

## Curriculum Guide 2023-2024

## Numb NORTHWE5T CATHOLIL <br> HIGH SCHOOL



# Northwest Catholic High School 2023-2024 <br> Curriculum Guide 

Dear Northwest Catholic Community,
Northwest Catholic High School offers an outstanding college preparatory curriculum rooted in the Catholic intellectual tradition of faith in dialogue with reason. Offering a large selection of advanced courses in both the humanities and STEM, we prepare our students to be well-rounded individuals ready for the challenges of college study.

The core curriculum at Northwest Catholic includes Religion, English, Mathematics, Science, Social Studies, Modern and Classical Languages, and Fine Art.

We also incorporate leadership development and Christian service into the course of study through our LEADS program and classes like Living as a Disciple of Cbrist in Society, ACTS (A Chance to Serve), and the Honors Institute for Leadership in Life. It is our goal to prepare our students to be leaders of high moral character who are inspired by their faith and prepared to serve God and others.

The faculty and staff at Northwest Catholic are lifetime learners who have made a commitment to excellence, guiding our students to the knowledge and skills they need to be successful at the next level. Using differentiated teaching methods, technology, and personal experience, our teachers engage and challenge students to think critically, creatively, and collaboratively--skills that will help our students both in college and also in life.

Northwest Catholic has a long tradition of excellence not only in the classroom but also on athletic fields, on stage, and through service to the community. Our students consistently outperform national and state averages in college readiness and Advanced Placement exams. They go on to attend prestigious colleges and universities around the country.

At Northwest Catholic High School, we find direction and inspiration from our school motto:
In lumine tuo videbimus lumen - In your light we shall see light. Our students are called to be a light to all people, sharing their gifts and talents with the world. At Northwest Catholic, we form our students in mind, body, spirit, and imagination as they develop values of faith, respect, leadership, and service.

Mrs. Jennifer R. Montoney<br>Principal

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## Administration

President
Principal
Dean of Students
Rev. Michael Dolan
Mrs. Jennifer Montoney
Mr. Paul Fitzpatrick

## Leadership Team

Director of Athletics
Director of Campus Ministry
Director of Admissions
Director of Advancement
Director of Technology
Director of School Counseling

Academic Staff
Director of School Counseling
School Counselor
School Counselor
School Social Worker
Coordinator of Special Services
Assistant to the Principal

## Academic Department Chairs

Religion
English
Social Studies
World Language
Mathematics
Science
Fine and Performing Art

Mrs. Ashley Mara
Mr. Christopher Haddad
Mrs. Gillian Ritter
Mrs. Donna Colliton
Mr. Patrick Williamson
Mrs. Kelly Morrison

Mrs. Kelly Morrison
Mrs. Mary Jo Foran
Ms. Allison Owsianko
Ms. Alexis Relyea-Niemann
Mrs. Shirley Pranaitis
Mrs. Katie Rose

Deacon Richard Santos
Ms. Joan Keating-McKeon
Mr. Michael Fess
Mrs. Ana Barrett
Mrs. Kate Calendrillo
Mr. Mark Dodd
Mrs. Charlotte Adams-Brooks

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## Mission Statement

We are a diverse，Catholic，co－ed，college preparatory community．
We educate the whole person，mind，body，spirit，and imagination．
We develop leaders who faithfully serve God and others．

## Northwest Catholic Values

巴 Faith
§ Respect
§ Diverse Community
§ Leadership and Service
巴 Education of the Whole Person

## A Northwest Catholic Graduate Aspires to Be．．．

§ Intellectually Curious and academically excellent
巴 Spiritually Aware and exploring a relationship with God
§ A Compassionate Leader who seeks to serve others and promote justice
§ Community Focused and growing as a member of the NWC family
ॐ A Whole Person who is developing mind，body，spirit，and imagination

## SCHOOL COUNSELING PROGRAM

## Academic Advisement, Counseling, and College Placement

Northwest Catholic school counselors are dedicated to ensuring that each student reaches his or her potential while in high school and is prepared to meet challenges of the future.
The school counseling program consists of classroom lessons as well as individual and group counseling techniques to support each student's academic progress, extracurricular involvement, and social interactions. The goal of ourprogramis to prepare students to become well-rounded with the necessary skills to successfully compete in college and beyond. Counselors maintain an active role during each student's four-year academic journey. Additionally, informational programs are offered to parents at each grade level.

Freshman year: The primary focus is to assist freshmen with the transition to high school and to help create a strong academic foundation. Counselors meet periodically with students to discuss study skills, time management, decision-making, digital citizenship, and goal setting. Additionally, students are introduced to Naviance and the Career Exploration tool. The PSAT 8/9 test is administered.

Sophomore year: Counselors actively work with sophomores to define academic and personal goals and implement a plan of action. Students are introduced to ways to prepare for the PSAT and SAT in preparation for the college planning process. Sophomores participate in group discussions with graduating seniors who offer "Words of Wisdom." A personality assessment 'Do What You Are' is administered via Naviance.

Junior year: The focus of the program in junior year is the college admissions process. Information and preparation about standardized tests utilized for college admissions will be reinforced in October. From the months of December through May, Juniors are presented with a variety of information and materials that will serve as a resource and assist them through the college admissions process. Counselors conduct individual sessions with each student and his/her family to review the student's academic achievement and to identify potential college choices. Students will utilize Naviance for researching colleges.

Senior year: Counselors assist seniors with the college application process. An information night for seniors and their parents occurs at the beginning of the school year to address all aspects of applying to college. Counselors also conduct small group sessions with seniors to review college admissions procedures. Each senior has an individual appointment with their counselor to review the college selection list and application requirements. Counselors continue to advise seniors as needed in choosing their college destination.

## PROCESS FOR COURSE SELECTION

For incoming students, the process consists of a meeting with an advisor, the student, and the family. Prior to this meeting, students receive a Program of Studies and their scores from the entrance exam. Classes are selected based on school/state requirements, student interest, middle school performance, and achievement on the entrance exam. Families will be provided with a list of initial placements to help guide the course selection process. All freshman students are placed into an Algebra I class pending the results of the entrance exam or a placement test. Placement tests for advanced classes in world languages and mathematics are in June. Academic advisement meetings occur during February and March.

For current students, following midterm exams, the teachers and school counselors will make recommendations and assist each student with his or her course selection. Course selections are based on the student's present needs, past performance, graduation requirements, course offerings, and teacher recommendations. A tentative course selection will be sent home for approval. In late spring, schedules are processed, and course conflicts are resolved.

It is important to consider an entire academic year during the course selection process. For ninth graders, the transition to high school involves a larger environment, more complex concepts, and more homework. Students who are involved in extracurricular activities also have a greater time commitment than they did in middle school. For current students, the transition from grade to grade also involves an increased workload and more difficult concepts. Again, it is important to consider an entire academic and extracurricular year. Higher level classes, honors courses, Advanced Placement work, and leadership roles in the arts and athletics all require more time and effort.

COURSE AVAILABILITY: Northwest Catholic reserves the right to cancel any courses based on student interest and enrollment numbers. All courses are subject to availability.

## SCHEDULE CHANGES

It is important to carefully consider the courses before committing to a schedule for the year. Student registration for courses determines allocation of teaching personnel. Students may not drop or change a course unless an exceptional situation exists. This decision will be made by the principal after consultation with the student's school counselor, the department chair, and the teacher. A signature from a parent is also required. A student may not elect to withdraw from a class after 10 academic days into the semester. All schedule changes after the first 10 academic days will be administratively initiated and must be approved by the principal. If a student withdraws after the drop/add period, a "W" will be reflected on the student transcript, and no credit will be awarded.

## COURSE LEVELS

ADVANCED PLACEMENT, EARLY COLLEGE EXPERIENCE (ECE): The Advanced Placement/ECE Program offers students the opportunity to obtain college credit while still in high school. Students should be aware that these courses are taught at a college level and require significantly more outside, independent work than Honors Courses. These courses involve the highest degree of selectivity and rigor. Students should consider their overall academic program and outside commitments when enrolling in these courses. Students enrolled in AP courses are required to take the AP Exam.

HONORS: Honors Courses at Northwest are offered to challenge students of superior academic ability. Courses at this level offer students the opportunity for very advanced intellectual challenge, particularly in the areas of conceptual and analytical reasoning, research, and independent study. These courses have a higher degree of selectivity, speed, and difficulty of material. Students with the highest earned academic achievement may enroll in these courses with teacher and department approval.

COLLEGE PREP (CPI): Courses at this level offer the opportunity to develop thinking and study skills at a college preparatory level. Students are challenged to grow in knowledge and to apply that knowledge through the development of problem-solving and critical-thinking skills.

COLLEGE PREP (CPII): Courses at this level offer the opportunity to develop thinking and study skills at a college preparatory level. Students are challenged to grow in knowledge and to apply that knowledge through the development of problem-solving and critical thinking skills at a foundational level.

## CREDIT REMEDIATION

If a student fails a course, that course must be remediated via a Northwest Catholic approved credit recovery program no later than August $31^{\text {st }}$. All summer school arrangements must be arranged through the Office of the Principal. When a student receives a passing grade for the course, a grade of " P " will be placed on the transcript. Readmittance and promotion to the next grade will not be granted unless required credits have been accumulated.

LEVEL 1
LEVEL 2

| A+ | 4.83 | 4.33 |
| :--- | ---: | ---: |
| A | 4.50 | 4.00 |
| A- | 4.17 | 3.67 |
| B+ | 3.83 | 3.33 |
| B | 3.50 | 3.00 |
| B- | 3.17 | 2.67 |
| C+ | 2.83 | 2.33 |
| C | 2.50 | 2.00 |
| C- | 2.17 | 1.67 |
| D+ | 1.83 | 1.33 |
| D | 1.50 | 1.00 |
| D- | 1.17 | 0.67 |
| F | 0 | 0 |

Portal Grade Ranges, Equivalents, and Scales: These grades, equivalents, and ranges are for use only on the Portal Gradebook. The Report Card Grading Scale is A through Fincluding pluses and minuses.

| Range Scale | Letter Equivalent | Range Scale |  | Letter Equivalent |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{A}+100-98$ | $\mathrm{~A}+=99$ | $\mathrm{D}+$ | $69-67$ | $\mathrm{D}+=$ |
| $\mathrm{A} \quad 97-93$ | $\mathrm{~A}=95$ | D | $66-63$ | $\mathrm{D}=65$ |
| $\mathrm{~A}-92-90$ | $\mathrm{~A}-=91$ | $\mathrm{D}-$ | $62-60$ | $\mathrm{D}-=61$ |
|  |  |  |  |  |
| $\mathrm{~B}+89-87$ | $\mathrm{~B}+=88$ | F | $59-50$ | $\mathrm{~F}=55$ |
| $\mathrm{~B} \quad 86-83$ | $\mathrm{~B}=85$ |  |  |  |
| B- $82-80$ | $\mathrm{~B}-=81$ |  |  |  |
| C $+79-77$ | $\mathrm{C}+=78$ |  |  |  |
| C $76-73$ | $\mathrm{C}=75$ |  |  |  |
| C- $72-70$ | $\mathrm{C}-+71$ |  |  |  |

PASS-FAILGRADING: Physical Education and Sports PE are graded on a pass-fail basis.

## NATIONAL HONOR SOCIETY

The National Honor Society recognizes students for scholarship, good character, leadership, and service. The qualifications for consideration into the NHS at Northwest Catholic High School are a cumulative grade point average of at least 3.67 (unweighted GPA beginning with the class of 2023) after a minimum of five marking periods at NWC, strength of character, demonstration of leadership and service in school, church and/or civic activities. Transfer students must have attended Northwest Catholic for at least a complete school year before being considered for the National Honor Society. Students must have been enrolled for at least three and a half (3.5) years to be considered for Valedictorian and Salutatorian.

