Preparing Students for College, Careers, and Beyond
# Graduation Requirements

Preparring Students for College, Careers, & Beyond

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>MINIMUM COURSE REQUIREMENTS FOR HIGH SCHOOL GRADUATION</th>
<th>GWCP RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>4 Credits</td>
<td>4 Credits, including Advanced Placement courses if recommended.</td>
</tr>
<tr>
<td></td>
<td>• English I: Survey of Literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• English II: World Literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• English III: American Literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• English IV: Literature &amp; Society</td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>3 Credits</td>
<td>4 Credits, including Advanced Placement courses if recommended.</td>
</tr>
<tr>
<td><strong>Students must complete:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Algebra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Geometry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Advanced Algebra with Trigonometry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Or 3 high school level courses if entering with Algebra credit</td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>3 Credits</td>
<td>4 Credits, including Advanced Placement courses if recommended.</td>
</tr>
<tr>
<td></td>
<td>• Biology is required</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Two additional lab sciences: Chemistry and Physics are recommended.</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>3 Credits</td>
<td>4 Credits, including Advanced Placement courses if recommended.</td>
</tr>
<tr>
<td></td>
<td>• Human Geography/Civics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• World Studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• US History</td>
<td></td>
</tr>
<tr>
<td><strong>World Language</strong></td>
<td>2 Credits</td>
<td>4 Credits, including Advanced Placement courses if recommended.</td>
</tr>
<tr>
<td></td>
<td>• Two years of language credit must be in the same language</td>
<td></td>
</tr>
<tr>
<td><strong>Fine Arts</strong></td>
<td>2 Credits</td>
<td>2 Credits, including Advanced Placement courses if recommended.</td>
</tr>
<tr>
<td><strong>Options include:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Drama</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Visual Arts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Dance</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Education &amp; ROTC</strong></td>
<td></td>
<td>2 Credits</td>
</tr>
<tr>
<td></td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• PE I/Health or ROTC I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• PE II/Driver’s Ed or ROTC II</td>
<td></td>
</tr>
<tr>
<td><strong>College to Careers or Career Education</strong></td>
<td>At least 2 Credits</td>
<td>2 Credits</td>
</tr>
<tr>
<td></td>
<td>• 3-4 credits for CTC students, depending on academy</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>2 Credits</td>
<td>2 Credits</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td>24</td>
<td>28-32</td>
</tr>
</tbody>
</table>

CPS also requires:

- Passing Driver’s Education
- Pass the Constitution (Public Law 195) Exam
- Pass the Consumer Education Exam
- Complete 40 hours of Service Learning
- Class of 2020 & after: 1 credit of Computer Science
GWCP provides many advanced course options in all content areas. These higher-level courses require an instructor recommendation prior to student enrollment. Recommendations for these courses begin in February for course selection that happens in March. Course recommendations will be available in Sound Programming when students choose courses.

If you have questions about a specific course, please contact the current teacher listed below or your counselor.

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>COURSE REQUIRING APPROVAL</th>
<th>TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>AP English Language and Composition</td>
<td>Dr. Hailey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mrs. O’Kane</td>
</tr>
<tr>
<td></td>
<td>AP English Literature</td>
<td>Mrs. Lesus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mrs. O’Kane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mrs. O’Neill</td>
</tr>
<tr>
<td>Mathematics</td>
<td>AP Statistics</td>
<td>Ms. Walter</td>
</tr>
<tr>
<td></td>
<td>AP Calculus AB &amp; BC</td>
<td>Ms. Blahnik</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Schuchhardt</td>
</tr>
<tr>
<td>Science</td>
<td>AP Biology</td>
<td>Mr. Templin</td>
</tr>
<tr>
<td></td>
<td>AP Chemistry</td>
<td>Mr. Alexander</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Butler</td>
</tr>
<tr>
<td></td>
<td>AP Physics C: Mechanics</td>
<td>Mr. Robinovitz</td>
</tr>
<tr>
<td></td>
<td>AP Environmental Science</td>
<td>Ms. Shabica</td>
</tr>
<tr>
<td></td>
<td>Principles of Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aerospace Engineering</td>
<td>Mr. Gamboa</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>AP Human Geography</td>
<td>Ms. Colsant</td>
</tr>
<tr>
<td></td>
<td>AP World History</td>
<td>Mr. O’Brien</td>
</tr>
<tr>
<td></td>
<td>AP US History</td>
<td>Mr. Staszak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr. A. Johnson</td>
</tr>
<tr>
<td></td>
<td>AP Government</td>
<td>Ms. Becker</td>
</tr>
<tr>
<td></td>
<td>AP Psychology</td>
<td>Ms. Bardoulas</td>
</tr>
<tr>
<td></td>
<td>AP Economics</td>
<td>Mr. A. Johnson</td>
</tr>
<tr>
<td>World Language</td>
<td>Heritage Speakers</td>
<td>Ms. Villalobos (Spanish)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Wei (Mandarin)</td>
</tr>
<tr>
<td></td>
<td>AP Spanish Language</td>
<td>Ms. Ochoa</td>
</tr>
<tr>
<td></td>
<td>AP Spanish Literature</td>
<td>Ms. Villalobos</td>
</tr>
<tr>
<td></td>
<td>AP Chinese Language</td>
<td>Ms. Wei</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>Intermediate, Advanced Band</td>
<td>Mr. Plaskota</td>
</tr>
<tr>
<td></td>
<td>Intermediate Guitar</td>
<td>Mr. Dixon</td>
</tr>
<tr>
<td></td>
<td>Intermediate Piano</td>
<td>Ms. Perry</td>
</tr>
<tr>
<td></td>
<td>Mixed Choir</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drama II,III, IV</td>
<td>Mr. Wolfe</td>
</tr>
<tr>
<td></td>
<td>AP Studio Art: Drawing</td>
<td>Ms. Coffee</td>
</tr>
<tr>
<td></td>
<td>Studio Drawing &amp; Painting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixed Media</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AP Studio Art: 2D &amp; 3D Design</td>
<td>Ms. Pennell</td>
</tr>
<tr>
<td></td>
<td>AP 2D Design: Digital</td>
<td>Ms. Lessard</td>
</tr>
</tbody>
</table>
Our English courses expose students to texts of various genres, periods, and regions of the world. Particular focus is given to analysis of these texts to understand the societies depicted within them while gaining essential skills in critical thinking. Students use literature to examine social, historical, and cultural values. With a school-wide targeted instructional area of writing, students critically analyze literature through structured essays as well as speaking and listening experiences. As a result, students become better readers, writers, and communicators in preparation for college, careers, and beyond.
**English I: Survey of Literature**

English I, Survey of Literature, is the first of four required courses in the English sequence and serves as a foundation for further English coursework. Students will read, write, and respond to increasingly challenging texts. Within the context of thematic units, students will study the following genres: short story, novel, poetry, drama, nonfiction, and film. They will apply their understanding of language and the writing process to develop organized and coherent responses to literature, express their personal ideas, describe situations or events, and inform and persuade their audiences. Using elements of the craft of writing, students will refine written, oral, and visual representations in response to literature. Through the writing process and effective composition strategies, students will refine grammar and usage skills. Students will also engage in inquiry to develop research-based products in collaboration with their Biology course. These reading and writing skills will help set the foundation for further coursework in English. This course is designed to help students meet and exceed the Common Core Standards and prepare them for future work in college.

