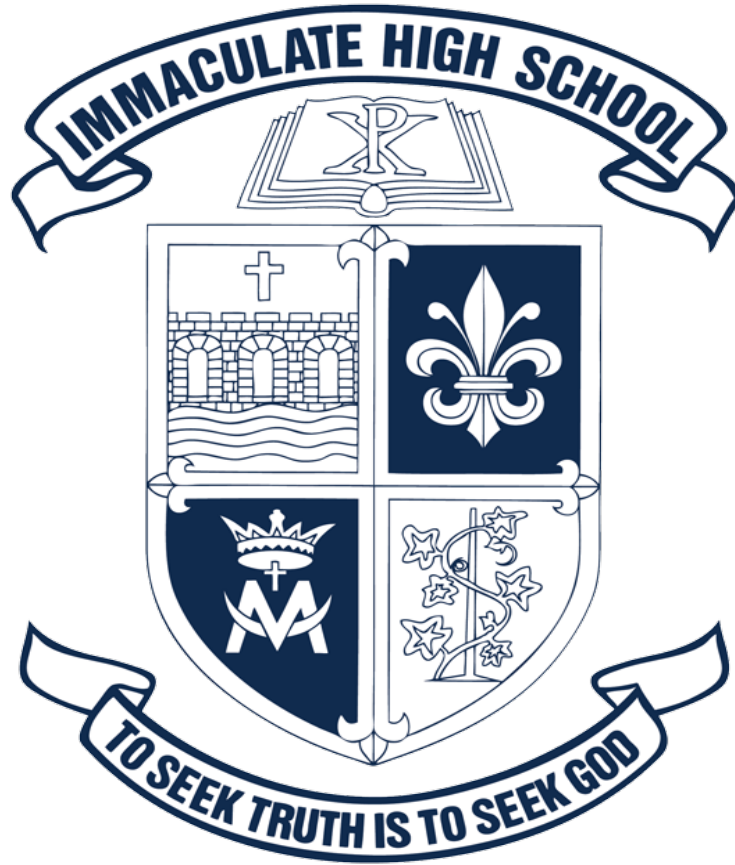


2022-23 PROGRAMS OF STUDY



Requirements for Immaculate High School Diploma

Students are required to earn a minimum of 25 credits to graduate from Immaculate High School. The charts below reflect the minimum core course requirements. Please consult with your school counselor for the recommended distribution of courses and credits most suited to your educational and career goals.

Content Area	Years	Credits
Theology	4	4.0
English	4	4.0
Mathematics	4	4.0
Science	3	3.0
Social Studies	3	3.0
World Language	2	2.0
Fine Arts	1	1.0
Physical Education	1	1.0
Career and Technology ONE course in Business OR Technology OR a 3 rd course in World Language	1	1.0
Senior Seminar (Health / Personal Finance)	1	1.0
Community Service (25 hours/year)	4	1.0
Total Credits for Graduation		25

2022 - 23 CURRICULUM PATHWAY (SAMPLE GUIDE)

Subject Area	Freshman	Sophomore	Junior	Senior
English (4 Credits)	English I (CP/H)	English II (CP/H)	English III (CP/H) AP English Language & Composition	Text & Context/CC (CP) Sci Fi & Fantasy/CC (CP) Public Speaking/CC (CP) English IV (H) AP English Literature & Composition
Mathematics (4 Credits)	Foundations of Algebra (CP) Algebra I (CP/H) Geometry (CP/H)	Algebra I (CP) Geometry (CP/H) Algebra II (CP/H)	Geometry (CP) Algebra II (CP/H) Precalculus (CP/H)	Algebra II (CP) Precalculus Essentials (CP) Precalculus (CP/H) Intro to Stats (CP) Calculus (H) AP Calculus/ AB ECE
Science (3 Credits)	Biology (CP/H)	Intro to Biomedical Science (CP) Chemistry (CP/H)	Forensic Science (CP) Human Anatomy & Physiology (CP/H) Physics (CP/H) Adv. Health Care & Bioscience/CAN Clinical (H) AP Biology/UCONN ECE AP Chemistry AP Physics 1/UCONN 1201Q ECE AP Physics 2/UCONN 1202Q ECE Environmental Studies (CP) Introduction to Sports Medicine (CP) .5	
Social Studies (3 Credits)	Modern World History (CP/H)	American Government (CP/H) & Principles of Economics (CP/H) AP US Government & Politics	US History Since 1877 (CP/H) AP US History/UCONN ECE	No Required Senior Year SS Course See Electives Below
		Trial Law (CP) .5 Criminal Justice (CP) .5 African American/Black & Puerto Rican/Latino Studies AP US History/UCONN ECE AP US Government & Politics AP Psychology AP Principles of Macroeconomics/UCONN ECE AP European History/UCONN ECE		
AP Modern World History				

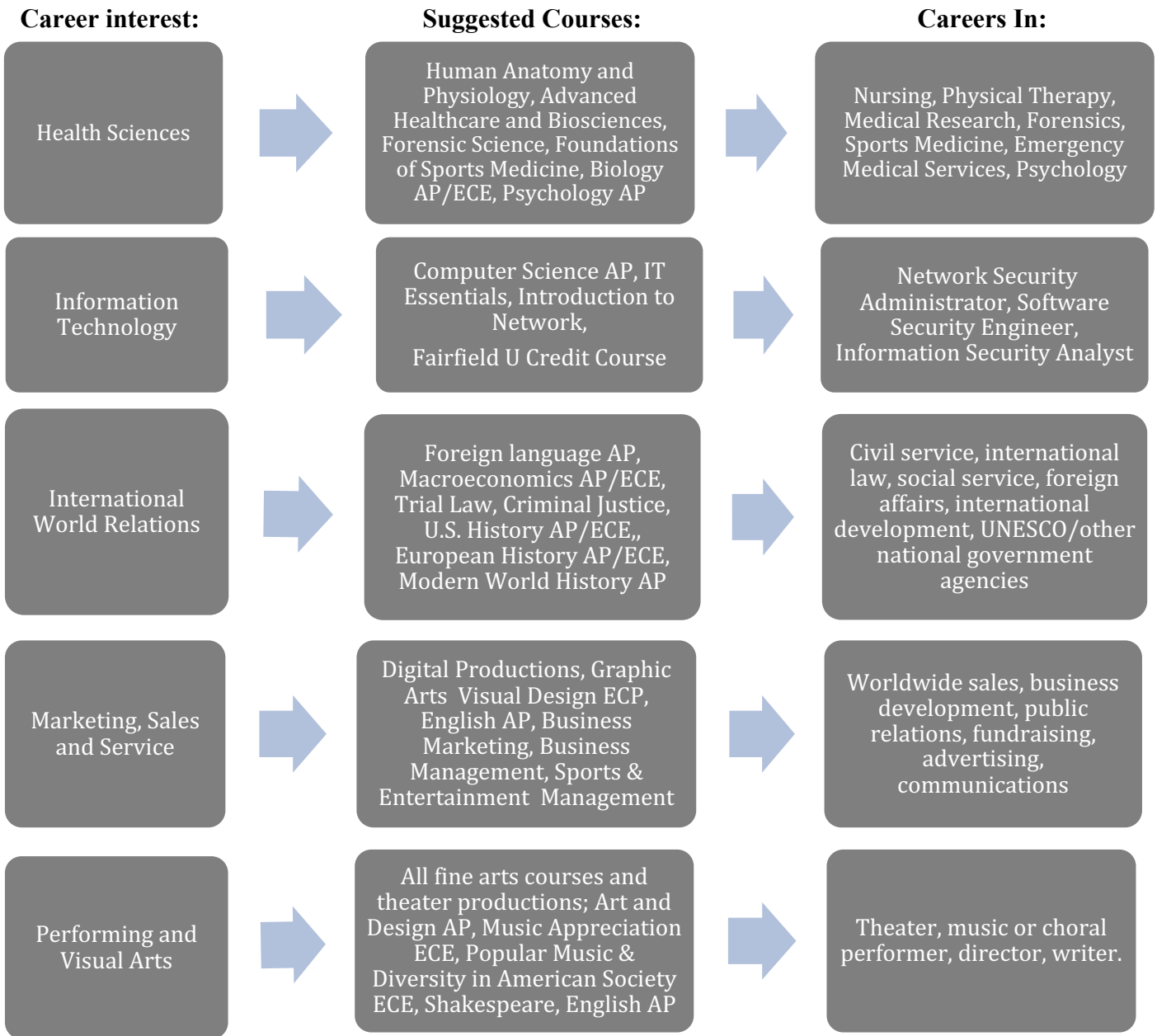
Subject Area	Freshman	Sophomore	Junior	Senior	
Theology (3 Credits)	Religion I (CP)	Religion II (CP)	Religion III (CP)	Christian Lifestyle (CP) .5 & Social Teachings of the Catholic Church (CP) .5 <i>or</i> World Religions (CP) .5 Christian Lifestyle (H) .5 & Mariology (H) .5 <i>or</i> Current Catholic Culture (H) .5	
World Language (2 Credits)	Spanish I (CP/H)	Spanish II (CP/H)	Spanish III (H)	Spanish IV (H) AP Spanish Virtual	
			Spanish for the Professional (CP)		
	French I (CP)	French II (CP/H)	French III (H)	French IV (H)	
	Chinese I (CP)	Chinese II (H)	Chinese III (H)	Chinese IV (H)	
	American Sign Language I (CP)	American Sign Language II (CP)	American Sign Language III (H)	American Sign Language IV (H)	
Fine Arts (1 Credit)	Introduction to Art (CP)	3D Sculpture & Design (CP) Drawing & Painting (CP)		AP Studio 2D Art & Design	
			Portfolio Development & Individual Study (H)		
	Graphic Design I (CP)	Graphic Design II (H)	Visual Design (ECP)	Digital Graphic Design IV (H)	
	Introduction to Engineering Design for Art (H)				
	Concert Band (CP) Beginning Piano (CP) Guitar Ensemble (CP)	Concert Band (H) Piano II (CP) Guitar Ensemble (H)			
	Mixed Chorus (CP)	Concert Chorus	Treble Chorus (CP)	Concert Choir (H)	
		Podcast 101 (CP) Music Appreciation UCONN ECE			
			Musical Theater (H) Music Theory and Digital Composition (H)		

Subject Area	Freshman	Sophomore	Junior	Senior
Career & Technology (1 Credit)	Principles of Information Technology (CP) IT Essentials (CP)	AP Computer Science Introduction to Networks (H)		
	Introduction to Engineering Design (H)	Prin. of Engineering (H)	Civil Engineering & Architecture (H)	
	Graphic Design for Business I (CP)	Graphic Design for Business II (H)	Graphic Design for Business ECP	Graphic Design for Business IV (H)
		Introduction to Business and Marketing (CP) Fundamentals of Accounting (H)		
			Sports and Entertainment Management (CP)	
Physical Education (1 Credit)	Physical Education (CP)	Physical Education (CP)		
Senior Seminar (1 Credit)				Personal Finance (CP) .5 Health and Wellness (CP) .5
Community Service 100 Hours (1 Credit)	Community Service 25 hours .25	Community Service 25 hours .25	Community Service 25 hours .25	Community Service 25 hours .25

COLLEGE AND CAREER PATH REFERENCE CHART



COLLEGE AND CAREER PATH REFERENCE CHART



COURSE DESCRIPTIONS AND LEVELS

Immaculate High School course offerings are designed to provide an opportunity for students to pursue their interests as well as meet the requirements established by the Diocese of Bridgeport and the State of Connecticut. The process for selecting courses includes students reviewing the course guide, registering electronically and meeting with a counselor. Registration for courses should represent a firm commitment to enrollment in courses for the following year. However, a student may request a program change in June on a date specified by the Counseling Department.