## EARLY COLLEGE EXPERIENCE

## EARLY COLLEGE EXPERIENCE PROGRAM

Northwest Catholic offers ECE courses in Biology, English, and Statistics. These courses offer students the opportunity to obtain college credit from the University of Saint Joseph while still in high school. A nominal fee of $\$ 50$ per credit is charged. Students must be approved to enroll in this course by the Department Chairperson, School Counselor, and Principal. A grade of "C" in the course is required to earn University of Saint Joseph credit.

## UNIVERSITY OF ST. JOSEPH CHALLENGE PROGRAM

Certain 100 and 200 level courses are available for Juniors, and Seniors to take for college credit through the University of St. Joseph. Spots for USJ courses are limited, and there is an application process for acceptance into the USJ Challenge Program. Tuition is free for the first class, but students are responsible for the cost of books. Students must be ages 16-18. Students are only allowed to take one USJ Challenge Program course at a time. Please see the school counseling office for more details.

## ACADEMIC PLANNING

The program offered at Northwest Catholic High School is designed to prepare students for college, as well as to provide a well-rounded high school education. Beginning with the class of 2023 the requirement for graduation is 26 credits including the following:

| 4 credits | English |
| :--- | :--- |
| 4 credits | Religion |
| 4 credits | Mathematics |
| 3.5 credits | Social Studies |
| 3 credits | Science (Biology required) |
| 2 credits | World Language (3 recommended) |
| 1 Credit | Fine \& Performing Arts |
| 0.5 credit | Health \& Wellness |
| 1 credit | Physical Education* |
| 0.5 credit | Integrated Technology** |
| 0.5 credit | Technology Elective** |
| 2 credits | Other Electives |

Minimum Credit Requirement 26

* In place of traditional physical education class students may choose to play and successfully complete a season on a sports team to earn 0.25 credits towards the 1.0 physical education graduation requirement.
** Technology Requirement begins with the class of 2025.
All students must maintain a minimum of 7 credits during the school day. However, seniors in good standing who have accumulated at least 20 credits entering senior year may carry 6 credits.

Within the parameters of the graduation requirements and the typical four-year program below, there is flexibility. Flexibility exists in the levels open to a student in most subject areas and in the opportunity to choose some electives within the required subject areas and outside of the required subject areas.

Northwest Catholic High School and/ or the Archdiocese of Hartford reserve the right to amend the curriculum of the school at any time.

## PROGRAM OF STUDIES

| 9 $^{\text {th }}$ grade |  |
| :--- | :--- |
| 1 credit | English I |
| 1 credit | Religion I |
| 1 credit | Mathematics: Foundations of Alg I, AlgI, or Geometry |
| 0.5 credit | Human Geography |
| 0.5 credit | Integrated Technology |
| 1 credit | World Language |
| 1 credit | Biology |
| 1 credit | Fine Art/Phys Ed/Technology |
| $\mathbf{7 . 0}$ credits | Total |
|  |  |
| $\mathbf{1 0}$ th grade |  |
| 1 credit | English II |
| 1 credit | Religion II |
| 1 credit | Mathematics: Foundations of Geometry, Geometry, Alg II |
| 1 credit | World History |
| 1 credit | World Language |
| 1 credit | Chemistry or Integrated Physics and Chemistry |
| 1 credit | Fine Art/Phys Ed/Technology/Elective |
| $\mathbf{7 . 0}$ credits | Total |
|  |  |
| $\mathbf{1 1}$ th grade |  |
| 1 credit | English III |
| 1 credit | Religion III |
| 1 credit | Mathematics |
| 1 credit | Physics |
| 1 credit | US History |
| 0.5 credit | Health and Wellness |
| 0.5 credit | Technology Elective |
| 1 credit | Elective |
| $\mathbf{7 . 0}$ credits | Total |
|  |  |
| $\mathbf{1 2}$ th grade |  |
| 1 credit | English IV |
| 1 credit | Religion IV |
| 1 credit | Mathematics |
| 1 credit | Social Studies (Civics or equivalent) |
| $\mathbf{2}$ credits | Elective |
| $\mathbf{6 . 0}$ credits | Total |
|  |  |

Student placement will be dependent on meeting the required prerequisites. There is no guarantee that every request will be met, although every reasonable effort will be made to do so. Course offerings are subject to availability of staffing as well as student interest. Underenrolled courses are subject to cancellation.

## ENGLISH DEPARTMENT

The English Department's objective is to challenge students with a college preparatory curriculum throughout the four years of instruction. Students are expected to master the following skills: critical reading, analytical and expository writing, thesis statements, organization, editing, research procedures, vocabulary development, grammar and usage, and PSAT and SAT preparation. The core values of spirituality, respect, and leadership comprise the foundation for the school as a whole and for all English department activities, both academic and extracurricular.

## ENGLISH I

Grade 9 CPI Course number 102
The primary purpose of this college preparatory course is to improve critical reading and written expression. Students will be instructed on such grammatical concepts as parts of speech, parts of a sentence, phrases, and clauses. Students will read a variety of literary genres, which may include myth, epic, play, short story, novel, and poetry, and apply common literary devices to analyze selections. In addition, vocabulary enrichment, writing development with text-based sentences, well-constructed paragraphs, and completedessays will be focus areas along with developing effective study skills.

## HONORS ENGLISH I

Grade 9 Hon Credit Course number 101

The primary purpose of this advanced college preparatory course is to improve critical reading and written expression. Students will be instructed on such grammatical concepts as parts of speech, parts of a sentence, phrases, and clauses. Students will read a variety of literary genres, which may include myth, epic, dramashort story, novel, and poetry, and utilize literary devices to analyze selections. Students at this honors level are expected to complete more challenging, fast-paced work, to read additional selections both in class and independently, to complete more difficult writing assignments, and to master more vocabulary in each unit. Placement is based primarily on entrance test scores as well as previous academic performance and teacher recommendations.
Prerequisite: Placement determined by entrance exam score and previous course work.

## ENGLISH II: AMERICAN LITERATURE

Grade 10 CPI Course number 126

Emphasizing American literature from the colonization to the modern era, this course focuses on expository writing and critical reading skills. It includes the genres of poetry, essay, short story, drama, and the novel, as well as the historical and philosophical backgrounds of the various time periods. PSAT preparation focuses on vocabulary, grammar, and usage. Expository writing requirements include an analysis of literary passages and documented uses of literary texts. Major readings may include such literary selections as The Crucible by Arthur Miller and The Catcher in the Rye by J.D. Salinger.

## HONORS ENGLISH II: AMERICAN LITERATURE

| Grade 10 | 1 Credit | Hon | Course number 125 |
| :--- | :--- | :--- | :--- |

This course focuses on expository writing and critical reading with an emphasis on American literature from colonization to the modern era. It includes the genres of poetry, essay, short story, drama, and the novel, as well as the historical and philosophical backgrounds of the various time periods. PSAT preparation focuses on vocabulary, grammar, and usage. The expository writing includes an analysis of literary passages and a research paper. Major reading selections may include such literary selections as The Catcherin the Rye by J.D. Salinger, The Great Gatsby by F. Scott Fitzgerald, and short stories by such noted authors as Ernest Hemingway.
Prerequisite: Completion of College Prep English I with a grade of A- or better or Honors English I with a grade of B- or better.

## ENGLISH III: ENGLISH LITERATURE

Grade 11 CPI Course number 155

This survey course involves critical reading of representative British literature, beginning with the Anglo-Saxon period, with a focus on such works as Beowulf, the Canterbury Prologue and Tales, Macbeth. and the poetry of the Elizabethan and Metaphysical periods as well as later-period selections by such authors as Milton, Swift, Wordsworth, Tennyson, and Browning. Students will complete a variety of writing assignments, including critical analyses of selected literature.

## HONORS ENGLISH III: ENGLISH LITERATURE

Grade 11 1 Credit Hon Course number 154

This course involves the reading of representative British literature, beginning with the Anglo-Saxon period, with a focus on such works as Beowulf, the Canterbury Tales, Hamlet, the poetry of the Elizabethan and Metaphysical periods as well as the works of Eighteenth, Nineteenth, and Twentieth Century authors, including but not limited to Milton, Swift, Wordsworth, Tennyson, and Browning. This honors-level course requires more challenging critical reading and includes literature-based expository critiques utilizing literary strategies rich in textual evidence and documented in accordance with the Modern Language Association Handbook criteria.
Prerequisite: Completion of College Prep English II with a grade of A- or better or Honors English II with a grade of B- or better.

## AP ENGLISH III: LANGUAGE AND COMPOSITION

Grade 11 AP Credit Course number 140 (AP Test Fee)

AP Language and Composition is a college level course for highly motivated students in both effective writing and critical reading. It encompasses an investigation of language in its communicative capacity as well as artistic and creative scope. Writing assignments are widely varied and include analytic, argumentative, and reflective styles. Readings are based on non-fiction writings from a variety of international authors. In addition, students will develop and improve their skills in critical reading, composition, grammar usage, and knowledge of the development of rhetoric. SAT guidelines and preparation are part of the course work. The students will write one research paper in the form of a literary analysis. Students who take AP Language and Composition must take a British Literature course senior year. Students may expect the College Board's recommendations of one to two hours of homework per night for this class. Students will be required to take the AP examination.
Prerequisite: Completion of College Prep English II with a grade of A- or better or Honors English II with a grade of B or better.

## ENGLISH IV: WORLD LITERATURE

Grade 12 CPI Course number 156
This course will focus on representative literary works from the Classics period to the Modern era, which may include a variety of genres from various geographic sites and eras. Students will be encouraged to recognize and appreciate cultural similarities and differences as well as explore larger themes involving the universal human experience.

## HONORS ENGLISH IV: WORLD LITERATURE

Grade 12 Hon Credit Course number 157

This accelerated course will focus on representative literary works from the Classics period to the Modern era, which may include a variety of genres from various geographic sites and eras. Students will be encouraged to recognize and appreciate cultural similarities and differences and to explore larger themes in the universal human experience.
Prerequisite: Completion of College Prep English III with a grade of A- or better or Honors/ AP English III with a grade of B or better.

## ECE/AP ENGLISH IV: LITERATURE AND COMPOSITION

Grade 12 AP Credit Course number 150 (AP Test Fee)

A chronological survey of major literary works from the English Anglo-Saxon period to the Modern Era, students in this course will master critical reading and writing skills at the college level. While this course fulfills the British Literature requirement, students will also read supplementary literature from American and international authors, playwrights, and poets. Students taking this course for Advanced Placement (AP) credit will take the AP Exam for Literature and Composition in May; Students taking this course for Early College Experience (ECE) credit and earn a C or better will receive course credit through the University of St. Joseph. Concurrent enrollment in both AP and ECE is available.
Prerequisite: Completion of Honors Level III English or AP English III with a grade of B+ or better and teacher recommendation. Students must be familiar with research methods and MLA research paper requirements. A writing sample and evidence of critical reading skills in literature is required.

## WORLD LANGUAGE DEPARTMENT

The overall purpose of the World Language Department is to expose students to other cultures through the study of the language and to prepare them to communicate in at least one language other than English. Most colleges require a minimum of two years of language study and prefer that one language is carried out for three or four years if the student has the ability to do so. Three years of one world language is preferred over two years of two world languages. The recommended grade to move to the next level is C-.

## LATIN I

Grades 9, 10, 11 CPI Course number 202

Latin I is an introductory course with the objective of beginning to read and comprehend the written Latin language. Students will learn the basic rules of Latin grammar, syntax and vocabulary. Topics for beginner Latin translation include history, culture, and daily life of those living in ancient Pompeii and Alexandria. The second year of Latin is required in sequence.

