

# Academy of Computer Science and Engineering High School

## Program of Studies



**CREC**  
**Academy of Computer Science  
and Engineering**

2023-2024

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# The Comp Sci High Experience

When you come to the CREC Academy of Computer Science and Engineering High School, you get an opportunity you can't get anywhere else. "Comp Sci High," as you'll come to call it, is a one-of-a-kind comprehensive high school with immersive technology education, rigorous academic opportunities, extended learning experiences, expansive AP, Early College Experiences, CCP Dual Enrollment Experiences, and a school community that feels like family.

According to the World Economic Forum, 65% of the jobs our students will have don't exist yet. We're here to give you the skills and attributes to succeed in that world. Our core Computer Science program goes beyond what most schools offer as electives, including two full years of coding (in Python and JavaScript), a full year of Product Development, and coursework in Digital Citizenship, entrepreneurship, and elements of digital design. More important, however, are the attributes of critical thinking, problem solving, tenacity, flexibility, empathy, compassion, self-starting, and courage that will help you build the bright future you always dreamed of.

We're also a comprehensive high school, which means we have rigorous and innovative course offerings in English Language Arts, Social Studies, Mathematics, and Science. We have rich offerings in music, visual arts, and theater arts. Our athletic programs, which run throughout the school year, offer sports for every season and every athlete. In addition to a rich core of Computer Science courses, our school's Computer Science theme is woven into courses in every discipline.

As you transition from high school to college and beyond, you'll have the opportunity to choose a pathway in Computer Science, Design, or Entrepreneurship. Each of these pathways presents opportunities for college-level study both on and off campus. You will enjoy opportunities for internships and work-based learning experiences that set you up for success in college and career. We are committed to getting you ready for not just college, but for life.

Most of all, you'll find your voice in our community of learners, and make a difference in the world around you. Comp Sci High is a student-centered, family-oriented learning environment that values teamwork, compassion, collaboration, diversity, and a deep commitment to public service. We need these attributes now more than ever in our ever-expanding digital universe. At Comp Sci High we code, we write, we build, and we engineer with a greater purpose. We will have a positive impact on the world we serve.

Join us.

## **The Four Pillars of Comp Sci High**

The CREC Academy of Computer Science and Engineering program is built around four focus areas which we call our "pillars." These are:

## **Computer Science**

We will teach coding and software engineering so students have the core skills needed. At Comp Sci High, coding is a core subject alongside Math, Science, English, and Social Studies.

## **Design**

We teach Design Thinking using the Stanford Design Thinking Process. This is the industry standard for bringing new ideas to life in the marketplace.

## **Entrepreneurship**

In addition to understanding the basic operation of a small business, we build the collaboration, creativity, passion, problem solving, open-mindedness, and courage entrepreneurs need.

## **Social and Community Impact**

Everything we create, and everything we do has to have a greater purpose and serve the community in which we live. Social and Community Impact is our legacy, our culture, and it is written in our DNA.

## **Pathways at Comp Sci High**

The purpose of a Pathway is to give students the opportunity to earn job-ready skills and experience that will accelerate their college and career journey. By 11th grade, Comp Sci students will have a choice of three pathways:

### **Computer Science**

This pathway includes advanced study and college-level coursework in programming including Java, Web Design, App Development, and Game Development. Students will develop the coding and thinking skills required to pursue majors and careers in the computer science field.

### **Design**

This pathway includes advanced study and college level coursework in digital design including graphic design, new media design, content creation, and more. Students will develop the skills and artistry to pursue majors and careers in a variety of design disciplines.

### **Entrepreneurship**

This pathway includes advanced study and college-level coursework in business development, entrepreneurship, marketing and communications. Students will develop the leadership skills and business acumen necessary for majors and careers in the business world.

## **General Course Information**

## Diversity & Inclusion

Capitol Region Education Council (CREC) Magnet Schools is an intentionally diverse social justice organization whose members work to acknowledge, respect, and empathize with people of all different identifiers, such as race, socioeconomic status, gender identity and expression, education, age, ability, ethnicity, culture, sexual orientation, language, nationality, and religion.

In accordance with CREC's mission of equity, excellence, and success for all through high-quality educational services, our staff and students commit to participate in and support ongoing equity and inclusion programming through curricular and co-curricular offerings, professional learning, and local and national partnerships. Moreover, CREC Magnet Schools staff and students strive to understand and confront the symptoms and causes of systematic oppression—ranging from implicit biases to microaggressions to discriminatory policies, practices and traditions—that benefit privileged groups. While at CREC Magnet Schools, staff and students commit to affirm and honor the lived experiences of others, to willingly challenge inherited beliefs and ideologies, and consequently learn, grow, and serve.

## Course Selection, Faculty Advisement, & Course Placement

The scheduling process at the Academy of Computer Science and Engineering requires a cooperative effort among students, families, and the school to select the most appropriate program for each individual from the diversity of courses offered. This course catalog provides a listing of every course offered at CompSci High; however some courses may not be offered every year.

Shortly after the second semester begins, faculty will, in consultation with students, recommend courses for the next academic year. Recommendations will then be made available through PowerSchool for families to review. If there is disagreement on the recommendation, families are encouraged to initiate conversations with their child's current team of teachers.

Students at CompSci High are encouraged to take the most rigorous course available. It is a school-wide goal that all classes are accessible to all students. It should be noted however, that as rigor increases so do the expectations on the student. Faculty and staff will work with students to support them in their classes.

Students who enroll at CompSci High after their ninth grade year will be placed in courses after a thorough review of previous transcripts and in consultation with families when possible.

## College Credit Opportunities for CompSci High Students:

UConn Early College Experience (UConn ECE): UConn Early College Experience (UConn ECE) provides academically motivated students with the opportunity to take university courses while in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head start on a college degree and other postsecondary opportunities. UConn ECE Instructors are high school teachers certified by the University. UConn ECE Instructors foster independent learning, creativity, and critical thinking - all important for success in college and careers. The Academy of Computer Science and Engineering offers UConn ECE courses in Spanish, Environmental Science, Physics, English, Biology, and Sociology, and Music. To support rigorous learning, University of

Connecticut academic resources, including library and online classroom access, are available to all UConn ECE Students.

