



SACRED HEART ACADEMY

COURSE OF STUDIES 2010-2011

www.sacredhearthamden.org

MISSION STATEMENT

Sacred Heart Academy, founded by the Apostles of the Sacred Heart of Jesus in the Roman Catholic tradition and committed to the expression of strong Christian values and intellectual growth, provides a challenging college preparatory education for young women.

The School is a community which promotes the growth of the whole person in a caring environment that encourages personal integrity, compassion, justice and sense of responsibility to self, to others, and to the needs of society.

GRADUATION REQUIREMENTS

Sacred Heart Academy's balanced curriculum provides each student with a well-rounded academic foundation upon which to build. In addition to core requirements that provide broad exposure across several disciplines, an extensive selection of elective courses allows students to pursue special areas of interest. Honors, Early College Experience, and Advanced Placement courses are available for those students who qualify. Graduation from Sacred Heart Academy requires the successful completion of 27 credits distributed as follows:

Department	Credit Requirement
English	4.0
Mathematics	4.0
Theology	4.0
Science	3.0 (4 encouraged)
Social Studies	3.0
World Languages	2.0 (3-4 encouraged)
Fine Arts	1.0
Physical Education	1.0
Business and Computer Technology	0.5
Electives	4.5

Students are encouraged to plan their courses of study with advisors, teachers, and parents, mindful of the fulfillment of basic course requirements, intended college major, interests, and academic strengths. All students shall register for 7 credits each year. Seniors may elect to take 6.5 credits. After-school courses do not count toward these requirements.

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FRESHMAN CURRICULUM

SUBJECT AREA	COURSE	CREDITS
Business	Computer Applications	0.5
English	English I	1.0
Fine Arts	Intro. to Fine Arts	0.5
World Language (*)	Spanish, Latin, French	1.0
Mathematics (*)	Algebra I/Geom./Alg.II	1.0
Physical Education	Physical Education	0.5
Theology	Theology I	1.0
Science	Biology	1.0
Social Studies	Constitutional Foundations	0.5
	Freshman Seminar	

TOTAL REQUIRED CREDITS 7.0

(*) All incoming students are placed in the appropriate level math and world language as determined by the results of their Placement Tests in these subject areas.

SOPHOMORE CURRICULUM

SUBJECT AREA	COURSE	CREDITS
English	English II	1.0
World Language	Spanish, Latin, French	1.0
Mathematics	Geometry/Algebra II	1.0
Theology	Theology II	1.0
Science	Chemistry	1.0
Social Studies	W. Civilization	1.0

REQUIRED CREDITS 6.0

ELECTIVES 1.0

TOTAL REQUIRED CREDITS 7.0

JUNIOR CURRICULUM

SUBJECT AREA	COURSE	CREDITS
English	English III	1.0
Mathematics	Algebra II/Pre-Calc	1.0
Physical Education (+)	Physical Education II	0.5
Theology	Theology III	1.0
Science	Elective(s)	1.0
Social Studies	U.S. History	1.0

REQUIRED CREDITS 5.5

ELECTIVES 1.5

TOTAL REQUIRED CREDITS 7.0

(+) Students may elect to fulfill the PE requirement as a senior

SENIOR CURRICULUM

SUBJECT AREA	COURSE	CREDITS
English	World Lit. and Elective (**)	1.0
	or AP English Literature	
Theology	Theology IV	1.0
Mathematics (++)		1.0
Social Studies	Elective (**)	0.5

(++) Students must complete at least 4 math credits to graduate

(**) This is only required if the requirement has not already been met

REQUIRED CREDITS 3.5
 ELECTIVES 3.0
 TOTAL REQUIRED CREDITS 6.5
 (7.0 encouraged)

GRADING INFORMATION

Honors courses are designed to challenge highly motivated students with proven study skills. Students who are recommended for multiple honors courses must carefully consider, with their parents and advisor, the number of honors courses to select each semester. Students who attend summer school, in order to advance to the next level in a subject must have approval from the assistant principal and must pass the SHA final exam for the subject. A minimum 3.5 GPA constitutes Honors and 3.8, High Honors. Teachers will compute averages using the numerical equivalents. The computer will convert the letter grade into quality points to adjust the grading scale for course level.

Grading Scale

	College Prep	Honors	AP
Num. Equiv.	Letter Grade	Qual. Point	Qual. Point
97-100	A+	4.33	4.67
93-96	A	4.00	4.33
90-92	A-	3.67	4.00
87-89	B+	3.33	3.67
83-86	B	3.00	3.33
80-82	B-	2.67	3.00
77-79	C+	2.33	2.67
73-76	C	2.00	2.33
70-72	C-	1.67	2.00
67-69	D+	1.33	1.67
65-66	D	1.00	1.33
Below 65	F	0.00	0.00

Juniors and seniors who are consistently maintaining a minimum 3.8 GPA may entertain the possibility of taking a course at Yale University for college credit after school hours. Students who wish to consider this option must not have any other after school responsibilities and must discuss this matter with the assistant principal whose permission is a Yale requirement.