The following are accepted reason for schedule change consideration after the specified June deadline:

- successful completion of an approved summer school course
- discovery of a clerical error or,
- a course has been canceled due to insufficient enrollment.

Course Levels

All course levels are created to provide an opportunity for every student to be successful as they prepare for college and beyond. We develop the courses with the intent to support learning needs and abilities so that students may progress to more challenging coursework during their four years at Immaculate. Students matriculate each school year with the opportunity for being engaged in new academically challenging courses.

College Preparatory Courses

The College Preparatory program is designed to offer stringent scholastic requirements for entry into colleges and universities. Courses include a rigorous quantity of classwork, homework, and expectations to achieve and meet the content skills expected by diverse colleges and universities. This level offers extended student support to master content, organizational and study skills.

Honors College Preparatory Courses

The rigor of a regular college preparatory course is extended and demands that a student be independent and have an ability to have more time for additional writing assignments, homework and classwork. The GPA weight per course is +0.3.

AP and College Courses

This level of coursework has a syllabus approved by the College Board and affiliated colleges. Students must meet stringent prerequisites and are expected to engage in a college-level instruction model where the teacher facilitates instruction, and the student is independent. Students must take the required AP or ECE exam as well as the course exam. The GPA weight for this level is +0.7. Exemption from the course exam is offered to seniors who have achieved a 90% in the course. *All AP and college courses require an exam fee.*

Student Ranking

Immaculate High School adheres to the common practice of internal ranking of students beginning at the end of five semesters to those colleges who request such information for scholarships/other, for military school requests and for top ten student announcements in June. Percentile ranking only will appear on student transcripts. It is at the discretion of the school administration to determine the process of a top ten graduation speaker.

Virtual Course Program

Immaculate High School offers courses in collaboration with The Virtual High School, a nonprofit organization based in Maynard, Massachusetts, which serves as a portal through which schools and teachers throughout the world offer online

courses. Our partnership with VHS allows us to expand our course offerings to provide students with the most challenging and extensive academic curriculum possible taught by certified teachers in accredited schools.

VIRTUAL COURSE OVERVIEW

Immaculate students have the opportunity to participate in online courses not offered at I.H.S. through Virtual High School (VHS). Courses are open to students who opt to enroll in a virtual world language program and to seniors who have completed Immaculate High's program and want to take advanced classes that are not available. Teacher and administration endorsement required for senior courses.

Prerequisites

The ability to learn independently and to make and keep commitments and submit assignments on time are essential to the success of a VHS student. Students enrolled in an online course must demonstrate strong time management skills, disciplined work habits, and good problem-solving skills.

Requirements

- An interview with the Assistant Principal for Curriculum, Instruction and Assessments.
- Approval to enroll in an online VHS class will be made by the Assistant Principal.
- Each course offered through VHS has its own set of requirements, learning objectives and expectations.
- Each student is required to comply with the individual VHS teacher's expectations. The VHS teacher is an online teacher employed by VHS.
- Students selected for this program will participate in an online orientation in order to become familiar with the VHS learning environment.
- Each participant will be scheduled to spend the equivalent of a full class period each during school hours to work on his/her VHS course.
- It is understood that students will also need to complete tests, quizzes, homework, outside reading and projects assigned by the VHS teacher.
- Students must be willing to spend eight (8) to ten (10) hours per week on homework and independent assignments in a VHS course.
- Students are required to secure access to an online computer outside the scheduled class time (either at home or at school) in order to complete assignments and projects.
- Students who enroll in an AP course through VHS must follow the AP policies established by IHS and VHS and are required to take the AP examination in May.
- All assignments are completed online.
- Course grades virtual courses are posted on student report cards, transcripts and factor into honor roll status and cumulative GPA. A passing grade of 65 is required.

ENGLISH

0111 ENGLISH I CP

1 Credit

This two-semester course is an introduction to basic concepts of literature and composition. Students read, analyze, and evaluate various genres of literature including short story, drama, novel, essays, poetry, biography, and autobiography. Text such as; *Fahrenheit 451* by Ray Bradbury, *Romeo and Juliet* by William Shakespeare, and Harper Lee's *To Kill a Mockingbird* will be studied. Review of basic grammar, unity, and coherence in writing is stressed. Other topics include study skills, research skills, and vocabulary development. Additionally, there will be training in standardized test-taking strategies.

0118 FOUNDATIONS OF ENGLISH LANGUAGE ARTS CP

1 Credit

Prerequisite: HSPT Score and/or Academic Review Committee Recommendation (Freshmen Elective)

This two-semester course is offered concurrently with English I CP to assist students with additional critical thinking skills in reading, writing, listening, and speaking. Students are challenged to progress in all areas necessary for effective oral and written communication. Review of basic grammar, unity, and coherence in writing is stressed. Other topics include study skills, research skills, and vocabulary development. Additionally, there will be training in standardized test-taking strategies.

0112 ENGLISH I H

1 Credit

Prerequisite: HSPT Score and/or Academic Review Committee Recommendation

This two-semester course is an introduction to basic concepts of literature and composition. Students read, analyze, and evaluate various genres of literature including short story, drama, novel, essays, poetry, biography, and autobiography. In addition, this level course focuses on close-reading strategies as well as written and oral communication. Quarterly independent reading is required throughout the year. Students have multiple opportunities throughout the year for creative writing and presentations based upon their reading. Additionally, there will be training in standardized test-taking strategies.

0121 ENGLISH II CP

1 Credit

Prerequisite: Successful completion of English I

This two-semester course is a logical development of the close reading and writing skills and critical- thinking techniques acquired in English I. Students read, analyze and apply critical thinking reading skills for coherent oral presentations, essay and journal writing. In addition to strengthening grammar, writing, reading and vocabulary development, the mechanics of the research paper will be covered; students will be required to produce a paper of moderate length. Additionally, there will be training in standardized test-taking strategies. Students read and analyze literature such as; William Shakespeare's *Macbeth*, *A Christmas Carol* by Charles Dickens, and *Antigone* by Sophocles.

0122 ENGLISH II H

1 Credit

Prerequisite: 83 in English I H or 93 in English I CP

English II Honors is an accelerated two-semester course that consists of in-depth analyses of challenging classical and modern readings. Students examine textual and supplementary examples of short story, poetry, drama, non-fiction, novels, and medieval legends. Expository writing and the writing process are emphasized, complemented by extensive vocabulary study. The students read independently and produce several small papers and one comprehensive research paper. Critical thinking skills are emphasized in preparation for the PSAT, ACT, and SAT. Additionally, there will be training in standardized test-taking strategies.

0131 ENGLISH III CP: AMERICAN LITERATURE**1 Credit****Prerequisite: Successful completion of English II CP**

English III is a two-semester course that surveys the tradition of American literature. Literary works such as; *The Crucible* by Arthur Miller, F. Scott Fitzgerald's *The Great Gatsby*, *Just Mercy* by Bryan Stevenson are chosen to reflect the evolution of American thought within a historical setting. In addition to selections from the text, several novels/essays, short stories, poetry, non-fiction and drama will be analyzed as representations of American thought and literary movements. Reading selections are analyzed as representative pieces of American thought and literary movements from 1620 into the 1900s. Students will be required to produce a research paper and complete all outside assigned readings. Additionally, there will be training in standardized test-taking strategies.

0132 ENGLISH III H: AMERICAN LITERATURE H**1 Credit****Prerequisite: 83 in English II H or 93 in English II CP**

English III Honors is a two-semester course that introduces literary works that reflect the evolution of American thought within a historical setting from the 17th to the 20th centuries. In addition to selections from the text, several novels/essays will be analyzed as representations of American thought and literary movements. Furthermore, the student will examine the role of the individual in American society, his search for identity, and his pursuit of the American Dream. The concerns of modern man as reflected in the literature of each era will be the focus of the short stories, poetry, non-fiction, drama, and novels for this course. Students will be required to do independent reading, write several papers, and deliver oral presentations. Additionally, there will be training in standardized test-taking strategies.

0133 LANGUAGE AND COMPOSITION AP**1 Credit****Prerequisite: 85 in English II H or 95 in English II CP and/or Academic Review Committee Recommendation**

In the two-semester AP English Language and Composition class, student reading and writing experiences focus on diversified non-fiction prose. Teachers ask that students become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. Writing tasks give students the practice necessary to make them aware, flexible writers who can compose in different modes and for different purposes. In developing sophisticated reading and writing skills, students explore and describe how language works. They learn to observe and analyze diction and syntax that create subtle effects on language. AP students learn to describe language through discussion of rhetorical strategies and terms, demonstrating a working knowledge of parts of speech, structural patterns, awareness of connotation and shades of meaning in context. Attention will be focused on models from major American literature selections. Workshops will be used to develop additional skills required on the AP exam and to provide students with a more intensive writing experience. Students enrolled in this course are required to take the AP Language & Composition exam as well as course exam.

040 TEXT AND CONTEXTS / COLLEGIATE COMPOSITION CP**1 Credit****Prerequisite: Successful completion of English III or English III H**

Students will compare and contrast the elements and techniques of both literary and cinematic form, as well as study the challenges of adapting a work of fiction for film. The course focuses on written as well as visual literacy and students will develop critical criteria to judge the ultimate success of an artistic creation and its effect on the reader or viewer. Reading is assigned regularly, and students are expected to produce a comprehensive final project and presentation on a book of choice with a film companion. Collegiate Composition English is designed to improve students' writing ability, as it is necessary for success in college and a future career. The coursework focuses on active reading and analytic writing, with an emphasis on organization, unity, coherence, and development. Students will also learn how to reflect on their writing and revise their errors in grammar, mechanics, and tone. Finally, this course will provide students with the study skills necessary for college success.

0147 PUBLIC SPEAKING / COLLEGIATE COMPOSITION CP
Prerequisite: Successful completion of English III or English III H

1 Credit

This one-semester course offers an overview of the process of communication and provides a variety of public speaking experiences. Students will develop critical speaking and listening skills. Required speeches are the self-introduction speech, the informative speech, the persuasive speech, and the speech for a special occasion. Speech provides the study of and practice in the basic principles and techniques of effective oral communication. This course includes instruction in adapting speech to different audiences and purposes. Students are given opportunities to express subject matter knowledge and content through creative, analytical, and expository writing, as well as reading a variety of literary genres related to course content and speaking assignments. Collegiate Composition English is designed to improve students' writing ability, as it is necessary for success in college and a future career. The coursework focuses on active reading and analytic writing, with an emphasis on organization, unity, coherence, and development. Students will also learn how to reflect on their writing and revise their errors in grammar, mechanics, and tone. Finally, this course will provide students with the study skills necessary for college success.

