

# COURSE CATALOG 2020-2021 



## REQUIREMENTS FOR IMMACULATE HIGH SCHOOL DIPLOMA Effective September 2020

To meet minimum credits for graduation, students are required to earn $\mathbf{2 5}$ credits. The requirements below reflect the minimum core course requirements to graduate. Please consult with your counselor for the recommended distribution of courses and credits most suited to your educational and career plans.

| Religion | 4 years | 4.0 |
| :---: | :---: | :---: |
| English | 4 years | 4.0 |
| Mathematics | 4 years | 4.0 |
| Science | 3 years | 3.0 |
| Social Studies | 3 years | 3.0 |
| World Languages | 2 years | 2.0 |
| Fine Arts | 1 year | 1.0 |
| Physical Education | $1 / 2$ year | .5 |
| Freshman Seminar (Tech/PE) | 1 year | 1.0 |
| Senior Seminar (Health/Finance) | 1 year | 1.0 |
| Community Service <br> (.25 credit per year) | 4 years | 1.0 |
|  | TOTAL FOR GRADUATION | 25 |


| Freshman Year |  |
| :--- | :--- |
| Subject | $\mathbf{7 . 2 5}$ Credits |
| Religion | 1.0 |
| English | 1.0 |
| Mathematics | 1.0 |
| Science | 1.0 |
| Social Studies | 1.0 |
| World Languages | 1.0 |
| Technology (Required) | 1.0 |
| Elective | 1.0 |
| Community Service | .25 |


| Sophomore Year |  |
| :--- | :--- |
| Subject | $\mathbf{7 . 2 5}$ Credits |
| Religion | 1.0 |
| English | 1.0 |
| Mathematics | 1.0 |
| Science | 1.0 |
| Social Studies | 1.0 |
| World Languages | 1.0 |
| Physical Education | 1.0 |
| Elective | 1.0 |
| Community Service | .25 |


| Junior Year |  |
| :--- | :--- |
| Subject | $\mathbf{7 . 2 5}$ Credits |
| Religion | 1.0 |
| English | 1.0 |
| Mathematics | 1.0 |
| Science | 1.0 |
| Social Studies | 1.0 |
| Elective | 1.0 |
| Elective | 1.0 |
| Community Service | .25 |
|  |  |


| Senior Year |  |
| :--- | :--- |
| Subject | $\mathbf{7 . 2 5}$ Credits |
| Religion | 1.0 |
| English | 1.0 |
| Mathematics | 1.0 |
| Senior Seminar (Required) | 1.0 |
| Elective | 1.0 |
| Elective | 1.0 |
| Elective (Recommended) | 1.0 |
| Community Service | .25 |
|  |  |

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 June 15-30:

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-successful completion of an approved summer school course;
-discovery of a clerical error; or
-a course has been cancelled due to insufficient enrollment.
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## 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 $\mathbf{+ 0 . 3}$.

AP and ECE 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 $\mathbf{9 0 \%}$ in the course.

Student Ranking
Effective in the 2019-20 school year, Immaculate High School will adhere 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.

## 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. Review of basic grammar, unity and coherence in writing is stressed. Other topics include study skills, research skills, and vocabulary development.

## 0112 ENGLISH I H

## 1 Credit

In addition to the English I concept, this two-semester Honors course practices essential skills with a stress on closereading 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
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 and analyze literature according to genres; however, content will be slightly more sophisticated. In addition to grammar, writing, and vocabulary development, the mechanics of the research paper will be covered; students will be required to produce a paper of moderate length.

## 0122 ENGLISH II H

## Prerequisite: 90 in English I CP or 85 in English I H

## 1 Credit

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.

## 0131 English III CP: American Literature

## 1 Credit

English III is a two-semester course that surveys the tradition of American literature. Literary works are chosen to reflect the evolution of American thought within a historical setting. 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.

## 0132 ENGLISH III H: American Literature H

## 1 Credit

## Prerequisite: $\mathbf{9 0}$ in Eng. II CP or 85 in Eng. II H

English III Honors is a two-semester course that reviews 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.

## 0133 LANGUAGE AND COMPOSITION AP

1 Credit
Prerequisite: 90 in Eng. II CP or 85 in Eng. II H or Department Chair endorsement
Students are required to take the AP Language \& Composition exam as well as course exam. 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.

## 0142 ENGLISH IV: BRITISH LITERATURE H

1 Credit
Prerequisite: 90 in Eng. III CP or 85 in Eng. III H or 80 AP Language and Comp or Department Chair Endorsement English IV Honors is intended for students of exceptional reading and writing ability. Like English IV CP, 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.

## 0143 LITERATURE AND COMPOSITION AP

## 1 Credit

Prerequisite: 90 in Eng. III CP or 85 in Eng. III H or 85 AP Language and Comp, or Department Chair Endorsement. 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. Concentrating on British Literature, 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.

## 145/101 BRITISH LITERATURE .5/PUBLIC SPEAKING CP . 5 Credit Senior Level Course 1 Credit

British Literature CP surveys English literature in the Anglo-Saxon, Medieval, Renaissance, and Elizabethan periods, and the 17 th, 18 th, and romantic (19th) centuries. Students study the various literary genres in these periods, including English poetry, drama, the essay, short story, and novel. In addition, the student can expect to produce a major research paper, along with numerous other papers designed to develop the student's academic and creative expression. The Public Speaking course is designed to learn effective public speaking communication skills. In this performancebased course, students will examine effective speaking techniques and self-presentation skills to be utilized in individual, group and/or public speaking opportunities. Attention will be given to speech-writing composition and analysis of famous public speeches.