ADVANCED PLACEMENT (AP) AND EARLY COLLEGE EXPERIENCE (ECE) COURSES

AP and ECE classes are college-level courses and, as such, are more demanding. Students should expect more required reading, a heavier workload, and applications involving analytical reasoning.

ADVANCED PLACEMENT (AP) COURSES

The AP exam is required for each Advanced Placement class. The College Board determines the fee, which will be billed separately from tuition.

SHA's 13 AP course offerings include:

AP Computer Science	AP English Literature
AP Spanish Language	AP French Language
AP Latin: Vergil	AP Calculus AB
AP Calculus BC	AP Statistics
AP Biology	AP Chemistry
AP U.S. Government	AP U.S. History
AP Psychology	

EARLY COLLEGE EXPERIENCE (ECE) COURSES

ECE courses allow students to earn college credit while enrolled at SHA. For all ECE courses, UCONN will bill students separately for UCONN ECE credit in the fall and spring.

SHA's ECE course offerings are:

AP Latin: Vergil	Honors Latin Literature
Honors Latin IV	AP Calculus
Honors Precalculus	Honors Calculus
AP Biology	

NOTE: UCONN adjunct professorships are announced in the early spring. At that time, students will be notified of any changes to the list of ECE-eligible courses.

ELECTIVE COURSES AND PRE-REQUISITES

The school reserves the right to cancel any elective class with insufficient enrollment.

Student qualification for courses will be evaluated at the end of the first and second semesters.

For registration purposes, pre-requisites for ECE courses will be evaluated after Term 1. No ECE courses may be added in June. However, a student may be removed from a course roster in June if she no longer meets course pre-requisites based on end-of-year grades.

SCHEDULE CHANGES AND/OR WITHDRAWALS

Course selections that are made in February for the following year may be changed until mid-June (within 3 days after final grades are received in discussion with the Assistant Principal) without penalty. Any changes made after that time will be subject to a Schedule Change Fee.

No course changes are made during the summer months. Students must wait until the first cycle of the school year to make a schedule change.

Sacred Heart Academy does not allow students to change a course because of instructor preference. However, students may change a non-required course within the first cycle of each semester as long as the course has not reached its maximum enrollment. A parental signature and signatures of the teachers involved are required on the schedule change form along with the fee. Students may start or stop attending class only with a new schedule in hand.

Once the cut-off date has passed, permission to drop either a full year, non-required or semester elective is rarely granted, and only in extreme circumstances. The course name and grade will appear on the report card and transcript with a WD (withdrawn) in the appropriate column. Students do not receive partial credit for the time spent in the class. Once a transcript has been sent to a college as part of the college application process, the college will be notified in writing of any change in the applicant's course load.

Seniors wishing to change their second-semester course load must make all change requests during the first semester Schedule Change Period. After that point, any change request must include a Drop and an Add.

COURSE DESCRIPTIONS

Freshman Seminar

100frsem GR 9 SEM 1 PASS/FAIL

This course is designed to assist students in taking charge of their own learning with the goal to improve their school performance. In becoming more independent learners, students will feel more capable and gain a sense of empowerment. By being taught how to better learn, students will feel more capable and consequently, become more successful in their learning. Study strategies, memorizing techniques, note taking, time management, and organizational skills are stressed. **Successful completion of this course is required for entrance into the sophomore year.** The course does not carry any credit, meets once per cycle, and is graded on a Pass/Fail basis.

INTERDISCIPLINARY STUDIES

For those students interested in integrating knowledge from a variety of subject areas, courses in this section are geared as electives in preparation for higher education.

Honors Fundamentals of Philosophy

007int QP 4.67 GR 11, 12 SEM 1,2 .5 CREDIT

The unexamined life is not worth living! From the very beginnings of philosophy in ancient Greece thousands of years ago to today, serious thinkers have engaged in scrutinizing the views that we accept about our world and ourselves. This course will bring to light what our implicit beliefs are, what assumptions we make about our world, ourselves, our values. The major philosophic themes of the Western world will be explored: logic, ethics, metaphysics, epistemology, philosophy of religion, philosophy of art, and social and political philosophy. The students will be introduced as well to some of the classic philosophical writings that have helped to shape our world view. Prerequisite: Minimum overall GPA: 3.5.

Genetic Ethical Issues

008int QP 4.33 GR 10,11,12 SEM 2 .5 CREDIT

Since the initiation of the Human Genome Project, a series of controversial genetic, ethical, and social issues have become a concern of the US Government, research scientists, and the general public. This course examines and debates these issues beginning with the eugenics movement, Tuskegee Syphilis Experiment, and the Belmont Report, and including genetic testing/screening, forms of gene therapy, stem cell research, cloning, the patenting of human genes, and the use of genetic information with privacy and confidentiality issues. Lectures, speakers, case studies, structured controversies, position papers, and student presentations provide the format for the course. Prerequisite: Biology

BUSINESS AND COMPUTER TECHNOLOGY

The Business and Computer curriculum is an integral part of the total academic structure, as it fosters the understanding of business communication and management, as well as the use of computers with related software in an academic environment. 0.5 credits are required for graduation.