### Asnuntuck CCP

- College Career Pathways (CCP):
  - College Career Pathways, a federally funded program, allows students to earn up to 13 FREE college credits, by taking classes at their high school, that have been approved by Asnuntuck Community College faculty. Students apply for College Career Pathways at their high school and can be enrolled in various disciplines, including math, science and a career-related area (e.g. accounting, digital arts, early childhood development, business, etc.). Students are required to fill out an Asnuntuck Community College AND College Career Pathway application to be eligible.
- High School Partnership Program (HSPP):
  - Qualified Connecticut students who have an 80 (B) cumulative grade point average can enroll in up to two accredited college course at Asnuntuck Community College free of tuition and fees each semester during their junior and senior years (up to 8 credits each semester). The cost of textbooks and materials associated with the class(es) is the responsibility of the student.
- Senior Specific Opportunities:
  - i. All seniors have the opportunity to enroll in Asnuntuck's "First Year Experience" course during 1<sup>st</sup> semester. This course is taught at CompSci and supplemented by an Asnuntuck faculty member, free of charge. The course is designed to promote academic success by introducing 12<sup>th</sup> grade students to the college environment, the expectations needed for college coursework, and as an introduction to college life.
  - ii. Seniors may also choose to take Asnuntuck's "Public Speaking" course during 2<sup>nd</sup> semester in place of or in combination with their Internship requirement. The objective of this course is to develop student capabilities in oral communication before an audience.

Advanced Placement: Advanced Placement courses are designed to prepare students for the College Board AP exams in May. They are college level courses and the AP exam is required in order to gain AP credit. There is a cost associated with the exam, please speak with your School Counselor for more information regarding this. These courses are very rigorous and require a level of commitment and time that generally greatly exceeds that of College Preparatory or Honors classes.

### AP Exam Policy:

Advanced Placement courses are designed to prepare students for the College Board AP exams in May. The AP exam is required in order to gain AP credit through the College Board. All students at CompSci who enroll in AP courses are encouraged to take the AP exam in May. Students who qualify for financial assistance can request a fee waiver from their school counselor.

CompSci will do our best to honor any request to take an AP Exam. If a student is not registered for the course for which they would like to take the exam, they must consult with the AP Coordinator to determine if the school can support the administration of an exam outside of our course offerings.

## Capstone Credit Requirement

Successful student completion of Capstone is necessary for graduation from a CREC Magnet School. Students will receive 1 credit for completing the required outcomes outlined in the Capstone course. A grade of *Pass* or *Fail* will be recorded on students' high school transcript but will not count toward GPA.

## Grade Level Promotion

Promotion to the next grade is based on the total credits earned by the student. In order for students to move to the next grade they must meet the following criteria:

- Students who have accrued 5.5 or more credits are promoted to the 10<sup>th</sup> grade.
- Students who have accrued 11.5 or more credits are promoted to the 11<sup>th</sup> grade.
- Students who have accrued 17 or more credits are promoted to the 12<sup>th</sup> grade.

## Valedictorian and Salutatorian Honors

CREC high school students who entered a CREC high school beginning in grade nine, and continue through grade 12, may be eligible for valedictorian and salutatorian honors\*.

- Only classes taken on our campus and/or graded by our faculty will be counted towards Valedictorian or Salutatorian honors.
- All classes taken on our campus and/or graded by our faculty will be counted towards Valedictorian or Salutatorian honors.
- **The valedictorian and salutatorian will be determined by the cumulative grade point average taken at the end of the first semester, grade 12.**

\* ONLY students who have spent their entire high school career with CREC will be eligible for valedictorian and salutatorian honors.

## Graduation Requirements

	Graduation Requirements (25 credits)
<b>Humanities</b> Including: - 4 English - 3 Social Studies - 0.5 Civics - 1 Fine Art - 1 Humanities Electives	<b>9 Credits</b>

<b>Science, Technology, Engineering, and Mathematics (STEM)</b> Including: -4 Mathematics -3 Laboratory Sciences -2 STEM Electives	<b>9 Credits</b>
<b>Fitness, Health and Safety</b> - 1 Physical Education and Wellness - 1 Health and Safety Education	<b>2 Credits</b>
<b>World Languages</b>	<b>2 Credits</b>
<b>Mastery Based Examination (Capstone)</b>	<b>1 Credit</b>
<b>Open Electives</b>	<b>2 Credits</b>



## Grade Point Average

Letter Grade	Numeric Value	GPA	Honors Weight	AP/ECE Weight
A+	100	4.5	4.75	5.0
A+	96-99	4.4	4.65	4.9
A	93-95	4	4.25	4.5
A-	90-92	3.7	3.95	4.2
B+	86-89	3.4	3.65	3.9
B	83-85	3	3.25	3.5
B-	80-82	2.7	2.95	2.9
C+	76-79	2.4	2.65	2.9
C	73-75	2	2.25	2.5
C-	70-72	1.7	1.95	2.2
D+	66-69	1.4	1.65	1.9
D	63-65	1	1.25	1.5
D-	60-62	.7	.95	1.2
F	0-59	0	0	0

A student's GPA will only include classes that have been taken within a CREC high school program. This would also include credit recovery taken during the summer, if applicable.

### High School Honor Roll Protocol

- Students who earn a quarterly GPA average of 3.0 or higher with no Ds or Fs shall earn "Honor Roll" for that academic quarter.
- Students who earn a quarterly GPA average of 3.5 or higher with no Cs, Ds or Fs shall earn "High Honors" for that academic quarter.
- Students who earn a quarterly GPA of 4.0 or higher and earned only grades in the "A" range shall earn "Honors with Distinction" for that academic quarter.

## College Planning

Admission requirements for colleges vary greatly, but general guidelines like those below can be very helpful for students planning their high school program. Be sure to consult with counselors on a regular basis and to read the college, university, and trade school catalog to be sure that you are taking the number and types of courses that will meet their specific requirements for admission. Below are some general requirements for types of colleges based on selectivity. Please also keep in mind that you must meet CompSci's credit requirement (both total credits and category credits) and CompSci's credit requirements may be higher.

	Most Selective	Highly Competitive	Very Competitive	Competitive
English	4 credits			
Math	4 credits	3-4 credits	3 credits	
Science	4 credits	3 credits	3 credits	
Social Studies	4 credits	3 credits	2 credits	
World Language	3-4 years of the same language	3 years of the same language		2 years of the same language
Fine Arts	1 credit recommended			
Extracurricular	Leadership and initiative activities			
Rank in class	Top 10-20%	Top 20-35%	Top 35-50%	Top 50-65%
SAT/ACT scores	1310-1600 or ACT minimum of 29	SAT 1240-1308 ACT 27-28	SAT 1146-1238 ACT 24-26	SAT 1000-1144 ACT 21-23
SAT Subject Tests	Expected		Optional	
GPA	A to B+	B+ to B	B to B-	B- to C+
AP/ECE Expectations	Expected		Recommended	Optional
Computer Literacy	Recommended			
Example Schools	MIT, Yale, Harvard, Stanford	UConn (Storrs), RIT, Quinnipiac, RPI	CCSU, UConn (regional campus)	UHart, Becker,

# Course Descriptions

## Cluster 1: Science, Technology, Engineering and Math (STEM)

	Required Courses (H)	AP/ECE	Electives
Grade 9	Integrated Science	--	--
Grade 10	Biology	--	--
Grade 11 & 12	Chemistry	--	Anatomy and Physiology Aquaponics I Aquaponics II Forensics Psychology Astronomy A Astronomy B

### SC3272 Integrated Science

1 Credit  
Honors

The freshman Integrated Science course is designed to provide students with a fundamental background in earth science, chemistry, and physics while developing a deeper understanding of scientific inquiry and science literacy. Students will gain a comprehensive understanding of the fundamentals of Earth's dynamic processes and the role the human population plays in impacting and responding to natural events on Earth. Students will explore the topics of planetary evolution, geologic history, plate tectonics, internal and external forces, along with water and carbon cycles. These topics will allow students to explore data and research into understanding how these processes work and how we impact them as a species. Students will also explore current news and research into ways we are mitigating the effects of climate change and pollution on the environment and society.