## 146/157 BRITISH LITERATURE (.5) /FILM LITERATURE CP . 5 Credit Senior level class 1 Credit

British Literature surveys English literature in the Anglo-Saxon, Medieval, Renaissance, and Elizabethan periods, and the 17th, 18th, and romantic (19th) centuries. Students study the various literary genres in these periods, including English poetry, drama, the essay, short story, and novel. In addition, the student can expect to produce a major research paper, along with numerous other papers designed to develop the student's academic and creative expression. The Film Literature course examines film masterpieces and how stories are an essential part of every human culture. Students will analyze the use of plot, setting, style, and point of view in classic films. Class activities include viewing, listening,
researching, and analyzing film. This course requires parental permission before students can participate in the classroom viewing. **Please be advised that Film Lit is not an NCAA sanctioned class.

## 108/109 CREATIVE WRITING .5/SHAKESPEARE DRAMA .5 CP Junior and Senior Elective 1 Credit

The Shakespeare/Drama course focuses on both Shakespeare and modern works, incorporating reading, interpretation, and the preparation and presentation of monologues and scene studies. Students will become comfortable with basic terminology of the theatre, formulate design concepts, set renderings, costume and makeup techniques, and learn how these elements contribute greatly to both our understanding of the playwright's words and the audience experience. The final grade will be determined in part by a student portfolio. The one semester writing course is designed to enhance student recognition, understanding, appreciation and application of strong writing skills. The course will explore a variety of styles and techniques in order to equip the student with a range of writing approaches. Students will model various styles of fiction, poetry and drama creating original short stories, poems and a one-act play. The school literary magazine will be a product of the class. Assessment will be by portfolio

## MATH

## 0211 ALGEBRA I CP

1 Credit
This two-semester course develops a background in basic algebraic skills: basic properties of real numbers; solving firstdegree equations; word problems using first-degree equations; solving first-degree inequalities; word problems using first-degree inequalities; graphing linear functions in two variables; solving linear systems in two variables by 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.

## 0212 ALGEBRA I H

## 1 Credit

This two-semester course requires an in-depth study of all the topics covered in the (CP) 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; and Data Analysis and Probability. Practical applications of real-world problems will be incorporated throughout this course.

## 0221 GEOMETRY CP

## 1 Credit

This-two semester course, sequential to Algebra I, is an integration of plane geometry with arithmetic and algebra. Syllabus includes all of 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.

## 0222 GEOMETRY H

## 1 Credit

Prerequisite: $\mathbf{8 5}$ in Algebra I H or $\mathbf{9 0}$ in Algebra I CP
This two-semester course, sequential to Algebra I (Honors), requires an in depth study of all topics covered in the CP Geometry course, but offers such additional topics 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.

## 0231 ALGEBRA II CP

1 Credit
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; and applications of real-world problems.

## 0232 ALGEBRA II H

## 1 Credit

Prerequisite: $\mathbf{8 5}$ in Geometry $\mathbf{H}$ or $\mathbf{9 0}$ in Geometry CP
This two-semester course is sequential to Geometry H and requires an in depth study of all topics covered in the CP Algebra II course, but offers such additional topics 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.

## 0241 MATH IV/TRIG CP Prerequisite: Algebra II 1 Credit

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 polar notation. This course is totally integrated with a TI-84 + calculator.

## 0246 PRE-CALCULUS CP

## 1 Credit

## Prerequisite: $\mathbf{8 0}$ in Algebra II CP or Completion of Algebra II H

This two-semester course, 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, and 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 TI84+ calculator.

## 0242 PRE-CALCULUS H

## 1 Credit

## Prerequisite: 85 in Algebra II H/90 in Algebra II CP or Department Chair Endorsement

This two-semester course is sequential to Algebra II (H), provides an in-depth study of advanced algebra and trigonometry: 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, and arithmetic and geometric series and sequences. 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 totally integrated with a TI-84+ calculator. This course is integrated with a $\mathrm{TI}-84+$ calculator.

## 0244 CALCULUS H

## 1 Credit

Prerequisite: 85 in Pre-Calculus H/ 90 in Pre-Calculus CP or Department Chair Endorsement
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 $\mathrm{TI}-84+$ calculator.

## 0243 CALCULUS/AB ECE

## 1 Credit

Prerequisite: 85 or higher in Pre-Calculus H or Completion of Calculus H or Department Chair Endorsement 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. Students are required to take the AP Exam and course exam. ECE exam is optional. TI-84+ calculator required.

## 0203 INTRODUCTION TO STATISTICS H <br> 1 Credit

Prerequisite: Completion of Pre-Calculus CP or H
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. TI-84 graphing calculator for applications is required.

## Theology

## 011 RELIGION I: Christ Revealed in the Hebrew Scriptures: A Study of the Old Testament 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 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 both personal and communal prayer in deepening our relationship with God.

## 021 RELIGION II: 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 RELIGION III: 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.