**Speech**

The speech course helps students examine ways in which they communicate with one another and the world around them, and vice versa. The speech course emphasizes authentic speech, writing, grammar and mechanics, and vocabulary, as well as reemphasizing instruction from the freshman English language arts curriculum. Students will explore oral and written language, concentrating on communication skills for use in business and higher education in alignment with the CTE program. Students will be expected to complete assignments both cooperatively and independently, in and out of class, creating oral presentations and producing written work throughout the course for evaluation. This course concentrates on research, expository, and argumentative writing. Written assessments will focus on developing students’ ability to state a main idea or argument, and then develop their idea(s) using appropriate and thorough evidence and explanation. Reading assessments will explore a variety of texts including historic speeches, nonfiction articles, and novels. Oral assessments will take place quarterly, where students will speak, present, or debate on assigned topics. Speaking and listening skills are essential to the course in helping students prepare for their high school careers as well as postsecondary success.

**English II: World Literature**

World Literature is the second of four required courses in the English sequence. Students will become adept at analyzing increasingly challenging text and using elements of the writer’s craft to refine written, oral, and visual representations in response to world literature. World Literature encompasses a rich body of work ranging from the early and classical oral traditions to the voices of post-colonial groups, and to the modern diversity of today’s society, reflecting the complex and interwoven voices of global perspectives. Students will read and respond in a variety of ways to works by influential writers. They will explore and analyze world literature within its historical and cultural framework. This, in turn, will help to create a deeper knowledge and understanding of world events. Building on their understanding of historical events as taught in English I, students will be able to meet or exceed expectations for Key Performance Indicators. KPIs are developed to meet Common Core Standards and prepare students for SAT and college skills.

**English III: American Literature**

American Literature and Composition is the third of four required courses in the English sequence. Students will become adept at analyzing increasingly challenging text and using elements of the writer’s craft to refine written, oral, and visual representations in response to American literature. American literature encompasses a rich body of work ranging from the Native American oral traditions to the voices of post-colonial groups, and to the modern diversity of today’s society, reflecting the complex and interwoven voices of American men and women. Students will read and respond in a variety of ways to works by influential writers. They will explore and analyze American literature within its historical and cultural framework. This, in turn, will help to create a deeper knowledge and understanding of the American heritage.
This class will examine the following overarching essential questions:
1. How are worlds within literature crafted? How does a talented reader explore these worlds?
2. What is the relationship between literature and society? How does one influence the other?
3. How do we shape our stories and/or how are they shaped for us?

Students will read and critically analyze texts, and study texts of various genres, periods, and regions of the world. We will immerse ourselves in the details of these texts to understand the societies depicted. We will also see how literature can reflect social, historical, and cultural values. We will critically analyze literature through discussions and essays. We will develop the ability to read complex texts, and to write organically using effective rhetoric.

Advanced Placement
English Language & Composition

AP English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer’s purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. This course will give students a learning experience equivalent to a typical undergraduate introduction to his or her first composition class. Through close reading of literary texts, students will understand how writers use language to provide meaning and make text-to-text, text to self, and text to world connections. We will analyze and evaluate style and structure, rhetorical strategies, diction, figurative language, imagery, selection of detail, language and syntax. Students will master literary terms. We will examine the expository, analytical, and argumentative writing that forms the basis of academic and professional communications as well as on the personal and reflective writing that fosters writing facility in any context. Additionally, students will write a variety of essays in preparation for success on the AP English exam.

Advanced Placement
English Literature & Composition

The AP English Literature and Composition course “engages students in the careful reading and critical analysis of imaginative literature.” Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. This course follows the guidelines in the AP English Course Description. Students are expected to take the AP Exam at the end of the year. Over the course of the year, students will engage in careful reading and critical analysis of texts spanning various genres and periods- from the 16th-21st century. We will study texts from various regions of the world and immerse ourselves in the details of these texts to understand the societies depicted within them. We will also see how literature can reflect social, historical, and cultural values. We will critically analyze literature through discussions as well as essays. During class, we will develop a wide vocabulary, the ability to read complex texts, and the ability to write organically using effective rhetoric. Students will become better readers, writers, and communicators by the end of the course.

English 160- UIC English Course

As a citizen of the world, you are a part of a network of social issues; some of which directly affect you and some affect those around you! In this course, we will individually and collectively explore what it means to be a part of our cultures, communities, city, and nation; we’ll also analyze how history affects the present. From argumentative writing and personal narratives to interviews and analysis, we will look closely at how social issues shape our lives. Through reading and writing, as well as personal connections to social issues, our discussions will center on what campaigns for change exist and how we might participate in those campaigns.

One important goal of this course is to advance our abilities as writers and thinkers. We will analyze the impact of story in relation to personal experiences. We will write in various genres, not only to develop our skills as writers, but to further our engagement in the community and the country around us. As a whole, we will discover what it means to be a productive, empowered citizen of a society and learn from one another as we write about its impact. Upon successful completion, students may earn course credit for English 160 from UIC.
George Westinghouse College Prep High School offers a rigorous and demanding course selection for all students. Our mathematics sequencing provides a groundwork for critical thinking by developing skills in reasoning and problem solving. Our students are continually challenged to develop their skills in reasoning, analysis, creativity, shared learning, and self-expression as they build on their mathematical understanding. We strive to create students to be mathematically developed thinkers who can communicate their understanding and be prepared for all mathematical challenges that exist beyond the high school level.
Algebra I
Prep, General, & Honors  9th
Algebra I introduces the student to the language of mathematics. Students will learn to use variables to describe patterns and numerical relationships. Students will learn to apply real number properties, perform operations on polynomials, solve linear and quadratic equations and inequalities, graph linear and quadratic functions, solve linear systems and use appropriate mathematical models to solve real-world problems. This course is designed to help students meet and exceed the Illinois Learning Standards for Mathematics and prepare them for the PSAE.

Geometry
Prep, General, & Honors  9th—10th
Geometry provides students with an introduction to formal mathematical reasoning, logic, and proof. Through geometry, you will be introduced to the tools needed to study space and spatial relationships. The study of Geometry includes math vocabulary, organization of proofs, points, lines, planes and angles, parallel lines and planes, transformations and congruence, congruent triangles, similar polygons, right triangles, circles, areas of plane and solid figures, volumes and surface areas of solids, using formulas in solving problems, visualizing geometric situations, and using geometric ideas in real situations. The objective of this course is to provide the student with a comprehensive review of important Algebra concepts as well as the requisite foundation for the study of advanced algebra and trigonometry.

Advanced Algebra with Trigonometry
Prep, General, & Honors  10th—11th
In Advanced Algebra with Trigonometry students will have a comprehensive and summative preparation for the SAT. This will include an integrated approach of all previous math courses with a focus on algebraic functions, trigonometry, and statistics. Students will also be prepared for advanced mathematical courses in College Algebra, Pre-Calculus, Calculus, or Statistics. This course extends the study of the major topics from Algebra I to give students an opportunity to solve more difficult problems. There is a review of fundamental operations, linear and quadratic sentences and systems, rational and radical expressions and functions. Students study complex numbers and logarithms before learning the basic trigonometric functions. Students then use those functions and their properties to solve triangles and prove identities. Graphs of trigonometric and inverse trigonometric functions are analyzed.
**Precalculus**  
General & Honors  
11th—12th  

Precalculus expands upon previously mastered algebra skills learned in Algebra I and Advanced Algebra with Trigonometry. Elementary functions, sequences and series, matrices and determinants, theory of equations, partial fractions, probability and statistics and mathematical induction are studied. The analytic geometry part of the course involves the use of algebraic methods to analyze properties of the straight line, conic sections, and vectors. Parametric and polar functions are also studied. Students placed at the Honors level will be programmed into AB or BC sections in preparation for AP Calculus.

