWING 1** (½ credit)

*(Prerequisite: Visual Dynamics)* This course is open to all students who are interested in learning how to draw. Contour drawing, shading techniques, perspective and rendering are all introduced. We will be drawing the human figure, portraits and still-life, with an emphasis on realistic observation. Digital media will be introduced. Drawing 1 is a required course for AP Drawing and in order to meet all AP prerequisites, Drawing 1 must be taken in the second semester freshman year or first semester sophomore year.

##### **9430(S) FASHION DESIGN 1** (½ credit)

*(Prerequisite: Visual Dynamics)* Students will learn how to develop fashion design concepts including, but not limited to, surface and form. There will be an introduction to the cycles, trends and fads that constantly initiate change in fashion. Students will create and design original pieces with an emphasis on developing a personal aesthetic.

##### **9102(S) FILMMAKING 1** (½ credit)

*(Prerequisite: Visual Dynamics)* During this basic hands-on course in digital film production, students will work collaboratively and independently to produce short digital films and school productions. Skills include developing concepts through scripting, camera work, editing and post-production. Students are exposed to the historical foundations of film, film theory, and aesthetics. Emphasis is placed on participation, creativity, technique, and critical analysis. Filming outside class time is required.

### **9522(S) GRAPHIC DESIGN AND ADVERTISING 1 (½ credit)**

*(Prerequisite: Visual Dynamics)* Graphic design communicates ideas or messages in a visual way. Students will learn digital design skills for planning, creating and advertising using Adobe Apps. Projects will be based on real world applications.

### **9525 GAME THEORY AND DESIGN (½ credit)**

*(Prerequisite: Visual Dynamics)* This course will introduce students to classic game structures, themes, mechanisms and strategy. How is psychology and human behavior implicated in games? What makes a game durable from a player perspective, and how has history and culture been reflected in games over time? How does the artwork and overall aesthetic of a game affect its popularity? Students will prototype physical and digital games. Students will investigate game play, themes and digital means to develop them.

### **9113(S) INDUSTRIAL DESIGN 1 (½ credit)**

*(Prerequisite: Visual Dynamics)* This course is an introduction to classic topics of Industrial Design, including transportation, housewares, electronics, toys and furniture, as well as other 3D design areas like engineering and architecture. The structure of the course will follow a STEAM think tank environment with a heavy emphasis placed on brainstorming, revision, collaboration, sketching and blueprints, model making, and basic marketing strategies. In this course, students will look at both traditional and contemporary design styles, work with a variety of materials, and learn basic manufacturing techniques ranging from hand-building to subtractive and additive manufacturing using industrial mass production tools (laser cutters, 3D printers, CNC routers, 4-axis mills and other related equipment).

### **9008(S) PAINTING 1 (½ credit)**

*(Prerequisite: Visual Dynamics)* This course is an introduction to painting. Students will learn how to create form, color theory and composition.

### **9032(S) PHOTOGRAPHY 1 (½ credit)**

*(Prerequisite: Visual Dynamics)* This course is an introduction to the aesthetic and technical aspects of digital photography. It will include processing and editing in Adobe Lightroom and Photoshop. Emphasis will be placed on participation, craft, aesthetics, creativity and critical analysis. This is a required course for admission to AP 2D.

### **9062(S) SCULPTURE 1 (½ credit)**

*(Prerequisite: Visual Dynamics)* This course is an introduction to 3-dimensional creative design and exploring our relationship to physical form through various media and process. Media may include clay, wire, wood, plaster, wax and 3-D printing. Emphasis is on the creative process.

## **BUSINESS**

### **9320 INTRODUCTION TO BUSINESS (½ credit)**

*(Open to all.)* This semester course will expose students to the world of business. The first quarter will examine the contributions to the U.S. economy of three forms of business ownership: sole proprietorships, partnerships and corporations. The second quarter will focus on business decision-making through the lens of consumer choice. Students will follow a particular

company for the semester and complete project-based learning assessments related to class topics. Current business news will be followed.

### **9300 PERSONAL FINANCE AND INVESTING** (½ credit)

*(Open to all.)* Students will develop their financial literacy skills of personal financial management, budgeting and investing. Students will also learn how the different securities markets operate, how to plan effective investment strategies, the criteria for choosing investments, and the steps for investing wisely. Course concludes in a stock market game simulation.