Computer Applications

114cmptrapp QP 4.33 GR 9 SEM 1,2 .5 CREDIT

This one-semester course provides a thorough introduction to computer applications. The course begins with an introduction to computer hardware and software, including related concepts and terminology. The balance of the course will allow students to develop proficiencies in five types of business software applications: word processing, spreadsheet, presentation graphics, Web design, and digital image editing. To maximize contextual learning of the software applications, assignments will be project-based.

Entrepreneurship and Small Business Management

156entre QP 4.33 GR 11,12 SEM 1,2 .5 CREDIT

This one-semester course is designed to appeal to students who may aspire to business ownership or to pursue the study of business (including accounting) in college. It is designed to enable students to acquire the knowledge and develop the skills needed to effectively organize, develop, create, and manage their own business. Topics include: benefits and potential drawbacks of owning a small business; building a business plan; forms of business ownership; marketing; franchising; understanding financial statements; contracts, and negotiations.

AP Computer Science (Advanced Placement) (2011-2012)

190cmprAP QP 5.0 GR 10-12 YEAR 1 CREDIT

In today's innovation-driven economy, complex problem solving and analytical reasoning skills are important for building a foundation for numerous careers, including jobs in math, science, engineering, and technology-related fields. This course emphasizes object-oriented programming with a concentration on problem solving and algorithm development. Students take the AP Computer Science Exam in May. Prerequisite: 3.67 or higher in current full-year math and science courses. AP Course fee applies. (This course counts for math credit.)

ENGLISH

The English Department strives to provide students with a strong foundation in critical reading, analysis and writing through required courses that address grammar, vocabulary, composition and literature. Elective courses offer an opportunity to study a particular aspect of English, whether writing-based or literature-driven. In all English classes, students regularly use technology for research, writing, and presentations. Four credits are required for graduation.

Introduction to Literary Genres and Basic Composition

214engI QP 4.33 GR 9 YEAR 1 CREDIT

This course introduces students to the genres of fiction, non fiction, drama, and poetry. It exposes students to the language of literature and teaches them how to read each genre critically. The course also fosters the development of writing skills, incorporating both critical and creative assignments, and includes grammar and vocabulary components.

Honors Introduction to Literary Genres and Basic Composition

217engIH QP 4.67 GR 9 YEAR 1 CREDIT

This course is offered to students who have qualified by their English scores on the entrance test. Like English I, this course introduces students to the genres of fiction, nonfiction, drama, and poetry; exposes students to the language of literature; and teaches them how to read each genre critically—but it does so in greater depth. The course also fosters the development of writing skills, incorporating both critical and creative assignments, and includes grammar and vocabulary components. Individual assignments/projects complement the material covered in class. Prerequisite: Performance on the High School Placement Test.

American Literature

224eng II QP 4.33 GR 10 YEAR 1 CREDIT

This course offers a survey of American literature from Native American to the present. In addition to developing grammar, vocabulary, and PSAT skills, students produce creative works consistent with the materials being studied and papers reflective of their maturing critical skills including an author-based research paper. Grammar, vocabulary, and PSAT skills are also addressed.

Honors American Literature

227eng IIIH QP 4.67 GR 10 YEAR 1 CREDIT

This course surveys American literature from Native American to the present. Students must produce an in-depth critical paper on an American author whom they have read and researched. In addition to developing grammar, vocabulary, and PSAT skills, students produce a series of critical essays as well as creative expressions. Prerequisite: 3.67 in 214/217

British Literature

234engIII QP 4.33 GR 11 YEAR 1 CREDIT

This course examines masterpieces of British literature, surveying works from the Anglo-Saxon period through the twentieth century. Writing, grammar, vocabulary and critical discussion skills are stressed. Independent reading assignments and critical essays are completed each quarter, culminating in the production of a 5-6 page research paper which conforms to MLA guidelines required for course credit.

Honors British Literature

237engIIIH QP 4.67 GR 11 YEAR 1 CREDIT

This course examines masterpieces of British literature in depth, surveying works from the Anglo-Saxon period through the twentieth century. Writing, grammar, vocabulary and critical discussion skills are stressed. Extensive reading and research are required as independent reading and critical essays are assigned regularly. To receive course credit, students must produce a 7-8 page well-written research paper. Prerequisite: 3.67 in 224/227 **The successful completion of the research paper during junior year is required in order to advance to senior year.**

All Seniors are required to take Literature 265, 267, or 291.

World Literature

265wldlit QP 4.33 GR 12 SEM 1,2 .5 CREDIT

World Literature surveys a selection of short stories, drama, and poetry from around the world, including the Mediterranean, Continental Europe, Africa, the Far East, the Middle East, Latin America. Universal themes such as fantasy and imagination, friendships, love and romance, self-discovery, the individual and society, values and beliefs, war and peace, youth and age are explored. Students write a series of critical essays based on textual readings. The course continues the development of language art skills and vocabulary study of the previous years. Students are required to write an 8-page literature-based research paper following MLA guidelines.