### SC3132 Biology

1 Credit  
Honors

This course is designed to develop a comprehensive understanding of fundamental concepts and principles in the life sciences. Students will explore real-world scientific phenomena in order to demonstrate mastery of the Performance Expectations (PE) as part of the Next Generation Science Standards (NGSS).

### SC3305 Anatomy and Physiology

Prerequisite: Biology

This course is designed for students interested in biomedical research or the medical field. Students will learn about the structural organization of the human body and the underlying physiological processes that are essential for maintaining homeostasis. In the first part of this course, students will learn the organization of the human body and histology and review basic biology and biochemistry. Organ systems will be covered in depth, with the first semester focusing on the nervous, muscular, skeletal and integumentary systems. Throughout the course, we will consider not only the normal structures and function of the body, but also what happens when the body's normal mechanisms fail and disease results. Students will have in- depth discussions, diagnose case studies, and complete presentations on medical conditions and diseases. Laboratory experiments will include dissection of preserved organs and/or animals.

### SS4371 Psychology

.5 Credit  
Honors

Prerequisites: Biology

This course will cover the curriculum in psychology. Students will learn about the history of psychology as a way to both explain the range of human behavior that is considered normal and to establish criteria for identifying that which is abnormal. Many approaches have come into fashion and faded away during this history and we'll learn about what influenced them and what benefits some of these approaches brought to the field. One of the most important advancements came when psychologists began to explore the methods being independently developed and employed by scientists studying behavior in animals. From this historical foundation, students will evaluate the modern study of behavior and mental processes in human beings and other animals and how this knowledge is applied in the various major subfields in psychology. Students will also learn about the ethics and methods psychologists use in their science and practice.

### SC3212 Chemistry

1 Credit  
Honors

Chemistry explores the fundamental concepts, laws, and theories of chemistry; using real-world applications throughout the course. With the implementation of the Next General Science Standards (NGSS); the Disciplinary Core Ideas (DCIs, the chemistry content) will be interwoven with the Science and Engineering Practices (SEPs, the way scientists think about and do science) and the Cross-Cutting Concepts (CCCs, the way different domains of science are linked). Students will be presented with various phenomena throughout the course and will use DCIs, SEPs, and CCCs to describe matter and the changes it undergoes. Chemical principles such as states of matter, atomic structure, electron structure, periodicity, nomenclature, stoichiometry, aqueous reactions, nuclear chemistry, and bonding theory will be covered using NGSS. Additional topics may include thermochemistry and acid-base theory. Inquiry-based laboratory activities involving state of the art technology and equipment will be included with all NGSS bundles of study.

### SC3241 Forensic Science

Prerequisite: Biology

This half-year elective course provides an introduction to the topics of criminology within the field of forensic science. Study includes the applications of concepts from the areas of Biology, Chemistry, Physics, Entomology, Earth Science, and Anatomy and Physiology to analyze and investigate evidence that may be discovered in a criminal investigation. Major topics include processing a crime scene, collecting and preserving evidence, identifying types of physical evidence, organic and inorganic analysis of evidence, hair, fibers, and paint, toxicology, arson and explosion investigations, serology, DNA, fingerprints, firearms, and document analysis. The main focus of this course will be to emphasize the evidential value of crime scene and related evidence and the services of what has become known as the crime laboratory. This course combines basic theory and real laboratory experiments, creating an experiment based situation for the better understanding of the students. The experiments used reinforce previously learned scientific principles rooted in Biology, Chemistry and Physics. Classroom activities include experiments, projects, case studies and the incorporation of technology.

#### SC3541 Aquaponics I

0.5 Credit  
Honors

This class helps young minds delve deeply into an ecosystem of fish & plants, used to feed people around the world, while learning science, art, physics, humanities and math.

#### SC3551 Aquaponics II

0.5 Credit  
Honors

This class helps young minds delve deeply into an ecosystem of fish & plants, used to feed people around the world, while learning science, art, physics, humanities and math.

#### SC3344 Advanced Astronomy A: Cosmology and Planetary Science

0.5 Credit  
Honors

Explore the history of the universe and what makes it function. This course will provide an overview of the field of cosmology: the study of Cosmic Microwave Background radiation, galaxies, other related phenomena, the history of the universe, and a study of planetary sciences, where we'll take a look at the planetary formations and properties of planets in our Solar System. Part of the course will involve research on current explorations and studies of extrasolar planets and development on research in understanding the depths of our universe.

#### SC3354 Advanced Astronomy B: Astrophysics and Stellar Evolution

0.5 Credit  
Honors

This course will provide a broad introduction to the field of astrophysics and the study of stars and interstellar medium, how stars evolve and change with time, and how we study the cosmos. Topics will include: history and development of the field of astronomy, star formation, stellar evolution, supernovae, neutron stars, black holes, and spectroscopy. Students will participate in multiple research opportunities for exploring current research into the field and studying telescopes and the tools used for exploration and current missions. Astronomy B can be taken without having taken Astronomy A.

EMT4958 Emergency Medicine Technician Preparation

1 Credit  
College Prep

The EMT is often the first responder on the scene in the event of an accident or illness. He or she must assess injuries, administer emergency medical care, extricate trapped individuals, and transport injured or sick people to medical facilities. Students will use online resources and will prepare students to take a certification course at an outside paid program at the student's request.

## COMPUTER SCIENCE

	CP	AP & ECE
	Critical Thinking Technology Immersion Program - All 9th and 10th graders	
Grade 9	Computer Science 1* Product Development 1* Digital Futures 1*	
Grade 10	Product Development 2* Digital Futures 2*	AP Computer Science Principles*
	Pathways Program - Write Your Future	
Grade 11	Graphic Design I and II	AP Computer Science A** UConn ECE CSE1010 - Computer Science for Engineers (Pilot Fall 2023)
Grade 12		

\*Required course

\*\*To be offered in 2024-2025 and after.