## **ENGLISH**

### **1000 ENGLISH 9** (1 credit)

The study of English for grades 9 and 10 consists of a two-year, skills-based program deeply rooted in reading and writing. Instruction includes whole-class texts (both classic and modern), choice books, and independent reading. Students also read non-fiction texts and study rhetorical strategies in accordance with the Common Core Standards. Writing in a variety of genres is taught, and emphasis is placed on actionable feedback and revision. Both English 9 and English 10 foster creativity, analytical and expressive writing, student choice, and a love of reading. English 9 allows for a smooth transition to high school English. English 10 focuses on deepening skills and preparing students for the upper level English electives. Tenth grade students will take the Common Core English Regents in June.

## **MATHEMATICS**

### **4201 ESSENTIALS OF ALGEBRA 1** (1 credit)

*(Prerequisite: 8th grade teacher recommendation.)* This course is designed to assist students in learning the key concepts of Algebra 1. Students will take the New York State Common Core Algebra Regents exam in June.

### **4204 CORNERSTONES OF HIGH SCHOOL MATHEMATICS** (1 credit)

*(Prerequisite: 8th grade teacher recommendation.)* Students in this course will extend and formalize their mathematical knowledge. The course will explore topics such as: rational expressions, solving and graphing linear equations and inequalities, a thorough study of functions, factoring, and solving quadratic equations. An emphasis will be placed on problem solving, making mathematical connections, and communicating mathematically. A departmental final exam will be given in June.

### **4205 GEOMETRY** (1 credit)

*(Prerequisite: 8th grade teacher recommendation.)* Topics of study include logic with proof using laws of inference and classical geometry (congruence, similarity and measurement) with some proof. An emphasis is placed on reasoning from given conditions. Coordinate geometry, circles, triangles, quadrilaterals and other polygons, and geometric problem-solving are also included. Algebra is infused throughout. A departmental final exam will be given in June.

**4207 ENRICHED GEOMETRY (1 credit)**

*(Historically, students who are successful in this course have achieved a grade of either 85 or better in Enriched Algebra.)* Topics of study include logic and geometry (congruence, similarity and measurement), with a strong emphasis on proof, logic, reasoning and geometric problem solving. Coordinate geometry, transformations, circles, triangles, quadrilaterals, and other polygons are also included. Rigorous algebra is infused throughout. A departmental final exam will be given in June.

**4209 MATH 9 HONORS (1 credit)**

*(To enroll in the course, students must receive their prior teacher's recommendation including an average of at least 97 in Algebra OR teacher's recommendation, an average of at least 94 in Algebra and a qualifying score on a placement exam administered in late June.)* This fast-paced course covers the equivalent of Enriched Geometry **and** part of Enriched Algebra 2, as well as advanced topics from both courses. The course moves rapidly through a classical geometry curriculum with emphasis on proof. Logic proofs implementing laws of inference, coordinate geometry, circle geometry, similarity of figures, and problem-solving with geometry are included. Enriched Algebra 2 and advanced topics include: graphing quadratic relations (ellipse and hyperbola), synthetic division, remainder theorem, rational root theorem, absolute value equations and inequalities, quadratic inequalities, exponents and radicals, the complex number system, an introduction to functions and logarithms. A departmental final exam will be given in June.

**4502 INTRODUCTION TO COMPUTER SCIENCE IN JAVA (½ credit)**

(NOT NCAA APPROVED)

*(Open to all students.)* This course introduces the student to object-oriented programming (OOP) in JAVA. Topics covered include: variable types, I/O, methods, objects, classes, parameters, one-dimensional arrays, strings, problem solving and good structured programming habits.

**MUSIC****5080 CHORUS (1 credit)**

*(Incoming freshmen are especially encouraged to take Chorus.)* Chorus is open to everyone who enjoys singing. This mixed ensemble performs challenging choral literature from many different cultures and styles. There are approximately 4 to 6 performances annually. Chorus is the foundation of the vocal music program at Greeley. Rotations are required for all students involved in major performing organizations. Rotations are small group lessons scheduled during a student's available time. Those students who are in two ensembles alternate rotations between the two groups.