## 042/044 RELIGION IV: Christian Lifestyles (.5) and Social Teachings of the Church (.5) 1 Credit

This two - 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) will be discussed from the point of view of creating a Christian lifestyle, the demands, responsibilities, strengths and weaknesses. During the second semester 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 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.

## 042/043 RELIGION IV: Christian Lifestyles (.5) and World Religions (.5)

 1 CreditThis two-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 an expected vocation. The individual vocations (married life, single life, consecrated life and priesthood) will be discussed from the point of view of creating a Christian lifestyle. Each vocation will be considered as to its demands and responsibilities, strengths and weaknesses. 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.

## 013/015 RELIGION IV H: Christian Lifestyles H (.5) Mariology H (.5)

## 1 Credit

## Prerequisite: 90 in Junior Year CP Religion or Department Chair Endorsement

This two-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 an expected vocation. The individual vocations (married life, single life, consecrated life and priesthood) will be discussed from the point of view of creating a Christian lifestyle. Second Semester 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. The course will 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 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.

## 014/015 RELIGION IV H: Christian Lifestyle H (.5)/Catholicism and Culture H (.5) Prerequisite: $\mathbf{9 0}$ in Junior Year CP Religion

## 1 Credit

This two-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 an expected vocation. The individual vocations (married life, single life, consecrated life and priesthood) will be discussed from the point of view of creating a Christian lifestyle. Second Semester current events, art, and films will be used 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 Languages Department 

## 0319 SPANISH 1 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 IH

1 Credit

## Prerequisite: Score on Placement Exam

This two-semester course is designed for the qualified, highly motivated beginner. The four basic skills of listening, speaking, reading and writing is 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. This course uses the level 1 textbook in the Senderos series.

## 0326 Spanish II CP

1 Credit

## Prerequisite: 65 in Spanish I CP

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: 85 Spanish I H/ 90 Spanish I or Department Chair End orsement

This two-semester course reinforces and builds upon previously learned skills using pair and group activities, projects and presentations. 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: 65 Spanish II

Continuing and reinforcing the work done in Spanish II CP, students continue developing the four language skills. More advanced grammatical structures are introduced, and basic structures are reinforced. All aspects of the course, including projects, are presented in a cultural context which enhances the students' understanding of the geography, history and rich diversity in the Spanish-speaking world. Spanish is used as the medium of instruction as much as possible.

## 0332 SPANISH III H Prerequisite: 85 in Spanish II H 1 Credit

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.

## 0341 SPANISH IV H

## 1 Credit

## Prerequisite: 85 in Spanish III H; 90 in Spanish III (CP) or Department Chair Endorsement

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 aural and oral exposure to the language as well as on achieving mastery of the most complex grammatical structures in writing assignments. Thematic vocabulary acquisition continues with extensive, in-depth study and weekly assessments. Original works of Spanish literature are read and interpreted. All class activities use the Spanish language as the primary vehicle for communication. English is spoken only with the permission of the instructor. The class will prepare for the SAT II exam and college placement exams.

## 0349 SPANISH V H

1 Credit

## Prerequisite: $\mathbf{8 5}$ in Spanish IV H

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.

## 0352 SPANISH FOR THE PROFESSIONS Sophomore, Junior or Seniors 1 Credit

## Prerequisites: 90 in Spanish II H or 85 in Spanish II CP or Department Chair endorsement

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.

## 0351 AP Spanish Virtual

## 1 Credit

## Prerequisite: 85 in Spanish IV H

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

## 0314 FRENCH I 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. A major project focuses on the history of Paris.

## 0324 FRENCH II H

## 1 Credit

## Prerequisite: 65 in French I H or qualifying score on placement test

Students continue their study of French culture and language, adding mastery of past tenses and more advanced grammar concepts. Much 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. During the second semester students will research, prepare and serve a French meal to their families as well as engage in informal conversations using the French language.

## 0334 FRENCH III H

## 1 Credit

## Prerequisite: 70 in French II H

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.

## 0343 FRENCH IV H V (Two Semester Virtual Course)

1 Credit

## Prerequisite: 70 in French III H

This course prepares students for the rigors of AP French Language

## 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 65 in Chinese I CP

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. The online, self-paced course consists of 180 lesson days divided in two semesters including a midterm and final each semester. Student progress is assessed in proficiency through quizzes, tests, and speaking/writing submissions. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0366 CHINESE III H

1 Credit

## Prerequisite 65 in Chinese II H

Students continue to expand their abilities in various aspects of Chinese Mandaring. 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. The Chinese III course greatly improves students reading abilities and students are able to writhe 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 Chinese culture, including the origins, histories. Anecdotes, and etiquettes for various cultural settings, events, and occasions. Students also learn to compare and contrast the Chinese culture with their own cultures in many different aspects.