**Advanced Placement Statistics**  
AP  
11th—12th  

AP Statistics is the high school equivalent of an introductory college statistics course. The purpose of AP Statistics is to introduce students to major concepts and tools for collecting, analyzing, and drawing conclusions from data. Throughout the course students will be exposed to the following four themes:
1. Exploring Data: Describing patterns and departures from patterns  
2. Sampling and Experimentation: Planning and conducting a study  
3. Anticipating Patterns: Exploring random phenomena using probability and simulation  
4. Statistical Inference: Estimating population parameters and testing hypotheses
Successful mastery of course content and skills may translate to earning credit in a college introductory statistics course. AP Statistics prepares students to pass the AP (Advance Placement) examination given in May.

**Advanced Placement Calculus**  
AP AB or BC  
11th—12th  

AP Calculus teaches students to work with functions represented in a variety of ways: graphical, numerical, analytical or verbal. The course covers the meaning of the derivative in terms of a rate of change and a local linear approximation. These concepts will be used to solve a variety of problems. Furthermore, the meaning of the definite integral both as a limit of Riemann sums and as the net accumulation of a rate of change is taught, with applications. The course teaches the relationship between the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus. Students will model written descriptions of physical situations with functions, differential equations, or integrals. Technology is used to assist in verifying and interpreting results, determining the reasonableness of solutions, and then making conjectures. AP Calculus prepares students to pass the AP (Advance Placement) examination given in May. GWCP offers both AB and BC Calculus. AP Calculus BC is an extension of AP Calculus AB: the difference between them is scope, not level of difficulty. AP Calculus AB includes techniques and applications of the derivative, the definite integral, and the Fundamental Theorem of Calculus. It is equivalent to a semester of calculus at most colleges and universities. AP Calculus BC includes all topics in AP Calculus AB, plus others such as parametric, polar, and vector functions, and series. It is equivalent to one year of calculus at most colleges and universities.

**Exploring Computer Science**  
General  
9th  

The Exploring Computer Science (ECS) class is a national program committed to democratizing computer science knowledge by increasing learning opportunities at the high school level for all students, with a specific focus on access for traditionally underrepresented students. The ECS curriculum consists of multiple units, covering Human Computer Interaction, Problem Solving, Web Design, Introduction to Programming, Computing and Data Analysis, Robotics, E-Textiles, and Artificial Intelligence. The ECS curriculum is structured to facilitate inquiry and equity-based instructional practices so that all students, are introduced to the problem solving, computational practices, and modes of inquiry associated with computer science.

**AP Computer Science Principles**  
AP  
10th—12th  

AP Computer Science Principles (CSP) introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology impact the world. Students don’t need previous computer science experience to take this course. With a unique focus on creative problem solving and real-world applications, AP CSP prepares students for college and career. Whether for 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science experience is essential for today’s students and the workforce they’ll enter. AP CSP was designed to attract and engage a greater diversity of students, including those traditionally underrepresented in computer science, such as women and minorities.
The mission of the science department is to develop critical thinkers who have the scientific content knowledge and skills necessary to be active citizens and life-long learners. Through a comprehensive sequence of rigorous and relevant science classes, we prepare students for their academic and professional careers by fostering their abilities to interpret data, analyze scientific investigations, evaluate models, process academic text, and articulate their comprehension of scientific processes and concepts. Students develop these skills through laboratory and hands-on activity experiences which allow students to form text-based and data-based conclusions and connect these conclusions to real world examples.
**Biology**

Biology teaches students to think scientifically and emphasizes key biological concepts, scientific thinking skills, and scientific literacy that can help students in their everyday lives and prepare them for college. Examples of topics explored include: the scientific method, ecology, evolution, diversity of organisms, cells, protein synthesis, and genetics. Students will also gain an overview of contemporary science technology, learn how to use the tools of biologists, and will acquire a wide variety of laboratory skills.

**Chemistry**

Chemistry is an inquiry-based course that examines matter and the changes it undergoes. Experiments and activities are used to introduce concepts including the structure of atoms and chemical compounds, the relationships among the elements on the periodic table, chemical and physical transformations, and the measurement and calculations of chemical quantities. Students who complete this course will develop an understanding of interconnections among the sciences, technology, society, and the environment.

**Physics**

Physics is the study of energy and how it affects matter in the universe. Students will begin the year with an exploration of energy and will apply this knowledge to the study of work, gravity, linear and rotational motion, torque, waves, sound, light, electricity, and magnetism. This course has a yearlong focus that involves a great deal of lab work and data interpretation to find different ways to understand how energy affects us all the time. Students of introductory physics will learn about the relationships between motion and forces through Newton’s laws of motion, the difference between vector and scalar quantities, and learn how to solve basic problems involving these quantities.

**Anatomy & Physiology**

Anatomy & Physiology will explore the various human body systems such as the circulatory, respiratory, muscular, skeletal, integumentary, endocrine, and reproductive systems. An emphasis will be placed on scientific research, the impact of structure on function, and the physiological processes at the cellular through organ level that allow each system to serve a particular function.

**Introduction to Engineering Design**

In this course, students learn about the various disciplines of engineering and apply math and science skills to create solutions to problems. Students develop problem-solving and teamwork skills that are invaluable for any major in college and future careers. Through several projects, students will practice using the engineering design process from brainstorming to testing out prototypes, to revising and rebuilding solutions, using math, science and innovation as real engineers do. We learn to use Autodesk Inventor 3D modeling software (also known as computer-aided drafting, or CAD) to develop and document our designs.

**Principles of Engineering**

Through problems that engage and challenge, students explore a broad range of engineering topics, sampling from mechanical engineering (simple machines and drive trains, and robotics), chemical engineering (alternative energy sources), and electrical engineering (energy, electrical circuits, robotics automation). Students develop skills in problem solving, research, design, and basic programming, while learning strategies for design process documentation, collaboration, and presentation.

**Aerospace Engineering**

Through problems that engage and challenge, students explore a broad range of engineering topics, sampling from mechanical engineering (simple machines and drive trains, and robotics), chemical engineering (alternative energy sources), and electrical engineering (energy, electrical circuits, robotics automation). Students develop skills in problem solving, research, design, and basic programming, while learning strategies for design process documentation, collaboration, and presentation.
**Advanced Placement Biology**

AP Biology is the equivalent to an introductory college level course that would be taken by a freshman Biology major. The course will be focused around evolution as a process that drives biological diversity, the utilization of free energy and molecular building blocks in biological systems, the retrieval, transmission, and response to information that is essential to life’s processes, and the interactions within and among living things. Students will utilize science practices and mathematical models to develop an understanding of these concepts and will connect them to social and ethical concerns of today’s world.

**Advanced Placement Chemistry**

In AP Chemistry, students will learn about the fundamental concepts of chemistry such as structure and states of matter, intermolecular forces, reactions, and how to use chemical calculations to solve problems. Students will engage in hands-on laboratory investigations to learn chemical concepts through direct experience and observations. The course is designed to be the equivalent to a general chemistry course taken by a freshman science major.

**Advanced Placement Physics C: Mechanics**

AP Physics C is a calculus based mechanics course that will focus on such topics as equilibrium, kinematics, dynamics, energy and work, momentum, and rotation. This course approximates a first-semester university-level college physics course for science and engineering majors. Students will use science practices while completing 14 major labs and smaller weekly activities and will use calculus and advanced algebra to define and explain principles of mechanics. This course is designed to help prepare students for the AP exam in May and university physics courses.