### Computer Science 1

1 Credit

Computer Science 1 teaches the foundations of computer science and basic programming with an emphasis on helping students develop logical thinking and problem-solving skills. Python is a powerful, versatile cross-platform programming language, and it's pretty much everywhere. While Python itself may be deceptively simple, the vast array of tools makes it remarkably powerful in all areas of technology, from Machine Learning to Cybersecurity. This course will provide a practical and hands-on introduction to the Python programming language, focusing on small coding projects and mini-applications. As the course progresses, students will learn to work with packages, data structures, object-oriented programming, and tools for data science and cybersecurity.

### Computer Science Support

This course is designed to provide additional support for students who require it after Computer Science 1. Students will be provided with direct support for their current coding classes, plus additional enrichment projects that will develop the necessary skills to succeed in future Computer Science classes.

### Digital Futures I and II

Tomorrow's careers will happen in a Digital Future, and many of these jobs haven't been invented yet. In addition to learning essential digital skills, students in Digital Futures will learn digital citizenship, privacy, personal safety, and security in the digital space. In Digital Futures 1, students will learn how to communicate their learning effectively through a variety of digital products such as slide decks, explainer videos, spreadsheets, white papers, infographics, and more. In Digital Futures 2, students will become content creators and curators, learning how to curate their learning and assemble portfolios that demonstrate mastery of a wide range of digital media. This course is for everyone, and these skills will be necessary in our world's digital future.

## Product Development I & II

Every successful product you buy, digital or physical, goes through a Product Development process. In this course, students will learn the Stanford Design Thinking Model to bring physical and digital products to the marketplace. This class is project-based, and students work entirely in groups and teams, just as in the business world. In Product Development 1, students will focus on how games are designed and the process of developing new digital and physical game products. Product Development 2 expands the focus to developing business models and plans, marketing strategies, market discovery, and business leadership. These are essential skills for everyone who plans to participate in the workplace one day.

## TE1043 AP Computer Science Principles

1 Credit

Advanced Placement

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

## SC3373 AP Computer Science A

1 Credit

Advanced Placement

This course will cover the AP Computer Science curriculum. It is focused on the JAVA programming language. The course starts with an early introduction to objects and GUI. The course introduces basic data types, user-defined data types, control structures, and basic input and output (both console and graphical interfaces). The course will introduce the analysis and implementation of simple data structures (Arrays and ArrayLists), searching and sorting, recursion, inheritance and polymorphism. Inquiry-based laboratory activities are used to enhance the understanding of core concepts.

## ECE CSE 1010 - Introduction to Computing for Engineers

Introduction to computing logic, algorithmic thinking, computing processes, a programming language and computing environment. Knowledge obtained in this course enables use of the computer as an instrument to solve computing problems. Representative problems from science, mathematics, and engineering will be solved. (For an explanation of ECE courses, please refer to page 4.)



## MATHEMATICS

Grade Level	Honors	AP/ECE	Electives
Grade 9	Algebra 1 Geometry	--	--
Grade 10	Geometry Algebra 2	--	--
Grade 11	Algebra 2 Pre-Calculus Introduction to Data Science	ECE Statistics ECE Discrete Math*	Financial Algebra ECE Statistics Problem Solving*
Grade 12	Pre-Calculus Calculus Introduction to Data Science	ECE Statistics ECE Discrete Math*	Financial Algebra ECE Statistics Problem Solving*

\*\*Proposed new course for 23-24 school year.

### MA2014 Algebra I

1 Credit  
Honors

Based on a discovery approach (learn by doing), this course is designed so that students will discover important algebraic principles blended with geometry, data analysis, discrete mathematics and statistics. This investigative approach, driven by a strong emphasis on conceptual understanding and mathematical relationships, reflects national and state standards. Within the context of real-world data and cooperative learning groups, students will create an algebraic vocabulary; continue to develop oral and written expression; explore graphs and statistical methods to represent and interpret data; extend work with proportions and percents to rates and variation; graph and write linear equations; connect linear equations to parallel and perpendicular lines; solve systems of linear equations; investigate exponential growth and properties of exponents; describe functions and function notation; and model quadratics and find their roots. Active learning will be enhanced with technology-rich instruction including computer software applications, graphing calculator exploration and use of the Geometer's Sketchpad. A TI-83 or TI-84 graphing calculator is required.

### MA2102 Geometry

1 Credit  
Honors

Proof Based Geometry emphasizes advanced geometry including axiomatic foundations of the deductive process. The course integrates different elements of three-dimensional figures and algebraic/graphical representation of geometric principles. Problem solving will include the use of graphing calculators. This course develops a structured mathematical system employing both deductive and inductive reasoning. It includes plane, coordinate, and transformational geometry. Proof is developed and the concepts of congruence and similarity are investigated and applied. Algebraic methods are employed to solve problems involving geometric principles. While Euclidean geometry is the basis of most of the course some non-Euclidean geometries are investigated. When appropriate, portions of MATH 121 will be applied to Foundations in Science courses.

## MA2202 Algebra II

1 Credit  
Honors

Prerequisites: Algebra I and Geometry

Building on the skills, concepts, and vocabulary of Algebra I, this course extends what has been previously learned and introduces students to more advanced topics in algebra. The course is designed to satisfy the Common Core State Standards and to prepare students to compete with peers nationally as well as globally. Students will gain experience with the concepts of functions and inverse functions and investigate polynomial functions, rational expressions and functions, trigonometric functions, exponential and logarithmic functions, and inferential statistics. Use of technology in working with different mathematical models of real world problems is employed to enhance the learning experience. Successful completion of this course provides a foundation for further study in Mathematics as well as providing prerequisite knowledge for courses in other disciplines.

## MA1009 Introduction to Data Science

1 Credit  
Honors

Prerequisites: Algebra I and Geometry

Data science is one of the hottest industries in the US where professionals analyze “big data”. You will use a variety of technological tools to understand, ask questions of, and represent data through project-based units. You will be a data explorer and develop your understanding of data analysis, sampling, correlation/causation, bias and uncertainty, modeling with data, making and evaluating data-based arguments, and the importance of data in society. This will provide you with opportunities to understand the data science process of asking questions, gathering and organizing data, modeling, analyzing and synthesizing, and communicating.

## MA2243 Pre-Calculus

1 Credit  
Honors

Prerequisites: Algebra II

This course is a rigorous study of functions and their properties. Trigonometric, polynomial, rational, radical, and exponential mathematical functions are studied in detail as well as sequences and series, vectors, parametric, and polar coordinates. Development of integrated mathematical tools for applications to science will include more advanced levels of mathematical modeling. This course provides a strong foundation in functions and equations as they apply to both mathematical functions and models of science while preparing students to pursue calculus.