**5005 MADRIGAL CHOIR (Pass/Fail, ½ credit for full year)**

Madrigal Choir consists of 12 to 16 singers, chosen by audition. Only students enrolled in Chorus are eligible. This a cappella ensemble sings challenging music chosen in a variety of styles and languages. There are 4 to 6 concerts annually, as well as performances throughout the community.

**5035 TREBLE CHOIR** (Pass/Fail, ¼ credit for full year)

*(Incoming freshmen are especially encouraged to audition for this ensemble.)* Treble Choir performs choral music written in the Alto/Soprano range. Rehearsals take place on Tuesdays after school from 2:45 to 3:30 PM, and performances occur at the chorus concerts in December and May. They perform challenging arrangements of both pop and classical music, often a cappella. There are public concerts scheduled during the year.

**5077 NINTH GRADE STRING ORCHESTRA** (1 credit)

This ensemble offers 9<sup>th</sup> grade students who play string instruments the opportunity to perform string orchestra literature encompassing diverse styles and periods. It is an active performing group concentrating on ensemble playing, technique and preparing a strong musical foundation for the Symphony Orchestra. All students are encouraged to be members of the Symphony Orchestra in their sophomore year. Rotations are required for all students involved in major performing organizations. Rotations are small group lessons scheduled during a student's available time.

**5015 CHAMBER ORCHESTRA** (Pass/Fail, ½ credit for full year)

Chamber Orchestra performs repertoire written for a smaller sized ensemble. The core of the group is a string orchestra, with selected winds and brass players added to complete the instrumentation. The ensemble meets weekly on Thursday evenings. Instrumentalists must be currently enrolled in band or orchestra. Auditions are held in September.

**5055(F)/5057(S) DIGITAL SONGWRITING AND COMPOSITION** (½ credit)

Students actively engage in musical creation in Digital Songwriting and Composition 1. Using programs such as Logic Pro X, and Final Cut Pro, students will create covers of their favorite songs and even begin the process of finding their own sound and style of composition. Musicians of all experience are welcome, including those with no experience at all.

**5020 SMALL INSTRUMENTAL ENSEMBLES** (Pass/Fail, ¼ credit for full year)

String, woodwind, brass and percussion ensembles may be formed from the larger ensembles. Small ensembles are coached and provided with opportunities to perform in our chamber music series. **Participation in this course requires previous years of study of an instrument.**

**5065 CONCERT BAND** (1 credit)

This ensemble is for all 9<sup>th</sup> grade band musicians. All band students must have one year of Concert Band before progressing to the Symphonic Band. The Concert Band offers the opportunity to perform outstanding band literature encompassing many styles and periods. There are two public performances each year in addition to performances at school and community functions. Rotations are required for all students involved in major performing organizations. Rotations are small group lessons scheduled during a student's available time. Those students who are in two ensembles alternate rotations between the two groups.

**5025 STAGE BAND** (Pass/Fail, ½ credit for full year)

The Stage Band is based on the instrumentation of the traditional Big Band. They perform swing, blues, be-bop, and fusion pieces by composers such as Duke Ellington, Count Basie and Thelonious Monk. The group performs at many school and community functions. It is open to

current members of the Concert or Symphonic Band. Rehearsals are held one evening per week. *Admission by audition only. Auditions are scheduled in June.*

#### **5040 MUSIC THEORY** (½ credit)

This course is an overview of how music works. Learn the skills you need to compose and arrange music. We begin with a review of fundamentals, or basic building blocks of music, then progress through a study of techniques including basic keyboard skills, counterpoint, and harmonic analysis. Identifying chords/intervals by ear and sight reading are integral parts of the course. Music Theory is strongly recommended for all band, chorus, and orchestra students, as well as those who create their own music outside of school. It is a prerequisite for AP Music Theory.

#### **5050 PEP BAND (F)** (Pass/Fail, ¼ credit for first semester)

*(Incoming freshmen are urged to join.)* The Pep Band performs at all Greeley Varsity Football games during the fall. The band rehearses twice a week during the football season, and its flexible scheduling can accommodate those students who are also in a fall sport. The pep band is comprised of woodwind and brass players in addition to electric bass, drum set and guitar. There are no audition requirements, just a desire to play rock classics, jazz styles and cheers to lead the team on! Free food is provided for all band members at the games.