Honors World Literature

267wldlitH QP 4.67 GR 12 SEM1,2 .5 CREDIT

Honors World Literature surveys a selection of short stories, drama, and poetry from around the world, including the Mediterranean, Continental Europe, Africa, the Far East, the Middle East, Latin America. Universal themes such as identity, faith, heroism, and alienation are explored. In addition to writing short critical papers, students are required to do considerable research culminating in a 10 page research paper. Vocabulary and Grammar study continue. Prerequisites: 3.67 average in 234/237.

AP English Literature (Advanced Placement)

291litAP QP 5.0 GR 12 YEAR 1 CREDIT

This course concentrates on comparative studies of famous pieces of literature which share theme, plot and/or other characteristics. Selections are chosen from different cultures, eras, and perspectives, and are discussed according to various schools of critical thought. The writing component includes genre studies, literary analyses and a 12-15-page research paper. Each student participates in panel presentations of selected major works. All students in this course take the Advanced Placement exam in May. Prerequisite: 4.0 in 234/237. AP Course fee applies.

Feminine Perspectives in Literature

246femlit QP4.33 GR 11,12 SEM1,2 .5 CREDIT

This course focuses on the ways in which women have used their voices and written words to speak about their own lives and times. Focusing on coming-of-age literature and other works that speak directly to women's conditions, the curriculum features a survey of internationally-recognized female writers and their works. In addition, poetry and essays from diverse regions and time periods will be used. Students will determine how women have been viewed in society and evaluate changes in perception over time in these images as well as analysis of the changing political and social roles of women. Writing assignments, panel discussions and traditional assessment will be included.

Shakespeare

266shkspr QP 4.33 GR 12 SEM 1,2 .5 CREDIT

This elective course provides students with the skills to both analyze and perform Shakespearean text. This unique approach is taught from both literary and theatrical perspectives. Students will read four of Shakespeare's plays representing his comedies, tragedies, histories, and romances. For each play, students examine the historical and social context while researching literary criticism. They will write short analysis papers for each play. In addition, students will engage in performing monologues and scenes, studying vocabulary, completing writing assignments, and formal assessments.

Writing Seminar

286writsem QP 4.33 GR 11, 12 SEM 1,2 .5 CREDIT

This course focuses on practicing and perfecting the elements of the writing craft. Designed for students who have experienced discomfort in writing, Writing Seminar aims at teaching these students to master overall coherence in essay writing. This course emphasizes editing skills, unity, and the writing of reasonably correct prose. Students spend a considerable amount of time perfecting these essential skills while perfecting the various forms of expository writing. By the end of this course, each student should be able to recognize and evaluate the various writing techniques of exemplary writers and be more confident about her own unique writing style.

Honors (Advanced) Composition

287compH QP 4.67 GR 11, 12 SEM 1, 2 .5 CREDIT

Designed for students with a firm foundation in writing, Honors Composition prepares students for college writing courses by introducing students to the complex literacy of reading, writing, thinking, and speaking. Students will be introduced to the specific requirements and rigorous standards of academic writing, including essay format, voice, and organizational strategies. Each student will take an active role in the reading and writing process, which regularly includes roundtable discussion, peer editing, and frequent revision. Students produce 8-10 essays during the semester and, at the end of the course, create a portfolio of their work. Prerequisites: 3.67 average in one of 224/227/234/237, and demonstrated ability in writing.

Mythology as Literature (2011-2012)

245myth QP 4.33 GR 11, 12 SEM 1,2 .5 CREDIT

Ancient Mythology forms the core around which much of Western art, literature, and music revolve. The topic of mythology will be approached by way of exploring universal themes and archetypes. By focusing on Classical Mythology, students will investigate the connections between myths of that time period, and those of contemporary cultures in a fascinating variety. Creative writing, formal writing, and critical panel discussion skills are stressed, in addition to root-based vocabulary development. Students write 3-4 page expository essays and research multicultural myths.

FINE ARTS

The Fine Arts Department offers Music, Drama, Media Production, and a sequential course of study in the Visual Arts. Students are required to participate and learn in an active, artistic, and intellectual manner. They learn to appreciate and evaluate their work. A minimum of 1 credit is required for graduation.

Introduction to Fine Arts

310arts QP 4.33 GR 9 SEM 1,2 .5 CREDIT

This course is a survey of the main concepts necessary for the study of art and music. It covers foundational topics in music and art history, the vocabulary of music and art criticism, and exploration of all styles of music from ancient to modern.

Media Production

365avprod QP 4.33 GR 11-12 SEM 1,2 .5 CREDIT

This course begins with the fundamental principles of communications and quickly moves to their application in audio/visual communications. It incorporates the technical aspects of audio, lighting, makeup, and full-motion analog and digital video production. Projects include production of the school's daily news show, *Good Morning SHAmerica*, as well as the making of short films, commercials and Public Service Announcements. LIMIT: 15 STUDENTS.