## MA4052 Financial Algebra

1 Credit  
Honors

Prerequisites: Algebra II

Financial Algebra is a comprehensive learning program aligned to the Common Core State Standards. It is an applications-rich, algebra-based, technology-oriented program that incorporates mathematical skills in real-world contexts. Topics include: Banking, Investing, Credit, Employment and Income Taxes, Automobile Ownership, and Household Budgeting. The course allows students to experience the interrelatedness of mathematical topics, find patterns, make conjectures, and extrapolate from known situations to unknown situations. The mathematics topics contained in this course are introduced, developed, and applied in an

as-needed format in the financial settings covered. Students are encouraged to use a variety of problem-solving skills and strategies in real-world contexts, and to question outcomes using mathematical analysis and data to support their findings.

### MA2400 Calculus

1 Credit  
Honors

Prerequisites: Pre-Calculus

This course will provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. This course introduces students to calculus and includes the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of change problems); and integral calculus (including antiderivatives and the definite integral). Active learning will be enhanced with technology-rich instruction including the use of Desmos, an online graphing calculator.

### MA2326 ECE Statistics

1 Credit  
ECE

Standard and nonparametric approaches to statistical analysis; exploratory data analysis, elementary probability, sampling distributions, estimation and hypothesis testing, one- and two-sample procedures, regression and correlation. Learning to do statistical analysis on a personal computer and TI 83 OR TI 84 is an integral part of the course. A TI 83 OR TI-84 calculator is required for this class.

### Proposed Courses for 2023-2024 School Year:

\*Please note that the course(s) below are subject to curriculum approval.

### MA1010 Problem Solving

.5 Credit  
Honors

### MA3019 ECE Discrete Math

1 Credit  
ECE

Topics chosen from discrete mathematics. May include counting and probability, sequences, graph theory, deductive reasoning, the axiomatic method and finite geometries, number systems, voting methods, apportionment methods, mathematics of finance, number theory.

## **Cluster 2: Humanities**

### **LANGUAGE ARTS**

	<b>Honors</b>	<b>ECE</b>	<b>Electives</b>
Grade 9	English I	--	--
Grade 10	English II	--	--
Grade 11	English III	Introduction to Academic Writing	College & Creative Writing Journalism SAT Success Digital Publishing* Writing Center*
Grade 12	English IV	Introduction to Academic Writing  Academic Writing & Multimodal Comp.	College & Creative Writing DocuDrama Journalism SAT Success Digital Publishing* Writing Center*

\*Proposed new course for 23-24 school year

#### **EN1372 English Language Arts I**

1 Credit  
Honors

Students enrolled in this course will study American Literature through a variety of themes. It will encourage the students to think critically about literature, connect to their personal experiences and make connections across disciplines. Students in American Literature will work closely with the American History curriculum to complement the content of the course. The American Literature course will also involve the students in a variety of writing experiences to demonstrate their knowledge of the content and their ability to develop their skills in this area. Technology will be integrated to enhance the students' knowledge of American Literature and culture.

#### **EN2402 English Language Arts II**

1 Credit  
Honors

The emergence of voice is integral in understanding the power, authority, and social advancements within societies. Power is gained, maintained, and often restricted through language and the expression of individual and collective voices. Along with the power of voice comes responsibility: the obligation to act justly and the spirit to better the world around. When used properly, strong voices have given rise to leadership, activism, empowerment, and liberation. Unfortunately, the responsibilities of voice are not always fulfilled. Often, voice and the associated power are corrupted, leading to oppression and injustice. In "The Power of Voice," students will study voices from around the globe and across America. Reading classical texts, modern works, current periodicals, and diverse genres will add to student knowledge of global voices. In addition, students will write and create their own works to help discover and develop their own voices and unleash the inherent power to better the world around them. The ultimate goal of the course is to heighten the students' understanding of the powers, dangers, and endless possibilities of voice.

### EN3401 English Language Arts III

1 Credit  
College Prep

World Literature provides students with the opportunity to explore literature from many cultures within its historical context. The course will examine how cultural and literary archetypes exist in a multicultural and historical context. Students will learn how literature passes on cultural values and explains natural events. Students will continue to develop their effective communication skills in the areas of reading, writing, listening, speaking, and viewing. Technology will be integrated to enhance the students' knowledge of world literature and culture. This course will encourage students to think critically about literature, make connections across disciplines, and connect to their personal experiences in order to succeed in their academic studies and their future careers. SAT Verbal skill practice will be integrated into the course.

### EN1004/ENGL 1004 Introduction to Academic Writing

1 Credit  
UConn ECE

Prerequisite: English I and English II

This is a UCONN ECE elective credit course. It serves as an intense introduction to the foundations of various types of writing formats. It focuses on the development of the reading and writing skills essential to university work. It is recommended that students successfully pass this course before electing to take AP Language/ENGL 1010 or AP Literature. Students can earn 4 credits from UCONN.

### EN4052 English Language Arts IV

1 Credit  
Honors

This course is designed to assist students in the development of their creativity, as well as their college writing abilities. By reading and discussing the work of selected authors, students will add to their knowledge of characterization, plot, setting and point of view. Students will apply this knowledge while experimenting with different writing genres and discovering their own unique writing styles. Students will also learn and practice college level writing skills, beginning with the college application essay in order to be better prepared for the rigors of college writing. An assortment of mini-lessons will be aimed at improving grammar and mechanics. An emphasis will be placed on peer-revision as students work together to hone both their creative and academic writing skills. In addition to completing numerous written assignments and individual portfolios, each student will contribute to a class anthology and be encouraged to prepare at least one piece for submission to a publishing outlet or writing contest.

### EN3000 Academic Writing & Multimodal Composition

1 Credit  
ECE

Prerequisite: English I and English II

Instruction in academic writing through interdisciplinary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style.

### EN1312 College & Creative Writing

.5 Credit  
College Prep

College and Creative Writing explores the relationship between formal college writing expectations and informal creativity in order to succeed in higher education. Students will analyze fiction, non-fiction, and poetry. Students will demonstrate their knowledge of literary techniques, style, and diction by crafting unique, college-ready papers, including their college essay. Students will have various opportunities to discuss literature and respectfully peer edit to best aid the revision process. Students will write poems, one-act plays, memoirs, and fictional short stories as well as critical, analytical, comparative, and research college-level essays.

### TH1081 Docu-Drama

.5 Credit  
College Prep

A docudrama (or documentary drama) is a genre of radio and television programming, feature film, and staged theatre, which features dramatized re-enactments of actual events. On stage, it is sometimes known as documentary theatre. Students will learn about this unique genre.