## HONORS LATIN I

Grades 9, 10, 11 Hon Credit Course number 201

Honors Latin I is an introductory course with the objective of mastering the basics of Latin grammar, syntax and vocabulary. This course focuses more on answering the question of why the Latin language translates into a particular manner rather than what does the Latin says. Topics for beginner Latin translation include history, culture and daily life of those living in ancient Pompeii and Alexandria. The second year of Honors Latin is required in sequence.
Prerequisite: Placement determined by entrance exam score and previous course work.

## LATIN II

Grades 10, 11, 12 CPI Course number 212

Latin II builds on the grammar, syntax and vocabulary learned in beginning Latin. Students will learn more complex rules for written Latin. Topics for intermediate Latin translation include history, culture, and daily life of those living in ancient Britannia and Rome.

## HONORS LATIN II

Grades 10, 11, 12 1 Credit Hon Course number 211

Honors Latin II is an intermediate course with the objective of mastering the complexity of Latin grammar and syntax.
This course focuses more on answering the question of why the Latin language translates into a particular manner rather than what does the Latin say. Topics for intermediate Latin translation include history, culture and daily life of those living in ancient Britannia and Rome.
Prerequisite: Completion of College Prep Latin I with a grade of A- or better or Honors Latin I with a grade of B- or better.
HONORS LATIN III
Grades 11, 12 Hon Credit Course number 221

This advanced level of Latin rotates each year between the following Prose and Poetry. Prose: Latin prose is an advanced course with the objective of translating selections of original works of Roman writers. Focusing on grammar, syntax and Roman history, students will read and translate works from Caesar, Pliny, Cicero, Petronius and other authors of the Golden Age of Rome. Poetry: Latin poetry is an advanced course with the objective of translating selections of original works of Roman writers. Focusing on grammar, syntax, and rhetorical devices, students will read and translate works from Martial, Ovid and Vergil.
Prerequisite: Completion of College Prep Latin II with a grade of A- or better or Honors Latin II with a grade of B- or better.

## HONORS LATIN IV

Grades 11, 12 1 Credit Hon Course number 225

This advanced level of Latin rotates each year between the following Prose and Poetry. Prose: Latin prose is an advanced course with the objective of translating selections of original works of Roman writers. Focusing on grammar, syntax and Roman history, students will read and translate works from Caesar, Pliny, Cicero, Petronius and other authors of the Golden Age of Rome. Poetry: Latin poetry is an advanced course with the objective of translating selections of original works of Roman writers. Focusing on grammar, syntax, and rhetorical devices, students will read and translate works from Martial, Ovid and Vergil.
Prerequisite: Successful completion of Honors Latin III

FRENCH I
Grades 9, 10, 11
1 Credit
CPI
Course number 232

The objective of this course is to begin to read, write, and speak French and to understand spoken French. Students will learn the meanings and conjugations of regular verbs in the present tense. Irregular verbs include aller, etre, avoir, and faire. Topics for vocabulary include school, home, friends and family, food, shopping, transportation, and sports. Cultural background is given through reading selections.
Grades 9, 10, 11, 12 CPI Course number 242

The objective of this course is to pursue proficiency in French by learning more of its applications through the four language skills (listening, speaking, reading, and writing). This course is a continuation of French I. This class may also include students who have had French every day in middle school and demonstrate proficiency in French I on the placement test. Cultural background is presented in each lesson through thematic vocabulary units.
Prerequisite: Freshmen: Results of placement test. Successful completion of French I.

## HONORS FRENCH II

Grades 9, 10, 11, 12 1 Credit Hon Course number 241

The prerequisite of this course is outstanding achievement in French I with a final year average grade of A- or higher. This class may also include students who have had the language every day in middle school and demonstrate proficiency in French I on the placement test. Honors French II will continue with the four skills at a more rapid pace than French II. It will also include more supplementary readings and projects. The two major past verb tenses will be explored in depth. Cultural background will be addressed in each lesson.
Prerequisite: Freshmen: Results of placement test. Completion of College Prep French I with a grade of A- or better.

## FRENCH III

Grades 10, 11, 12 CPI Course number 252
The students will progress to more complex grammatical structures in the four skills (listening, speaking, reading, and writing). Students will read excerpts from French newspapers and magazines. Students will gain an appreciation of literature through reading excerpts from other French writers. There is a greater exposure to current events and cultural topics of France and French-speaking countries. Geared for students who have had two years of French at level 2 or higher and wish to continue the study of the language. Note - This course is often combined with Honors French III.
Prerequisite: Successful completion of French II

## HONORS FRENCH III

Grades 11, 12 1 Credit Hon Course number 251

The students will continue their quest for proficiency in the four skills (listening, speaking, reading, and writing) at a higher level. Students will read excerpts from French newspapers and magazines. Students will gain an appreciation of literature through reading excerpts from other French writers. There is exposure to current events and cultural topics of France and French-speaking countries.
Prerequisite: Completion of College Prep French II with a grade of A- or better or Honors French II with a grade of B- or better.

## HONORS FRENCH IV

Grades 11, 12 1 Credit Hon Course number 264

This course will include survey of French history and literature from the Middle Ages to the twentieth century. The students will read literary texts, essays, poetry, and short stories in their original form and discuss them in the target language. The students will express their ideas in the target language. Grammar points are reviewed as needed. Students will analyze literary texts with an understanding of the author and the relationship between the work and the historical period in which it was written.
Prerequisite: Completion of College Prep French III with a grade of A- or better or Honors French III with a grade of B- or better.

## ADVANCED PLACEMENT FRENCH V

Grade $12 \quad 1$ Credit $\quad$ AP Course number 260 (AP Test Fee)

The AP French Language course focuses on the mastery of communicative language skills and prepares students to take the AP French Language exam. Emphasis is on using the language to speak extemporaneously about oneself and the world. Students must read and comprehend French newspaper and magazine articles as well as literary selections. Students must also be well versed in many aspects of French culture. They must be able to express their ideas with accuracy and fluency. Students practice parts of previous AP exams frequently and their work is assessed using the same criteria as the College Board uses to score the AP exam. (Students are required to take the AP Exam.)
Prerequisite: Successful completion of Honors French IV with a B- or better. Note: Course offerings are subject to availability of staffing as well as student interest. Under-enrolled courses are subject to cancellation.

## HONORS MANDARIN CHINESE II

Grade 10, or by appointment 1 Credit Hon Course number 240
This course is designed to help students further enhance their foundation in the four communicative skills of Mandarin Chinese (Listening, Speaking, Reading, and Writing) through a contextualized approach. Students will continue to develop effective pronunciation and phrases to use in everyday life. By the end of the course, students will have the ability to use Chinese to communicate in real-life contexts, such as: discussing preferences, talking about daily routine,
and means of transportation used in daily life. This course will also help students further cultivate their confidence in speaking through providing opportunities to apply what they learn through the performance-based activities conducted in class. In addition to language skills, the objectives of understanding both Chinese and American culture and how people from these two cultures can effectively communicate are also emphasized in this course.
Prerequisite: Completion of College Prep Chinese I with a grade of A- or better or Honors Chinese I with a grade of B- or better.

## HONORS MANDARIN CHINESE III

Grade 11, or by appointment 1 Credit Hon Course number 257
This course is designed to help students further enhance their listening, speaking, reading, and writing Mandarin skills. Students will further build their language confidence through presentations, dialogues, and essay writing. By the end of the year, students will be able to use their excellent tones and pronunciation skills to initiate, engage, and maintain simple native-paced conversations about everyday tasks and events. Students will also learn to understand, predict, appreciate, and engage Chinese culture and its differences and similarities with American culture. In this course, students will learn simplified characters.
Prerequisite: Completion of College Prep Chinese II with a grade of A- or better or Honors Chinese II with a grade of B- or better.

## HONORS MANDARIN CHINESE IV

Grade 11, or by appointment 1 Credit Hon Course number 249
Students will listen, speak, read, and write Mandarin Chinese at an advanced level. At the conclusion of the course, students will be able to engage in conversational Chinese. Students will continue to learn to understand, predict, appreciate, and engage Chinese culture and its differences and similarities with American culture. In this course, students will learn simplified characters.
Prerequisite: Completion of Honors Chinese III with a grade of B- or better.
SPANISH I
$\begin{array}{lll}\text { Grades } 9,10,11 & 1 \text { Credit } & \text { CPI }\end{array}$
The objective of this course is to begin to read, write and speak Spanish and to understand spoken Spanish. Students will learn the meanings and conjugations of regular and irregular verbs; the present and past tenses; the differences between ser and estar. Students are exposed to Hispanic cultures through reading selections and thematic vocabulary units.

## SPANISH II

Grades $9,10,11,12 \quad 1$ Credit CPII $\quad$ Course number 277
The focus of this course will be on proficiency to understand, read, and write Spanish with a higher degree of perfection. This class may also include students who have had Spanish every day in middle school and demonstrate proficiency in Spanish I on the placement test. Spanish II will continue with the four language skills (listening, speaking, reading, and writing). Cultural background is presented in each lesson.
Prerequisite: Freshmen: results of placement test. Successful completion of Spanish I.

## HONORS SPANISH II

Grades 9,10,11,12 1 Credit Hon Course number 276
The prerequisite of this course is outstanding achievement in Spanish I. This class may also include students who have had the language every day in middle school and demonstrate a high degree of proficiency in Spanish I on the placement test. Honors Spanish II will continue with the four skills at a more rapid pace than in Spanish II. It will also have more supplementary readings and projects. Cultural background will be addressed in each lesson.
Prerequisite: Freshmen: results of placement test. Completion of College Prep Spanish I with a grade of A- or better or Honors Spanish I with a grade of $B$ - or better.

The students will progress to more complex grammatical structures in the four language skills (listening, speaking, reading, and writing). There is an emphasis on comprehension without translating word for word. Students should know the conjugations and usage of the preterit and imperfect of regular and irregular verbs. They must also know the usage of both tenses in a paragraph. Cultural background is presented in each lesson.
Prerequisite: Successful completion of Spanish II

## HONORS SPANISH III

Grades 10, 11, $12 \quad 1$ Credit $\quad$ Hon $\quad$ Course number 281
The students will continue to be proficient in the four skills (listening, speaking, reading, and writing) at a higher level. There is emphasis on comprehension without translation. Students should know the conjugations and usage of the preterit and the imperfect of regular and irregular verbs. They must also know the usage of both tenses in a paragraph. Honors Spanish III will also have more supplementary readings and projects. Cultural background will be addressed in each lesson.
Prerequisite: Completion of College Prep Spanish II with a grade of A- or better or Honors Spanish II with a grade of B- or better.

## SPANISH IV

Grades 11, $12 \quad$ CPI Credit $\quad$ Course number 289

The students will go on to be even more proficient in the four language skills (listening, speaking, reading, and writing) at a higher level. The emphasis will continue to be on comprehension without translation. The students will express their ideas in the target language. This course pursues a thorough, systematic presentation of the structures of the Spanish language as they appear in the lessons. The students will also acquire a deeper appreciation and understanding of the Spanish culture.
Prerequisite: Successful completion of Spanish III

## HONORS SPANISH IV

Grades 11, 12 Credit Hon Course number 290
A survey of Spanish literature from the Middle Ages to the twenty-first century. The students will read high school adaptations of original works and discuss them in the target language. The students will express their ideas in the target language. This course pursues a thorough and systematic review of the structures of the Spanish language as illustrated in reading selections. These have been chosen to give the students a deeper understanding and appreciation of culture, ideas, and achievements of Spanish speaking people.
Prerequisite: Completion of College Prep Spanish III with a grade of A- or better or Honors Spanish III with a grade of B- or better.