0148 - SCI-FI/FANTASY LIT./COLLEGIATE COMPOSITION CP
Prerequisite: Successful completion of English III CP or English III H

1 Credit

Students in this two-semester course will develop an understanding and appreciation of the genres of science fiction and fantasy. Students will read a wide variety of works and will be guided to make thematic and topical connections between texts and time periods. Students will also analyze the literary and structural elements specific to the science fiction and fantasy genres and be asked to expand their thinking about science and its connection to humanity, society, and its role in our past and future. Collegiate Composition English is designed to improve students' writing ability, as it is necessary for success in college and a future career. The coursework focuses on active reading and analytic writing, with an emphasis on organization, unity, coherence, and development. Students will also learn how to reflect on their writing and revise their errors in grammar, mechanics, and tone. Finally, this course will provide students with the study skills necessary for college success.

0142 ENGLISH IV H: BRITISH LIT./ADV. COLLEGIATE COMP. H
Prerequisite: 83 in English III H or 93 in English III CP

1 Credit

English IV Honors: British Literature and Advanced Collegiate Composition is intended for students of exceptional reading and writing ability. The course surveys English literature in the Anglo-Saxon, Medieval, Renaissance, and Elizabethan periods, and the 17th, 18th, and Romantic 20th centuries, where students will study literary genres including English poetry, drama, the essay, short story, and novel. In addition to outside readings of critical analysis and comparative studies, independent study, research, and expository papers are required. Advanced Collegiate Composition English is designed to improve students' writing ability, as it is necessary for success in college and a future career. The coursework focuses on active reading and analytic writing, with an emphasis on organization, unity, coherence, and development. Students will also learn how to reflect on their writing and revise their errors in grammar, mechanics, and tone. Finally, this course will provide students with the study skills necessary for college success.

0143 - ENGLISH LITERATURE AP (Senior AP Class)
Prerequisite: 85 in English III H or 95 in English III CP or 83 in Language and Composition AP and/or Academic Review Committee Recommendation

1 Credit

Students are required to take the Literature & Composition AP exam as well as course exam. Literature and Composition AP is a college-level course for qualified, highly motivated seniors. The course includes representative works in several genres including novel, short story, poetry, drama, and essay. Students receive a list of required works to be read during the summer. In addition to close analysis of the representative works, frequent writing assignments develop the student's

style and skill. Workshops will be used to develop additional skills required on the AP exam and to provide students with a more intensive writing experience.

0117 ENGLISH FUNDAMENTALS CP

1 Credit

This two-semester course focuses on increasing listening and reading skills and strategies with an intensive focus on vocabulary development. Students will practice writing in English in a variety of contexts. At the end of the class, students should be able to write an evidence-based essay with few grammatical and spelling errors. Students will also participate in a discussion forum about a novel they read together in this class. Additionally, there will be training in standardized test-taking strategies.

MATH

0251 FOUNDATIONS OF ALGEBRA CP

1 Credit

Prerequisite: Placement Test Score and/or Academic Review Committee Recommendation

This two-semester course is offered five days a week to master basic algebraic skills in solving first-degree equations, word problems using first-degree equations, solving and graphing first-degree inequalities, word problems using first-degree inequalities, graphing linear functions in two variables, solving linear systems in two variables by graphing, substitution and linear combination, word problems using linear systems in two variables, operations with radicals, operations with polynomials, factoring polynomials, simplifying rational expressions, operations with rational expressions, solving quadratic equations over the rational numbers by factoring and quadratic formula, and solving word problems using quadratic equations. Additionally, there will be training in standardized test-taking strategies.

0211 ALGEBRA I CP

1 Credit

Prerequisite: Placement Test Score and/or Academic Review Committee Recommendation

This two-semester course builds on basic algebraic skills where students will master solving first-degree equations, word problems using first-degree equations, solving and graphing first-degree inequalities, word problems using first-degree inequalities, graphing linear functions in two variables, solving linear systems in two variables by graphing, substitution and linear combination, word problems using linear systems in two variables, operations with radicals, operations with polynomials, factoring polynomials, simplifying rational expressions, operations with rational expressions, solving quadratic equations over the rational numbers by factoring and quadratic formula, and solving word problems using quadratic equations. Additionally, there will be training in standardized test-taking strategies.

0212 ALGEBRA I H (Honors)

1 Credit

Prerequisite: Placement Test Score and/or Academic Review Committee Recommendation

This two-semester course requires an in-depth study of all the topics covered in the Algebra I Course with an increase in pace and rigor and offers additional topics such as; linear, quadratic and exponential functions, solving quadratics over the real numbers by completing the square, solving quadratic functions over the real numbers by the quadratic formula. Practical applications of real-world problems will be incorporated throughout this course. Additionally, there will be training in standardized test-taking strategies.

0221 GEOMETRY CP

1 Credit

Prerequisite: Successful completion of Algebra I or 77 in Foundations of Algebra and/or Academic Review Committee Recommendation

This two-semester course, sequential to Algebra I, is an integration of plane geometry with arithmetic and algebra. Syllabus includes all the basic concepts of geometry, such as points, lines, planes, angles, triangles, quadrilaterals, polygons, circles, congruence, similarity, formal and indirect proofs, constructions, areas, and volumes of solids, translations and trigonometric ratios of right triangles. Additionally, there will be training in standardized test-taking strategies.

0222 GEOMETRY H (Honors)

1 Credit

Prerequisite: 83 in Algebra I H or 93 in Algebra I CP and/or Academic Review Committee Recommendation

This two-semester course, sequential to Algebra I (Honors), requires an in-depth study of all topics covered in Geometry with an increase in pace and rigor and offers additional topics such as; elementary logic, 3-dimensional concepts, transformations, similarity in polygons, parallel lines and planes, coordinate geometry, inequalities in geometry,

trigonometric ratios of right angles, geometric probability, and applications of real-world problems relating to each topic studied. Additionally, there will be training in standardized test-taking strategies.

0231 ALGEBRA II CP

1 Credit

Prerequisite: Successful completion of Geometry CP

This two-semester course, sequential to Geometry, offers a continued study of the skills and concepts of algebra: the solution of first- and second-degree equations; linear systems in two variables; quadratic systems; rational equations and expressions; irrational, imaginary and complex numbers; functions and graphs, an introduction to analytic geometry through the conic sections; exponential and logarithmic functions; and applications of real-world problems. This course is integrated with a TI-84 + calculator. Additionally, there will be training in standardized test-taking strategies.

0232 ALGEBRA II H

1 Credit

Prerequisite: 83 in Geometry H or 93 in Geometry CP and/or Academic Review Committee Recommendation

This two-semester course is sequential to Geometry, and requires an in-depth study of all topics covered in the CP Algebra II course with an increase in pace and rigor and offers additional topics such as: polynomial equations and functions; rational equations and functions; radical equations and functions; piecewise functions; operations with matrices; analytic geometry; trigonometry of the right triangle and the unit circle; graphing sine and cosine and applications of real-world problems relating to each topic studied. This course is integrated with a TI-84 + calculator. Additionally, there will be training in standardized test-taking strategies.

0233 PRECALCULUS ESSENTIALS CP

1 Credit

Prerequisite: Successful completion of Algebra II

This two-semester course is a functions approach to algebra and trigonometry covering: equations and inequalities, functions and graphs, system of equations and inequalities, determinants, exponential and logarithmic functions with applications, trigonometry with both an analytic and triangular emphasis, complex numbers including graphical representation, and an introduction to sequence, series, and probability. This course is integrated with a TI-84 + calculator. Additionally, there will be training in standardized test-taking strategies.

0246 PRECALCULUS CP

1 Credit

Prerequisite: 83 in Algebra II or successful completion of Algebra II H

This two-semester course, uses a functions approach to advanced algebra and trigonometry, covers the following topics: factoring, completing the square, discriminate, quadratic formula, equations of lines, polynomial and rational functions, partial fraction decomposition, linear and nonlinear systems of equations, linear programming, exponential and logarithmic functions, matrices and determinants. Additional emphasis is given to the trigonometric functions including the unit circle, graphs, identities, and inverse functions and their graphs. This course is integrated with the TI-84+ calculator. Additionally, there will be training in standardized test-taking strategies.

0242 PRECALCULUS H

1 Credit

Prerequisite: 83 in Algebra II H or 93 in Algebra II CP and/or Academic Review Committee Recommendation

This two-semester course is sequential to Algebra II (H), and provides an in-depth study of advanced algebra and trigonometry with an increase in pace and rigor and covers the following topics: polynomial and rational functions and their graphs, inverse functions, composition of functions, linear and nonlinear systems of equations, partial fraction decomposition, linear programming, polynomial and rational inequalities, exponential and logarithmic functions with applications, matrices, and determinants. Additional emphasis is given to the trigonometric functions including the unit circle, graphs, identities, inverse functions and their graphs, complex numbers in polar form, DeMoivre's Theorem, and graphs of polar equations. The curriculum of the College Board SAT Subject Test (Level II) is covered. This course is integrated with a TI-84+ calculator. Additionally, there will be training in standardized test-taking strategies.

0244 CALCULUS H**1 Credit****Prerequisite: 83 in Pre-Calculus H 87 in Pre-Calculus CP and/or Academic Review Committee Recommendation**

Two-semester course, sequential to Pre-Calculus, is an introductory college-level course intended for students who desire to enroll in a university Calculus course or in AP Calculus. The course contains an examination of polynomials; rational, exponential, trigonometric, and logarithmic functions with an emphasis on the study of differential and integral calculus in one variable. This course is integrated with the TI-84+ calculator. Additionally, there will be training in standardized test-taking strategies.

0243 CALCULUS/AB ECE /AP**1 Credit****Prerequisite: 87 in Pre-Calculus H or Completion of Calculus H and/or Academic Review Committee Recommendation**

This two-semester course, sequential to Pre-Calculus H, prepares students for the Advanced Placement Calculus examination (AB level). Topics include limits and continuity. L'Hôpital's Rule; the differential calculus of algebraic, trigonometric, exponential, and logarithmic functions; anti-derivatives of algebraic, trigonometric, exponential and logarithmic functions; techniques of integration, definite integrals and numerical approximations; the solutions of differential equations and their representation by slope field. The derivative, as the slope of a function at any given point and the definite integral, as the area under a function between any two given points, are regularly graphed and checked on a graphing calculator. Applications of derivatives and integrals are explored regularly. This course is integrated with the TI-84+ calculator. **Students are required to take the Calculus AP exam and course exam in May. By registering with UCONN (Additional fee) students can earn three college credits that are transferable to 90% of the colleges and universities throughout the nation.**

0203 INTRODUCTION TO STATISTICS CP**1 Credit****Prerequisite: Completion of Pre-Calculus or Pre-Calculus Essentials**

This two-semester course is a general introductory course to the field of statistics. The content is designed to provide students with the basics of statistics that can be used across many fields of study. Students study the organization, analysis, and interpretation of data; methods of planning and conducting a study, survey, and experiment and probability theory and simulations in everyday situations. This course is integrated with the TI-84+ Calculator.