ART

Studio Art

325stdart QP 4.33 GR 10-12 SEM 1,2 .5 CREDIT

Designed for the student who enjoys art and is serious about improving her drawing skills, this course introduces the fundamentals of drawing and design from step one. Students do not need to know how to draw to take this course. This is the prerequisite for most other art courses.

Multimedia Studies in Art

313mltart QP 4.33 GR 10-12 SEM 1 .5 CREDIT

In this skills-based course, students learn the fundamentals of art pertaining to three-dimensional studies. They use a variety of techniques and media to complete several short- and long-term projects. Prerequisite: 325 Studio Art

Painting

327paint QP 4.33 GR 11-12 SEM 2 .5 CREDIT

This course is an introduction to painting, design and visual concepts. During their semester-long study, students learn to work with many painting media and a variety of subjects. Prerequisite: 325 Studio Art

Digital Photography

330photo QP 4.33 GR 10-12 SEM 1,2 .5 CREDIT

This course provides students with the skills to take, alter, print, critique, and appreciate digital photography and is taught from both technical and aesthetic perspectives. Students learn how to control the functions of a digital camera, create a balanced and interesting composition, and manipulate digital photographs through Adobe Photoshop. They examine the history of photography with an emphasis on social realism during the 20th century. Two photo projects are required: a photo calendar and a photojournalism project documenting a day-in-the-life of either themselves or someone else. In addition, students engage in short term photo assignments.

Honors Art Portfolio

345portH QP 4.67 GR 11 SEM 2 .5 CREDIT

This course is intended only for students who plan college study in studio art, this course provides students with the opportunity to build portfolios for presentation to colleges. Student needs are assessed at the beginning of the class, and that assessment drives the content of the course. Prerequisite: 313, 325, AND permission from the instructor.

MUSIC

Orchestra

351orch QP 4.33 GR 9-12 YEAR PASS/FAIL
Students of various levels of proficiency (beginner to advanced) must already own (or rent) and know the rudiments of their instruments. Additional instruction is given to build an ensemble capable of playing musical literature of various styles and periods. Members also get the opportunity to perform in small chamber ensembles. Performances are scheduled throughout the year, including a Christmas and spring recital. This course meets after school on Mondays from 2:15- 4:00 PM and at specially scheduled rehearsals.

Elementary Theory and Composition I

373mutheoryI QP 4.33 GR 10-12 SEM 1 .5 CREDIT
Designed as a course for the beginner, students will learn foundational principles of notation, scales and keys; cadence patterns, chord classification, and basic harmonic progressions, four-voiced writing using triads and the dominant seventh chord and their inversions. After a basic level of competence with theory has been achieved, students will embark on composing their own pieces with emphasis on small forms and logical organization of musical ideas. Students will also gain experience using Sibelius composition and notation software.

Music History

A historical survey in two parts offered in alternating years, Music History traces the development of Western music from the middle ages to the present. Student may elect to take either or both of the two semester-long units. Extensive listening to recorded examples will be a major component of the course and students will be encouraged to hear music in live performance. A basic knowledge of the rudiments of music and writing skills are assumed. A portable MP3 player such as an iPod is recommended equipment.

Music History I (2011-2012)

376mushisI QP 4.33 GR 10-12 SEM 2 .5 CREDIT
A study of Western music from the Middle Ages to the eighteenth century this course surveys both the literature of music and the data of written history. Prerequisites: Intro. to Fine Arts.

Music History II

377mushisII QP 4.33 GR 10-12 SEM 2 .5 CREDIT
A continuation of Music History I, this course begins with the eighteenth century and extends through major composers of the twentieth century. Prerequisites: Intro. to Fine Arts. Music History I is encouraged but not required.

Concert Choir

380chorus QP 4.33 GR 9 - 12 YEAR PASS/FAIL
Students focus their study on a variety of sacred and secular choral repertoires drawn from the Western art music tradition, world music, and popular song. Through rehearsals and performance, students develop their vocal abilities, sight-singing skills, and sense of ensemble. Study culminates in major performances each academic term both at SHA and other venues. Often, collaborative concerts with other schools, recording sessions, and tours are scheduled. No audition required, although each participant will be heard individually to determine vocal range. This course meets after school from 2:30-3:45.

Honors Chamber Choir

390choirH QP 4.67 GR. 10,11,12 YEAR .5 CREDIT
In this course, students work to achieve excellence in the performance of choral music. A wide variety of literature, different from that of the Concert Choir, is studied with the aim of learning many styles of music. Through intensive rehearsals and performance, students develop their vocal abilities, sight-singing skills and sense of ensemble. Members of the Chamber Choir also serve as section

leaders in the Concert Choir. The chamber Choir performs in public on many occasions, both for the SHA community and beyond. Audition required. Students will also be required to prepare annotated program notes on pieces and composers from the concert repertoire. Members must sign up for Concert Choir (380) that meets after school at 2:15; this course meets after Concert Choir from 3:45-5:00 PM.