#### **5060 HISTORY OF POPULAR MUSIC** (½ credit)

This course will take an in-depth study of the development of popular music. The course will emphasize key social, cultural, and historical influences that developed and shaped the growth of American music. The class will concentrate on text readings and listening to musical examples to illustrate the growth of popular music. Additional out-of-class listening assignments will be included to enhance the scope of the music listening experience.

### **PHYSICAL EDUCATION**

#### **3500(F)/3502(S) PHYSICAL EDUCATION 9 (full year) (½ credit for the full year)**

The course of study includes concepts of health-related fitness and skill-related fitness. Students will be introduced to the fitness center and will be taught proper mechanics. Students will participate in individual, dual and team sports and group decision making. It is expected that students will achieve a selected norm level in physical fitness and motor skills tests.

### **SCIENCE**

#### **6005 LIVING ENVIRONMENT** (1 credit)

*All 9th grade students.* This Regents course will include the significant themes and elements of the curriculum of the State Education Department but is not limited to them. Topics will include biochemistry, structure and processes of cells and organisms, reproduction and development, heredity, evolution, and ecology. Frequent lab work will stress the design and implementation of the experimental process, with required written reports. Successful completion of the laboratory requirements is required. Students are required to take the Regents exam as their final exam. This course is required for admission to AP Biology.

### **Additional Science Offerings**

#### **6003 INTRODUCTION TO ENGINEERING AND DESIGN (½ Elective Credits)**

*Open to all grades.* This semester-long course covers Computer Aid Design (CAD), basic electrical engineering, an introduction to robotics, basic programming, and the design process. This course prepares, but is not a prerequisite, for further studies in engineering and computer science and the Greeley classes of: Java, Robotics, Computer Science, and Technology and Design Integration.

### **SOCIAL STUDIES**

#### **7000 GLOBAL HISTORY & GEOGRAPHY 9 (1 credit)**

This initial year of a two-year survey of world history spans from ancient history to the Enlightenment. Students explore themes such as the development of civilization, empires, golden ages, cultural diffusion, and changes in the balance of power in the world up to 1750. While examining this content, students build their capacity to think historically, write persuasively, and analyze documents. Students develop inquiry questions to shape their learning, learn to give and receive feedback, and develop the habits necessary to collaborate effectively, learn independently, and contribute to a learning community.

### **THEATRE ARTS**

#### **5205 ACTING 1 (½ credit)**

This class provides an overview of theatre and its many facets, including the art of the actor, director, designer, and playwright. Students are involved in the reading of plays, the writing of scenes, and the viewing of performance work. Students enrolled in this course may be eligible to earn 2 undergraduate credits through SUNY Westchester Community College; students may choose to pay a (discounted) fee and receive a SUNY transcript for this course.

#### **5223(F)/5222(S) ACTING 2, 3, 4 (½ credit)**

An introduction to the craft of acting. Acting skills are explored and developed through both structured and improvised classroom activities. The emphasis of this course is on liberating the student's creative energy and expression. Students enrolled in this course may be eligible to earn 2 undergraduate credits through SUNY Westchester Community College; students may choose to pay a (discounted) fee and receive a SUNY transcript for this course.

#### **5230 MUSICAL THEATRE (½ credit)**

Explore a wide range of integrated performance skills in order to break the concept of being exclusively an actor, singer, or dancer. Students will select, study, and stage their own selected individual and ensemble repertoire pieces exploring a contrast of styles and genres. Course units will culminate with student performances.

#### **5240 SPEECH COMMUNICATION (½ credit)**

*(Open to all.)* Students learn to communicate verbally and non-verbally and gain practical experience in a variety of public speaking situations. Course activities include vocal technique exercises, speech writing strategies, and approaches to overcoming communication apprehension. Students work individually and in small groups to develop their communication skills.