## ADVANCED PLACEMENT SPANISH V

Grade $12 \quad 1$ Credit AP Course number 291 (AP Test Fee)
The AP Spanish Language course focuses on the mastery of communicative language skills. Emphasis is on using the language, acquiring an excellent vocabulary, and using the dictionary as infrequently as possible. Students must read and comprehend Spanish newspaper and magazine articles as well as literary selections. They must speak with accuracy and fluency and express their ideas accurately and fluently in writing. Spanish culture is also an important part of this course. (Students are required to take the AP Exam.)
Prerequisite: Successful completion of Honors Spanish IV with a B- or better. Note: Course offerings are subject to availability of staffing as well as student interest. Under-enrolled courses are subject to cancellation.

## MATHEMATICS DEPARTMENT

The Mathematics Department believes that each student should increase his or her ability to analyze real life situations in mathematical terms and appreciate the beauty of math. The department strives to teach students to graphically, numerically, verbally, and analytically define functions that model the world around them. An in-depth analysis of these functions will foster a greater understanding of real-life phenomena. The Mathematics Department also commits itself to developing in each student the technological skills needed to help solve problems that would otherwise take substantial amounts of time. In addition, the Mathematics Department strives to develop a strong spirit of intellectual curiosity and to develop the confidence in each student to be a creative problem solver. The use of technology will enable each student to adapt to the increasing demands of the workplace. Graphing calculators (TI-84 Plus) are required for many classes. A scientific calculator is sufficient for all Algebra 1 and Geometry classes.
Required Courses: Four years of math are required for graduation.

This course is a comprehensive program in first-year Algebra that is ideal for students who need extra time and step-by-step instruction to master first-year Algebra. It will reinforce fundamental math skills and integrate them into a thorough treatment of first-year Algebra. The topics covered include foundations for algebra, solving equations, solving inequalities, an introduction to functions, linear functions, systems of equations/inequalities, exponents/exponential functions, polynomials, factoring, quadratic functions/equations, and radical expressions. Successful completion of this course meets the requirement for entrance into Geometry and Algebra 2. Placement is determined by a placement test, entrance scores, and previous math grades.

## ALGEBRA 1

Grades $9 \quad 1$ Credit CPI $\quad$ Course number 302

This course is for students who have mastered the fundamentals of arithmetic. The content of the course includes operations with polynomials and fractions, linear functions, solving inequalities and linear and quadratic equations, graphing (both one- and twodimensional) including slope, systems of equations and inequalities, exponents, factoring, operations with radicals, and statistics. There is a strong emphasis on problem solving throughout the course. Placement is determined by a placement test, entrance scores, and previous math grades.

## HONORS ALGEBRA 1

Grade 9 1 Credit Hon Course number 301
This is an in-depth coverage of the content of Algebra 1, with greater emphasis on theory, complex problems, and examples. This course covers topics such as operations with polynomials; solving inequalities and linear and quadratic equations; functions (linear and quadratic); graphing (both one- and two-dimensional), including slope; systems of equations and inequalities, exponents, factoring, operations with radicals; and statistics. Placement is determined by a placement test, entrance scores, and previous math grades.

## FOUNDATIONS OF GEOMETRY

$\begin{array}{llll}\text { Grade } 10 & 1 \text { Credit CPII } & \text { Course number } 346\end{array}$
This course is open to those students who do not qualify for Level 2 Geometry (313). Spatial relationships, inductive and deductive reasoning and geometric concepts are learned and applied to real-life situations. The rigor of proof is not emphasized, but discovery of the basic concepts will be emphasized.
Prerequisite: This course is open to students who have successfully completed Algebra 1. Teacher recommendation is required.

## GEOMETRY

Grades 9, 10
1 Credit
CPI
Course number 313

This course presents a development of logic by means of the structure of Geometry, emphasizing precision of language, clear thinking, and proof. Spatial relationships, inductive and deductive reasoning and real-life applications are also studied.
Prerequisite: This course is open to students who have completed Algebra 1 (302) with a grade of C or better. Teacher recommendation is required. If a student is applying from Grade 8, demonstration of competency in Algebra 1 on a placement test is required.

## HONORS GEOMETRY

Grades 9, 10 1 Credit Hon Course number 311
This course is a follow up to Honors Algebra 1 with a rigorous approach to geometric theory and applications. This course emphasizes inductive and deductive reasoning and formal proof.
Prerequisite: This course is open to students who have completed Honors Algebra 1 (301) with a grade of a B+ or better, or Algebra 1, Level 2 (302) with an A- or better. Teacher recommendation is required. If a student is applying from Grade 8, a demonstration of competency in Algebra I on a placement test is required.

## FOUNDATIONS OF ALGEBRA 2

Grades 11, 12
1 Credit
CPII
Course number 347

This is an Algebra 2 course taught at a slower pace and with less complexity than Algebra 2, Level 2. The topics covered include inequalities; linear, quadratic, and polynomial equations, functions, inequalities, complex numbers, variation, linear and quadratic systems, exponents, statistics and probability, and exponential and logarithmic functions.
Prerequisite: This course is open to students who have completed any level of Algebra 1 and Geometry or are concurrently taking Geometry. Teacher recommendation is required.

ALGEBRA 2
Grades 10, 11, 12 Credit CPI Course number 323

This is a standard level Algebra 2 course. The topics covered include inequalities, linear systems, quadratic functions, polynomial functions, radical functions, rational exponents, exponential functions, logarithmic functions, and rational functions.
Prerequisite: This course is open to students who have completed Algebra 1 (302) and have completed or are concurrently taking Geometry (313) with a grade of C- or better. Teacher recommendation is required.

## HONORS ALGEBRA 2

Grades 9, 10, $11 \quad 1$ Credit Hon Course number 321

This is a rigorous course for advanced students covering the topics of Algebra 2. The topics covered include inequalities, linear and quadratics systems, quadratic functions, polynomial functions, complex numbers, radical functions, rational exponents, exponential functions, logarithmic functions, and rational functions.
Prerequisite: This course is open to students who have completed Honors Algebra 1 (301) with a grade of B or better and have completed or are concurrently taking Honors Geometry (311) with a grade of B or better, or students who have completed Algebra 1, Level 2 (302) with a grade of A- or better and have completed or are concurrently taking Geometry, Level 2 (313) with a grade of A- or better. If a student is applying from Grade 8, demonstration of competency in Algebra 1 and Geometry on placement tests is required. Teacher recommendation is required.

## PRE-CALCULUS

Grade 11, $12 \quad$ CPI Credit Course number 344

One half of this course will cover the study of trigonometry: triangle measure, trig functions and their inverses and identities, graphs and equations of trig functions. The second half of this course is designed to prepare students for success in calculus, with emphasis on theory as well as application. Functions and their inverses are studied, including exponential, logarithmic, and rational functions. Additional topics include sequences and series, limits, and introductory calculus. Real-life applications will be included.
Prerequisite: This course is open to students who have completed Algebra 2 (323) and Geometry (313) with a C+ or better, or Foundations of Algebra 2 (347) and Foundations of Geometry (346) with an A- or better.

## HONORS PRE-CALCULUS

Grades 10,11, 12 Hon Course number 333

One half of this rigorous course will cover the study of trigonometry: triangle measure using the sine, cosine, and tangent functions, their reciprocals and inverses, and their graphs and equations. Additional topics include the polar plane and DeMoivre's Theorem. The second half of this course is designed to prepare students for success in calculus, with emphasis on theory as well as application. Functions and their inverses are studied, including exponential, logarithmic, and rational functions. Additional topics include sequences and series, math induction, limits, linear programming, and introductory calculus. Real-life applications will be included.
Prerequisite: This course is open to students who have completed Honors Algebra 2 (321) and Honors Geometry (311) with a B or better, or Algebra 2, Level 2 (323) and Geometry, Level 2 (313) with an A- or better. Teacher recommendation is required

## CALCULUS

Grade 12
1 Credit
CPI
Course number 329

This course focuses on limits, rates of change, derivatives, and integrals. Applications of derivatives and integrals are also investigated. This course focuses on calculus skills.
Prerequisite: This course is open to students who have completed Pre-Calculus Level 2 (344) with a grade of B or better. Teacher recommendation is required.

## ADVANCED PLACEMENT CALCULUS AB

Grades 11, $12 \quad$ AP Credit Course number 331 (AP Test fee)

This course follows curriculum designed by the College Board for AP Calculus AB. The course covers limits, rates of change, derivatives, and integrals. Applications are studied in-depth with emphasis on particle motion related to physics. Introduction to differential equations is included. Students will be required to take the Advanced Placement Exam in May.
Prerequisite: This course is open to students who have completed Honors Pre-Calculus (333) with a B or better, or Pre-Calculus Level 2 (344) with an A. Teacher recommendation is required.

This semester-long, introductory course emphasizes the interpretation and communication of statistical results, statistical literacy, and the development of statistical thinking, as well as elements of probability. Students will use technology to develop conceptual understanding and for analyzing data.
Prerequisite: This course is open to students who have completed Algebra 2 (any level), with a grade of C or better. Teacher recommendation is required.

## ECE/AP STATISTICS

Grades 11, $12 \quad 1$ Credit $\quad$ ECE $\quad$ Course number 348 (ECE Test Fee)
This is a rigorous college course emphasizing the interpretation and communication of statistical results, statistical literacy and the development of statistical thinking, as well as elements of probability. Students will use technology to develop conceptual understanding and for analyzing data. Focus will be on developing concrete data analysis skills that enable students to interpret, explain, justify, and draw conclusions. Students will earn college credit from the University of St. Joseph upon successful completion of the course with a grade of "C" or better. Concurrent enrollment with AP Statistics.
Prerequisite: This course is open to students who have completed Honors Pre-Calculus (333), or AP Calculus (331) with a B- or better; Pre-Calculus Level 2 (344) or Calculus Level 2 (329) with an A- or better; or Honors Algebra 2 (321) with a B- or better or Algebra 2, Level 2 (323) with an A- or better. Teacher recommendation is required. Pre-Calculus may be taken concurrently.

## COMPUTER PROGRAMMING

## Grades 10, 11, $12 \quad$ 0.50 Credit <br> CPI <br> Course number 351

This is a semester course designed to familiarize the student with the fundamental concepts of computer programming in the Java language. Mainly a "hands on" course, topics to be introduced include algorithms, programming methodology, and data structures. It includes writing and executing programs on the computer, and mathematical applications of these techniques. This course is a prerequisite for AP Computer Science.
Prerequisite: This course is open to students who have completed Algebra 1 (any level) with a C or better. Ability to work independently and/or to spend time in the computer lab beyond class times is required. Teacher recommendation is required.

ADVANCED PLACEMENT COMPUTER SCIENCE
Grades 11, $12 \quad 1$ Credit AP Course number 355 (AP Test Fee)
This is a year-long course in algorithms, programming methodology, and data structures using the Java language. The curriculum will be guided to a large extent by the Course Description of the College Board Advanced Placement Examination in Computer Science (A). Students will be required to take this exam in May.
Prerequisite: The course is open to students who have completed Computer Programming (351) with a B or better, or have demonstrated programming competency on a placement test. Ability to work independently and/or to spend time in the computer lab beyond class times is required. Teacher recommendation is required.

## FINITE MATH

| Grade 12 | 1 Credit | CPI | Course number 357 |
| :--- | :--- | :--- | :--- |

Topics include statistics, logic, theory of sets, counting techniques, probability theory, linear equations, linear programming, personal finance, geometric applications, and voting apportionment theories. Emphasis will be placed on the construction of mathematical models and their applications. Application to real-world problems, such as financial topics and evaluating statistical reports, will be included.
Prerequisite: This course is open to students who have completed Algebra 2. It is not open to students who are taking or have taken PreCalculus or Calculus.