Handbell Choir (2011-2012)

385bells QP 4.33 GR 10-12 SEM 1,2 .5 CREDIT
This course is open to all musicians. Sight-reading ability is required. This group will be expected to perform at all music department concerts, as well as for the wider community. Grade is based on performance.

Woodwinds Ensemble (2011-2012)

333woodwinds QP 4.33 GR 10-12 SEM 1 .5 CREDIT
This course is open to flute, oboe, clarinet, bass clarinet and English horn players who have a minimum level of proficiency on their instrument. This group is expected to perform at all music department concerts as well as for the wider community. Grade is based on performance.

String Orchestra (2011-2012)

334strings QP 4.33 GR 10-12 SEM 2 .5 CREDIT
A small string orchestra, open to all string players, will explore a repertoire from various style periods. Players must have a minimum level of proficiency on their instruments, as this group is expected to perform at all music department concerts as well as for the wider community. Grade is based on performance.

DRAMA

Introduction to the Theatre I

369theatre QP 4.33 GR 10-12 SEM 1,2 .5 CREDIT
This course introduces both the acting and technical aspects of theatre. Techniques in elementary acting as well as the basic principles of performance including blocking, theatre etiquette, and stage business are rehearsed. Character development is introduced using script analysis. An introduction to safety rules as they apply to the basic scenic, lighting, property, costumes and makeup practices is also presented. Book fee applies.

Introduction to the Theatre II

370theatreII QP 4.33 GR 10-12 SEM 1,2 .5 CREDIT
This course is designed to give students the opportunity to further develop the skills introduced to them in Introduction to the Theatre I. The analysis of the physical, social, and emotional dimensions of a character found in several dramatic works will be explored to promote character transformation. Creating a character that is very detailed in delivery and execution will be stressed. Students will be challenged to analyze and constructively evaluate the effectiveness of their own and others' artistic choices from a directorial perspective. Finally, the students will be offered an opportunity to create, plan, and execute a project of their own design in an area of special interest. Finally, the students will be offered an opportunity to create, plan, and execute a project of their own design in an area of special interest. Prerequisite: 369 Intro. Theatre I. Book fee applies.

WORLD LANGUAGE

The World Language Department requires entering students to take two consecutive years of study of the same language in grades nine and ten. It is strongly recommended that students take three or four years of the same language. Five-year programs of study are offered in Latin, Spanish, and French with Advanced Placement courses in each language. All modern world language classes are regularly assigned to the Language Learning Center.

SPANISH

Spanish I

413spI QP 4.33 GR 9-11 YEAR 1 CREDIT

This course focuses on the basic foundations of grammar with a development of listening, speaking and reading skills for the student with limited or no previous knowledge of Spanish.

Spanish II

424spII QP 4.33 GR 9-12 YEAR 1 CREDIT

This course continues to emphasize the basic skills of oral expression, reading, and writing through the use of the text and supplemental materials as well as the Language Learning Center. New grammatical skills are introduced and class participation requires increased use of the Spanish language. Prerequisite: Spanish I.

Honors Spanish II

427spIIH QP 4.67 GR 9-12 YEAR 1 CREDIT

This course continues to develop vocabulary acquisition through oral expression, reading, and writing using the text and an additional reader. Composition skills are stressed. Prerequisite: 3.67 in Spanish I

Spanish Conversation and Culture

433spconv QP 4.33 GR 10-12 YEAR 1 CREDIT

This course expands on the study of grammar structures begun in levels I and II, with activities designed to enhance all language skills: listening, speaking, reading and writing. Through cultural readings and a grammar overview, students will expand vocabulary, and acquire a better understanding of the Spanish language and an appreciation of Hispanic culture. This is a **terminal** course. Prerequisite: 424/427 and departmental recommendation.

Spanish III

434spIII QP 4.33 GR 10-12 YEAR 1 CREDIT

This course entails the completion of the basic principles of grammar, composition skills, a survey of Spanish culture, and a practical application of conversational skills. Prerequisite: 2.67 in 424/427 and departmental recommendation.

Honors Spanish III

437spIIIH QP 4.67 GR10-12 YEAR 1 CREDIT

This course entails the completion and refinement of grammar principles and conversational skills. Aspects of Hispanic culture and literature are presented through selected readings. Prerequisite: 3.67 in 424/427 and departmental recommendation.

Spanish IV

444spIV QP 4.33 GR 11, 12 YEAR 1 CREDIT

This course focuses on vocabulary enrichment, grammar review of previously acquired grammatical concepts and knowledge of Hispanic culture and civilization through selected readings. Prerequisite: 434/437 and departmental recommendation.

Honors Spanish Literature

445spIVH QP 4.67 GR 11, 12 YEAR 1 CREDIT

This course focuses on vocabulary enrichment, grammar review of previously acquired grammatical concepts and knowledge of Hispanic culture and civilization through selected readings. Students will

continue the development of the four skills (reading, writing, speaking, and listening) through selected literary works of major Hispanic authors. Prerequisite: 437/444 and departmental recommendation.