**Advanced Placement Environmental Science**

The goal of this course is to provide students with the scientific principles, concepts, and methodologies to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, and to evaluate the risks associated with these problems and examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet, there are several major unifying constructs or themes that cut across the many topics included in the study of environmental science. This course is designed to help prepare students for the AP exam in May and for a university Environmental Science course.
Social Science courses at George Westinghouse are designed to engage students in their own development towards becoming informed, active, and thoughtful citizens in their community, country, and world. Throughout our wide variety of courses students examine the complexity of individual and collective human behavior, experience, and interaction with the environment. Practices include document analysis, text-based discussions, college readiness skill building, and real-world application. These methods offer students the tools necessary to succeed in college and to better navigate their lives.
Human Geography
Prep, General, & Honors 9th

The purpose of Human Geography is to introduce freshmen students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students also learn about the methods and tools geographers use in their science and practice. Throughout the course they will ask the fundamental questions with which geographers are concerned. Common Core reading and writing skills are also a major focus. This is a semester long course.

Civics
Prep, General, & Honors 9th

Civics is a semester course that focuses on the questions “Who has power in our democracy, why do they have it, and how do they use it?” and “What power do I have in our democracy? How will I use that power?” During the course of the semester students will learn what it means to be a citizen in our democracy. Students will engage in various forms of civic participation, such as campaign simulations, civil conversations, and election analysis, culminating in a service-learning project of the students’ choosing. Common Core reading and writing skills are also a major focus.

World Studies
Prep, General, & Honors 10th

World Studies is a course offered to sophomores as a Social Studies requirement. The class approaches historical study by looking at recent events and then going backwards to explore their roots. In this learning setting students will discuss, but not limit the class to: Empires, Imperialism and Colonialism (Greek, Roman, and Indian), Social Change (Political, Industrial, and Social Revolutions), and Exploding Technologies (Wars, Mass Production, and Destruction). World Studies is the systematic study of human society. The essential wisdom is that our social world guides our actions and life choices in much the same way that the seasons influence our clothing and activities. Peter Berger states seeing the general in the particular, World Studies helps us see general patterns in the behavior of particular people. This class will challenge students to explore the social forces that shape our society and as a result our identity. Common Core reading and writing skills are also a major focus.

US History
Prep, General, & Honors 11th

U.S. History is a junior level course that explores the history of the United States, from roughly 1492-1975. We will study some of the major people, ideas and events that have shaped our history. We will examine the roots of our government, our economy, our foreign policy and our society. We will also attempt to uncover the origins of some of the difficulty issues with which the United States still struggles-racism, sexism, economic inequality and environmental destruction. This course is a survey of United States history, which means that we will have to cover a lot of the material in one year. As a result we will be focusing on getting the “big picture” of the United States History. Our content and historical analysis objectives will focus on categorization through the lens of SPRITE (social, political, religious, intellectual, and economic). It is through this lens that we will examine historical events to uncover continuity and change throughout time. Common Core reading and writing skills are also a major focus.
Ethnic Studies

This senior elective course is designed to explore questions about how race and perceptions of race shape our experiences both in the past and in the present. Ethnic Studies is an interdisciplinary course that uses a historical and contemporary lens to examine social issues in order to arrive at a multicultural understanding of the United States. This course examines relevant topics such as housing, immigration, poverty, media, the prison system, affirmative action, and even personal identity. At the same time, Ethnic Studies focuses on themes of social justice, social responsibility, and social change. This course is designed to provide students with the opportunity to develop academic skills and to learn about important issues regarding race and ethnicity to work towards building a better world.

Advanced Placement Economics

Economics is the study of how individuals and societies produce, distribute, and consume goods and services. Sound boring? Maybe, but probably not when you realize that this means that economists study poverty, wealth, inequality, environmental protection, immigration, taxes, investment, laws and regulations, banking, housing, food stamps, business decisions, unemployment, human capital, the health of entire national economies --- virtually anything that has material value and that impacts our lives. In other words, economics is the study of who gets what and why. How people make such decisions is just as important as the decisions themselves. Economics is a systematic way of thinking about the costs and benefits of everyday choices --- both yours and our society’s. Thus, economics is also a social science that seeks to explain human behavior. This makes it a cousin to psychology, sociology, anthropology, and political science. The course is available to juniors or seniors as an elective; juniors in the CTC Business Academy are required to take it.

Advanced Placement Human Geography

The purpose of the AP Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students also learn about the methods and tools geographers use in their science and practice. Throughout the course students will ask the fundamental question that geographers are concerned with: where and why? They will use and think about maps and spatial data. Students will be able to define regions and evaluate the regionalization process and characterize and analyze the changing interconnections among places. In addition to addressing College Readiness Standards for reading this course is designed to help students meet and exceed the Common Core Standards and prepare students for the AP exam in May.
### Advanced Placement World History

This class offers a true global approach to understanding the history of our world, beginning around 8,000 BCE and ending at the end of the 20th century. While it is impossible to learn about everything that happened in these 10,000 years, it is possible to study continuity and change over time, make comparisons between cultures, and study some general themes that can help us understand the forces that have shaped our world today. In order to analyze these common threads and subsequent changes over time, we will utilize both a thematic and chronological approach throughout the class. The course emphasizes historical thinking skills such as comparing and contrasting, analyzing cause and effect, and analyzing change.

### Advanced Placement US History

The purpose of this course is to engage students in a comprehensive study of American History, examining the complexities and the controversies inherent in historical analysis. The themes that will be included in the course are: American Identity and Diversity, Development of Political Institutions, Citizenship, the Role of Religion, Social Reform, Pop Culture, War and Policy and Global America. The course will challenge students to think of history in a multidisciplinary context, noting the connection of history of literature, popular culture, music, and art. The course is meant as an equivalent college-level American history survey course and the goal is to prepare students to take the AP test in May. This course is primarily open to juniors who meet required specifications.

### Advanced Placement European History

This class is a window to the world --- both historical and contemporary --- through the lens of European history and influence. In other words, it’s not just about Europeans. Many of history’s enduring themes and conflicts can be traced to European origins: modern notions of race and racism; religious conflict among Catholics, Protestants, and Muslims; modern science and social science; the West’s economic and cultural exploitation of the globe; and the rise of the modern nation-state based on capitalism and representative political structures. While mastering this historical content knowledge, the course will require that you “reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.” Thus, this class will help you learn history and help you learn how to think (and write, and read, and discuss) at a college level.

### Advanced Placement Psychology

The AP Psychology course is designed to introduce students to the systematic and scientific study of behavior and mental processes of humans and animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their research and practice. Students will be able to understand human development and the connections between biology and behavior. This course addresses the College Readiness Standards for reading and prepares students for the AP exam in May. This course is currently available to juniors and seniors who meet required specifications.

### Advanced Placement Government

This course gives the student an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. politics. This class helps to prepare the student for the American government and politics AP exam in May.
The World Language courses emphasize effective communication and confidence using target languages. Our courses seek to develop language proficiency along with the knowledge and appreciation of different cultures. The objectives are for the students to be able to converse utilizing the target language, develop a broad vocabulary, and interact with fundamental components of world cultures. The learning activities continuously reinforce student-centered learning, cooperative learning, the use of technology, as well as creative learning and thinking.
**Spanish I**

Spanish I introduces the Spanish language and the cultures of the Spanish speaking countries. Effective communication and confidence using the language is emphasized. The course objectives are for the students to converse utilizing the present tense, to possess a broad basic vocabulary, and to interact with fundamental components for the Hispanic culture. Students listen and speak Spanish daily, take regular written and oral quizzes and exams, develop projects, write short essays/paragraphs in the target language, and perform short dialogues.

**Spanish I for Native Speakers**

Spanish I for NSS provides for a student’s continued development of existing competencies in the Spanish language. This course offers students the opportunity to study Spanish formally in the same way native English-speaking students study English language arts. The emphasis is on speaking (formally and informally), reading, writing and listening. Students will acquire skills that range from learning grammar and spelling, and developing specialized vocabulary, to interpretation and analysis of different literary genres. Students will also increase their awareness and appreciation of the different Hispanic cultures. Students will compare and contrast language functions between Spanish and English and enhance their language skills in both languages.