### SK3001 SAT Success

.5 Credit  
College Prep

The SAT Prep course is designed to help students prepare for the rigors of taking the SAT tests offered by the College Board. The primary goal of this course is to identify and implement test taking strategies using prerequisite knowledge to increase student performance. Students in this course should have passed Algebra II or are taking it concurrently.

### Proposed Courses for 2023-2024 School Year:

\*Please note that the course(s) below are subject to curriculum approval.

### DPUBL2S2 Digital Publishing

.5 credit or 1 Credit  
College Prep

This course will engage students in web-based literary publication as a framework for a basic introduction to a wide range of careers in the content creation field. Students will learn the skills used by content creators, editors, fact-checkers, graphic designers, web developers, marketers, business leaders, journalists, and consultants worldwide. This course will use a web-based literary publication as a framework for a basic introduction to various editorial (writer, fact checker, editor), design (graphic and web designer), and computer science (web developer) jobs and compare production requirements for both print and online publications.

### EN3011 Writing Center

.5 credit or 1 Credit

This unique course teaches students how to create and run a student driven writing center, modeled after the UCONN Writing Center Workshop. Students will be trained to lead the writing center and then will move into staffing the writing center and providing assistance to peers at CompSci High.

## SOCIAL STUDIES

	Honors	AP/ ECE	Electives
Grade 9	Modern World History	--	--
Grade 10	Civics	--	Political Science
Grade 11	U.S. History	ECE International Relations  ECE Human Rights & Global Problem Solving	Psychology Sociology AA/Black & PR/Latinx History Intro to Digital Ethics and Equity* Cyber Terrorism*
Grade 12	<i>(see elective list)</i>	ECE International Relations  ECE Human Rights & Global Problem Solving	Psychology Sociology AA/Black & PR/Latinx History Intro to Digital Ethics and Equity* Cyber Terrorism*

\*Proposed new course for 23-24 school year

### SS4022 United States History

1 Credit  
Honors

American History is a course designed to take students on an exploratory journey of the history of North America from post-Civil War to present. Students will investigate history in chronological order through various themes such as expansion, race relations, geography, government, education, immigration, arts & entertainment, transportation and economics. Students will have an opportunity to look at history from the vantage point of an everyday citizen alongside a more traditional approach of studying significant historical figures and events. Students in American History will work closely with the American Literature curriculum as it complements the content of the course.

### SS2005 Civics

.5 Credit  
Honors

Civics is a required course for graduation. The focus of this course is to prepare students to exercise their political responsibilities as thoughtful and informed citizens. Civics provides a basis for understanding the rights and responsibilities of being an American citizen and a framework for competent and responsible participation in American government. Emphasis is placed on the historical development of government and political systems, and the importance of the rule of law; the United States Constitution; Federal, State and local government structure; and rights and responsibilities of citizenship. Students will actively investigate local, state and national issues, read and participate in discussions, and develop informed opinions using a variety of writing forms. This course prepares students for college level analytical writing by teaching key writing skills throughout the curriculum.



## SS1302 Sociology

.5 Credit  
Honors

Sociology is the systematic study of social behavior and human groups. The course will examine the patterns of human behavior by studying the primary institutions found in all human societies by identifying the membership groups various people belong to. The concepts of social norms, values, status, class ranking, racial, ethnic, gender, and religious elements will form the core basis of the course. The class will also explore the ever changing societal issues of crime, aging, poverty, deviant and anti-social group activities, urbanization, drugs, and alienation. It is the desire of the course to assist the student in developing problem solving skills and a rational approach to the world in which they inhabit.

## SS2001 African American, Black, Latinx, and Puerto Rican Studies

1 Credit  
Honors

The African American, Black, Latino, and Puerto Rican Course of Studies is a one credit, year-long elective in which students will consider the scope of African American, Black, Latino, and Puerto Rican contributions to U.S. history, society, economy, and culture. The course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American, Black, Latino, and Puerto Rican people in the United States. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, national, and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities. This course will contribute to the critical consciousness and civic-mindedness competencies of a twenty-first century graduate. It is available to students enrolled in their junior or senior year.

## SS3262 ECE Human Rights and Global Problem Solving

1 credit  
ECE

Exploration of central human rights institutions, selected human rights themes and political controversies, and key political challenges of contemporary human rights advocacy.

## SS3100 ECE International Relations

1 credit  
ECE

The goal of this course is to provide a comprehensive survey of the major issues in, and approaches toward, international politics. In International Relations, we will seek answers to many important questions about the world, including: Why do states go to war? When do diplomatic solutions win out? Under what conditions can an international organization be effective?

## SS2401 Political Science

.5 Credit  
Honors

Political Science uses data to analyze how and why decisions are made and how power is executed. Students explore concepts such as legitimate and corrupt systems of government, sources of political power, ideology, political parties, and influence throughout the institutions of national governments. Students conduct in-depth studies of campaigns and elections, voting behavior, interest groups, and the media, and gain practical

experience and insights by conducting their own public opinion polling, interacting with candidates for state and local office, touring the State Capitol, and devising solutions to a variety of current political problems.

SS4371 Psychology

.5 Credit  
Honors

Prerequisites: Biology

This course will cover the curriculum in psychology. Students will learn about the history of psychology as a way to both explain the range of human behavior that is considered normal and to establish criteria for identifying that which is abnormal. Many approaches have come into fashion and faded away during this history and we'll learn about what influenced them and what benefits some of these approaches brought to the field. One of the most important advancements came when psychologists began to explore the methods being independently developed and employed by scientists studying behavior in animals. From this historical foundation, students will evaluate the modern study of behavior and mental processes in human beings and other animals and how this knowledge is applied in the various major subfields in psychology. Students will also learn about the ethics and methods psychologists use in their science and practice.

Proposed Courses for 2023-2024 School Year:

\*Please note that the course(s) below are subject to curriculum approval.

SS3015 Cyber Terrorism

.5 Credit  
Honors

Cyber Terrorism examines definitions, history, philosophy, and theories of international terrorism with a focus on cyber terrorism and security, as well as tactics and strategies of terrorist groups and responses of governments, with emphasis on policy alternatives and civil liberties dilemmas for democratic countries combating terrorism. This course will define and identify cyber terrorism, cyber security, and explore career and education opportunities in the field of cyber security, and the ethics of privacy vs security in a digital age.

24658 Introduction to Digital Ethics and Equity

.5 Credit  
Honors

This course will focus on considerations that increased creation and use of digital bring to society. This might focus on the impact of AI programs, the ethics that should be considered when developing programs from an equity standpoint and other considerations.