SCIENCE

0411 BIOLOGY CP

1 Credit

This two-semester lab course introduces fundamental principles of biology to freshmen including an introduction to biochemistry, cellular structure and function, metabolism, the central dogma of biology, genetics, and evolution. Students will be introduced to inquiry based learning through hands-on laboratory activities, where they will become familiar with basic laboratory techniques and master the scientific method.

0412 BIOLOGY H

1 Credit

Prerequisite: Academic Review Committee Recommendation

This two-semester lab course introduces the honors level freshmen to major biological principles including biochemistry, cellular structure and function, evolution, genetic continuity, metabolism, and the diversity of life. Emphasis is placed on science as inquiry based. Students perform numerous experiments, covering basic laboratory skills, biochemical analysis, and microscopic procedures and studies.

0431 CHEMISTRY CP

1 Credit

Co-requisite: Completed or Co-registered for Algebra II or Algebra II H

This two-semester lab course conceptually examines the basic physical and chemical properties of matter and the energy changes that occur during phase changes and chemical reactions. It includes the study of atomic structure, chemical bonding, naming compounds, equation writing, stoichiometry, gas laws, kinetic theory, solutions, and acids and bases. The problem-solving approach is emphasized when appropriate. Scientific calculator is required.

0422 CHEMISTRY H

1 Credit

Prerequisite: 83 in Biology H and 83 in 9th Grade Honors Math Course or 93 in Biology CP and 93 in Geometry and/or Academic Review Committee Recommendation

This two-semester lab course conceptually and mathematically analyzes basic chemical phenomena. Topics studied include the unit analysis method of problem-solving, measurement, atomic structure, the historical development of modern atomic theory, the periodic table, chemical bonding, and energy changes in chemical and physical changes. Skill in naming chemical compounds and writing balanced chemical equations is emphasized. Both the behavior of various states of matter and the gas laws are studied with the kinetic molecular theory. Studies of solutions and acid/base chemistry are included. Scientific calculator required.

0463 CHEMISTRY AP

1 Credit

Prerequisite: 85 in Chemistry H or Physics H, 95 in Chemistry or Physics and/or Academic Review Committee Recommendation

This two-semester lab course is a first-year college chemistry program. This course prepares students for the Advanced Placement Examination in Chemistry. A summer assignment to review fundamental skills is required. Strong emphasis is placed on chemical calculations, the mathematical treatment of problems, and laboratory work. Topics covered extensively include atomic structure and properties, molecular and ionic compound structure and properties, intermolecular forces and properties, chemical reactions, kinetics, thermodynamics, equilibrium, acids and bases, and applications of thermodynamics. Students are required to take the final exam and the AP Chemistry exam. Each student must have a scientific/graphing calculator.

0424 INTRO TO BIOMEDICAL SCIENCE CP**1 Credit****Prerequisite: Biology CP or Biology H**

This two-semester lab course introduces students to the various disciplines that encompass the biomedical sciences: human anatomy and physiology, cell biology, bacteriology, virology, immunology, and epidemiology. Emphasis is placed on examining lifestyle choices, understanding various health conditions, and exploring available medical treatments. Students conduct a variety of labs, activities, and research projects to support their learning and reinforce the important concepts.

0448 ENVIRONMENTAL STUDIES CP (Junior/Senior Course)**1 Credit****Prerequisite: Introduction to Biomedical Science CP or Chemistry CP/H**

This course examines the earth's natural systems and the impact that human activity has on these systems including positive, solution-oriented responses from a local, regional, and global perspective. Students will collaborate on projects, pursue independent study and participate in field trips. Topics include agroecology/organic agriculture, carbon dioxide sequestration, natural resource management, water quality and environmental monitoring, renewable energy, sustainable systems design, and bioremediation. Case studies may involve regional natural resource study of the Long Island Sound, Lake Candlewood, area organic farms, and renewable energy installations.

0453 BIOLOGY AP / UCONN ECE**1 Credit****Prerequisite: 85 in Biology H and Chemistry H or 95 in Biology CP & Chemistry CP and/or Academic Review Committee Recommendation**

This two-semester lab course is part of the Early College Experience program for the University of Connecticut, as well as an AP program, and offers the potential for students to earn 4 University of Connecticut transferable credits upon successful completion of the course. Students examine topics such as the chemistry of life, cellular energetics, cell structure and function, heredity, molecular genetics, evolutionary biology, diversity of organisms, ecology, and human anatomy. Students will perform various inquiry-based laboratory experiments as well as dissections. **Students are required to take the AP Biology course exam in May and the final exam. By registering with UCONN (Additional fee) students can earn four college credits that are transferable to 90% of the colleges and universities throughout the nation. Summer readings and assignments may be a requirement for the course.**

0435 PHYSICS CP**1 Credit****Prerequisite: Completion of Chemistry CP or Chemistry H and Algebra II CP or Algebra II H**

Physics is the study of matter and energy and how they interact. This lab course focuses on the central concepts of physics with an emphasis on the relationship to events in everyday environments, problem solving techniques that apply to several different problems, basic algebra to solve analytical problems as well as logic and synthesis of information to solve conceptual problems. Newton's Laws of Motion, velocity and acceleration, conservation of energy and momentum, gravity, thermodynamics, waves and sound, optics, electrostatics, electricity, and magnetism are introduced.

0436 PHYSICS H**1 Credit****Prerequisite: 83 average in Honors Geometry or Honors Algebra II and Honors Chemistry or 93 average in Algebra II CP and Chemistry CP, and/or Academic Review Committee Recommendation****Co-requisite: Concurrent enrollment in Honors Algebra II or Pre-Calculus or Pre-Calculus Essentials**

This course mathematically analyzes basic physical phenomena: motion, force, energy, heat, waves, sound, light, electricity, and magnetism. During the year, each student performs approximately 16 experiments on these topics.

Comprehensive written lab report is submitted following each experiment. Intended for those students who desire a college physics course for degrees other than engineering, sciences, math, and medical fields. Scientific calculator, protractor, and compass required.

0444 PHYSICS AP 1 UCONN 1201Q/ECE

1 Credit

Prerequisite: 85 in Honors Algebra II or 95 in Algebra II and/or Academic Review Committee Recommendation

Co-requisite: Concurrent enrollment in either Pre-Calculus or Calculus

This inquiry-based course with a laboratory section prepares students for the Advanced Placement examination in Physics 1. The curriculum represents topics covered in a non-calculus first semester college physics course: Newtonian mechanics, work/energy and power, mechanical wave and sound as well as an introduction to electric circuits. A strong emphasis is placed on the application of familiar principles in new situations in which the student must devise a logical solution. Each student must have a scientific or graphing calculator. Intended for those students planning on majoring in chemistry, biology or physics, any engineering course, mathematics, or medical fields. **Students are required to take AP Physics 1 Exam and course exam.** Students will earn 4 college credits for UCONN Physics 1201Q; General Physics. *By registering with UCONN (Additional fee) students can earn four college credits that are transferable to 90% of the colleges and universities throughout the nation. Summer readings and assignments may be a requirement for the course.*

0445 PHYSICS AP 2/UCONN ECE 1202Q

1 Credit

Prerequisite: Completion of AP Physics 1 or 85 in Honors Physics and/or Academic Review Committee Recommendation

A non-calculus-based course introducing the principles governing electromagnetic phenomena, including electromagnetic radiation, waves and electric circuits. The laboratory offers fundamental training in precise measurements. This course meets standard scope and sequence requirements for a second-semester, algebra-based physics course. It is grounded in real-world examples to help students grasp fundamental physics concepts. It requires knowledge of algebra and some trigonometry, but not calculus. **Students are required to take AP Physics 2 Exam and course exam.** Students will earn 4 college credits for UCONN Physics 1202Q; General Physics. *By registering with UCONN (Additional fee) students can earn four college credits that are transferable to 90% of the colleges and universities throughout the nation. Summer readings and assignments may be a requirement for the course.*

0441 HUMAN ANATOMY & PHYSIOLOGY

1 Credit

Prerequisite: Junior/Senior elective, Completion of Biology CP or Biology H, concurrent enrollment in Chemistry advised

This two-semester lab course offering is for any student considering a career in health studies, medical science, physical training or any other related field. Designed for motivated students, a review of human biological concepts learned in earlier courses is quickly followed by the study of human structure and function, both in health and illness. Lecture and lab activities as well as various research and independent work projects are included.

0404 HUMAN ANATOMY & PHYSIOLOGY H

1 Credit

Prerequisite: Junior/Senior elective, 93 in Biology CP or 83 in Biology H and/or Academic Review Committee Recommendation

Concurrent course with Advanced Healthcare & Biosciences course.

This two-semester lab course offering is for any student considering a career in health studies, medical science, physical training or any other related field. Designed for highly motivated students, a review of human biological concepts learned in earlier courses is quickly followed by the study of human structure and function, both in health and illness. Lecture and lab activities as well as various research and independent work projects are included.

0403 ADVANCED HEALTH CARE & BIOSCIENCES H**1 Credit**

Prerequisite: Junior/Senior elective 83 in Biology H or 93 in Biology CP. Anatomy and Physiology H prerequisite or must be taken concurrently. Concurrent enrollment in Nursing Assistant Clinical H

This is a two semester state certified health course that prepares students for entry into health and medical science college studies including nursing, physical and occupational therapy and supports students with broadening their understanding of medical career pathways and health care systems while developing skills in Allied Health infection control, common and acute health conditions, communication, patient rights, patient safety, medical record documentation, medical terminology, physical rehabilitation, and more.

0402 NURSING ASSISTANT CLINICAL H**.5 Credit**

Prerequisite: 83 in Biology H or 93 in Biology CP. Concurrent enrollment in Advanced Health Care & Biosciences H and Anatomy & Physiology H.

Students participate in off-campus clinical rotations to meet the requirements of 60 or more clinical experience hours as required for CT Nursing Assistant Certification. Strong focus is on the development of healthcare skills and procedures. Course is taken concurrently with Advanced Health Care & Biosciences H and Anatomy and Physiology H.

0407 FORENSIC SCIENCE CP**1 Credit**

Forensic science is a comprehensive study of the sciences used by police agencies in the criminal justice system. Major topics include processing a crime scene, identification and analysis of evidence, fingerprint analysis, serology, document analysis, firearm identification, toxicology, and explosion and arson identification. This course will use real world examples, multimedia sources, basic theory and laboratory work to create an exciting way for the student to explore the subject. Lab experiments will reinforce or teach basic principles of biology, chemistry and physics.