**Spanish II**

Spanish II continues to present the Spanish language and cultures of the Spanish speaking countries. The course objectives are for students to be able to converse utilizing the present tense as well as selective forms of the past and future tenses. Students will continue to broaden their vocabulary and use their reading and writing skills to explore politics, history, geography, art, and music of Spanish speaking people. Students will listen and speak Spanish daily, take regular written and oral quizzes and exams, develop projects, write essays in the target language, and perform short dialogues/oral presentations.

**Spanish II for Native Speakers**

Spanish II for NSS provides for a student’s continued development of existing competencies in the Spanish language. This course offers Spanish-speaking students the opportunity to study Spanish formally in an academic setting in the same way native English-speaking students study English language arts. In this class, students will continue developing their vocabulary through the study of other disciplines and will further examine the grammar behind the Spanish that they already know. Students will also further develop their reading and writing skills through the analysis of different literary genres and research assignments.

**Spanish III**

Spanish III reviews essential grammar concepts and vocabulary introduced in Spanish I and II. Emphasis is on communicating in Spanish through speaking, listening, reading, and writing in various aspects of time. Students will be introduced to a higher-level vocabulary and complex grammar. They will read articles from newspapers and magazines, and different literature genres. In addition, students will watch and discuss authentic award-winning short films by Hispanic filmmakers. The primary focus will be to increase the students’ ability to comprehend and communicate in Spanish with ease and confidence. In this class students will listen and speak Spanish daily, take regular written and oral quizzes and exams, develop projects, write research papers in the target language, and perform oral presentations.
Spanish IV Honors 12th
Spanish IV students are expected to converse and write about various topics in the target language. Contemporary publications, historical texts, music, and original works of literature are studied and used as the substance of classroom discussion. In addition, students will watch and discuss authentic award-winning short films by Hispanic filmmakers. The appreciation of music, art and other cultural aspects of countries is developed and studied through the target language. Advanced grammar topics are covered, and students are expected to build on their previous three years of study. In this class students will listen and speak Spanish daily, take regular written and oral quizzes and exams, develop projects, write research papers in the target language, perform thorough oral presentations and present/act out plays.

Advanced Placement Spanish Language AP 11th—12th
This AP course is designed to provide students with a learning experience equivalent to that of a third-year college course. It is intended for students who wish to develop proficiency and integrate their language skills, using authentic materials and sources. This course will help prepare students to demonstrate their level of Spanish proficiency across three communicative modes: Interpersonal (interactive communication), Interpretive (receptive communication), and Presentational (productive communication), and the five goal areas outlined in the Standards for Foreign Language Learning (Communication, Cultures, Connections, Comparisons, and Communities). Students enrolled in this course will take the AP Spanish Language Exam during the Spring semester in May.

Advanced Placement Spanish Literature AP 12th
This AP course is designed to provide students with a learning experience equivalent to that of a third-year college course in Peninsular and Latin American literature. The course is designed to introduce students to the formal study of a representative body of Peninsular and Latin American literary texts. Students enrolled in this course will take the AP Spanish Literature Exam during the Spring semester in May.
# Mandarin

## Mandarin I

<table>
<thead>
<tr>
<th>General</th>
<th>9th—11th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese I is an introduction course of Chinese. Students acquire fundamental knowledge for Mandarin and Chinese culture. Students will develop a knowledge base for the grammatical system and characters necessary for the communicating in Mandarin. The learning activities encourage cooperative learning, use of information technology, and creative learning and thinking.</td>
<td></td>
</tr>
</tbody>
</table>

## Mandarin II

<table>
<thead>
<tr>
<th>General &amp; Honors</th>
<th>10th—12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese II continues to focus on the introduction to the Chinese language grammatical system as well as the functional use of the language. It develops learners’ communicative competence from general description of events to specific description, from sentences to discourse with contexts, from simple expressions to complex structures. The learning activities encourage cooperative learning, use of information technology, and creative learning and thinking.</td>
<td></td>
</tr>
</tbody>
</table>

## Mandarin III

<table>
<thead>
<tr>
<th>General &amp; Honors</th>
<th>11th—12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese III is a native intermediate level Chinese language course. It starts to introduce sophisticated topics and emphasizes use of authentic materials. Culture learning and development of insight into the nature of the language and culture and integrated into the curriculum through the use of cooperative learning, use of technology, and creative learning and thinking.</td>
<td></td>
</tr>
</tbody>
</table>

## Mandarin III for Native Speakers

<table>
<thead>
<tr>
<th>Honors</th>
<th>9th—11th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese III for Native speakers continues to develop students’ critical thinking and writing skills necessary for heritage speakers to gain proficiency in their native language. Students will read novels, short stories and analyze authentic resources that help deepen students’ understanding toward Chinese culture. The course also focus on the heritage, student’s role in society, and help build their problem solving skills.</td>
<td></td>
</tr>
</tbody>
</table>

## Mandarin IV

<table>
<thead>
<tr>
<th>Honors</th>
<th>12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese IV is a higher intermediate level Chinese language course. It introduces sophisticated topics and emphasizes using authentic materials. Culture learning and development of insight into the nature of the language and culture are integrated into the curriculum. Students are expected to reach higher levels of proficiency in the target language and do independent cultural research.</td>
<td></td>
</tr>
</tbody>
</table>

## Advanced Placement Chinese

<table>
<thead>
<tr>
<th>AP</th>
<th>12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Chinese aims at consistent development of knowledge and proficiency of and about Chinese Language and culture. The learning activities reinforce student-centered learning and cooperative learning, the use of information technology, and encourage creative learning and thinking. In addition to other texts, authentic materials and student-made texts are used. Audio and visual materials are also used inside the classroom and are encouraged to be used at home. Eligible students must have successfully completed at least 3 years of school Chinese courses and must acquire the recommendation of the instructor. This course is intended to prepare students for the AP exam.</td>
<td></td>
</tr>
</tbody>
</table>
### French I
**General**  
*9th—11th*

French I is a multimedia approach to learning French specifically targeted for students who have never studied French before. French I offers a variety of communicative tasks that develop speaking, listening, reading, and writing skills. The course objectives are for students to be able to navigate real life situations such as: presenting yourself in both casual and formal settings; talking about school, family and friends; expressing likes, dislikes and opinions; and discussing the past. Furthermore, students will gain an appreciation and sensitivity to the diverse cultures and history of the French-speaking world through readings, films, projects and communication with Francophone pen-pals.

### French II
**General**  
*10th—12th*

This course builds upon the basic language skills introduced in French I using the same multimedia approach. The course objectives are to further develop speaking, listening, reading and writing skills by exposure to the grammar and vocabulary needed for more complex communicative tasks. Conversational and writing skills will be deepened through readings, songs and films accompanied by discussion of these cultural selections from the Francophone world, as well as continued contact with Francophone pen-pals.

### French III
**Honors**  
*11th—12th*

This course continues to build upon the foundation of skills in French conversation, listening, reading, and writing established in French I & II. The course objectives are to use authentic literary selections, short-subject films and songs from diverse Francophone countries to accompany the advanced study of grammar and facilitate communicative skills. Furthermore, students will come away with deeper knowledge and understanding of French and Francophone history and culture. This class is conducted in French.