## PERSONAL FINANCE

Grade 11, 120.5 Credit CPI Course number 315
This semester-long course provides an overview of the financial planning and investing process. It examines personal incomes and budgets, banking, types of credit, managing credit, paying for college, home and consumer financing, insurance, personal investing, and retirement planning. Additional topics covered will include the time value of money, investments, taxes, life and health insurance, and consumer skills. Credit does not count towards total math credits.

## SCIENCE DEPARTMENT

The Science Department curriculum emphasizes critical thinking, scientific methodology, and a study of the natural world with subsequent application. Students will notice the world around them and learn problem-solving skills to help them navigate the world of science. The laboratory experience is a vital part of our science curriculum. Laboratory exercises expose the students to a variety of experiments and technology that are designed to complement classroom learning.

Most colleges require at least three years of science. Many appreciate or strongly recommend a four-year program including Biology, Chemistry, and Physics, especially for those seeking to major in the sciences. In addition, ECE Biology, Advanced Placement Physics, and Advanced Placement Chemistry are offered to further enhance student understanding of these topics.
Required Courses: 3 years of Science including state required Biology and a physical science

## BIOLOGY

Grade 9
1 Credit
CPI
Course number 412

A required lab science course designed to introduce students to the fundamental principles of Modern Biology. Emphasis is placed on the cellular and chemical basis of life, human anatomy and physiology, genetics, microbiology, evolution, and ecology. These topics are explored through lecture, discussions, laboratory investigations, projects, and reports. Laboratory work is an essential component of this course and comprises a significant portion of class time. Successful completion of this course fulfills the Biology graduation requirement.

## HONORS BIOLOGY

Grade 9
1 Credit
Hon
Course number 411

A rigorous laboratory science course designed to introduce students to an in-depth study of the fundamental principles of biology. Emphasis is placed on the cellular and chemical basis of living things, genetics, biotechnology, DNA, microbiology, vertebrate biology, botany, evolution, and ecology. These topics will be explored through lecture, discussion, laboratory work, projects, and reports. Laboratory work is an essential component of this course and comprises a significant portion of the class time. Successful completion of this course fulfills the Biology graduation requirement.
Prerequisite: Placement determined by entrance exam score and previous course work.

## ECE BIOLOGY

Grades 11, $12 \quad 1$ Credit $\quad$ ECE $\quad$ Course number 428 (ECE Test Fee)
The ECE Biology course is designed to be the equivalent of a semester college introductory biology course usually taken by biology majors during their first year. Primary emphasis is placed on developing an understanding of biological concepts through personal experience of scientific inquiry, recognition of unifying themes that integrate major topics of biology and application of biological knowledge and critical thinking. Topics covered includes an introduction to both biological processes occurring in the human body and the influences that the environment play on those processes. Emphasis will be placed on cell structure and function, energy and metabolism, cell division, DNA structure and control of gene expression, genetics and inheritance, and advances in biotechnology. Students are expected to work independently on much of the material and to assume responsibility for success in the course. Prerequisites: Honors Biology with a A- or College Prep Biology with an A, Honors Chemistry with A- or College Prep Chemistry with an A .

## INTEGRATED PHYSICS AND CHEMISTRY

$\begin{array}{llll}\text { Grade } 10 & 1 \text { Credit } & \text { CPII } & \text { Course number 408 }\end{array}$
This is a science course which introduces basic concepts of physics and chemistry. The topics included are classification of matter, atomic structure, chemical bonding, chemical reactions, calorimetry, velocity, acceleration, force, momentum, energy, and wavers. This course serves as a background for subsequent courses in chemistry and physics. This course fulfills the physical science requirement. Note: If selected, IPC must be completed prior to chemistry and physics. Students may be recommended to take this course by their Biology teacher, school counselor, or by an administrator.

## CHEMISTRY

| Grade 10 | 1 Credit | CPI | Course number 424 |
| :--- | :--- | :--- | :--- |

A laboratory science course designed to teach students the fundamental concepts of Chemistry. Content includes matter and energy, atomic structure, chemical formulas, bonding, and chemical reactions. Also included are behavior of gases, stoichiometry, solutions, acids and bases, and an introduction to organic chemistry. Laboratory emphasis is on developing chemical concepts.

Prerequisite: Algebra 1 or Geometry with a grade of C or better. Biology with a grade of $\mathrm{C}+$.

## HONORS CHEMISTRY


#### Abstract

Grade $10 \quad 1$ Credit Hon Course number 423

A rigorous laboratory science course offering an in-depth study of Chemistry. Content includes atomic theory, electron structure, chemical bonding, chemical reactions, thermodynamics, properties of gases, solution chemistry, and acids and bases. Laboratory work during the course will develop students' practical lab skills and their understanding of the connection between concrete and abstract ideas in chemistry. Prerequisite: A minimum grade of B- in Honors Algebra I or Honors Geometry, or A- in College Prep Algebra I. A minimum grade of B- in Honors Biology or A- in College Prep Biology. Co-requisite: Honors Geometry or Algebra 2 or higher math.


## ADVANCED PLACEMENT CHEMISTRY

Grades 11, 12

$$
1 \text { Credit }
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AP
Course number 420 (AP Test Fee)

This is an Advanced Placement course in general chemistry for students wishing to study a second year of chemistry in high school. The curriculum follows the recommendations established by the College Board. It is designed to be the equivalent of a first-year college level course. Topics covered include atoms and molecules, thermodynamics, kinetics, equilibrium, acids and bases, oxidation/reduction, transition metals and organic chemistry. Students are expected to work independently on much of the material. The student will take the Advanced Placement exam.
Prerequisite: Honors Chemistry with A- or College prep Chemistry with an A. successful completion of Honors Pre-calculus or college prep pre-calculus. Alternatively, these could be taken concurrently.

## PHYSICS

Grades 11, $12 \quad 1$ Credit CPI Course number 432
Alaboratory science designed course to familiarize students with the fundamental concepts of physics. Content includes mechanics, linear and circular motion, heat, electricity, magnetism, waves, nucleonics, quantum mechanics, and relativity. This course combines some mathematical emphasis with applications of physics to our daily lives. Laboratory work is an essential component of this course and comprises a significant portion of the class time.
Prerequisite: Honors Algebra 2 and Honors Geometry with a grade of C+, Honors Chemistry with a grade of C, or College Prep Chemistry, with a grade of C+. Algebra 2 may be taken concurrently.

## HONORS PHYSICS

Grades 11, $12 \quad 1$ Credit Hon Course number 431
Alaboratory science course designed to familiarize students with the fundamental concepts of physics. Content includes mechanics, linear and circular motion, heat, electricity, magnetism, waves, quantum mechanics, and relativity. This course combines mathematical emphasis with attention to problem solving and the applications of physics to our daily lives. Laboratory work is an essential component of this course and comprises a significant portion of the class time.
Prerequisite: Honors Algebra 2, Honors Geometry with a grade of B-. Honors Chemistry with a grade of B- or College Prep Chemistry with a grade of A-

## ADVANCED PLACEMENT PHYSICS

Grades 11, $12 \quad 1$ Credit AP Course number 430 (AP Test Fee)

Students enrolled in this course should have a deep understanding of physical science or a desire to study a related field in college. This course is alaboratory science course designed to familiarize students with the fundamental concepts of physics. Content includes mechanics, linear and circular motion, heat, electricity, magnetism, waves, quantum mechanics, and special relativity. This course features mathematical emphasis with much attention to problem solving as well as innovative lab experiences centered on ideas generated by students. Students are expected to work independently on much of the material. AP students are required to take the Physics AP exam. Admission to this course also requires the completion of an application and departmental approval.
Prerequisite: Honors Chemistry with A- or College prep Chemistry with an A. successful completion of Honors Pre-calculus or college prep pre-calculus. Alternatively, these could be taken concurrently.

## ANATOMY AND PHYSIOLOGY

Grades 11, 12
1 Credit
CPI
Course number 409

This laboratory science course is an in-depth study of human anatomy and physiology of major systems found in humans including the skeletal, muscular, nervous, reproductive, endocrine, digestive, immune, and circulatory systems.

Prerequisite: Successful completion of Biology and Chemistry, or Biology and Integrated Physics and Chemistry
HONORS ANATOMY AND PHYSIOLOGY

| Grades 11, 12 | 1 Credit | Hon | Course number 439 |
| :--- | :--- | :--- | :--- |

This course is an accelerated course in the study of human anatomy and physiology. This is a laboratory science course for students who have shown a high degree of achievement in prior laboratory science courses. This course is an in-depth study of major systems found in the human body, including, but not limited to, the skeletal, muscular, nervous, digestive, immune, and circulatory systems.
Prerequisite: Successful completion of Biology and Chemistry with a grade of A- or better, or successful completion of Honors Biology and Honors Chemistry with a grade of B- or better in both classes.

## ASTRONOMY

Grades 11, $12 \quad$ CPI Course number 441

This course is designed to provide students with an understanding of the universe, the structures within the universe, motions of celestial bodies, and identification/interpretation of cosmic anomalies. Students will cover the vast idiosyncrasies of the universe from ancient epochs to the present. Approach includes class discussions, audio-visual materials, class project, and laboratory activities.

## HUMAN BODY SYSTEMS

Grades 11, 12
0.50 Credit (One Semester)

CPI
Course number 443

A course designed for students who desire additional study in human body systems. The course includes study of cells, tissues and systems of the body beyond that covered in previous Biology courses. Current topics in human biology and related diseases and conditions are discussed. The approach includes class discussions, projects, lecture and lab activities, as well as internet research and system building on anatomical models.
Prerequisite: A grade of C or better in Biology.
OCEANOLOGY AND STREAM ECOLOGY
Grades $11,12 \quad$ CPI 0.50 Credit (One Semester) Course number 444

This course is designed to introduce students to the concepts of marine and fresh water ecology. Topics explored are: chemical, physical, and biological oceanology with special emphasis on the organisms found in Long Island Sound. Various marine habitats will be studied in class and correlated with fieldwork on Long Island Sound. Students will participate in the collection and analysis of water quality data of a local stream. Special emphasis will be on the relationship between organisms and their environment and on the interdependence of organisms with each other. The class will also explore some environmental problems and possible solutions related to our water world.

## ENVIRONMENTAL SCIENCE

Grades $11,120.50$ Credit (One Semester) CPI Course number 429

This course is designed to introduce students to the scientific concepts required to understand the interrelationships of the natural world in order to analyze environmental issues. Topics studied will include ecological systems, human impact on the environment, resources and resource management including energy, biodiversity, environmental problems and solutions, and interdisciplinary topics such as environmental economics and ethics.

## INTRODUCTION TO ENGINEERING

## Grades 11, 12 <br> 0.50 Credit (One Semester) <br> CPI <br> Course number 457

This course is designed to introduce students to the concepts related to engineering design, techniques, and the engineering profession. Topics studied will include the nature of engineering, engineering and society, introduction to engineering design, problem solving and the application of scientific principles and mathematics.