## 0367 CHINESE IV H

## 1 Credit

## Prerequisite 70 in Chinese III H

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

## 0356 ITALIAN I CP (Virtual)

## 1 Credit

Students are introduced to the Italian language using an interactive online program. Students learn how to greet someone, introduce themselves and their family, express opinions, describe objects, places or situations, make a phone call, go shopping and much more! This course offers a personalized experience enabling students to progress through a structured sequence with pacing provided for guidance. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0357 ITALIAN II H (Virtual)

1 Credit

## Prerequisite: 65 in Italian I

Students review, practice and reinforce how to express opinions, describe objects, places or situations, make a phone call, go shopping, use the simple past, sing in Italian, watch Italian videos, and much more! Upon completion of the course students should be able to understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance, communicate in simple and routine tasks requiring a direct exchange of information on familiar topics and activities, use a series of phrases and sentences to describe family and other people, location and living conditions, educational background and jobs. This course offers a personalized experience enabling students to progress through a structured sequence with pacing provided for guidance. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0358 ITALIAN III H (Virtual)

## 1 Credit

## Prerequisite: 70 in Italian II H

Student immerse their knowledge of the Italian culture and become familiar with Italian topics such as opera, art, cinema and others. They learn how to better express their opinions, understand more complex sentences, make comparisons, narrate a fact with different kinds of past, use the future, use pronouns, relate situations, read Italian newspapers, watch Italian videos and visit some recommended Italian websites. Upon successful completion of this course students should be able to understand the main points of clear standard speech regularly encountered in work, school, leisure, etc. and be able to deal with most situations likely to arise whilst traveling in an area where Italian is
spoken. This interactive immersion course is presented in Italian. The virtual class is self-paced and recommended for the self-motivated, independent learner.

## 0315 LATIN I H (Virtual)

## 1 Credit

Students begin their introduction to Latin with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. The online, self-paced course consists of 180 lesson days divided in two semesters including a midterm and final each semester. Student progress is assessed in proficiency through quizzes, tests, and speaking/writing submissions. Each week consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0317 LATIN II H (Virtual)

## 1 Credit

## Prerequisite 65 in Latin I H

The Latin II H course continues the study of an ancient language in a modern way. Weekly lessons stress the fundamental building blocks of foreign language study: listening comprehension, speaking, reading, and writing. The online, self-paced course consists of 180 lesson days divided in two semesters including a midterm and final each semester. Student progress is assessed in proficiency through quizzes, tests, and speaking/writing submissions. Each week consists of a new vocabulary theme and grammar concept, a notable ancient myth in Latin, interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments. The virtual class represents an ideal blend of language learning pedagogy and online learning for the selfmotivated, independent learner.

## 0318 LATIN III H (Virtual)

## 1 Credit

## Prerequisite 70 in Latin II H

Students expand their knowledge and appreciation of Latin to the next level. Students read some of the best Latin prose and poetry ever written or spoken including the timeless words of Caesar, Cicero, Catullus, and other great Roman poets, storytellers and orators. The purpose of this course is to strengthen students' Latin vocabulary as well as their appreciation for well-crafted writing. Students go directly to the source and recognize why Latin and those who spoke it are still relevant today. This online course is self-paced and recommended for the self-motivated, independent learner.

## 0320 GERMAN I CP (Virtual)

## 1 Credit

This course provides students with an introduction to the German language. Students begin their language study and development with the four key areas of foreign language study: listening, writing, reading, and speaking through a variety of content related activities. The themes covered throughout the course are introductions and greetings, friends and family, school and daily routines, and social activities. Students will learn basic grammar concepts and vocabulary in order to communicate with others in a variety of real-world situations in the German language. Culture is incorporated throughout each unit. The online, self-paced course is divided in two semesters including a midterm and final exam each semester. Student progress is assessed in proficiency through quizzes, tests, and speaking/writing submissions. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0327 GERMAN II H (Virtual)

## 1 Credit

## Prerequisite 65 in German I CP

In this continuing introduction to German, students deepen their focus on four key skills in foreign language acquisition:
listening, writing, reading, and speaking. A continuing storyline introduces and reinforces new vocabulary, while activities prompt students to analyze meaning from context, and then reproducing new vocabulary items in functional real-life oral expressions. This course employs direct-instruction approaches, including application of the target language through activities. Each unit includes a discussion topic which provides an opportunity for discourse on specific topics in German. The online, self-paced course is divided in two semesters including a midterm and final exam each semester. Student progress is assessed in proficiency through quizzes, tests, and speaking/writing submissions. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0329 GERMAN III H (Virtual)

## 1 Credit

## Prerequisite $\mathbf{7 0}$ in German II H

This course builds on the basics covered in levels one and two. The four language skills: listening, writing, reading, writing will be further developed, and additional grammatical structures and vocabulary introduced. Unit themes in this course include home and health, life and world, everyday things, places and events, tourism and recreation, and professions and hobbies. The virtual class is self-paced ideally suited for the self-motivated, independent learner.

## 0328 JAPANESE I CP (Virtual)

1 Credit
Students are introduced to the Japanese language program using an interactive online program. Students learn how to greet someone, introduce themselves and their family, express opinions, describe objects, places or situations, make a phone call, go shopping and much more! This course offers a personalized experience enabling students to progress through a structured sequence with pacing provided for guidance. The virtual class represents an ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0331 JAPANESE II H (Virtual)

## 1 Credit

## Prerequisite 65 In Japanese I

Students review, practice and reinforce how to express opinions, describe objects, places or situations, make a phone call, go shopping, and more. Upon completion of the course students should be able to understand phrases and he highest frequency vocabulary related to areas of most immediate personal relevance, communicate in simple and routine tasks requiring a direct exchange of information on familiar topics and activities, use a series of phrases and sentences to describe family and other peoples location and living conditions, educational background and jobs. This course offers a personalized experience enabling students to progress through a structured sequence with pacing provided for guidance. The virtual class represent and ideal blend of language learning pedagogy and online learning for the self-motivated, independent learner.