### French IV
**Honors**  
*12th*

In French IV, students will continue to build and refine their reading, writing, speaking and listening skills through vocabulary acquisition, introduction and review of grammar concepts, discussions in French, and focused writing assignments. Students will study French literature and poetry, film, art, as well as French and European history and current events.
Students encounter numerous opportunities for enrichment in the Westinghouse Fine Arts Program. Our Music courses allow students to explore not only historical and cultural elements of music, but also the engineering and construction elements involved in the instruments students learn to play for performances. Our Arts courses integrate the foundations of visual arts with extended opportunities for art in the digital world with technology use in the classroom. Regardless of the chosen course, students will be asked to identify how the principles of art are used in master works and student works of art while also articulating these evaluations through discussions, critiques, and written formats.
Art I
Art I is a foundational course in the visual arts designed for both the beginning artist as well as those with elementary school experience in art. This course will engage students in the various ways one can express ideas through visual art production, art appreciation, and art criticism. The course will have three major components: (1) understanding various elements and principles of art (both modern and postmodern) through observation and practice by learning different techniques and using various media, (2) creating art projects that demonstrate content, concept, skills learned, as well as originality/innovation, and (3) general knowledge of how the arts function in society throughout history and in our present day. Students will be assessed through art projects, sketchbooks, tests, written reports and participation on an art class blog.

Digital Arts I
This course both aims to enrich skills that students have developed in previous courses and also expand their knowledge of various digital arts. In this course we will research and discuss contemporary trends in media/technology while developing skills in digital photo manipulation and print media. The course covers various programs including, but not limited to, Photoshop and Illustrator.

Drawing & Painting
In this intermediate level studio course, students explore the creative possibilities of drawing and painting. Students work in a variety of media and techniques including pencil, charcoal, pastel, oil pastel, conté, ink, watercolor, acrylic paint as well as other alternative materials. This course will engage students in the various ways one can express ideas through art production, art appreciation, and art criticism. The course will have three major components: (1) demonstrating understanding of various skills and techniques used for drawing & painting (both modern and postmodern methods/means) through practice with various media, (2) creating drawing & painting projects that demonstrate explorations in various content & concepts as well as originality/innovation, and (3) general knowledge of how drawing & painting function in society throughout history and in contemporary society. You will be assessed through class art projects, sketchbooks, homework, writing projects and final portfolios at the end of each semester.

Studio Mixed Media
In this intermediate course, students will create works of art combining multiple 2-D and 3-D methods of making. We will explore the juxtaposition of materials and techniques to build meaning in works of art. The first semester will focus on 2-dimensional art forms such as printmaking, fashion illustration, logo design and collage. In second semester students will explore materials such as clay, recycled/found objects, paper mache and wire. Art projects will include traditional as well as modern artworks such as conceptual installations. This class will also prepare students for the AP 2D/3D Studio Art course. Art I is a prerequisite for Studio Mixed Media.

Video Production
Video Production is a second level course designed to provide a time arts experience for those students interested in film, or video. Students learn camera operation and editing techniques through a variety of assignments such as short narrative, monologue montage, music video and experimental work. Video Production will build upon our Art 1 foundational course through the on-going exploration of the visual elements and aesthetics of art. These same visual elements will be developed through the lens of image sequencing, perception, and context. This course continues to shape an awareness and understanding of technologies used to communicate in our modern society. Students cover the basic elements of video production including script writing, story-boarding and editing. Students build upon current critical thinking skill by critiquing films, as well as fulfilling sketchbook/journal assignments. These explorations lay the foundation to allow students to engage in many ways of expressing themselves through the making and discussing of time-based art in the classroom.
Photography

Pre-requisite: Digital Media 1. This course students will learn more advanced techniques and methods of creative expression. Students will engage in an in-depth use of the Digital DSLR camera controls, including f/stops (aperture), shutter speeds, focal range and the production of a correct exposure. New techniques include special effects imagery, studio lighting, panoramic imagery, and an introduction to Adobe programs. Skills will include composition, criticism, lighting, and image editing software. Students will engage in creating a visual style or telling a visual story through research, discussion, and exposure to contemporary photographic works; as well as the history and invention of photography. The student will also create individual websites to showcase their portfolios and learn basic web design through word press.

ARTivism

This is a studio course that combines studio art with activism. Students are introduced to various techniques used to create site-specific performance/art works. Through a series of progressive exercises, using different artistic mediums and structures, students will create site-specific studies. The class begins with ourselves as a site, expand to our classroom, our associated communities and the public and private spaces that comprise our urban environment. Along the way, students will be exploring what skills and tools we have and need to acquire in order to develop as artists working in this field. The course will culminate in the creation of proposals for larger scale hypothetical site-specific works to allow to the student to expand their imaginations outside the limits of the course and learn the basics of writing grant proposals to fund such projects.

Advanced Placement Studio Art: Drawing

Students will be challenged to develop their own artistic voice while showing their versatility as they expand on different themes and use varied media in the creation of 24 original pieces. The student will engage in a sustained investigation of all three aspects of the AP studio portfolio: Quality, Concentration, and Breadth. In this course students explore how they can articulate different themes and emotions with a versatile approach to media and design. Students are asked to identify how these principles are used in master works and student works of art, as well as articulate these evaluations through discussions, critiques, and written formats. Students will also focus on the Concentration and Quality aspects of their portfolios by picking an area or theme to focus on and explore in depth. By the end of the course, students will have developed mastery in concept, composition, and execution of 2D designs and drawings. The class culminates in a final presentation of the AP portfolio to be submitted to the College Board.

Advanced Placement 2D & 3D: Studio Art

This course is a rigorous, demanding, and intense journey into artistic creation. As a year long, college-level course, it challenges artists to investigate formal, technical and conceptual issues in a variety of materials and mediums. Students will choose to pursue either 2D or 3D artworks from the start of the class. During this time, students will be challenged to develop their own artistic voice while at the same time showing their versatility as they expand on different themes and use varied 2D or 3D media during the creation of their portfolio. The student will engage in a sustained investigation of all three aspects of the AP studio portfolio: Breadth*, Concentration**, and Quality***

Advanced Placement 2D: Digital

In this course, artists will be developing their artistic voice while at the same time showing their versatility in digital imaging as they expand on different themes during the creation of 24 original artworks. The artists will engage in a year-long investigation of all three aspects of the AP studio portfolio: Quality, Concentration, and Breadth. The artists will explore how they can articulate different themes and emotions with a versatile approach to digital techniques and design. Artists will also be responsible for examining, investigating, and critiquing works of art. In semester two, artists will focus on the Concentration and Quality aspects of their portfolios by picking an area or theme to focus on and explore in depth. The class culminates in a final presentation of the AP portfolio to be submitted to the College Board.
**Beginning Choir**

Beginning choir is a mixed voice choir for students with limited or no prior music experience required. The course focuses on rehearsal and performance techniques, using a variety of choral literature. Introductory music theory is also incorporated in the study of music. Students will prepare a repertoire for various performances throughout the year.

**Mixed Choir**

Concert Choir is a select mixed voice choir by audition only. The choir performs a variety of choral literature in concert and contest; students will begin level 2 music theory, sight-reading, and advanced vocal production techniques. Members of the choir are encouraged to participate in solo and ensemble contests as well as audition for the All-City Festival Choir.

**Beginning Band**

Beginning Band covers the skills needed to develop a mastery of a band instrument. The class will cover music reading skills, performance skills, and students will play and analyze music from many genres. There will be several concerts over the year. We will cover basic note reading skills, rhythms, sound production on all band instruments, the history of the instruments, tools of musical expression, breathing, practice habits, and music interpretation skills. The course is assessed through a variety of tools including essays, formative practice records, and live playing exams.

**Intermediate Band**

Intermediate band is the second level of band at Westinghouse. The course continues where beginning band left off, bringing students to a higher level of performance proficiency on their instrument. Students will perform in three concerts and will attend a local band festival and clinic in the spring. Intermediate band will also perform as a pep band at school athletic events. The course is assessed through a variety of way including formative and summative performance exams, and essays. Intermediate band is a secondary level music course and fulfills the CPS music graduation requirement. Prerequisites: Beginning band or prior band experience with permission of instructor.