## SOCIAL STUDIES DEPARTMENT

The Social Studies department emphasizes a knowledge and understanding of complex relationships between people and cultures. By emphasizing reading and writing skills, critical thinking and analysis, and technological competence, students are prepared to make a positive contribution as virtuous citizens in a democratic society. The Social Studies department believes that students learn in a variety of ways. Thus, the department works to accommodate diverse learning styles. Methods of presentation include lecture, discussion, role- play, debate, and various implementations of technological instruction. Interpretation of primary source materials, appreciation for global cultures, and emphasis on geographic themes, are a few of the skills of historical detection and interpretation emphasized in the Social Studies department. Required Courses: 4 years including Human Geography, World History, Civics, and United States History.
$\begin{array}{llll}\text { Grades } 9 & 0.5 \text { credit (One Semester) CPI } & \text { Course number } 520\end{array}$

Students will gain a general understanding of the histories and cultures of the world and how these histories relate to and affect our own world. Students will study the civilizations of Africa, Asia, Europe, South America, and the Middle East. The course will focus on the cultural, social, religious, and political developments in each of these areas. We will pay particular attention to how these developments created the world in which we live today.
Essential questions of the course include: How do fundamental beliefs and geographic location affect human interaction? How have these beliefs changed over time? How and to where do these ideas spread? What are the modern-day implications of the interplay among religion, geography, and politics? Students are introduced to key themes including globalization, democratization, population growth, economic development, gender, and environmental issues. The course focuses on developing analytical reading and writing abilities and introduces students to the various disciplines within the department.

## HONORS HUMAN GEOGRAPHY AND OUR CONTEMPORARY WORLD

Grades $9 \quad 0.5$ credit (One Semester) Hon Course number 528
In this honors level course, students will be required to read and write like a historian. The reading and writing rigor is aimed at preparing our students for future study in honors and Advance Placement level courses. Students will gain a general understanding of the histories and cultures of the world and how these histories relate to and affect our own world. Students will study the civilizations of Africa, Asia, Europe, South America, and the Middle East. The course will focus on the cultural, social, religious, and political developments in each of these areas. We will pay particular attention to how these developments created the world in which we live today.
Essential questions of the course include: How do fundamental beliefs and geographic location affect human interaction? How have these beliefs changed over time? How and to where do these ideas spread? What are the modern-day implications of the interplay among religion, geography, and politics? Students are introduced to key themes including globalization, democratization, population growth, economic development, gender, and environmental issues. The course focuses on developing analytical reading and writing abilities and introduces students to the various disciplines within the department.

## WORLD HISTORY

Grades 10
1 Credit
CPI
Course number 502

This course examines a broad spectrum of Ancient, Medieval, Early Modern Civilizations. Students are expected to demonstrate mastery of the following skills: critical analysis of documents and information, research and argumentative based writing, and active discussion and debate. Throughout the year, students will be challenged to interpret documents, assimilate information from other sources, and complete short-term projects. The development of higher-level thinking skills is a major emphasis of the course.

## HONORS WORLD HISTORY

$\begin{array}{llll}\text { Grade } 10 & 1 \text { Credit } & \text { Hon } & \text { Course number } 501\end{array}$

This course offers a thematic and conceptual approach to the study of Ancient, Medieval, and Early Modern Civilizations. In addition to the textbook, students will read and analyze primary source material. Regular projects that require independent and collaborative research will be assigned. This honors-level work emphasizes higher level thinking skills: analysis, synthesis, and evaluation. In addition, students will be expected to read with a critical lens, write with clarity using evidence, and engage with classmates to better develop an understanding of the implications of world events over time.

## AP WORLD HISTORY

Grade $10 \quad 1$ credit Hon Course number 506 (AP Test Fee) This course is a rigorous exploration of the major people, societies, events, and ideas that have shaped world history since the Middle Ages. Course topics will follow the nine-unit structure presented by the College Board. Beginning with China and the Islamic Caliphates, the course will study major topics such as the formation of Eurasian empires, the Colombian Exchange, the Industrial Revolution, European Imperialism, the World Wars, the Cold War, decolonization, and globalization in the 21 st Century. Students should expect nightly reading, rigorous writing assignments, class debate and discussion, and a fast-paced classroom atmosphere. All class participants are required to take the AP Exam in May.
Prerequisites: B+ in Honors Human Geography or an A in both Human Geography and English I, and a recommendation from one's current Social Studies and English teachers.

## U.S. HISTORY

Grades 11, 12 Credit CPI Course number 512

This course is designed to give students information and experience to help them develop an understanding of the present, an appreciation of our cultural heritage, and to build those attitudes and ideals, which will enable them to participate as responsible citizens in our democratic society. Further emphasis is placed on the reinforcement of related skills (essay writing, note-taking, map analysis) considered to be essential in the Social Sciences.

This is a course designed to take a thematic and conceptual approach to the study of American History. The course will cover from 1492 to the Second World War with emphasis on the evolution of American politics, identity, and economics. A primary focus of the course will be employing honors level research skills when interacting with both primary and secondary sources. Emphasis will be placed on using these sources in forming argumentative essays both on tests and on research papers.
Prerequisite: Completion of World History with a grade of A- or better, completion of Honors World History with a grade of B or better, or completion of AP World History with a grade of B- or better.

## ADVANCED PLACEMENT U.S. HISTORY

Grades 11, $12 \quad 1$ Credit $\quad$ AP $\quad$ Course number 511(AP Test Fee)

The course is designed to offer students an in-depth approach to American History, focusing on the development of analytical skills. Emphasis will be placed on the interpretation and application of primary source materials as they pertain to major themes in American History. Preparation for the mandatory Advanced Placement U.S. History Exam is a major focus of the class. Students will be expected to complete a large volume of work independently and extensive assignments will be given over school vacations. Through this exam, students have the opportunity to obtain college credit in U.S. History.
Prerequisite: Grade of at least an A- in Level 2 World History, at least a B+ in Honors World History, or at least a B in AP World History.

## CIVICS

Grade $12 \quad$ CPI 0.5 credit (One Semester) Course number 566
This course examines the structure and operation of the United States government as it is developed within the framework of the Constitution. Students explore such topics as global government, civil rights, the institutions of government, such as the presidency, Congress, the courts, and contemporary problems in government and politics. The students will be familiar with the functions and structure of the United States government and their individual roles and responsibilities within our system. Please note that this class is mandatory for graduation.

## ECONOMIC THEORY AND PRACTICE

Grades 11, 12
0.5 credit (One Semester)
CPI
Course number 542

This course seeks to introduce the student to the many aspects of economics. Topics include the American Market economy, comparative economic systems, marketing, trade, advertising, consumerism, regional economies, unions, economic justice, and the stock market. Students also research related economic topics that are presented in class as part of a group project.

## SOCIAL PSYCHOLOGY

Grades 11, 12
0.5 credit (One Semester) CPI

Course number 544
This course is designed to examine the complex psychological and societal aspects of life. Basic concepts, as expressed by notable members of the psychological world, will be discussed. These are then related to the behavior of people in today's society. Case studies, psychological tests, group discussion, and research highlight this course.

## ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS

| Grade 12 | 1 Credit | AP | Course number 530 (AP Test Fee) |
| :--- | :--- | :--- | :--- |

This course prepares students to take the Advanced Placement examination. Students approach the course from a topical perspective by examining both the formal institutions of government (Congress, Presidency, judiciary, bureaucracy), the informal or linkage institutions (the media, public opinion, elections, interest groups), and the relationship between the two in the formation of public policy. Students will also examine the constitutional underpinnings of the American system, as well as explore important issues in both civil rights and civil liberties. This course seeks to foster a systemic appreciation for the major themes and concepts of Political Science, and the students will be expected to keep abreast of current affairs. Students will be required to complete frequent position papers and/or essays, as well as participate in policy debates. Students will be required to take the AP exam. This course meets the Civics requirement.
Prerequisites: The student must have completed either AP United States History with a grade no lower than a B- or United States History, Level 2, with a grade no lower than an A-.

AP COMPARATIVE GOVERNMENT AND POLITICS
GRADE $12 \quad 1$ Credit
AP Course number 570 (AP Test Fee)
Through work in a college-level text and regular consideration of current media, this course exposes students to the current political systems of different countries and examines them using analytical and comparative themes. The course will examine the systems and
politics of six "core" countries: the U.K., Russia, Iran, Mexico, Nigeria, and China. Students will consider each country's history and political culture, social divisions, formal structures of government, forms of participation, leadership groups, and policy issues and challenges. Topics of discussion will include the relationship of citizens to the state, the purposes and powers of government, opposition and dissident groups, and policy making in a changing world. Students will also consider broader issues such as globalization, democratization, and political change. This course prepares students for the Advanced Placement Comparative Government examination. Students will be required to take the AP exam. This course meets the Civics requirement.
Prerequisite: Completion of United States History and permission of the department.

## AP PSYCHOLOGY

GRADE $12 \quad 1$ Credit AP Course number 546 (AP Test Fee)

AP Psychology is an introduction to a college level psychology course. This course helps to cultivate a student's understanding of the systematic and scientific study of human behavior and mental processes. Students are exposed to psychological facts, principles, and phenomena associated with the field of psychology. Topics include the biological basis of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology.
Prerequisite: Completion of United States History and permission of the department.

## AFRICAN AMERICAN HISTORY

GRADE $12 \quad$ 0.5 Credit (One semester) Course number 519

This one semester, introductory-level course is largely designed to provide students with an overview of the major events and developments in African American history from its ancestral beginnings to present. Some of the specific topics covered include African timeline, colonial and antebellum slavery, the abolition movement, the free black experience, the Civil War, emancipation, Jim Crow segregation, racial violence, black culture, the modern freedom struggle, popular culture, political movements, and the contemporary experience.
Prerequisite: Completion of United States History

## RELIGION DEPARTMENT

Through experiences both in and out of the classroom, the Religion Department works cooperatively to educate and encourage the student to know, love, and serve God, to follow Jesus, to love others as Jesus loves us, and to empower others to do the same. Three basic goals stand out: to educate students regarding the twin pillars of the Church of Jesus: Scripture and Tradition, to educate students in the academic and intellectual aspects/realities of the past and present Church (with emphasis on teaching and beliefs), and to nurture in the students a strong Christian spirituality and a life-giving faith.

By virtue of our human dignity and of the gifts of Baptism and Free Will, to have respect for life and all its forms, the department believes that each student must learn to take responsibility for his/her own faith development, becoming an informed critic of his/her own choices and social milieu.

Students are required to take four years of religion. The current sequence of classes is 9th Grade-Sacred Scripture: Old Testament and Sacred Scripture: New Testament; 10th Grade-History of the Catholic Church and Living as a Disciple of Jesus Christ in Society; 11th Grade-Responding to the Call of Jesus Christ and Christian Morality and Conscience Formation; 12th Grade-Ecumenical and Interreligious Issues and an elective.

## RELIGION I

| Grade 9 | 1 Credit | CPI | Course number 608 |
| :--- | :--- | :--- | :--- |

## SEMESTER I: SACRED SCRIPTURE: OLD TESTAMENT

This course provides an overview of the Old Testament, its major themes, and how they relate to the lives of the students. The students will be introduced to the basic principles for understanding and interpreting the Bible. The course will also provide the background for understanding the concepts of fidelity to covenant, Salvation History, the unity of both Testaments, and the application of Scripture to living a moral, Christ-centered life.

## SEMESTER II: SACRED SCRIPTURE: NEW TESTAMENT

This course provides an overview of the New Testament by exploring the Gospels, Acts of the Apostles, selections from the Epistles, and the Book of Revelation. Students learn the essential teachings of Jesus, the elements of Christian living, and the importance of prayer and community worship. The Sacraments and growth of the Church are considered.

| Grade 10 | 1 Credit | CPI | Course number 609 |
| :--- | :--- | :--- | :--- |

SEMESTER I: HISTORY OF THE CATHOLIC CHURCH
The purpose of this course is to supply the students with a general knowledge of the Church's history from Apostolic times to the present. They will be introduced to the Church founded by Christ through the Apostles and sustained by Him throughout history through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today and, as such, has both Divine and human elements. In this course, students will learn about the Church's 2000 years of history and about how the Church is led and governed by the successors of the Apostles.