AP Spanish Language (Advanced Placement)

457splngAP QP 5.0 GR 11, 12 YEAR 1 CREDIT

AP Spanish Language is offered on a sequential basis to juniors and seniors who have been recommended for the course after having completed Spanish III Honors or Spanish IV. The course is designed to refine, perfect, and enhance the four language skills, broaden students' understanding of Hispanic culture and foster interest in the study of the Spanish language. All students take the Advanced Placement Exam in May. Prerequisite: 3.67 in 437/444 and departmental recommendation. AP Course fee applies.

FRENCH

French I

416frI QP 4.33 GR 9-11 YEAR 1 CREDIT

This course provides a basic foundation of grammar with development of listening, speaking, reading, and writing skills. It is intended for students with limited or no previous knowledge of French. The course incorporates a study of culture and the geography of the francophone world.

French II

426frII QP 4.33 GR 9-12 YEAR 1 CREDIT

Students continue to develop basic skills with more emphasis on oral expression, reading and writing. The course stresses vocabulary acquisition to enable students to speak with greater fluency. Prerequisite: French I

Honors French II

429frIIH QP 4.67 GR 9-12 YEAR 1 CREDIT

Students continue to develop basic skills with more emphasis on oral expression, reading, and writing. Vocabulary acquisition is stressed as well as fluency in everyday speaking situations. Supplementary readings enhance comprehension. Prerequisite: 3.67 in French I.

French III

436frIII QP 4.33 GR 10-12 YEAR 1 CREDIT

This course entails the completion of grammar requirements, further development of oral expression and introduction to composition and literature. A study of Francophone cultures enhances the students' appreciation of the French language and French-speaking peoples. Prerequisite: 426/429 and departmental recommendation.

Honors French III

439frIIIH QP 4.67 GR 10-12 YEAR 1 CREDIT

This course completes the study of French grammar and introduces students to French literature through selected readings in prose and poetry. The student will refine composition skills in essay writing and analysis of French texts. Prerequisites: 3.67 in 426/429 and departmental recommendation.

French IV

446frIV QP 4.33 GR 11, 12 YEAR 1 CREDIT

This course provides an in-depth review of French grammar and a detailed survey of the history of France from prehistoric times to the present. Francophone culture is studied through literature, film, television and music. Prerequisite: 436/439 and departmental recommendation.

AP French Language (Advanced Placement)

460flrangAP QP 5.0 GR. 11,12 YEAR 1 CREDIT

Objectives of this course are to emphasize the use of language for active communication and written expression. Students develop the ability to understand spoken French in a variety of contexts. Students increase their vocabulary and strengthen grammar skills so that they can read a variety of texts and develop the ability to express themselves coherently, resourcefully and with reasonable accuracy and fluency in both written and spoken French. The course is for 4th and 5th year students of French. All students take the AP exam in May. Prerequisite: 3.67 in 439/446 and departmental recommendation. AP Course fee applies.

Classical Language

LATIN

Latin I

415latI QP4.33 GR 9-11 YEAR 1 CREDIT

This course provides the foundation for the acquisition of the Latin language for the purpose of eventually reading the literary masterpieces of the ancient Romans. Students are introduced to most of the basic grammar. They learn vocabulary as well as the rules of Latin syntax. Proficiency is developed through memorization, drills and extensive practice in translation and composition from Latin to English and vice versa. Grammar work is supplemented by the study of Classical history, mythology and culture.

Latin II

425latII QP 4.33 GR 10-12 YEAR 1 CREDIT

Students continue the study of the remaining elements of Latin grammar and syntax. Vocabulary continues to be built. Drills, translation, and composition skills continue to be emphasized. Grammar work is still supplemented by the study of Classical history, mythology, and culture. As they complete the grammar, students gradually make the transition from reading adapted Latin to studying authentic Roman literary texts. Prerequisite: 415 Latin I.

Honors Latin II

428latIIH QP 4.67 GR 10-12 YEAR 1 CREDIT

Students continue their preparation in the remaining elements of Latin grammar and syntax. Vocabulary continues to be built. Drills, translation, and composition skills continue to be emphasized. Grammar work is still supplemented by the study of Classical history, mythology, and culture. As they complete the grammar, students make the transition from reading adapted Latin to studying authentic Roman literary texts. Prerequisites: 3.67 GPA in 415 Latin I and departmental recommendation.

Honors Latin Literature ECE

450latlitH QP 4.67 GR 10-12 YEAR 1 CREDIT

3 college credits from UCONN. All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program that allows students to earn 3 college credits for the fall semester. Having completed basic Latin grammar, students focus on some of the more sophisticated and subtle grammatical structures, while also increasing skill with that material that was previously learned. Emphasis is placed on refining translation and literary interpretation skills by reading selections from the literary works of Roman authors. Attention is also given to the historical and cultural backgrounds of the works studied, metrics, rhetorical devices and figures of speech, as well as to Classical literary criticism and scholarship. Latin Literature students will typically read from the works of Catullus, Ovid, Cicero, and Horace. Prerequisite: 3.67 GPA in 425/428 OR departmental recommendation.