0804 PHYSICAL EDUCATION CP**1 Credit****Sophomore Year**

Physical education provides an array of activities with an abundance of opportunities for every student to be successful. The program provides students a release from daily stress and strain while they participate in both competitive and non-competitive events. Skills, interests and appreciation for life-long learning, activity and recreation are developed through both team and individual activities. Also stressed is that students should be totally accountable for their own actions, both in and out of the classroom.

0455 HEALTH AND WELLNESS CP**.5 Credit****Required Senior Seminar Course**

This one-semester course is paired with Personal Finance as part of the Senior Seminar. Personal Health emphasizes the importance of knowledge, attitudes, and practices relating to personal health and wellness. It is a course designed to expose students to a broad range of issues and information relating to the various aspects of personal health, which include physical, social, emotional, intellectual, spiritual, and environmental aspects. A combination of lecture, group discussion, activities, presentations, guest speakers, video, and nutritional and fitness projects are included. This course covers all aspects of health as it pertains to the students as they go to college.

0456 FOUNDATIONS OF SPORTS MEDICINE CP**.5 Credit**

This course provides a general overview of sports medicine, athletic training, and exercise science. It examines human anatomy and the care and prevention of athletic injuries. Topics emphasize First Aid, CPR, muscular and skeletal anatomy, injury prevention, sports nutrition, and athletic training. This course is intended to help students gain an understanding of sports medicine, various associated disciplines, and the role they play in the physically active community

SOCIAL STUDIES**0525 MODERN WORLD HISTORY****1 Credit**

This survey course examines the progress of human civilization from the time of the French Revolution of 1789 to the emergence of the 21st Century. Topics include the general evolution of government from absolutism to popular consent. Overview of major world events such as the Age of Enlightenment, Modern Revolutions, National Unification Movements, Age of Imperialism, the World Wars, the Cold War, Decolonization, and the emergence of Global thinking at the dawn of the 21st Century are closely examined.

0526 MODERN WORLD HISTORY H**1 Credit****Prerequisite: Academic Review Committee Recommendation**

This survey course examines the progress of human civilization from the time of the French Revolution of 1789 to the emergence of the 21st Century. Topics include the general evolution of government from absolutism to popular consent. Overview of major world events such as the Age of Enlightenment, Modern Revolutions, National Unification Movements, Age of Imperialism, the World Wars, the Cold War, Decolonization, and the emergence of Global thinking at the dawn of the 21st Century are closely examined. There will be an emphasis on historical research and appreciation through essay writing.

0527 World History: Modern AP**1 Credit****Prerequisite: Academic Review Committee Recommendation**

In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation

0510 AMERICAN GOVERNMENT**.5 Credit**

American Government is a one semester course and a general introduction to the American Governmental system. It provides a description of the framework within which political decisions in the United States are made. Students will become aware of their basic rights, duties, and responsibilities as American citizens. Topics will include basic principles of government, the U.S. Constitution, branches of government, personal liberties and justice, election campaign patterns, and voting procedures. **American Government is a state mandated course for graduation. This course is concurrent with Principles of Economics.**

0509 AMERICAN GOVERNMENT H**.5 Credit****Prerequisite 83 in Social Studies course H or 93 in Social Studies course**

American Government (H) is a one-semester course with an in-depth study of the government of the United States with emphasis on individual rights and liberties. Students will study the Bill of Rights, the Constitution, the federal court system, landmark Supreme Court cases, political parties, mass media and public opinion, the branches of government,

and comparative economic and political systems. **American Government is a state mandated course for graduation. This course is concurrent with Principles of Economics Honors.**

0578 PRINCIPLES OF ECONOMICS CP

.5 Credit

This semester program of study is an introduction to the principles of macroeconomic and microeconomics. This course will look at themes such as scarcity, the laws of supply and demand, and elasticity while building to broader topics such as competition, market structures, and businesses and labor. Students will also look at how ideas and themes of economics affect their daily life, their local economy, their country, and the international economy.

0579 PRINCIPLES OF ECONOMICS H

.5 Credit

Prerequisite: 83 in H Social Studies course or 93 in Social Studies Course

This semester program of study is an in-depth study of the principles of macroeconomic and microeconomics. This course will look at themes such as scarcity, the laws of supply and demand, and elasticity while building to broader topics such as competition, market structures, and businesses and labor. Students will also look at how ideas and themes of economics affect their daily life, their local economy, their country, and the international economy.

0531 US HISTORY SINCE 1877 CP

1 Credit

This two-semester college-preparatory level class offers a survey of United States history from the end of the Reconstruction (1877) to the present. Emphasis is placed on the growth of the United States as a world power, America's role in the World Wars, its domestic issues and world involvement in the second half of the 20th century, and the country's entry into and the new challenges of the 21st century. **This is a required state mandated course for graduation.**

0532 U.S. HISTORY SINCE 1877 H

1 Credit

Prerequisite 83 in H Social Studies course or 93 in Social Studies course

The honors level course offers a more detailed approach to United States history from the end of Reconstruction (1877) to the present than the survey style of the CP level course. Emphasis is placed on the growth of the United States as a world power, America's role in the World Wars, its domestic issues and world involvement in the second half of the 20th century, and the country's entry into and the new challenges of the 21st century. **This course fulfills the US History graduation requirement.**

0533 U.S. HISTORY AP / UCONN ECE

1 Credit

Prerequisite: 85 in H and/or Academic Review Committee Recommendation

This two-semester advanced-placement AP level course is an in-depth examination of American history from the Age of European Exploration to the present, emphasizing political, social, economic, diplomatic, and intellectual interpretations of events. Students are required to do extensive reading and essay assignments at an advanced level, in order to develop the reading-comprehension and writing-proficiency skills required on the advanced-placement exam. A successful performance on the AP exam may earn college credit and/or advanced placement in college for the participating student. Additionally, the course is affiliated with the University of Connecticut. **Students are required to take the AP US History Exam in May. This course fulfills the US History graduation requirement. *By registering with UCONN (Additional fee) students can earn six college credits that are transferable to 90% of the colleges and universities throughout the nation. Summer readings and assignments are a requirement for the course.***

0508 TRIAL LAW CP (Fall Semester)

.5 Credit

This course will center upon torts, contracts, Constitutional Law, property, Civil Procedure, and Criminal Law. This program will be co-taught with guest attorneys who will serve as the Mock Trial coaches. **Be aware that there will be a**

fee to participate in the Mock Trial Competition. This course will run in the Fall. Participation in a courtroom simulation is mandatory to receive credit.

0513 CRIMINAL JUSTICE CP (Spring Semester)

.5 Credit

This course will provide students with an opportunity to learn how the justice system works in our society. Students will be given a practical understanding of law and the American legal system. The course will focus on two key areas of jurisprudence: criminal law and criminal procedure. The course will focus on the responsibility of citizens in the framework of the judicial system of the United States.

0562 UNITED STATES GOVERNMENT AND POLITICS AP

1 Credit

Prerequisite: 93 in Modern World History (H) for Sophomore placement or 83 in AP US History or US History (H) for placement and/or Academic Review Committee Recommendation

This two-semester course in government and politics provides the student with a variety of theoretical perspectives and explanations of the general concepts used to interpret and analyze U.S. politics. Particular attention is paid to the interaction between the various government branches and the role of Congressional committees, Executive departments, and judicial oversight. The methods by which the individual can affect government policy and the importance of public opinion will be the focus of study. **Students are required to take the AP American Government and Politics course exam in May.**

0573 PSYCHOLOGY AP

1 Credit

Prerequisite: 83 in Social Studies H or AP course or 93 in Social Studies, and/or Academic Review Committee Recommendation

Psychology is the study of human behavior based on social interaction with others. What effects does behavior have upon the lives of others, as well as upon oneself? This course explores these basic questions as well as other topics dealing with human behavior, including states of consciousness, memory, intelligence, personality theories, behavior disorders, and their treatments. The class focuses on the ways in which psychology operates in everyday life. In addition to lectures, teaching strategies include videotapes, interviews, debates, and other active learning exercises. **Students are required to take the AP Psychology and course final exam in May.**

0566 PRINCIPLES OF MACROECONOMICS AP/ UCONN ECE

1 Credit

Prerequisite: 83 in Social Studies H or AP course or 93 in Social Studies, and/or Academic Review Committee Recommendation

This full year course will introduce students to the “behavior” of entire economies. Concepts such as inflation, unemployment, interest rates, money, income distribution, productivity, and world trade are examined. In order to provide real-world application to and understanding of these economic concepts, articles and publications will be utilized from sources such as *The Wall Street Journal*, *Economist Magazine*, and *The Financial Times*. **Students are required to take the AP Exam in May. By registering with UCONN (Additional fee) students can earn six college credits that are transferable to 90% of the colleges and universities throughout the nation. Summer readings and assignments are a requirement for the course.**

0570 EUROPEAN HISTORY AP/UCONN ECE

1 Credit

Prerequisite: 83 in Social Studies H or AP course or 93 in Social Studies, and/or Academic Review Committee Recommendation

This full year course provides students an intensive course in college European History from the period 1500 to the present. Special emphasis will be placed on the emergence of the modern state system, the Renaissance and Reformation, the French Revolution, The Industrial Revolution, the World Wars, the Russian Revolution, the Cold War, and the Post - Cold War world. Major emphasis will be placed on extended reading and document-based assessments. **Students are required to take the AP European History course exam in May. By registering with UCONN (Additional fee)**

students can earn six college credits that are transferable to 90% of the colleges and universities throughout the nation. Summer readings and assignments are a requirement for the course.

0568 AFRICAN AMERICAN/BLACK AND PUERTO RICAN/LATINO STUDIES CP

1 Credit

“This (full year) course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American/Black and Puerto Rican/Latino people in the U.S. 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.” – Course Description taken from SERC – State Education Resource Center Curriculum for Connecticut Public Act No. 19-12

THEOLOGY

011 THEOLOGY I CP: A STUDY OF THE OLD TESTAMENT: CHRIST REVEALED IN THE HEBREW SCRIPTURES

1 Credit

This two-semester course illustrates how the Old Testament contains over a thousand years of God's self-revelation to His chosen people of Israel. Starting from the view of religion as a relationship, this course will explore the nature of revelation as recorded in Sacred Scripture. We will examine how the Scriptures were formed over many centuries and the role of the Church in defining the canon. Students learn to read Sacred Scripture as literary genre and historical context while relying on the Magisterium of the Church for interpretation. Students will immerse themselves in the stories of the Bible from Creation through the end of the Babylonian Exile and examine the role of Old Testament heroes as types for Christ, the Biblical foreshadowing of the sacraments, the structures of the Church, and the role of personal and communal prayer in deepening our relationship with God.