## 0333 JAPANESE III H (Virtual)

## 1 Credit

## Prerequisite 70 in Japanese II H

Students immerse their knowledge of the Japanese culture and become familiar with Japanese art forms, cinema and other cultural topics. They learn how to better express their opinions, understand more complex sentences, make comparisons, and narrate a story successfully. Upon successful completion of this course, students should be able to understand the main points of clear, standard speech regularly encountered in work, school , leisure, etc. and be able to deal with most situations likely to arise while traveling in an area where Japanese is spoken. This interactive immersion course is present in Japanese. The virtual class enables students to progress through a structured sequence with pacing provided for guidance. This class is for the self-motivate, independent learner.

## 0344 AMERICAN SIGN LANGUAGE I (Virtual)

## 1 Credit

American Sign Language (ASL) I is an introductory course that uses selected readings, visual recordings and interactive online activities to help students understand and respond to simple questions and statements in ASL. To demonstrate
ability in signing skills, students will be asked to record videos of themselves signing to submit to their instructors. Students will also build their knowledge and understanding about Deaf culture and history. This course adheres to both the National Standards for Learning American Sign Language and the World Readiness Standards for Language Learning, ensuring that students develop competence to communicate effectively and interact with cultural understanding of the Deaf community.

## 0345 AMERICAN SIGN LANGUAGE II (Virtual)

1 Credit
American Sign Language II builds upon skills developed in American Sign Language 1, extending students' ability to understand and express themselves in American Sign Language and increasing their vocabulary and speed. Students learn how to engage in discourse for informative or social purposes and to comprehend the language when signed slowly. This course focuses on everyday communication in ASL by introducing students to the basic signs, techniques and culture. To help develop receptive skills without relying on lip movements of the signers, the signing videos will be all "voice off." To develop expressive skills, students will continue to express their thoughts in signs within the given context in the lessons.
Through the introduction to some of the higher ASL techniques such as classifiers and indexing, this second-year course is designed to help students to develop an understanding that ASL is a visual language that delivers one's ideas and thoughts using more than the individual signs. Students will use various media tools including online resources, online dictionaries, a web cam and the knowledge of VHS video tool. This course targets Novice-High Level of World Language Standards and Benchmarks and will address the five goal areas targeted in the World-Readiness Standards for Learning Languages: communication, cultures, connections, comparisons, communities.

## 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

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 CP 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: 85 in Biology H and 85 in 9th Grade Honors Math Course or 90 in Biology CP and 90 in CP Geometry or Department Chair Endorsement
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: $\mathbf{8 5}$ in Chemistry H or Physics H, 90 in Chemistry CP or Physics CP or Department Chair endorsement.

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 PRINCIPLES OF 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

## 1 Credit

## Prerequisite: $\mathbf{8 0}$ in Biology CP

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 AP BIOLOGY, UCONN ECE and AP

1 Credit
Prerequisite: 85 in Biology H and Chemistry H or 90 in Biology CP \& Chemistry CP or Department Chair Endorsement 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 exam, as well as a final exam. Fee required for UCONN credit.

## 0435 PHYSICS CP

## 1 Credit

## Prerequisite: Completion of Chemistry CP or $\mathbf{H}$ and Algebra II CP or 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 the everyday environments, problem solving techniques that apply to a number of 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: 90 in CP Algebra II and CP Chemistry, OR 85 in Honors Geometry or Honors Algebra II and Honors Chemistry or Department Chair Endorsement
Co-requisite: Concurrent enrollment in Honors Algebra II or Pre-Calculus or Math IV/Trig
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 1 Credit
Prerequisite: 85 in Honors Algebra II or 90 in Algebra II CP or Department Chair Endorsement

## Corequisite: Concurrent enrollment in either Pre-Calculus or Math IV/Trig

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. This course should be taken during junior year. Students are required to take AP Physics 1 Exam and course exam.

## 0445 PHYSICS AP 2

## 1 Credit

Prerequisite: Completion of AP Physics 1 or 85 in Honors Physics or Department Chair Endorsement Corequisite: Concurrent enrollment in either Pre-Calculus or Math IV/Trig.
This inquiry-based course with a laboratory section follows AP Physics 1 and prepares students for the Advanced Placement examination in Physics 2. The curriculum represents topics mastered in a non-calculus second semester college physics course: fluid mechanics, thermodynamics, electricity and magnetism, light and optics, atomic and nuclear physics. A strong emphasis is placed on the application of familiar principles in new situations in which the student must devise a logical solution. Students are required to take the Advanced Placement Physics 2 exam and course exam.

## 0441 HUMAN ANATOMY \& PHYSIOLOGY CP <br> 1 Credit <br> 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 <br> Prerequisite: Junior/Senior elective, 90 in Biology CP or 85 in Biology H or Department Chair Endorsement 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.

## 0407 FORENSIC SCIENCE CP 1 Credit

## Prerequisite: Junior/Senior elective

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.