## SEMESTER II: LIVING AS A DISCIPLE OF JESUS CHRIST IN SOCIETY

The purpose of this course is to introduce students to the Church's social teachings. In this course, students are to learn how Christ's concern for others, especially the poor and needy, is present today in the Church's social teaching and mission. The Service Project is completed during this course. Completion of the Service Project is required in order to advance to the next grade level.

## RELIGION III

| Grade 11 | Credit | CPI | Course number 610 |
| :--- | :--- | :--- | :--- |

## SEMESTER I: RESPONDING TO THE CALL OF JESUS CHRIST

This course will help students to understand and express the vocations of life: how Christ calls each of us to live a life of holiness. The course will be structured around single life, married life, consecrated life, and ordained life. Students will learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

## SEMESTER II: CHRISTLAN MORALITY AND CONSCIENCE FORMATION

As Christians, we are challenged daily to embrace the dignity of the human person created in the image and likeness of God. We are called to reflect fully that image by living a virtuous life conformed to Christ. The course will teach the foundations of Christian morality using the Beatitudes and the Decalogue as the key guides in making moral decisions. Topics included in this course are the formation of conscience, the reality and nature of grace, the effects of personal and social sin, the dignity of human sexuality through the study of the Theology of the Body, and the sanctity of all life.

## RELIGION IV

| Grade 12 | 1 Credit | CPI | Course number 617 |
| :--- | :--- | :--- | :--- |

## SEMESTER I: CHRISTLAN ETHICS

This course provides an opportunity for the students to confront and analyze, from a perspective of Christian morality, classical theories of ethics, and the complex issues facing young adults today. Issues of personal and social ethics on such topics as sexuality, abortion, euthanasia, poverty, and hunger are discussed and researched. Current Papal documents are required readings.

## SEMESTER II: ECUMENICAL AND INTERRELIGIOUS ISSUES*

The purpose of this required course is to help students understand the manner in which the Catholic Church relates to non-Catholic Christians as well as to other religions of the world. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course is intended to help students recognize the ways in which important spiritual truths can also be found in non-Catholic Christian churches and ecclesial communities as well as in non-Christian religions. It is also intended to help students recognize the ways in which other systems of belief and practice differ from the Catholic faith. The richness of the Vatican II documents, the Decree on Ecumenism and the Declaration on the Relation of the Cburch to Non-Christian Religions, will help guide the students in this course.

## HONORS RELIGION IV: ACTS (A CHANCE TO SERVE)

Grade 12 1 Credit Hon Course number 618
SEMESTER I: This honors level course is designed to train leaders for service both within and beyond the school community. It will challenge students to discover talents and develop skills to be used for a lifetime of service in church and civic communities. The meaning of ministry and service as well as a study of contemporary Christian leaders and the Church's social teaching will be considered throughout the course. Skills of communication, leadership, and faith sharing will be developed. Leadership activities in the school and community, including talks to other classes and on retreats, social action projects, and liturgical planning will be included. Students participate in an outdoor adventure and recreation program course in June.

The second semester includes an exploration of ecumenism, studying the ways in which other systems of belief and practice differ from the Catholic faith and the manner in which the Catholic Church relates to non-Catholic Christians as well as to other religions of the world.

Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course is intended to help students recognize the ways in which important spiritual truths can also be found in non-Catholic Christian churches and ecclesial communities as well as in non-Christian religions. It is also intended to help students recognize the ways in which other systems of belief and practice differ from the Catholic faith. The richness of the Vatican II documents, the Decree on Ecumenism and the Declaration on the Relation of the Church to Non-Cbristian Religions, will help guide the students in this course.
Prerequisite: Departmental approval and teacher interview required.

## HONORS RELIGION IV: HILL (HONORS INSTITUTE FOR LEADERSHIP IN LIFE)

Grade 12
1 Credit
Hon
Course number 619

HILL is a seminar style course that leads students through an exploration of the challenges of leadership in a modern world, viewed particularly through the lens of our faith, considering issues from theological, sociological, historical and economic perspectives. Through the exploration of a variety of texts in fields such as theology, sociology, business and the arts, the consideration of current problems and moral/ethical challenges, and the incorporation of voices of many active in community, government and business leadership, HILL will explore what it means to be a Christian leader, the virtues and values essential for leadership, the unique challenges faced by leaders rooted in faith and how to navigate the challenges of leadership in an increasingly secular world. These topics are considered to better prepare students to handle the responsibilities of leadership.

The second semester includes an exploration of ecumenism, studying the ways in which other systems of belief and practice differ from the Catholic faith and the manner in which the Catholic Church relates to non-Catholic Christians and other religions of the world. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the study of ecumenism is intended to help students recognize the ways in which important spiritual truths can be found in non-Catholic Christian churches and ecclesial communities as well as in nonChristian religions. The richness of the Vatican II documents, the Decree on Ecumenism and the Declaration on the Relation of the Church to Non-Christian Religions, will help guide the students in this course.
Students are selected through an application and interview process; past academic performance of the student is an important consideration.
Prerequisite: Departmental approval and teacher interview required.

## FINE AND PERFORMING ARTS DEPARTMENT

These courses are designed for students who wish to pursue the arts as a hobby as well as those planning a career in the fine or performing arts. Our Performing Arts courses provide a variety of experiences for all artistic backgrounds. Some of the courses are open to all students; others require a special audition or portfolio for membership. In the Visual Arts courses, students explore a variety of media and disciplines to provide them with the best studio and academic background. These courses are taught in a state-of-the-art studio environment with the finest materials and computer technology available. This curriculum emphasizes the merging of traditional techniques and media with the technology of the future.

## INTRODUCTION TO GUITAR

Grades 9, 10, 11, 12 1 Credit CPI Course number 812
Introduction to Guitar is designed to teach students the basics of playing guitar. This course will provide an easy access foundation for students who have long thought about picking up the guitar, acoustic or electric, as well as those who already play. Students will learn the basics of playing through the study of music notation, chord symbols, and tablature. Students will also gain an understanding of many different styles, including but not limited to rock, jazz, pop, blues and classical.
Requirements: Open to students in grades nine through twelve. No music experience necessary. However, Students are required to provide or rent their own guitar.

CONCERT BAND
Grades 9, 10, 11, 12
1 Credit
CPI
Course Number 800

The Concert Band consists of brass, woodwind, and percussion instrumentalists who have reached an inter- mediate level in technique and musicianship. This course develops elements of performance, as well as the basic principles of ensemble playing, instrument technique, listening skills and music theory within the context of rehearsing music of various styles and historical periods. Repertoire includes works for band that serve to prepare the students for admission into the Wind Ensemble. Some of the year is spent studying chamber music, and students may be broken into smaller musical groups. This group performs at school concerts and graduation ceremonies and select athletic events. Some after-school and evening rehearsals may be required.
Prerequisite: Permission of the instructor and a grade of B or better is required to repeat Concert Band.

Grades 9, 10, 11, $12 \quad 1$ Credit Hon Course Number 801

The Wind Ensemble is a select group of students who are highly motivated and seriously interested in instrumental music performance. Students develop knowledge and skill in ensemble balance, tone production, repertoire study, and historical information to promote a high level of musicianship through performance with a strong foundation in the fundamentals of music. The Wind Ensemble performs advanced literature throughout the school year at school functions such as concerts, in-school assemblies and special events, including graduation ceremonies and athletic events. Some after-school and evening rehearsals may be required.
Prerequisite: Placement is audition-based. Seating, part, and instrument assignment will be determined based on the needs of the group and the ability of the student. Students are expected to provide their own instrument. Private lessons are highly recommended. Wind Ensemble may be repeated for credit. A grade of A- or better is required to repeat Wind Ensemble, and students may need to re-audition every year.

## ADVANCED JAZZ BAND

Grades 9, 10, 11, 12 1 Credit Hon Course Number 803

The Advanced Jazz Band is a highly developed performance ensemble consisting of standard big band instrumentation. This group rehearses two nights per week at the director's discretion. This course is a continuation of topics covered in the Jazz Ensemble. Students will study more difficult jazz literature and are expected to implement higher-level improvisatory techniques. Participation at school concerts, assemblies, Celebrate! West Hartford and other activities throughout the year are mandatory. Membership in the Concert Band, Wind Ensemble, String Ensemble, or Chorus is required. Meets two evenings per week
Prerequisite: Placement is audition-based. Seating, part, and instrument assignment will be determined based on the needs of the group and the ability of the student. Students are expected to provide their own instrument. Private lessons are highly recommended. Advanced Jazz Band may be repeated for credit. A grade of A- or better is required to repeat Advanced Jazz Band, and students may need to reaudition every year.

STRING ENSEMBLE
Grades 9, 10, 11, 12 Credit CPI Course Number 806

String Ensemble is a select group of string players who are highly motivated and seriously interested in studying chamber music. Some after-school and evening rehearsals may be required. Participation in school concerts is required. Meets three days per week
Prerequisite: An audition is required. Students are expected to provide their own instruments. Private lessons are highly recommended. String Ensemble may be repeated for credit.

ADVANCED STRING ENSEMBLE
Grades 9, 10, 11, 12 Credit Hon Course Number 807

Advanced String Ensemble is a select group of advanced string players who are highly motivated and seriously interested in playing chamber music at an advanced level. Some after-school and evening rehearsals may be required. Participation in school concerts and outside adjudications is required. Meets three days per week
Prerequisite: An audition is required. Students are expected to provide their own instruments. Private lessons are strongly recommended. Advanced String Ensemble may be repeated for credit.

## ADVANCED PLACEMENT MUSIC THEORY

Grades 11, 12 1 Credit AP Course number 720

AP Music Theory prepares students to take the AP Music Theory examination. This course includes harmonic analysis, keyboard technique, ear training, sight singing, and written notation. AP Music Theory is strongly recommended for any student considering a college major or minor in music. Students are required to take the AP examination. Meets five days per week

## CHAMBER CHOIR

$\begin{array}{llll}\text { Grades } 9,10,11,12 & \text { CPI } & \text { Credit }\end{array}$

This is a course in choral singing, vocal technique, listening skills, and music theory within the context of rehearsing music for performance. Course requirements include participation in the Christmas and Spring Concerts. Open to men and women.
Prerequisite: Consent of instructor after audition.

This is an advanced level course in choral singing, vocal technique, listening skills, and music theory within the context of rehearsing music for performance. Course requirements include participation in the Christmas Concert, Spring Concert, Graduation Ceremony, and other selected performances throughout the year. Open to men and women.
Prerequisite: Audition and consent of instructor.
HONORS JAZZ CHOIR
Grades 11, $12 \quad$ Credit Hon Course Number 804
This group is an advanced level choral ensemble. The Jazz Choir focuses on a repertoire of challenging jazz vocal music with concentration on a cappella and vocal improvisation. Vocal technique, listening skills, music theory, and music history are stressed within the context of preparation for performances and adjudications. This group performs at Christmas and Spring Concerts, the Berklee College of Music High School Jazz Festival, special events and tours. Meets 1 Day / 2 Evenings Per Week.
Prerequisite: Audition

## THEATRE ARTS

Grades 9, 10, 11, $12 \quad$ CPI Credit (One Semester) Course number 867
The goal of this course is to give students a thorough introduction to acting, musical theater, and stage production. Students will study improvisation, character development, action, and intention through games, scene work and other acting exercises. Students will watch various performances and analyze the work of master actors, responding with written analysis. There are no required texts, though students will occasionally have the opportunity to select their own scene work. The Musical Theatre unit offers an opportunity for students who wish to focus on the multidisciplinary craft of musical theatre. The class explores the art-form from a historical perspective while allowing the student to grow as storytellers through personal coaching, ensemble work, and self-discovery. The Stage Craft unit will explore the fundamentals of scenic, lighting, and sound design, as well as the methods and equipment used in executing those designs. This class will include hands-on work with tools and stage hardware, as well as lighting and sound equipment. This course may be repeated for elective credit.