021 THEOLOGY II CP: A STUDY OF THE NEW TESTAMENT AND EARLY CHURCH

1 Credit

Jesus asks His disciples "Who do you say that I am?" The way that a person answers this question has had life changing implications. Grounded in an understanding of Revelation, students begin to seek answers to Jesus' question in the New Testament. After a brief examination of the historical context of first century Palestine and a review of the canon of the New Testament, students explore the Christology of the Infancy Narratives, the Kingdom of God as revealed in Jesus' actions, His parables, death, and resurrection. The course will also investigate Christ's mission through the Church, the Church as the People of God, and the Mystical Body of Christ along with the implications of those models on the life of the individual. The Nicene Creed, the historical development of the Church's hierarchy, the universal call to holiness, evangelical counsels, the Lay Apostolate, common priesthood, communion of saints and the study of the role of Mary in the life of the Church culminates the purpose of this course.

031 THEOLOGY III CP: SACRAMENTS AND CHRISTIAN MORALITY

1 Credit

Through the study of the Sacraments, students will experience Jesus' continued living presence in the world. The development and historical significance of the sacraments, symbols, and rituals of the Roman Catholic Church will be explored. Students will study the fundamental principles for living a moral life based on the Roman Catholic belief that all persons possess a sense of dignity and are created in the image and likeness of God. Grounded in prayer and study of the Church's moral teachings, students will deepen their process of moral development. In addition, students will be offered a broader insight into their role in the life of the Church, especially in Sacrament of Reconciliation, as part of their ongoing moral development.

042 THEOLOGY IV CP: CHRISTIAN LIFESTYLES

.5 Credit

This one semester course will discuss how to live like Jesus Christ in order to achieve happiness with God. Students will explore the importance of choosing a vocation not just accepting and expected vocation. The individual vocations, (married life, single life, consecrated life, and priesthood.) It will be discussed from the point of view of creating a Christian lifestyle, the demands, responsibilities, strengths and weaknesses.

044 THEOLOGY IV: SOCIAL TEACHINGS OF THE CHURCH CP**.5 Credit****Prerequisite: Completion of Christian Lifestyles**

In this one semester course students will concern themselves with the Teaching of the Catholic Church and Social Issues as it has developed in the last 150 years. They will learn about the twelve documents of the Popes and Bishops that have dealt with modern issues, such as, working conditions, family life issues, health issues, and the issues dealing with war, justice and personal freedom.

043 THEOLOGY IV: WORLD RELIGIONS CP**.5 Credit****Prerequisite: Completion of Christian Lifestyles**

Throughout history people have sought to understand the meaning of their existence and their place in the world. The result of this search for truth has been the growth of the world's great religious traditions. This world religions course will examine many of these traditions including Daoism, Confucianism, Hinduism, Buddhism, Judaism and Islam. This course will look at the history, major beliefs and practices of these traditions and consider how they relate to our own Christian tradition. How do these diverse religions experience God? How do they confront death and the problem of evil? What do they have in common? How are they different? Along the way we will explore the concepts of sacred time and sacred spaces; consider the roles of prophets, sages, saints and shamans and examine the function of myth and scripture. Students will have a working knowledge of the role religion plays in the life of the individual and the community as well as a deeper appreciation for the power of their own faith.

015 - THEOLOGY IV H: CHRISTIAN LIFESTYLES H**.5 Credit****Prerequisite: 93 in Religion III**

This one semester course will discuss how to live like Jesus Christ in order to achieve happiness with God. Students will explore the importance of choosing a vocation not just accepting and expected vocation. The individual vocations, (married life, single life, consecrated life, and priesthood. It will be discussed from the point of view of creating a Christian lifestyle, the demands, responsibilities, strengths and weaknesses.

013 – THEOLOGY IV: MARIOLOGY H**.5 Credit****Prerequisite: 93 in Religion III and Christian Lifestyles H**

This one semester course in Roman Catholic Mariology deals with the life and appreciation of the Virgin Mary, as the New Eve, Mother of Jesus, God and all humanity, as well as her veneration throughout the ages in theology, prayer and apparitions. Essays, reflection papers, group projects and a pilgrimage to a local Marian Shrine will be part of this Honors course

014 – THEOLOGY IV: CURRENT CATHOLIC CULTURE H**.5 Credit****Prerequisite: 93 in Religion III and Christian Lifestyles H**

This one semester course will examine current events, art, and films as a means for reflection upon the meaning and truth of Christian faith. The course will also examine how social media plays a role in understanding our culture. Scripture, Catechism of the Catholic Church, the lives of the saints, and current news articles will serve as supplementary class material. Students will be expected to participate in class discussions, oral presentations, written papers, and group projects. The course will use a broad cross section of various methods to open creative windows for understanding and communicating the Christian faith. The tools developed in this course will serve as a lifetime of evangelization.

WORLD LANGUAGE

0319 SPANISH I CP

1 Credit

This two-semester course is an introduction to basic grammatical concepts, vocabulary, and idiomatic expressions. It will help students to develop all four of the basic skills needed for success in second-language acquisition: listening, speaking, reading, and writing. Vocabulary topics include talking about family, friends and possessions and communication about likes, dislikes, and daily activities. Students also learn about the commonalities and differences between and among the various Hispanic cultures and our own.

0312 SPANISH I H

1 Credit

Prerequisite: Score on Placement Exam and/or Academic Review Committee Recommendation

This two-semester course is designed for the qualified, highly motivated beginner. The four basic skills of listening, speaking, reading, and writing are stressed at an accelerated pace with Spanish being the primary language spoken in class. Students accrue vocabulary and learn grammatical concepts that enable them to communicate effectively in both the present and past tenses. A variety of audio, video, reading, and hands-on activities related to the Spanish-speaking world enable the students to compare and contrast the various Hispanic cultures with each other as well as with their own culture.

0326 SPANISH II CP

1 Credit

Prerequisite: Successful completion of Spanish I or Score on Placement Exam and/or Academic Review Committee Recommendation

This two-semester course reviews and continues to build on the basic grammatical, vocabulary and syntactical concepts begun in the first year. Using for their studies the Level 2 textbook in the students are introduced to several new grammatical concepts, and they learn how to talk and write about past events. Cultural comparisons and contrasts continue to be an important focus. Vocabulary and language structures used in a broader variety of everyday situations will be emphasized and practiced using all four major language skills.

0322 SPANISH II H

1 Credit

Prerequisite: 83 Spanish I H or 93 in Spanish I CP and/or Academic Review Committee Recommendation

This two-semester course reinforces and builds upon previously learned skills using pair and group activities. Students will practice new vocabulary and language structures used in many everyday situations. Grammar structures will be presented with greater emphasis on reading skills and quick recognition of meanings and cognates. Cultural aspects of the Spanish-speaking world are highlighted through student reports. Students are expected to maintain an accelerated pace. Spanish is used as the medium of instruction and communication as much as possible.

0330 SPANISH III CP

1 Credit

Prerequisite: Successful Completion of Spanish II CP

Continuing and reinforcing the work done in Spanish II CP, students continue developing the four language skills. More advanced grammatical structures are introduced with greater emphasis on reading skills and quick recognition of vocabulary and cognates. Cultural aspects of the Spanish-speaking world are highlighted in readings.

0332 SPANISH III H**1 Credit****Prerequisite: 83 in Spanish II H or 93 in Spanish II CP and/or Academic Review Committee Recommendation**

This is an extensive and more challenging two-semester course for superior students who have excelled in Spanish II H and who plan to continue their study of Spanish at the most advanced levels. Communication skills are stressed while students practice and master more complicated grammatical structures. More difficult readings are presented. Class discussions stress the utilization of the language and incorporate the diverse cultures of Hispanic countries. The goal is to make Spanish the main medium of communication in all listening, speaking, reading and writing activities.

0352 SPANISH FOR THE PROFESSIONS CP**1 Credit****Prerequisite: Successful Completion of Spanish III and/or Academic Review Committee Recommendation (Juniors and Seniors)**

This course provides students with the linguistic and cultural skills that are necessary to be successful in healthcare, business, and legal profession in Spanish-speaking settings. Students will have the ability to expand their knowledge of the functional use of Spanish in those professional settings. In doing so, students will be introduced to the vocabulary necessary in these workplace environments. Student's will also have the ability to enhance their speaking, writing, and listening skills through task-based activities and simulated real-world scenarios related to the professions. In addition, students will learn how cultural understanding is essential in effective communication. This course is ideal for those contemplating a career in healthcare, law or international business.

0341 SPANISH IV H**1 Credit****Prerequisite: 83 in Spanish III H or 93 in Spanish III CP and/or Academic Review Committee Recommendation**

The immediate precursor to Advanced Placement Spanish Language, this two-semester course is specifically designed for the highly motivated student who has successfully completed Spanish III (H) and plans to continue study of the Spanish language at the college-level. Great emphasis is placed on auditory and oral exposure to the language as well as more complex grammatical structures in writing assignments. All class activities use the Spanish language as the primary vehicle for communication. English is spoken only with the permission of the instructor.

0349 AP SPANISH (Virtual)**1 Credit****Prerequisite: 85 in Spanish IV H and/or Academic Review Committee Recommendation**

This two-semester course is an opportunity for advanced students to continue the study of Spanish with an emphasis on extensive daily use of the spoken language. Comparative studies of Spanish films paired with specific Spanish literary works will give the students the opportunity to use their skills in listening, speaking, reading, and writing. In addition to emphasizing the shift from being conversational to achieving fluency in the spoken language, students will continue to reinforce grammatical structures previously learned as they encounter new concepts throughout the course work. *Students must take the AP Spanish exam.*

0313 or 0314 FRENCH I CP or H**1 Credit**

Students are introduced to the skills of understanding basic spoken French, expressing their own ideas related to the topics studied in understandable French, and to reading and writing about essential concepts correctly. Vocabulary is student-centered, dealing with friends, family, shopping, eating, and daily activities. In addition to learning grammar and vocabulary, the students use supplementary materials which introduce them to the culture and civilization of France and the countries where French is spoken.

0323 or 0324 FRENCH II CP or H**1 Credit****Prerequisite: Successful Completion of French I**

Students continue their study of French culture and language, adding mastery of past tenses and more advanced grammar concepts. Additional vocabulary on many topics is added to the students' repertoire, and there is a continued emphasis on accurate pronunciation to reinforce their progress towards fluency in French.

0333 or 0334 FRENCH III CP or H**1 Credit****Prerequisite: Successful Completion of French II**

Students are challenged to grow in listening comprehension and communicative skills as their confidence and fluency in French increases. Longer readings, frequent short writing assignments, and daily use of the language will be standard. During the second semester, French becomes the main medium of communication for most purposes. Students will be introduced to the remaining non-literary indicative tenses and to the subjunctive mood. Students will learn how to respond effectively in French in many situations and predicaments. The text will be supplemented with a variety of authentic French materials, including news articles, literature, and film.

0361 CHINESE I CP**1 Credit**

Students use compelling stories, games, videos and multimedia experiences in this introduction to Chinese. They learn the elegant simplicity of Chinese grammar and the subtleties of Chinese pronunciation through entertaining lessons that give a base of conversational ability and listening comprehension. Students build a foundation for reading and writing in the Chinese language through an adaptive technology that lets them choose an approach that works best for them. Engaging graphics, video, and games keep students interested, making learning languages exciting. An integrated, game-based reward system keeps learners motivated and eager to progress.