**5225(F)/5227(S) STAGECRAFT\*** (Pass/Fail, ½ credit per semester)

This class gives the student background in the many areas of technical theatre and backstage work. The student learns about set design and construction, lighting, sound, props, costumes and makeup. **Classes will meet every Thursday after school in the auditorium in addition to frequent Saturday meetings. THIS IS AN AFTER-SCHOOL CLASS, AND STUDENTS MUST COMPLETE LAB HOURS FOR ACTUAL PRODUCTIONS OUTSIDE OF CLASS. YOU MUST BE FREE TO WORK AFTER SCHOOL AND WEEKENDS MUCH OF THE TIME.**

(\*) May be repeated for credit.

**WORLD LANGUAGE**

**2000 FRENCH 1** (1 credit)

French 1 is the first course in the high school sequence. A competency-based approach is used in teaching the basic skills of a world language: listening comprehension, speaking, reading, and writing. The cultural aspects of the Francophone world are introduced through readings and supplementary materials.

**2005 FRENCH 2** (1 credit)

*(Prerequisite: Based on the placement process or French 1)* This course places emphasis on developing conversational and written skills using the target language. Grammar and vocabulary are extended through the use of reading and listening activities. Students will continue to explore cultural aspects of the Francophone world.

**2012 FRENCH 9 ACCELERATED** (1 credit)

*(Prerequisite: Based on the placement process or French 1)* This course introduces students to advanced level work at a fast pace. Students are expected to use the target language consistently while producing more complex and accurate sentence structures in writing and speaking. Vocabulary is extended through the use of advanced reading and listening activities. Students will continue to explore cultural aspects of the Francophone world.

**2045 LATIN 1** (1 credit)

*(Open to all.)* This introductory course covers the fundamentals of grammar while introducing an extensive vocabulary. The reading of simple stories enhances the student's understanding of patterns of expression in language and deducing meaning within context. Vocabulary work stresses word building in both English and Latin with prefixes, suffixes and derivatives. Roman daily life, Roman social values and Roman and Greek mythology are also examined.

**2050 LATIN 2** (1 credit)

*(Prerequisite: Latin 1/Latin 8)* This course builds on the foundation of Latin 1 or Latin 7/8 examining more complex grammar while improving reading comprehension and vocabulary skills. The reading of short stories develops the student's comprehension and learning through context. The substance of these stories reinforces cultural knowledge about life in the Roman world.



**2075 SPANISH 1** (1 credit)

*(Open to all.)* Spanish 1 is the first course in the high school sequence. A competency-based approach is used in teaching the basic skills of a world language: listening comprehension, speaking, reading and writing. The cultural aspects of Spanish-speaking countries are introduced through readings and supplementary materials.

**2080 SPANISH 2** (1 credit)

*(Prerequisite: Based on the placement process or Spanish 1)* Spanish 2 is the second year in the high school sequence. Continued emphasis is placed on developing and refining both oral and written skills. Students are introduced to a deeper understanding of the Hispanic world.

**2087 SPANISH 9 ACCELERATED** (1 credit)

*(Prerequisite: Based on the placement process or Spanish 1)* The same four skills are taught as in the first year of Spanish using a competency-based approach. Grammatical structure becomes more complicated, vocabulary is extended, and the student's cultural knowledge of Spanish-speaking countries is broadened. Students are encouraged to use Spanish as much as possible.

**2085 SPANISH SPEAKERS ACCELERATED** (1 credit)

*(Open to grades 9-12.)* Accelerated Spanish for Spanish Speakers is a course designed for Spanish speakers to become truly bilingual. Students will be able to improve their proficiency, celebrate identity, and grow as multilinguals through the study of a variety of texts including short stories, films, and non-fiction readings. Students will study the Spanish-speaking world through the lens of their culture. This course will support students in the transfer of academic skills between languages. Students will continue to work towards meeting the *World-Readiness Standards for Learning Languages* through the study of a curriculum that addresses the five goal areas of Communication, Cultures, Connections, Comparisons and Communities.

**2300 CHINESE 1** (1 credit)

*(Open to all.)* Chinese 1, the first course in the high school sequence, is an introduction to the four essential skills involved in the acquisition of Chinese: listening, speaking, reading and writing. *Pinyin*, which is based on the Roman alphabet, will be introduced as a tool for both Chinese pronunciation and computerized written Chinese. Multi-media will be employed to enrich and enhance learning. The course will also explore Chinese culture, art, and its mysteries through exhibitions, shows and hands-on activities.