## 0403 ADVANCED HEALTH CARE \& BIOSCIENCES H 1 Credit

Prerequisite: Junior/Senior elective 85 in Biology H or 90 in Biology CP. Concurrent enrollment in Nursing Assistant Internship H and Anatomy and Physiology H or Department Chair Endorsement
This course 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: 85 in Biology H or $\mathbf{9 0}$ 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.

## 0805 PHYSICAL EDUCATION

. 5 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 noncompetitive 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

. 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.

## 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 $21^{\text {st }}$ 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, the World Wars, the Cold War, and the emergence of Global thinking at the dawn of the 21st Century are closely examined.

## 0526 MODERN WORLD HISTORY H

## 1 Credit

This survey course examines the in-depth progress of human civilization from the time of the French Revolution of 1789 to the emergence of the 21st Century. Emphasis is placed on the evolution of government from absolutism to popular consent. Major world events such as the Age of Enlightenment, Modern Revolutions, National Unification Movements, the World Wars, the Cold War, 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.

## 510 AMERICAN GOVERNMENT CP

.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. US Government is a state mandated course for graduation. This course is concurrent with Regional Economics of the US.

## 509 AMERICAN GOVERNMENT H

## . 5 Credit

## Prerequisite: $\mathbf{8 5}$ in Social Studies course $\mathbf{H}$ or $\mathbf{9 0}$ in Social Studies course CP

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. US Government is a state mandated course for graduation. This course is concurrent with Regional Economics of the US Honors.

## 0578 REGIONAL ECONOMICS of the US CP Sophomore Course . 5 Credit

This semester program of study is an introduction to the principles of regional economics. The American economy produces the world's second largest gross domestic product (GDP). The study of economics is the social science that deals with the allocation of resources, including production, consumption and distribution of goods and services. The course will focus on populations, agriculture, transportation, land use and resources of urban and rural areas in the United States. Special emphasis is placed on the relationship of culture, regional resources, technology and economic growth and opportunities in both urban and rural US regions.

## 0579 REGIONAL ECONOMICS of the US H Sophomore Course

## . 5 Credit

## Prerequisite: 85 in Social Studies course H or 90 in Social Studies course CP

This semester program of study is an introduction to the principles of regional economics. The study of economics is the social science that deals with the allocation of scare resources, including production, consumption, and distribution of
goods and services. Special emphasis placed on the relationship of culture, resources, technology, and the physical landscape of the American geographic patterns of economic activity. The Honors level will focus on economic data to analyze markets, solve supply and demand problems, business forms, market structure, labor, role of government and local economic policies, money and banking, globalization and international trade. Student assessments will include a project-based assignment.

## 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 21 st century. This is a required state mandated course for graduation.

## 0532 U.S. HISTORY SINCE 1877 H

## 1 Credit

## Prerequisite: 85 in H Social Studies course 90 in Social Studies course CP

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 is a required state mandated course for graduation.

0533 U.S. HISTORY AP / UCONN

## 1 Credit

## Prerequisite: 85 in H or 90 in CP during Sophomore year or Department Chair Endorsement

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. Students are required to take the Advanced Placement U.S. History final exam given in May. 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. By registering with UCONN, 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. This is a required state mandated course for graduation.

## 0513 CRIMINAL JUSTICE CP (Junior/Senior Elective) . 5 Credit

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.

## 0554 CONTEMPORARY U.S. ISSUES (Junior/Senior Elective)

. 5 Credit
Students will make an in-depth analysis of current issues on the American political, social and cultural areas of modern America. Emphasis will be placed on the study of recent American history as the basis for contemporary American
perspectives. Issues studied will range from domestic social issues such as Black Lives Matter, changing family structures, and the opioid crisis. Current foreign policy concerns will also be studied, including North Korea, immigration and the war on
terror.

0508 TRIAL LAW H (Fall Semester Only)
. 5 Credit
Prerequisite: $\mathbf{8 5}$ average in previous Honors or AP Social Studies courses; or a 90 average in CP courses.
This Honors 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 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.

## 0562 AMERICAN GOVERNMENT AND POLITICS AP

1 Credit

## Prerequisite: 85 in Social Studies course H or Department Chair Endorsement

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. Participation in the Connecticut state competition on the Constitution is part of this class. Students are required to take the AP American Government and Politics course exam in May.

## 0573 PSYCHOLOGY AP

## 1 Credit

Prerequisite: $\mathbf{8 5}$ in Social Studies H course or $\mathbf{9 0}$ in Social Studies CP, or Department Chair Endorsement 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 AND MICROECONOMICS/ AP/ECE 1 Credit

## Prerequisite: 85 in Algebra $\mathbf{H}$ or 90 in Algebra CP and 85 in Geometry H or 90 in Geometry CP

This full year course will introduce student 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 understandi9ng of theses economic concepts, articles and publications will be utilized from sources such as The Wall Street Journal, Economist Magazine, and The Financial Times. Student's, upon completion, will have the ability to ear three college credits from UConn. AP exam is mandatory.

## 0567 ECONOMIC HISTORY OF THE UNITED STATES H

## . 5 Credit

This course provides students the opportunity to study the development and history of the American economy, with the goal of understanding the events that shaped the sociopolitical and economic culture of the country. Students will explore 300 years of American economic development, but attention will be given to periods that were fundamental in the development of the American economic system. Topics will include the colonial economy, comparing and contrasting the economies of the North and South during the time of the Civil War, the Industrial Revolution, the Great Depression, the Post - WWII economic boom, globalization and the digital economy.