## ACTING AND IMPROVISION

$\begin{array}{llll}\text { Grades } 9,10,11,12 & 0.5 \text { Credit (One Semester) CPI } & \text { Course number } 868\end{array}$
This course will introduce students to the fundamentals of the creative process of acting. It will focus on developing and training the actor's instrument. Through structured exercises and performance projects, the student will develop skills in relaxation and concentration, voice and movement, and script analysis. Students will also acquire basic theatre terminology, sharpen their observation skills, and gain an understanding of the rehearsal process. The course will culminate in the final presentation of monologues and scenes from a contemporary play.

## 3D RENDERING AND DESIGN

Grades 9, 10, 11, $12 \quad$ CPI Course number 869
This course will explore the skills of computer-aided drafting and rendering through the lens of stage set design, an art form that is based on the study of architecture. Students will learn how to create designs based on architectural research and apply the details in both drafting and rendering. Students are introduced to drafting techniques, digital rendering, and modeling skills that can be applied to theatre, interior design, and architecture.

DRAWING I
Grades 9, 10, 11, $12 \quad$ CPI Credit (One Semester) Course Number 816
A semester-long course that introduces the basic foundations of drawing. Students will explore a variety of artistic media including pencil, charcoal, ink, marker, and pastel. Students will be introduced to the studies of art history and art criticism.

## PAINTING I

Grades 9, 10, 11, $12 \quad$ CPI Course Number 817
A semester-long course that introduces the basic foundations of painting. Students will explore a variety of artistic media including acrylic, watercolor, gouache, and oil paints. Students will be introduced to the studies of art history and art criticism.

DRAWING II
Grades 10, 11, 12 0.5 Credit (One Semester) CPI Course Number 818

A semester-long course that builds on the skills developed in Drawing I. Students will experiment in depth with a variety of drawing techniques, both traditional and non-traditional. Art history and art criticism are emphasized through the development of critical thinking and writing skills applicable to fine art disciplines.
Prerequisite: Drawing I with a B or higher, or portfolio review of ten pieces.

## PAINTING II

Grades 10, 11, $12 \quad$ CPI $\quad$ Course $\quad$ Number 819 A semester-long course that builds on the skills developed in Painting I. Students will experiment in depth with a variety of painting techniques, both traditional and non-traditional. Art history and art criticism are emphasized through the development of critical thinking and writing skills applicable to fine art disciplines.
Prerequisite: Painting I with a B or higher, or portfolio review of ten pieces.

## FUNCTIONAL ARTS AND CRAFT

$\begin{array}{llll}\text { Grades } 9,10,11,12 & \text { 0.5 Credit (One Semester) } & \text { CPI } & \text { Course Number } 753\end{array}$

This is a semester-long course that introduces students to both traditional and contemporary functional arts and crafts. Production of artwork is framed in the research and exploration of disparate cultures, and their treatment and traditions of specific art media. Materials and methods to create both functional as well as beautiful artworks will be explored.

## FIBER ART

Grades 9, 10, 11, 12
0.5 Credit (One Semester)

CPI
Course Number 820

This is a semester-long course that introduces students to both traditional and contemporary fiber arts. Students will explore traditional and nontraditional materials and techniques, including but not limited to weaving, basketry, and knitting. In this class, students will become more aware of how fiber art is influenced by environmental, geographical, cultural, social, and historical factors.

CERAMICS

| Grades 11,12 | 0.5 Credit (One Semester) | CPI | Course Number 821 |
| :--- | :--- | :--- | :--- |

A semester-long course that focuses on a variety of hand building and wheel throwing techniques. Students explore all facets of designing, creating, firing, decorating, and glazing pottery. Art history and art criticism are emphasized through the development of critical thinking and writing skills, as applicable to fine art disciplines.
Prerequisite: At least one Fine Art credit and portfolio review.

## SCULPTURE

Grades 11, 12
0.5 Credit (One Semester)

CPI
Course Number 822
A semester-long course that emphasizes design and sculpture techniques. Students will experiment with a variety of three-dimensional designs and sculpture processes for communication and defining space and form. Instruction is focused on teaching the skills necessary for students to produce their ideas visually. Art history and art criticism are emphasized through the development of critical thinking and writing skills applicable to fine art disciplines.
Prerequisite: At least one Fine Art credit and portfolio review.

## BEGINNERS PHOTOGRAPHY

Grade 9
0.5 Credit (One Semester)
CPI
Course Number 823

Using the elements of art as a foundation, freshmen will spend the semester learning the history of photography, the components of a camera, as well as creating photographs that exemplify the elements of art. Using cameras and computers, students will be exposed to multiple design resources, software, and applications of media. They will use the Adobe Suite programs to edit, retouch, and manipulate their images. This course counts as a technology elective.

## PHOTOGRAPHY

Grades 10, 11, 12
0.5 Credit (One Semester)

CPI
Course Number 754
Using the elements of art as a foundation, sophomores and above will spend the semester learning the history of photography, the components of a camera, as well as creating photographs that exemplify the elements of art. Using cameras and computers, students will be
exposed to multiple design resources, software, and applications of media. They will use the Adobe Suite programs to edit, retouch, and manipulate their images. This course counts as a technology elective.

BEGINNERS DIGITAL DESIGN

| Grade 9 | 0.5 Credit (One Semester) | CPI | Course Number 824 |
| :--- | :--- | :--- | :--- |

Open to freshmen only, this semester-long course focuses on the principles of design as a foundation for digital design. Students will focus on typography, digital drawing, text effects, logo design, advertising, and visual communication to create a personalized digital design portfolio. They will use the Adobe Suite programs and other applications to create each project. This course counts as a technology elective.

## DIGITAL DESIGN

| Grades $10,11,12$ | 0.5 Credit (One Semester) | CPI | Course Number 813 |
| :--- | :--- | :--- | :--- |

Open to sophomores and above, this semester-long course focuses on the principles of design as a foundation for digital design. Students will focus on typography, digital drawing, text effects, logo design, advertising, and visual communication to create a personalized digital design portfolio. They will use the Adobe Suite programs and other applications to create each project. This course counts as a technology elective.

## DIGITAL FILMMAKING AND VIDEO PRODUCTION

Grades 11, $12 \quad$ Credit Course Number 814
In this course, students will explore the continually evolving medium of digital filmmaking and video production: an integral tool for sharing stories, advocating issues, marketing products, and distributing information for learning. Students will learn to use state of the art editing software and focus on mastering the three phases of film production: pre-production (concept development, project planning, script writing, and shot listing), production (capturing video and audio content), and post-production (editing and special effects). This course counts as a technology elective.
Prerequisite: Photography and Digital Design or upon portfolio approval

## PORTFOLIO DEVELOPMENT

## Grade 11, 12 <br> 1 Credit <br> Hon <br> Course Number 825

An advanced studio art class designed for students who are highly motivated and seriously interested in the arts. Students must have demonstrated unique perceptual ability through their work's formal and technical qualities, as well as its concentration and depth of expression. The course outline is individualized to each student with the intention of personalized portfolio development. Art history and art criticism are emphasized through the development of critical thinking and writing skills applicable to fine art disciplines.
Prerequisite: Two Fine Art credits and portfolio review of at least 10 pieces.
ADVANCED PLACEMENT ART AND DESIGN
Grades 11, $12 \quad$ AP Credit $\quad$ Course Number 748
The Advanced Placement Art and Design course enables highly motivated students to do college-level work while still in high school. Candidates submit a portfolio of work for evaluation in early May to the College Board. Guidelines have been designed to accommodate a variety of interests and approaches to art but must include quality and concentration. Students must be able to work independently and meet deadlines. Preparation of art pieces will require considerable time outside of class. Students should have a portfolio of 10-15 pieces focusing on quality before beginning this course. Students will begin work on their concentration at home during the summer before the school year begins. This class may be repeated for credit.
Prerequisite: At least two Fine Art credits, portfolio review, teacher interview, and approval required.

## PHYSICAL EDUCATION DEPARTMENT/ WELLNESS

## HEALTH AND SAFETY

Grade 110.5 Credit (One Semester) CPI Course number 980
REQUIRED FOR GRADUATION: The program stresses the growth and development of sound physical and mental health through an examination of nutritional practice, drug and alcohol education, sex education, mind, and emotional maturation. The program is designed to meet the needs for health education at an early teenage level. Visual aids, such as videos, films, and slides are used extensively, and in addition, several speakers are brought in to lecture on dealing with health problems.

The physical education program is designed to promote a positive attitude toward fitness which will contribute to the well-being of the whole person. A combination of team play and individual activities will be integrated with the use of the fitness center. The fitness center provides an opportunity for training programs which can be introduced and expanded with each student. The fitness center is user-friendly with free weights, universal, and cardiovascular machines to meet the needs of all students. It is a goal of the physical education program to have the use of team play and personal fitness lead to the student's desire to continue his or her own fitness program in the future.

## TECHNOLOGY

## INTEGRATED TECHNOLOGY

Grade 09
0.5 Credit (One Semester)

CPI
Course number 359
This course is designed to help students build technology skills that will enhance their academic and personal development. Practical training using the iPad will include digital access to textbooks and applications. In addition, the course will address the key issues of internet safety, privacy and security, reliability of online information, cyberbullying, information literacy, digital footprints and reputation, and intellectual property in the digital world. Students will learn and apply basic skills in word processing, spreadsheets, and presentations through knowledge in Microsoft Office and Google Suite to thoroughly complete assignments and enhance organizational skills. Students will develop facility at the keyboard through an online typing program. Technology related topics in mathematics, English, science, and the arts will be integrated throughout the lessons.

COMPUTER PROGRAMMING
Grades 10, 11, 12 CPI Course number 351
This is a semester course designed to familiarize the student with the fundamental concepts of computer programming in the Java language. Mainly a "hands on" course, topics to be introduced include algorithms, programming methodology, and data structures. It includes writing and executing programs on the computer, and mathematical applications of these techniques. This course is a prerequisite for AP Computer Science
Prerequisite: This course is open to students who have completed Algebra I (any level) with a C or better. Ability to work independently and/or to spend time in the computer lab beyond class times is required. Teacher recommendation is required.

ADVANCED PLACEMENT COMPUTER SCIENCE
Grades 11, $12 \quad$ CPI Course number 355 (AP Test Fee)
This is a year-long course in algorithms, programming methodology, and data structures using the JAVA language. The curriculum will be guided to a large extent by the Course Description of the College Board Advanced Placement Examination in Computer Science (A). Students will be required to take this exam in the spring.
Prerequisite: The course is open to students who have completed Computer Programming (351) with a B or better, or demonstration of programming competency on a placement test. Ability to work independently and/or to spend time in the computer lab beyond class times is required. Teacher recommendation is required.

## The following electives also satisfy the digital technology credit (see Fine Arts Department for course description):

- Beginners Photograpby
- Pbotograpby
- Beginners Design
- Digital Design
- Digital Filmmaking and Video Production
- Computer Aided Design And 3d Rendering for Theatre, Design, And Architecture


## INTERNSHIP

COOPERATIVE WORK INTERNSHIP PROGRAM
Grades 11,12 0.5 Credit (One Semester)
CPI

Course number 979
This program provides educational opportunities that promote student's development as life-long learners in a dynamic, technological, and global economy. To receive credit a student must intern at St. Timothy's middle school for a semester and a total of 45 hours of logged experience per semester. It provides on the job training for a student enrolled with supervision by a school counselor and supervisor. The student gains skills, training, and experience for future employment or insight into possible post-secondary education/training opportunities. Prerequisite(s): Approval from Principal and school counselor