## FINE ART, DESIGN, AND MUSIC

### AR6020 Studio Art

.5 Credit  
College Prep

Studio Art is an art immersion course focusing on drawing, painting, printmaking, and sculpting. Tailored for the Arts focused high school student, the instructional goals of the Studio Art program are to:

1. Encourage creative as well as systematic investigation of formal and conceptual issues through advanced and in-depth technical explorations.
2. Emphasize making art as an ongoing process that involves the student in informed and critical decision-making.
3. Develop advanced technical skills and expand student's understanding of the functions and impact of the visual elements.
4. Encourage students to become independent thinkers who will contribute inventively and critically to their culture through the making of art.

### AR6022 Advanced Studio Art

.5 Credit  
College Prep

Studio Art is a semester-long foundation course for students who are interested in building on the skills they developed in previous Art courses. Students will also get to explore 2-dimensional art materials like digital painting, graphic design and mixed media collage. The focus of this course is an exploration of different techniques found in the visual arts. Regardless of a student's perceived level of artistic ability, they will find success.

### VA2009 Printmaking

.5 Credit  
College Prep

### MU1822 Band

1 Credit  
College Prep

This performance-based instrumental music group is for students interested in continuing to play a band instrument and perform in public. Students are required to purchase/rent an instrument. Students will participate in pep band and concert band performances. A wide variety of music for winds and percussion will be studied and performed throughout the year. Attending all full band performances is a course requirement.

### MU1812 Chorus

1 Credit  
College Prep

### AR4002 ECE Popular Music & Diversity in Society

1 Credit  
ECE

An introduction to popular music and diversity in America: jazz, blues, Top-40 pop, rock, hip-hop, and other genres. Musicians and their music studied in the context of twentieth-century and contemporary American society, emphasizing issues of race, gender, class, and resistance.

### TH1141 Musical Theater Production

.5 Credit  
College Prep

Music Theater provides the opportunity for students to perform in class and on the stage so that students may learn creative expression while gaining an introductory knowledge of the history of musical theater and performance traditions. Students will also design and create their own costumes, set structures and various stage make-up plots with and without special effects.

### TE1001 Cloud Based Computing

.5 Credit  
College Prep

What is the cloud? Where is the cloud? In this course students will learn all about cloud based technologies such as Google apps-Google drive, Google docs, Google hangout, Schoology, and other Internet based data storage sites. Students will explore the topics of Digital Electronics, Communications Technology, and Multimedia Production using computer software, web applications, 3D printers, wide format printers and iMac computers.

### GH1104 Introduction to Photography

.5 Credit  
College Prep

This course covers basic concepts and practice of digital photography, including understanding and use of the camera, lenses, and other basic photographic equipment. The course will address aesthetic principles as they relate to composition, space, exposure, light and color.

### CW2014 Media, Recording, and Production

.5 Credit  
College Prep

This course provides multimedia instruction to create content for convergent media audiences. This course teaches principal skills to prepare students to publish in audio, photo, print, video and web converged platforms.

### AR6071/AR6171 Graphic Design I/II

.5 Credit  
College Prep

This class is designed for students who enjoy creating art and using technology. We will create art through the use of sketching (pencil on paper), digital photography, Photoshop and Illustrator type applications. Students will create a portfolio of art work suitable for submission to college. Students will further their skills in Graphic Design II.

### Proposed Courses for 2023-2024 School Year:

\*Please note that the course(s) below are subject to curriculum approval.

Students in the Yearbook class are the leaders and decision -makers of the yearbook for CompSci. In Yearbook class students will complete the myriad of tasks to create a quality yearbook that reflects the pictorial history of the activities for the present school year.

### **Cluster 3: World Language**

	<b>Honors</b>	<b>ECE</b>
Grade 9	Spanish 1 Spanish 2 Spanish for Heritage Speakers 1	--
Grade 10	Spanish 2 Spanish 3 Spanish for Heritage Speakers 1 Spanish for Heritage Speakers 2	--
Grade 11	Spanish 3 Spanish 4	ECE Spanish Introduction to Latin American and the Caribbean.*
Grade 12	Spanish 4 Spanish 5	ECE Spanish Introduction to Latin American and the Caribbean.*

\*Proposed new course for 23-24 school year.

#### **SP5012 Spanish I**

1 Credit  
Honors

Students enrolled in this beginning course of study participate in thematic units that promote effective communication and improved oral and written proficiencies through a variety of instructional strategies and authentic assessments. Students become effective communicators in the present tense through purposeful listening, speaking, reading, or writing activities. Students participate in authentic exchanges of information for a real purpose between people, such as discussing pastimes, personality traits, school life, ordering food in a restaurant, and stating the locations of people, places, and objects. Students experience the history, geography, and cultural perspectives of Spain, Central and South America.

#### **SP5112 Spanish II**

1 Credit  
Honors

Prerequisites: Spanish I or teacher recommendation

Students enrolled in this course of study continue to participate in thematic units that promote effective communication and improved oral and written proficiencies through a variety of instructional activities and authentic assessments. Students continue to build upon their effective communication skills through purposeful listening, speaking, reading and writing activities. Students participate in authentic exchanges of information for a real purpose between people, such as describing classroom objects, extracurricular activities, and special events, and inquiring and giving directions. Additional authentic thematic units include discussing emergencies and injuries. Students communicate in the past and present tenses, and they experience the history, geography, and cultural perspectives of Spain. Literature in the form of poetry, fables and short stories is introduced.

### SP5212 Spanish III

1 Credit  
Honors

Prerequisites: Spanish II

The Spanish III course is designed to provide a review of the fundamentals covered in Spanish I and II followed by further development of their reading, writing, listening and speaking abilities through a variety of activities. Much of the class is conducted in Spanish and students are expected to take many risks with the language. The focus of the class shifts from vocabulary expansion and the basics of grammar to building a more in depth understanding of how these tools are used in everyday communication and actually putting them into practice in real life situations. Students are introduced to advanced aspects of the language such as command forms, distinguishing between the preterite and imperfect, the future tense and situational use of the subjunctive. Students are exposed to many of these aspects in Spanish I and II, however this course works to give students more practice using these skills in parallel with one another to produce fluid language. Students will practice and develop their skills by reading short stories, articles and dialogues; writing stories, compositions, and longer dialogues which employ learned grammatical concepts and vocabulary; reciting dialogues, speeches, stories, and poetry. They will continue to explore Spanish culture in an increasingly thoughtful manner looking at the relationships of Spanish speaking countries with the United States as well as understand the history behind these relationships.