## 0568 LATIN AMERICAN HISTORY

. 5 Credit
This course will provide students with an in-depth study of the history of Latin America beginning with pre-Columbian history and continuing through to the $21^{\text {st }}$ Century. Students will learn of the diversity of the cultures and populations in the region. Topics such as European conquest and colonialism, revolution and independence, dictatorship and repression, globalization, and regional relations with Unites State will be explored.

## 0569 WORLD WAR II IN EUROPE and THE MEDITERRANEAN H

1 Credit
Prerequisite: $\mathbf{9 0}$ in any CP History course or 85 in any Honors History Course
This advanced course traces the causes, course, and results of World War II in Europe and the Mediterranean from the Treaty of Versailles to Nuremberg War Crimes Trials. During the first quarter, students will examine the origins of the war. Approximately two and a half quarters will then be devoted to a detailed study of the war itself. The final four weeks will deal with the many results of history's most devastating conflict. Students may be required to purchase additional paperbacks during the year. Regular testing and research are also part of the course requirements.

## Career and Technology

## 0605 MICROSOFT SUITE CP Required Freshman Class . 5 Credit

This is a required full year course for all freshman students. The course is designed to offer the essential skills le on using Microsoft Excel and Microsoft Word, including Power Point. Advanced students will also have the opportunity to begin learning Microsoft Publisher to create print-ready brochures, posters, etc. Assessments will be based on the successful completion of the beginner and intermediate skills assignments and a year-end final project using Excel, Microsoft Word and Power Point.

## 0601 COMPUTER SCIENCE AP Junior/Senior Elective

## 1 Credit

## Prerequisite: 85 in Geometry Honors (or higher Honors Math Class)

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.

## 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: 85 or higher in IT Essentials
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.

## 0622 FUNDAMENTALS OF ACCOUNTING H Junior/Senior Elective 1 Credit

## Prerequisite: $\mathbf{9 0}$ in Algebra I CP or 85 in Algebra I H

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 CP

## 1 Credit

## (Fine Arts or Business Elective 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 detail 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. This course also meets the Fine Arts requirement for graduation.

## 0616 GRAPHIC DESIGN II H

## 1 Credit

## Prerequisite: 90 in Graphic Design I

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.

## 0614 DIGITAL MEDIA \& DESIGN III/UCONN

## 1 Credit

## Prerequisite 85 in Graphics Design II H

This Graphics III course is an intensive experience in designing for the digital arts. Students engage in a wide range of real-world projects in order to better understand the media and methodologies that form their foundation. Creating digital work is not so much about learning software, as it is about exploring new ways to share and communicate information. It is also as much about thinking and imagination as about doing. Students need to understand the effective uses of communication media and the ways in which information can be visualized and perceived by an audience. The objective of this course is to stimulate students to critically explore, comment and be empowered to develop their own facility, perspective and interests of a rapidly growing industry. The students will design, create and produce a product for a client. UCONN course credit.

## 0615 DIGITAL GRAPHICS DESIGN IV H

## 1 Credit

Prerequisite: Successful Completion of Graphics III/UCONN course or Department Chair Endorsement
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 increase 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

## 0606 DIGITAL SCHOOL PRODUCTIONS CP

## 1 Credit

This collaborative photojournalism class has the primary goal of producing an accurate, thorough, and consistent record of the lives, emotions, and activities of the Immaculate High School students through the production of the yearbook as well as a weekly digital newsletter once the yearbook is completed. Students will have the opportunity to express their creativity while developing new skills in computer design, photography, editing, marketing, and budget management. Members of this class are expected to be responsible, self-motivated students that work well in a group. They will develop leadership skills through managing their own individual projects as each student takes on their specific roles in the production of the yearbook and newsletter.

0617/0618 BUSINESS MARKETING . 5 /INTRODUCTION TO BUSINESS CP . 51 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 based on Dave Ramsey's personal finance program and 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 as occupational decisions.

## 0620 INTRODUCTION TO ENGINEERING H

## 1 Credit

## (Fine Arts or Business Elective Credit)

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.

## 0621 PRINCIPLES OF ENGINEERING H

1 Credit

## Prerequisite: 85 in Introduction to Engineering Design H

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 problemsolving skills. Using activities, projects and problems, students learn first-hand how engineers use math, science and technology in an engineering problem solving process.

0622 CIVIL ENGINEERING AND ARCHITECTURE H
1 Credit
Prerequisites 85 or higher in Principles of Engineering
This a full year high school course level from PLTW 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.

## Health and Wellness

## 0805 PHYSICAL EDUCATION

Sophomore Year ( CLass 2024) 1 Credit
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 noncompetitive 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 <br> . 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 the physical, social, emotional, intellectual, spiritual, and environmental aspects. A combination of lecture, group discussion and activities, presentations, video, nutritional and fitness projects are included.

## 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) <br> Prerequisite: Introduction to Art

1 Credit

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 as a means 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
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 as a means 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.

## 780 PORTFOLIO DEVELOPMENT/INDIVIDUAL STUDY H Seniors Only 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. 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.