**Advanced Band**

This audition-based class is for the most advanced instrumental students and is worth honors credit. It is intended for students who have studied their instrument for one or more years. We will perform at 3-4 concerts, and participate in athletic events and regional concert band festivals/competitions. The course is assessed through a variety of way including formative and summative performance exams, and essays. Advanced band is a third level music course and fulfills the CPS music graduation requirement. Prerequisites: Beginning band or prior band experience with permission of instructor.
### Beginning Guitar

**General** 9th—12th

This class is intended for students in all grade levels. The course will cover music reading skills, improvisation, history, performance, and composition. It will include elements of the “Little Kids Rock” program which is inspired by immersing students in the music, similar to the approach of a language class. Musical styles covered include blues, reggae, rock, hip-hop, and more.

### Intermediate Guitar

**General** 10th—12th

This class is intended for students who have already completed the Beginning Guitar course. The Intermediate Guitar course will expand on concepts introduced in Beginning Guitar such as musical literacy, improvisation, performance and composition. This course will provide the students with the experience of playing in an ensemble as it will be focused on performance and advancing musicianship through guitar ensemble repertoire and chamber music. Students will also advance their individual technique and musical literacy through solo repertoire for the guitar.

### Beginning Piano

**General** 9th—12th

Beginning piano is designed to teach the concepts and fundamentals needed to perform on the piano. It will increase musical understanding beyond reading notes by teaching students a vocabulary of chords and keys as well as accompaniment patterns. Students will play melodies in several positions and have the opportunity to participate in ensemble playing. Further, students will develop strong habits of practice while learning techniques to increase the muscular agility and flexibility of their hands.

### Intermediate Piano

**General** 10th—12th

The Westinghouse Intermediate Piano course will continue to develop keyboard skills, basic musicianship skills to include music reading, improvising, transposing, harmonizing, and ear training, taught in Beginning Piano. As a member of the performing arts program, performance skills will also continue to be emphasized. Students will be encourage to participate in the CPS Piano Festival held each year in February. The Intermediate Piano Course will integrated curriculum that emphasizes graded repertoire, theory, technic, and multiple-key solos. Students will perform in a formal piano recital at the end of each semester, The recital material will be selected with student choice built in the process.
Drama I
Honors
9th—12th
In this course students will participate in activities that develop design and performance skills, as well as the skills necessary for the business of production. The course is taught at the honors level and will include research and analysis in addition to creative products. Students should expect to spend time studying acting, directing, theater history, theater appreciation and evaluation, and technical aspects of theater including: props, sound, lights, set design, make-up and costumes. Students are expected to balance shared responsibility with individual accountability. The course will promote the skills necessary to work professionally in a collaborative environment, as delineated by National Standards.

Drama II
Honors
10th—12th
Drama II will build on the skills learned in Drama I through experimentation and personal expression. The course is taught at the honors level and requires historical research and critical analysis. In addition to studying and critiquing existing plays, students will write, design and perform their own one act plays, develop and present speeches and build a theater resume with headshots. Students in Drama II will develop leadership and communication skills while participating in theatrical roles both on and off stage. The course adheres to the National Standards for Arts Education.

Drama III
Honors
11th—12th
Students in Drama III will take on leadership roles in performance and behind the scenes. They will use the skills learned in Drama I and II to refine their audition, directing, designing and reviewing skills. During the second semester each student will select an area of concentration for an individual study project that will include in-depth research as well as hands-on practice, culminating in a presentation or performance. The course adheres to the National Core Arts Standards.

Drama IV
Honors
12th
Students in Drama IV will select areas of study within the guidelines of the National Core Arts Standards, culminating in projects that fall under the pillars of Creating, Performing, Responding or Connecting. Each quarter will include independent study, as well as guided practice and collaborative events. The course is designed to allow highly motivated students to specialize their study of theater to the career(s) or academic areas that most interest them. This curriculum will result in a portfolio of work samples that illustrate the students' mastery of theatrical skills.
Physical Education at Westinghouse provides students with the knowledge and tools necessary to achieve a healthy fitness level in order to maintain that level of fitness outside of school. Classes consist of individual and team sports with an emphasis placed on fundamentals, rules, and techniques of various activities. The Health component is a ten-week classroom experience with an emphasis on creating a healthy lifestyle through the study of various topics. The Driver Education component is a ten-week classroom experience that provides students with the opportunity to develop lifetime driving skills, including skills in managing conflicts associated with driving. In addition, our Junior ROTC program develops responsible cadet-leaders of character through high-quality instruction and enrichment opportunities that enable the development of the life skills, aspiration, and expectation to be college and career ready.
## Physical Education I & Health

### General 9th

This year long Physical Education class consists of individual and team sports with an emphasis placed on fundamentals, rules, and techniques of various activities including: Basketball, Flag football, Volleyball, Racquet Games, Tennis, Swimming Basics, Swimming Games, and Physical Fitness. The Health component is a ten-week classroom experience with an emphasis on creating a healthy lifestyle. Topical areas include: mental health and stress management, nutrition, drug abuse prevention, and healthy relationships. Students are assessed through participation and unit exams.

## Physical Education II & Driver’s Education

### General 10th

This course consists of individual and team sports including: Softball, Yoga and Pilates, Indoor Team Games/Challenges, Swimming Development II Swimming Games and Physical Fitness II. The Driver Education component is a ten-week classroom experience that will provide the student with the opportunity to develop lifetime driving skills. In addition, students will learn new skills that will be needed to manage the conflicts and risks associated with driving. A student must have acquired five credits to eligible for Driver’s Education.

## Dance

### General 11th—12th

This course is an entry-level experience, which involves a holistic approach to training the body (to develop dance technique), choreography, performing, and dance theory. Further it includes opportunities to apply dance knowledge, skills and understanding in different contexts. Dances included are Line, Modern, Hip Hop, Latin, Ballet, Cultural, and Fitness (Zumba). The students will explore the basic movements and vocabulary as well as mastering movement combinations. The history of dance will also be integrated into the course to assist in understanding the development of the differing styles of dance.

## Strength & Conditioning

### General 11th—12th

Strength and Conditioning class will provide an opportunity for development of strength and conditioning for a variety of fitness related activities. Free weights, exercise machines, and conditioning activities will be incorporated to promote improvement in strength, endurance, balance, agility, and speed. Students will lift on M-W-F and will participate in conditioning activities on T-TH. Proper technique, safety precautions, and proper application of the Principles of Training will be emphasized. Students will create year-long goals and log and track their progress throughout the school year. This course fulfills the requirements as one of the four years of physical education taken towards graduation.

## Sport Exercise and Health

### Honors 11th—12th

This course incorporates the disciplines of anatomy, physiology, biomechanics, psychology, and nutrition, which are studied in the context of sport, exercise and health. A combination of content and experimental work provides the opportunity for students to acquire the advanced knowledge and understanding necessary to apply and analyze human performance. Ethical issues that exist within sporting competitions are also considered. The course is designed for students interested in university courses including those specifically related to Sport, Sports Science or Physical Education. This course is a hybrid course primarily taking place in the classroom.

## Junior Leaders Physical Education

### Honors 11th

This year long course is offered for students who are interested in assisting the physical education teacher and helping their peers learn fitness and sports concepts and skills within the physical education setting. A strong emphasis is placed upon the development of responsibility for self and others, leadership skills, and peer teaching. In addition, all students will receive instruction leading to certification in American Red Cross Adult CPR. Students will be given the opportunity to apply for the program during their sophomore year. Application does not guarantee entry. This program is a prerequisite for the Physical Education Senior Leadership Program.