0363 CHINESE II H**1 Credit****Prerequisite: Successful completion of Chinese I**

This Mandarin Chinese II course builds on the basics covered in level one and continues to develop skills in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Some of the topics covered include counting, sports, weather, seasons, feelings, and activities. Each week consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading, and listening comprehension activities, and speaking and writing activities.

0366 CHINESE III H**1 Credit****Prerequisite: Successful completion of Chinese II**

Students continue to expand their abilities in various aspects of Chinese Mandarin. Students continue to build and expand their knowledge of vocabulary, character recognition, sentence patterns and grammar points in communicative contexts. They also enhance their Chinese Mandarin listening and speaking skills, such as pronunciation and intonation. Students learn more in depth Chinese reading and writing strategies and skills. This course greatly improves students' reading abilities and students are able to write in Chinese in various formats such as journal, letter, invitation and essay. The course also enriches and fortifies the student's knowledge and skills in writing simplified Chinese characters. In this course, students learn more essential knowledge of culture, including the origins, histories. Anecdotes, and etiquettes for various cultural settings, events, and occasions. Students also learn to compare and contrast Chinese culture with their own cultures in many different aspects.

0367 CHINESE IV H**1 Credit****Prerequisite: 93 in Chinese III**

Continuing and reinforcing the work done in level III, students develop increased fluency of the spoken language and literary skills. Research and history of Chinese culture is enhanced. Chinese is used as the medium of instruction as much as possible.

AMERICAN SIGN LANGUAGE (ASL) I CP**1 Credit**

This two-semester course is an introduction to basic grammatical concepts, vocabulary, and Deaf culture. Everyday communication is the centerpiece of every lesson. Topics revolve around sharing information about our environment and us. Grammar is introduced in context, with an emphasis on developing question and answering skills. Students will learn conversational strategies to help maintain a conversation. Interaction activities allow you to rehearse what you've learned.

AMERICAN SIGN LANGUAGE (ASL) II CP**1 Credit****Prerequisite: Successful completion of American Sign Language I.**

This two-semester course reviews and continues to build on the basic grammatical, vocabulary and cultural concepts begun in the first year. ASL II is an interactive course which focuses on expanding the students' ability to communicate in ASL through classroom instruction and participation. The course will explore all aspects of the language, including mechanics and culture.

FINE ARTS

0750 INTRODUCTION TO ART CP

1 Credit

This course will concentrate on the basics of drawing, painting, and sculpture. Introduction to Art is a foundational-level class focusing on the process of creating artwork in a variety of media such as pencil, paint, polymer clay, wire, and more. Concepts such as composition and perspective, as well as the Elements of Art and the Principles of Design will be addressed. Students will be required to think about their own creative process and utilize critical thinking skills in order to improve their artwork. They will be introduced to the vocabulary of art and will be asked to use such vocabulary in class critiques.

0752 3-D SCULPTURE AND DESIGN CP (Offered in Even Years)

1 Credit

Prerequisite: Introduction to Art CP

Students will focus on creating artwork that goes into the three-dimensional plane (3-D). This course will expand on the sculpture techniques learned in the Introduction to Art Course. The class will also gain an understanding of how the 2-D concepts and techniques learned in Introduction to Art can help bolster their three-dimensional work. The importance of working from good references (both picture and life) will be stressed to build up the student's visual library. Such a library will enhance their skill of interpreting their ideas in 3-D space. Students will work in both additive and subtractive sculpture methods, and work in a variety of materials such as polymer clay, oil-based clay, wood, paper, and metal.

0751 DRAWING AND PAINTING CP (Offered in Odd Years)

1 Credit

Prerequisite: Introduction to Art

Students will focus on creating artwork on the two-dimensional (2-D) plane. The course will reinforce and go beyond the concepts that were covered in Introduction to Art. The importance of working from good references (both picture and life) will be stressed to build up the student's visual library. Such a library will enhance their skill of representing the three-dimensional world on a 2-D space. The course will delve deeply into the issues of value, color, and composition. Students will create many pieces, including landscapes, portraits, still life and abstract works of art.

0783 STUDIO 2D ART & DESIGN AP

1 Credit

Prerequisite: Drawing & Painting CP, 3-D Sculpture CP, or Graphic Design CP and approval of Instructor

This is an intensive course that is designed for students serious about continuing their art education through college. The student will create a minimum of 24 highly refined works of art for their AP Portfolio. Students in this course will focus on three areas to fill out their portfolio: quality, concentration and breadth. Students will be expected to pursue mastery in concept, composition and execution of drawing. The importance of the artistic process, creative integrity, and problem solving will be a focus of this course.

0780 PORTFOLIO DEVELOPMENT/INDIVIDUAL STUDY H (Honors)

1 Credit

Prerequisite: Drawing & Painting, 3-D Sculpture, or Graphic Design and approval of Instructor

This course is designed for students who want to continue their art education beyond high school. The student will create a variety of highly refined artwork for their college application portfolio. Students in this course will have many options when it comes to creating their artwork in terms of subject matter and media. The importance of the artistic process and problem solving will be the focus of this course. Becoming self-sufficient in the area of critique will help students identify and fix their artwork's deficiencies. Learning how to work through mistakes and utilize critical thinking to solve such events will help the student evolve as an artist.

0700 GRAPHIC DESIGN I CP**1 Credit**

This course will introduce students to the broad field of graphic arts. Through hands-on projects, students will learn about design fundamentals, color theory, typography, and the design process. Students will be introduced to a wide variety of technical concepts and details related to graphic design, computer applications, digital and traditional photography, and career opportunities. Students will learn the basics of the Adobe Creative Suite to design and produce a variety of printed products and display graphics.

0716 GRAPHIC DESIGN II H**1 Credit****Prerequisite: 93 in Graphic Design I CP or Department Chair Endorsement**

Graphic Design II is an extension of Graphic Design I. The students will be involved with advanced techniques in photo manipulation, page and package design, and digital printing. Students will gain significant knowledge of the different programs in the Adobe Creative Suite. This course will significantly increase understanding of design thinking and problem solving as well as visual literacy.

0724 VISUAL DESIGN ECP**1 Credit****Prerequisite: 85 in Graphic Design II H or Department Chair Endorsement**

This course introduces students to the design process using professional-level software for digital image creation and editing, typesetting and typography, page layout and design in preparation for advanced coursework. Students produce course projects that demonstrate creativity, design concepts, critical thinking, aesthetic principles, and basic technical competence. ECP credit from Quinnipiac University. (additional fee required).

0715 DIGITAL GRAPHICS DESIGN IV H**1 Credit****Prerequisite: Successful Completion of Visual Design ECP/College course or Department Chair Chairperson**

This is an independent study course for Advanced Graphics course for students who intend to pursue a career in design or related business/arts field. Students will receive certification in several Adobe suite programs including PS, Id and Ai. Students will identify an area for improvement and work to obtain an increased implementation of their knowledge as well as working with clients to create marketing materials including but not limited to fliers, outdoor advertising, promotional items such as t-shirts, buttons, stickers and more.

0705 INTRODUCTION TO ENGINEERING DESIGN FOR ART H**1 Credit****Prerequisite: 90 in Algebra I CP or 85 in Algebra I H**

This Project Lead the Way course provides students the opportunity to dig deep into the engineering design process and apply math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing project. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software and use an engineering notebook to document their work. Course concepts include the design process, technical sketching and drawing, measurement and statistics, modeling skills, geometry of design, reverse engineering, documentation, advanced computer modeling, design team and design challenges.

0770 CONCERT BAND CP**1 Credit****Prerequisite: At least one year of experience/proficiency in woodwind, brass or precautions (Strings considered)**

Enrollment in Concert Band is open to any student who has at least one year of experience/proficiency on a woodwind, brass or percussion instrument. String instruments are also accepted, although the repertoire is based on concert band and jazz ensemble pieces rather than orchestral pieces. A wide variety of concert band and jazz ensemble literature will be studied, with increasing difficulty in the music throughout the year, and the repertoire will vary from year to year. Emphasis is placed on development of technique and interpretation, as individual instrumentalists and as an ensemble group, performance skills, and developing an overall mature musical expression. Music skills such as scale, sight reading and rhythm exercises, will be emphasized, along with music theory including music notation and key signature recognition. Attendance at all performances is mandatory.

0745 CONCERT BAND H (Honors)**1 Credit****Prerequisite 90 or higher in Concert Band or Department Chair Endorsement based on audition**

Advance musicians who are enrolled in Concert Band will audition for this course. Honors Concert Band members are leaders of the school music department in areas of performing, coursework and class conduct. Requirements for the honors level include higher level assigned parts, community service through performance, regional auditions and challenging written assessments including composition and history of music. Students will mentor incoming freshmen after school.

0776 BEGINNING PIANO CP**1 Credit**

Students of all musical backgrounds are welcome in Beginning Piano. Although the course is structured so that students with no prior background in music may learn to play the piano, experienced pianists are also welcome. The course will cover reading music, playing melodies with accompaniment, and various exercises to strengthen technical ability. The emphasis in the course is on solo playing. Owning a piano at home is helpful, but not necessary.

0778 PIANO II CP**1 Credit****Prerequisite: Beginning Piano or Department Chair Endorsement**

Piano II is for students looking to progress further in their piano playing. It is open to students who have completed Beginning Piano as well as those who pass an audition with the instructor. The course builds on the foundations of note-reading and piano technique and will also incorporate new topics such as music theory and music history. Students will continue to develop their musical abilities in a class setting with a focus on solo playing. The course covers a wide range of musical styles including pop, classical, jazz and blues. Although some method book material is required, students will be expected to learn piano literature. Students are not required to own a piano at home.

0771 GUITAR ENSEMBLE CP**1 Credit**

Enrollment in Guitar Ensemble is open to any student who plays guitar. Students should have their own acoustic guitar*. Guitar ensemble literature in varied styles (folk, rock, classical, jazz) will be studied and will change from year to year. Emphasis is placed on performance skills such as playing with a group and not just as a solo instrument, guitar picking and strumming techniques, and basic music theory involved in ensemble and solo playing. Grading includes performance evaluations and written examinations and quizzes, along with written exercises as homework. Attendance at all performances is mandatory.

0747 GUITAR ENSEMBLE H**1 Credit****Prerequisite 85 or higher in a music elective or Department Chair Endorsement**

This course is open to advanced guitar players, drummers, pianists, vocalists and other instrumentalists. Students plan, rehearse, and perform music while also learning the fundamentals of musical theory, composition and history. Repertoire is centered around modern music and musical styles. Students will form bands that play regularly around the school and surrounding community.

0749 MIXED CHORUS CP**1 Credit**

This is a year-long course offered to current and aspiring singers in 9-12 grade, regardless of previous choral experience. We explore vocal technique and sing through a range of musical genres. Students in the class will be expected to participate in our annual Christmas concert and spring musical showcase.