## 0783 AP STUDIO 2D ART \& DESIGN <br> Seniors Only <br> 1 Credit

## Prerequisite: Drawing \& Painting, 3-D Sculpture, or Graphic Design 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, a 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.

## 0612 GRAPHIC DESIGN I

## 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 detail 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. This course also meets the Fine Arts requirement for graduation.

## 0613 GRAPHIC DESIGN II H

## Prerequisite: 85 Graphic Design I

## 1 Credit

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.

## 0614 Digital Media Design \& Design III/UCONN

## 1 Credit

## Prerequisite: 85 in Graphic Design II H

This course is an intensive experience in designing for the digital arts. Students engage in a wide range of real-world projects in order to better understand the media and methodologies that form their foundation. Creating digital work is not so much about learning software, as it is about exploring new ways to share and communicate information. It is also as much about thinking and imagination as about doing. As creative produces of content students need to understand the effective uses of communication media and the ways in which information can be visualized and perceived by an audience. The objective of this course is to stimulate students to critically explore and comment upon the digital world they are immersed in, and to empower them to develop their own facility, perspective and interests of a rapidly growing industry. The students will design, create and produce a product for a client.

## 0615 DIGITAL GRAPHICS DESIGN IV H

## 1

## Credit

## Recommendation

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 increase 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.

## 0620 INTRODUCTION TO ENGINEERING H

## (Fine Arts or Business Elective Credit)

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

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

## 1 Credit

## Prerequisite 90 or higher in Concert Band or Department Chair Endorsement

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. Student will mentor incoming freshman 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 Prerequisite: Beginning Piano or Department Chair Endorsement 1 Credit

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 notereading 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 course is for beginner and advanced students. Mixed Chorus is a choral ensemble that will perform classic and contemporary music of medium difficulty that challenges their musical abilities. Some areas of study are basic music theory, voice production, solo and ensemble singing, sight reading and artistic interpretation. A variety of music literature is studied, including sacred and secular compositions from masterworks to contemporary. Chorus students will
perform together at various concerts and performances throughout the year. Participation at all performances is required.

## 0763 CONCERT CHOIR H

## 1 Credit

Prerequisite: $\mathbf{9 0}$ or higher in Mixed Chorus or previous year in Concert Choir or Department Chair Endorsement
Concert choir is a serious study of artistic music for the select chorus musician. This is an auditioned group of up perclassmen who demonstrate advanced skills in vocal production and score reading. They will study and perform advanced repertoire focusing on sacred and secular music ranging from 4 to 8 parts.
There will be an emphasis on a cappella singing. In addition, advanced music theory and music history will be studied. Choir members are REQUIRED to participate in all concerts and out of school performances.

## 0779 MUSIC THEORY AND DIGITAL COMPOSITION H Junior Senior Elective 1 Credit Prerequisite: $\mathbf{8 5}$ 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.

## 0783 Musical Theater H <br> Junior Senior Elective <br> 1 Credit

## Prerequisite: Chorus I, Concert Choir and/or Teacher Endorsement

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.

## 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

- 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 day in the Learning Commons 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 I.H.S. and VHS and are required to take the AP examination in May.
- All assignments are completed online.


## COLLEGE AND CAREER PLANNING COURSE REFERENCE GUIDE

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## COLLEGE AND CAREER PLANNING COURSE REFERENCE GUIDE

## Business

0618 Introduction to Business H
xxxx Fundamentals of Accounting H
0618 Introduction to Business
0617 Business Marketing H
0574 Principles of Macro/Micro Economics AP/UCONN
0575 US Economic History H

## Business and Engineering

0620 Introduction to Engineering CP
0621 Principles of Engineering H
0623 Civil Engineering and Architecture III (H)
Math and Physics H and AP courses

## Political Science and Criminal Justice

0407 Forensic Science
0576 Principles of Economics H
0562 American Government and Politics AP
0554 Contemporary US Issues
0533 U.S. History AP/UCONN
0508 Criminal Justice/Trial Law
0554 Contemporary US Issues
0574 Principles of Macro/Micro Economics AP/UCONN
0575 US Economic History
0578 Introduction to Sociology

## Music Concentration

0782 Music Theory
0745 Concert Band H
0763 Concert Choir H
0747 Modern Band H
0744 Digital Sound Design
0782 Music Theory and Digital Composition
0783. Musical Theater

Business Communications and Design
0612 Graphic Design I
0616 Graphic Design II H
0614 Digital Media Design UCONN
0606 Digital Productions
0780 Art Portfolio
0781 Studio Art

## Computer Sciences and Technology

0603 Computer Applications
0619 Introduction to Networks
0610 IT Essentials
0601 Computer Science AP

## Healthcare and Biosciences

0573 Psychology AP
0401 Nursing Assistance Internship
(Certification Program)
0403 Advanced Healthcare and Biosciences H
0404 Human Anatomy and Physiology H
0424 Principles of Bio Medical Science 0573 Psychology AP

## Science Concentration

Required Courses Plus:
0444 Physics AP Part I
0445 Physics AP Part II
0448 Environmental Studies
0453/1107 Biology AP/UCONN
0463 Chemistry AP
Math and Physics H and AP courses

## Visual Arts Concentration

0617 Portfolio Study H
0751 Drawing and Painting
0752 3D Sculpture and Design
0780 Art Portfolio H
0781 Studio Art AP