## Senior Leaders Physical Education

### Honors 12th

**Prerequisite: Junior Leaders Physical Education.** Students enrolled in the Senior Leadership Program assist the physical education teacher by leading warm-up activities, helping individuals and small groups of students acquire specific sport and fitness skills, officiating games, maneuvering equipment, and aiding the teacher with simple organizational tasks. The purpose of this program is to enhance leadership skills, initiative, responsibility, and resourcefulness.
JROTC I: Naval Leadership Education Training & Health

Naval Science I is the basic leadership course. This course emphasizes practical application in leadership. Topics include fundamentals of leadership, introduction to Navy organization, command and responsibility, and health and first aid. The course objectives provide an opportunity for first year cadets to learn about their personal obligation as American citizens. Also, the program introduces a cadet to leadership, citizenship, self-discipline, and character development using a military organizational structure, providing cadets leadership and responsibility at various levels within the organization, community service projects, and an academic curriculum approved by the Naval Education and Training Command. The Health component is a ten-week classroom experience with an emphasis on creating a healthy lifestyle. Topical areas include: mental health and stress management, nutrition, drug abuse prevention. This course fulfills the PE I and Health requirement for high school freshmen.

JROTC II: Naval Leadership Education Training

Naval Science II is an intermediate leadership course. This course covers naval history from ancient times to the current war on terror. Other topics include NJROTC Leadership, Oceanography, meteorology, astronomy, maritime geography, and physical science. The course objectives provide an opportunity for cadets to learn about their personal obligation as American citizens, self-discipline, self-confidence and character, an understanding of the military services, and an understanding of the basic elements needed for national security. The objectives are met using the academic curriculum, close order drill (marching), training, physical fitness, uniform inspections, community service, and field trips. This course fulfills the PE II and Driver’s Education requirements for high school sophomores.

JROTC III: Naval Leadership Education Training

Naval Science III is an advanced leadership course. Students enrolling in Naval Science III must have prior Naval Science Instructor approval. The course continues with leadership topics that include military justice, international law, navigation, seapower, and naval operations. The NJROTC program provides an opportunity for secondary school students to learn about their personal obligations as American citizens and to hone a professional demeanor. The basic objectives of the program are to develop leadership, citizenship, self-discipline, character, respect for authority, an understanding of the military services, and an understanding of the basic elements and requirements of national security. These objectives are met using the academic curriculum, close order drill, training, fitness, uniform inspections, community service, and field trips. This course fulfills the requirement for PE.

JROTC IV: Naval Leadership Education Training

Naval Science IV is an advanced leadership course. Students enrolling in Naval Science IV must have successfully completed a minimum of one-year Naval Science classes prior to enrolling and must have prior Naval Science Instructor approval. This course emphasizes practical application in leadership. Topics include career planning, financial planning, risk management, ethics, and advanced leadership. This NJROTC advanced course provides an opportunity for fourth year cadets to understand more about their personal obligation as American citizens. The basic objectives of the program are to refine a cadet’s leadership, citizenship, self-discipline, and character and to establish workplace professionalism. These objectives are met using leadership seminars, group case studies, and community service.
The CTC department offers students the chance to get a head start on preparing for college and careers through the following academies: Broadcast Journalism & Media, Business Accounting, Information Technology & Web Design, and Medical & Health Professions. In the chosen academy, students learn through interdisciplinary project-based units that are designed to facilitate depth of learning and professional literacy. CTC students have the opportunity to participate in hands-on training in the chosen program, while gaining real-world experience through job shadows and internships. Many programs offer students the opportunity to earn nationally recognized certifications, which can be used to acquire job placement and payment for college.
**Introduction to Health Occupations**

Introduction to Health Occupations is the first in a sequence of four courses. This curriculum provides an overview of health care systems, personal health care qualities, career exploration, and legal responsibilities. Other unit in the curriculum include medical terminology, medical math, and cultural diversity. Anatomy and physiology will provide an introduction to the body systems. Students will have “hands on” clinical lab experiences to enhance the proficiency of their clinical skills. Workplace readiness skills are incorporated into the curriculum. Career exploration will be enhanced by field experiences, guest speakers, and other industry sponsored activities.

**Anatomy & Physiology**

Anatomy and Physiology is the second of four classes in the GWCP Medical Academy program. A thorough working knowledge of anatomy and physiology is essential for health care professionals. Although challenging, students will find this course to be extremely interesting as it will focus on practical aspects of structure and function that will illuminate how the body functions and responds in the various states of health and disease. The study of anatomy and physiology focuses on the structures of the human body and how these structures work together to maintain bodily homeostasis. In the course, students will learn about the organs and organ systems of the body in great detail. Students will learn how structure and function work together to coordinate organ function. The human body is a complex organism; in this course students will analyze those complexities to prepare for advanced collegiate science courses.

**Medical & Health Professions I**

This is the third course of the Medical Academy at GWCP. During the third year of the Medical Academy, students will continue to expand their knowledge and sharpen their skills, gaining practical, hands-on experience with several basic clinical procedures.

**Medical & Health Professions II**

Medical and Health Professions II is the final course of the Medical Academy at GWCP. During the fourth and final year of the Medical Academy, students will continue to expand their knowledge and sharpen their skills, gaining practical hands-on experience with several basic clinical procedures.
**Fundamentals of Information Technology**

This course is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal is to develop students computational thinking practices of algorithm development, problem solving, and programming within the context of today’s world. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.

**Web Design Fundamentals I**

The Web Design Fundamentals I is an introduction to the design, creation, and maintenance of web pages and websites. Students learn how to critically evaluate website quality; learn how to create and maintain webpages; learn about website standards and why they are important, and learn to create and manipulate images. The course progresses from introductory work on web designing to a culminating project in which students design and develop websites for potential clients.

**Web Design Fundamentals II**

The Web Design Fundamentals II course builds upon students’ manual coding skills to teach them how to develop Web documents using new elements, attributes and selectors introduced in HTML5 (Hypertext Markup Language version 5) and CSS3 (Cascading Style Sheets version 3). They will create Web pages using the HTML5 structure elements, embed video and audio, and develop cross-browser user-input forms. They will use CSS3 to position and format content, and to create effects such as transformations, transitions and animation. Students will also learn basic JavaScript coding, and use HTML5 APIs (application programming interfaces) to extend the functionality of Web pages with modern features such as geolocation, drag-and-drop, canvas and offline Web applications. In addition, they will learn techniques for code validation and testing, form creation, inline form field validation, and mobile design for browsers and apps, including Responsive Web Design (RWD).
**Broadcast Journalism I**  
**General 10th**  
Students engage in planned experiences in production and technical skills, as related to the visual media industry. Skills introduced in this course include script writing, developing on-air and voice-over announcement skills, designing and constructing sets and prompts, and studying broadcast operations and management. Students involved in this course will have hands-on experience in the development of news media, video production and editing, ultimately learn the fundamentals of broadcast journalism. Students will learn television and radio news processes with an emphasis on quality reporting and news quality.

**Broadcast Journalism II**  
**General 11th**  
Students will enhance research skills, engage in live-event productions and be introduced to advance editing techniques. Students will develop sophisticated broadcast skills and news anchoring and producing skills. Students will also enhance research skills, engage in live-event productions, and be introduced to advanced video editing techniques.

**Broadcast Journalism III**  
**General 12th**  
In this course, students practice in-depth reporting and advanced editing skills through the production of a Senior Project. Students will be expected to work independently on the research and production of the video project of choice to be viewed and critiqued by a panel of professional journalists. Students will also produce a video essay and resume materials for college entrance and sit for the Final Cut Pro X Industry Certification exam.