0762 CONCERT CHORUS CP**1 Credit****Prerequisite: 90 or Higher in Mixed Chorus CP or previous years' experience or Department Chair Endorsement**

This is a year-long, upper-level performance opportunity offered to experienced music students who are accomplished in vocal performance. Students will continue to develop their vocal technique and musicianship. In addition to class repertoire, students are expected to prepare for, and participate in the Western Region concert Chorus auditions. Additionally, this group sings at various events throughout the school year including concerts at school and in our community.

0761 TREBLE CHORUS CP**1 Credit****Prerequisite: Concert Chorus**

This class is a year-long course offered to female students as a continuation in the choral sequence. Strong emphasis is placed on furthering vocal technique and musicianship. Singers will be expected to audition for the Western Region Concert Chorus as individuals, but this group will also compete as a group in a regional chorus competition.

0763 CONCERT CHOIR H (Honors)**1 Credit****Prerequisite: Treble chorus/Concert Chorus**

This class is a year-long course offered to both male and female students who have an interest in pursuing music in college. The class will be performance oriented, but students will have an opportunity to direct musical pieces, lead small group vocal rehearsals, and lead class vocal warm-ups. Elements of musical theater will be integrated into the class with choreographed songs and dances. Students will learn a variety of genres of music. Honors Chorus will participate in a regional chorus competition. Introduction to Music Theory will be part of this class.

0748 PODCAST 101CP**1 Credit**

Utilizing the Immaculate High School Recording Studio, students will learn the fundamentals of podcast production and distribution. The purpose, process, and execution of a successful podcast will be emphasized throughout the year, along with a stress on factual research and proper public speaking skills. Students will be instructed on the use of audio software to help improve the quality of their podcasts, as well as learning what equipment is best utilized when creating a podcast. Multiple topics will be tackled throughout the year, and student podcasts will be uploaded for viewing by their peers and faculty on a regular basis. A final hour-long podcast will be submitted at the end of the year to showcase the development each student has made. A USB flash drive will be required for this course.

0779 MUSIC THEORY AND DIGITAL COMPOSITION H (Honors)**1 Credit****Prerequisite: 85 or higher in a Choral or Instrumental course**

This course is designed for motivated students who are seeking a collegiate-level music study program. Students will discover the fundamental rules behind music, study a variety of music styles with a strong focus on note reading in treble and bass clefs and apply principles through ear training practice and sight singing. Students will use their knowledge of music theory to write songs and musical compositions as well as create a portfolio of music that they will bring to life through the sequencing and recording software such as *Garage Band* and record their final compositions in the IHS Recording Studio.

0785 MUSICAL THEATER H**1 Credit**

Provides comprehensive overview for students interested in pursuing a concentration in musical theater and stage production in college. Coursework focuses on acting, singing and diverse musical theater styles from operetta through rock. Includes anatomical and musical terms, voice classes, training, and performance in directing scenes and musical productions. Assessments based on participation, performance, and knowledge of course material including storytelling

through voice, improvisation, history of the American musical, analysis of Broadway productions and a project-based production assignment.

0769 MUSIC APPRECIATION, UCONN ECE

1 Credit

Prerequisite: 85 in a previous music course or Department Chair Endorsement

This course presents an approach toward intelligent listening, illustrated by recordings. Students will experience a deep dive into the incredible history of Western music, spanning from ancient times to the modern era. Students will gain insight into the structure and elements of music but also learn how to understand music in its historical context. Many eras, genres, and styles of music will be covered, yet the focus of the course is on classical music. Class time will be spent learning musical concepts, music history, and music theory as well as listening to recordings. Students will develop their listening skills and learn to recognize famous classical pieces. Students will also spend time journaling, reflecting, and writing about music. Students will earn 3 college credits through the University of Connecticut with successful completion of the course with a grade of C or better. Fee required for UCONN credit.

CAREER AND TECHNOLOGY

0680 PRINCIPLES OF INFORMATION TECHNOLOGY CP

1 Credit

Principles of Information Technology course equips students with computer literacy skills necessary to adapt to emerging technologies used in the global marketplace. Students will discover how to implement personal and interpersonal skills for a rapidly evolving workplace environment. Topics covered include Operating Systems and Networking, Computer Viruses, Microsoft Office Suite (Word, Excel, PowerPoint, Outlook), Web Authorizing and Software Languages, Web Names and Registration and Web Content.

0610 IT ESSENTIALS CP

1 Credit

IT Essentials is a two-semester course which covers fundamental computer and career skills for entry-level IT jobs. The IT Essentials course includes hands-on labs that provide practical experience using simulation tools to help you hone your troubleshooting skills and practice what you learn. You will learn how computers and mobile devices operate, identify common security threats and vulnerabilities (such as malware, phishing, spoofing and social engineering), apply skills and procedures to install, configure, and troubleshoot computers, mobile devices, and software and develop critical thinking and problem-solving skills using both real equipment and Cisco Packet Tracer, a network configuration simulation tool. Students who successfully complete the course may be eligible to attempt to attain the internationally recognized A+ professional certification exam.

0619 INTRODUCTION TO NETWORKS H

1 Credit

Prerequisite: 90 in IT Essentials and/or Academic Review Committee Recommendation

Begin preparing for a networking career with this introduction to how networks operate, including learning the architecture, structure and functions needed to support the operations and priorities of Fortune 500 companies and small innovative retailers. Students will configure a simple LAN/other network.

0601 COMPUTER SCIENCE AP (Not Available to Freshmen)

1 Credit

Prerequisite: enrolled in any Honors/AP Math Class and/or Academic Review Committee Recommendation

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem solving and design using Java language. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. Students are required to take the course exam as well as AP exam.

0620 INTRODUCTION TO ENGINEERING DESIGN H

1 Credit

Prerequisite: 93 in Algebra I or 83 in Algebra I H

This *Project Lead the Way* course provides students the opportunity to dig deep into the engineering design process and apply math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing project. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software and use an engineering notebook to document their work. Course concepts include the design process, technical sketching and drawing, measurement and statistics, modeling skills, geometry of design, reverse engineering, documentation, advanced computer modeling, design team and design challenges. *Students may earn up to three college credits based on their performance in the course and the end of course assessment.*

0621 PRINCIPLES OF ENGINEERING H**1 Credit****Prerequisite: 83 in Introduction to Engineering Design H or Senior with Academic Review Committee Recommendation**

This two-semester *Project Lead the Way* course introduces engineering concepts, methodologies, and the application of engineering principles. Students explore multiple engineering fields gaining a better understanding of each. The course provides students the opportunity to apply an engineering design process and develop their analytical and problem-solving skills. Using activities, projects and problems, students learn first-hand how engineers use math, science and technology in an engineering problem solving. *Students may earn up to three college credits based on their performance in the course and the end of course assessment.*

0622 CIVIL ENGINEERING AND ARCHITECTURE H**1 Credit****Prerequisites 83 or Higher in Principles of Engineering or Senior with Academic Review Committee Recommendation**

This is a full year high school course level from *Project Lead the Way* Engineering Track. Students learn the fundamentals of building design, site design, and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software. *Students may earn up to three college credits based on their performance in the course and the end of course assessment.*

0623 INTRODUCTION TO BUSINESS AND MARKETING CP**1 Credit**

To succeed as a business professional, students need a range of specific skills and training. The marketing course covers the latest marketing strategies, theories, trends, and ethical practices. Students will take part in multiple hands-on projects with a focus on innovative thinking, adaptability, and clear articulation of ideas. The importance of public relations, branding, consumer behavior, advertising and retail merchandising are highlighted. The introduction to business is a broad-based course designed to give the student exploratory experiences as they relate to the world of business. Students will explore business aspects through problem-solving, role-playing, critical thinking, project development and business strategies.

0250 PERSONAL FINANCE CP - Senior Seminar Requirement**.5 Credit**

This one semester senior seminar course is paired with the Health and Wellness course. Understanding and managing personal finances are key to one's future financial success. This course presents essential knowledge and skills necessary to make informed decisions about real world personal financial planning and management as well occupational decisions.

0626 SPORTS AND ENTERTAINMENT MANAGEMENT CP**.5 Credit**

This course gives students a fundamental understanding of the business and marketing landscape of the ever-changing sports and entertainment industry. Encompassed in this course are points such as event and facility management, business to business marketing, social media, branding, law, and many more. Utilizing the understanding of ethical and moral standards in the business decision making process. Students will experience the responsibility of developing a major project, research endeavor or business plan.

0622 FUNDAMENTALS OF ACCOUNTING H**1 Credit****Prerequisite: 93 in Algebra I CP or 83 in Algebra I H and/or Academic Review Committee Recommendation**

This course provides students with a comprehensive introduction to the principles of accounting. Students will explore why accounting is considered the language of Business. Students will learn how accurate accounting records are essential for business entities to stay profitable and thrive. Topics such as the accounting equation, the accounting cycle, journal

entries and adjustments, the creation of financial statements, and ethics in accounting will be examined in detail. This course is ideal for any student considering a career in Business of Finance.

0612 GRAPHIC DESIGN I FOR BUSINESS CP

1 Credit

This course will introduce students to the broad field of graphic arts. Through hands-on projects, students will learn about design fundamentals, color theory, typography, and the design process. Students will be introduced to a wide variety of technical concepts and details related to graphic design, computer applications, digital and traditional photography, and career opportunities. Students will learn the basics of the Adobe Creative Suite to design and produce a variety of printed products and display graphics.

0616 GRAPHIC DESIGN II FOR BUSINESS H (Honors)

1 Credit

Prerequisite: 93 in Graphic Design I CP and/or Academic Review Committee Recommendation

Graphic Design II is an extension of Graphic Design I. The students will be involved with advanced techniques in photo manipulation, page and package design, and digital printing. Students will gain significant knowledge of the different programs in the Adobe Creative Suite. This course will significantly increase understanding of design thinking and problem solving as well as visual literacy.

0624 VISUAL DESIGN ECP (GRAPHIC DESIGN III) ECP FOR BUSINESS

1 Credit

Prerequisite: 83 in Graphic Design II H and/or Academic Review Committee Recommendation

This course introduces students to the design process using professional-level software for digital image creation and editing, typesetting and typography, page layout and design in preparation for advanced coursework. Students produce course projects that demonstrate creativity, design concepts, critical thinking, aesthetic principles, and basic technical competence. ECP credit from Quinnipiac University. (Additional fee required).

0615 DIGITAL GRAPHICS DESIGN IV FOR BUSINESS H (Honors)

1 Credit

Prerequisite: Successful Completion of Visual Design ECP/College course

This is an independent study course for Advanced Graphics course for students who intend to pursue a career in design or related business/arts field. Students will receive certification in several Adobe suite programs including PS, Id and Ai. Students will identify an area for improvement and work to obtain an increased implementation of their knowledge as well as working with clients to create marketing materials including but not limited to fliers, outdoor advertising, promotional items such a t-shirt, buttons, stickers and more.