### SP5312 Spanish IV

1 Credit  
Honors

Prerequisites: Spanish III

Spanish IV is for students who want to become proficient in the language. The class is taught exclusively in Spanish and participation is a necessity. The course will review tenses previously taught in levels 1-3: present, preterite, commands, imperfect, future, conditional and subjunctive. This class will deepen the understanding of all tenses as well expand higher level vocabulary needed to express thoughts, emotions and ideas in a meaningful manner. Students will speak exclusively in Spanish, review and refine grammatical skills in Spanish through reading and writing, read and discuss original work in Spanish (short stories, novels, newspapers, etc.) and continue to deepen the appreciation of the Spanish speaking culture and people outside of and within the United States.

### SP5401 Spanish V

1 Credit  
College Prep

Prerequisites: Spanish IV

Students enrolled in this advanced course of study will continue to participate in the thematic units that promote communication and improved oral and written proficiencies through a variety of instructional activities and authentic assessments. Students continue to refine their effective communication skills through powerful listening, speaking, reading and writing activities. Students participate in advanced, authentic exchanges of information for a real purpose between people, helping them to connect their learning to the community in which they live and to see the relationship between language, community, and career. Through selected literary pieces from various countries based on themes such as heroism, friendship, myths and humanistic perspectives, students augment and refine their proficient skills in vocabulary and grammatical accuracy as they communicate. Cultural perspectives from a variety of Spanish-speaking countries are thematically woven into the units of study. The course is conducted in Spanish.

### WL3503 Spanish for Heritage Speakers I

1 Credit  
Honors

This course is designed to continue to develop and challenge students' ability in speaking, reading, writing, listening, and cultural understanding in Spanish. Spanish-speaking students are able to study Spanish formally in an academic and creative setting in the same way native English-speaking students study English language arts. Students will gain confidence using Spanish to express their own thoughts on social and academic themes, interact with other speakers of the language, understand oral and written messages, make oral and written presentations, and reflect on language variation. Students will be able to understand the material presented on a variety of topics related to contemporary events and issues in Hispanic communities.

### WL3504 Spanish for Heritage Speakers II

1 Credit  
Honors

This course is the continuation of Spanish for Heritage Speakers I. Students will build upon their current language skills to develop language and cultural literacy, as well as their own creative expression following a language arts approach. This course will continue to guide students in developing a deeper appreciation for their own cultural heritage while recognizing the diversity within the Latino community.

Reading, both as a class and independently, is a core component of the course, including newspaper articles, short stories, and novels. Students work to further develop their Spanish literacy and academic language skills, to learn more about their language and cultural heritage, and to critically view and evaluate media resources and websites.

### WL 3502 Spanish Language and Culture

1 Credit  
Honors

Students will explore Latinx, Hispanic, and Spanish cultures around the globe. They will learn about various Hispanic perspectives, traditions, and communities around the United States and the world. Students will utilize an array of authentic media (films, documentaries, docuseries, YouTube, etc.) and current texts to learn about Hispanic culture, both past and present. Students will become experts in making comparisons, contrasts, and connections to their own community, as well. *Please note: this class is a world language elective, and does not count towards the world language graduation requirement.*

### Proposed Courses for 2023-2024 School Year:

\*Please note that the course(s) below are subject to curriculum approval.

8039: ECE LLAS 1190: Introduction to Latin America and the Caribbean

1 Credit  
ECE

It is an interdisciplinary gateway course designed to introduce students to the issues and themes that have shaped Latin American society and Culture. The course provides a portrait of a region in broad strokes and can be taught in Spanish or in English in language classrooms or in social studies/history classrooms. The course includes considerations of geography, indigenous peoples, colonization, nation formation and migration; society, politics, and economics; the cultures of contemporary Latin America and their place in today's world. In addition, the course considers the hemispheric influence of the United States in Latin America and the region's perspective on this relationship. *Please note: this class is being proposed for offering and has not yet been approved for the 2023-24 school year.*



## Cluster 4: Fitness, Health, Safety

	Required - CP	Electives
Grade 9	Physical Education Health I	--
Grade 10	Physical Education 10 Health II	--
Grade 11	—	Physical Education HS Obstacles & Adventures
Grade 12	—	

\*Courses are recommended in this sequence, but starting in the sophomore year courses can be taken in any sequence and may also be doubled up.

### P6L2 Physical Education

.5 Credit  
College Prep

Through this course of study students will be empowered to make choices, meet challenges, and develop positive behaviors in fitness, wellness and movement activity for a lifetime. Topics that will be covered include: adventure education, lifetime activity, fitness and wellness, skill development, and rhythm, movement, and dance.

### PE102 Physical Education 10

.5 Credit  
College Prep

Through this course of study students will be empowered to make choices, meet challenges, and develop positive behaviors in fitness, wellness and movement activity for a lifetime. Topics that will be covered include: adventure education, lifetime activity, fitness and wellness, skill development, and rhythm, movement, and dance.

### PE2001 Physical Education HS

.5 Credit  
College Prep

Through this course of study students will be empowered to make choices, meet challenges, and develop positive behaviors in fitness, wellness and movement activity for a lifetime. Topics that will be covered include: adventure education, lifetime activity, fitness and wellness, skill development, and rhythm, movement, and dance.

### HE1001 Health I

.5 Credit  
College Prep

Health is designed to enable students to be responsible, respectful, informed and capable when making decisions which would impact the well-being of themselves and others. Topics that will be covered include: nutrition, diseases and disorders, mental and emotional health, drugs, alcohol, tobacco, growth and development, and healthy and safe relationships.

## HE2500 Health II

.5 Credit  
College Prep

New health based course to satisfy new state graduation requirements for Class of 2023+

## PE3001 Obstacles and Adventure

.5 Credit  
College Prep

Students who take this course will partake in adventures that generate excitement and motivation to be physically active for life. Activities will include obstacle courses, climbing walls, self-defense training, outdoor sports and fitness programs that support participation in these types of activities. Students will set personal best goals, improve their confidence in their physical abilities while contributing to a positive social experience.

## **Cluster 5: Capstone / Internship**

### **CP4571 Capstone**

1 Credit  
College Prep

The Capstone Project portion of this course is designed to be a cumulative experience of a student's high school years that demonstrates in-depth learning in a variety of ways. Students have the opportunity to use their personal interests, abilities, skills and special talents to create and present authentic projects. These projects are research-based and offer students the chance to demonstrate their knowledge and understanding of their chosen topic and to demonstrate the essential skills for a student graduating from high school. The Capstone Project involves each student choosing a research topic and research question, writing a proposal, extensive research of the chosen topic, designing and bringing the topic to fruition and publicly and formally presenting the findings to a panel of faculty, community members and students.

### **Z104 Internship**

.5 Credit  
College Prep

Internship is a class opportunity afforded to students who pass their CCP First Year Experience Class and Capstone class. In this course, students have the opportunity to participate in an unpaid internship or obtain a job to gain real world experience. There are also options available to students at school such as a Writing Lab Internship.