Honors Latin IV: Vergil ECE

452latIVH QP 4.67 GR. 11, 12 YEAR 1 CREDIT

3 college credits from UCONN All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program that allows students to earn 3 college credits for the fall semester. Students continue developing facility with analyzing, interpreting, and translating Latin literature by reading Vergil's epic, the Aeneid, as well as selections from other Latin Republic and Augustan Age authors. Extra emphasis will be placed on the cultural and historical background of Vergil's work. Prerequisite: 3.33 in Honors Latin Literature and departmental recommendation.

AP Latin: Vergil's Aeneid (Advanced Placement and ECE)

483latAP QP 5.0 GR. 11, 12 YEAR 1 CREDIT

3 college credits from UCONN All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program that allows students to earn 3 college credits for the fall semester. Students continue developing facility with analyzing, interpreting, and translating Latin literature by closely reading Vergil's epic masterpiece, the Aeneid. Students study the mythological, historical and cultural background of the work, the poetic techniques of the author, and secondary scholarship in preparation for taking the Vergil Advanced Placement Exam in the spring. The AP exam is a requirement of the course. Prerequisite: 3.67 in Honors Latin Literature and departmental recommendation. AP Course fee applies.

MATHEMATICS

The Mathematics Department requires all students to take 4 years of mathematics. Students who take Algebra I or Honors Algebra I as freshmen and Geometry as Sophomores have the opportunity to take Calculus on the Honors or AP level as seniors if they meet the criteria for enrollment in a course entitled Honors Algebra II/Pre-Calculus as juniors. Another option is Algebra I, Geometry, Algebra II and Pre-Calculus on the Honors or CP level. Also, any student who places into Geometry or Honors Geometry as a freshman may also take Honors Algebra II/Pre-Calculus as a sophomore if she meets the criteria for enrollment. The use of the graphing calculator and a variety of computer programs in math is an essential component of each course. Upon enrollment, all freshman will be required to have a TI83+or TI84+ Graphing Calculator which they will use for all their math and science classes.

Algebra I

515algI QP 4.33 GR 9 YEAR 1 CREDIT

This course covers the real number system, polynomials, inequalities, functions and their graphs, linear equations and systems, problem solving, and initial concepts of quadratic equations.

Honors Algebra I

517algIH QP 4.67 GR 9 YEAR 1 CREDIT

This course covers the same topics as 515, but problems of a higher difficulty level are presented as well as theoretical explanations of greater depth. Freshmen are invited into this course based on results from the Mathematics Placement Exam administered in May before freshman year.

Geometry

524geom QP 4.33 GR 9, 10 YEAR 1 CREDIT

This course is an axiomatic approach to the Euclidean geometry. Logical reasoning is used to explore the relationships between lines, planes, triangles, and polygons. Trigonometry, coordinated geometry and exploration of solid figures are also studied; theory and application are equally considered. The course has a strong integration with Algebra I. Prerequisite: 514/517.

Honors Geometry

527geomH QP 4.67 GR 9, 10 YEAR 1 CREDIT

This course is an in-depth axiomatic approach to Euclidean geometry. Topics include parallel lines and planes, triangles, polygons, circles, trigonometry, constructions, solid figures, and coordinate geometry. Abstract reasoning is developed in an advanced use of theory and application. Freshmen are invited into this course based on results from the Mathematics Placement Exam administered in May before their freshman year. Prerequisites: 3.67 in 515/517.

Algebra II

534algII QP 4.33 GR 10, 11 YEAR 1 CREDIT

This course stresses the structure of Algebra and the development of computational and problem-solving skills. Topics include a review of Algebra I, the real number system and its properties, complex numbers, polynomial and rational expressions, functions and relations. A theoretical approach is used with emphasis given to the application of theorems and formulas. Prerequisite: 514/517 and 524/527.

Honors Algebra II

537algIIIH QP 4.67 GR 10, 11 YEAR 1 CREDIT

This course stresses the structure of Algebra and the development of computational and problem-solving skills. Topics include a brief review of Algebra I, the real number system and its properties, functions and relations, systems of linear equations in three variables, complex numbers, polynomials, and rational expressions. An in-depth theoretical approach is used and emphasis is given to the application of theorems and formulas. Prerequisites: 527 as freshman **OR** Successful completion of 524/527 and 3.33 in 515/517

Honors Algebra II/ Pre-Calculus

539 algIIpcH QP 4.67 Grade 10,11 YEAR 1 CREDIT

This course is designed to allow freshman and sophomores currently in Geometry or Honors Geometry to enroll in Calculus, AP Calculus and any other advanced math class as juniors and seniors. Sophomores who studied Algebra I or Honors Algebra I as freshmen may enroll in this class to prepare for Calculus or AP Calculus as seniors. Present freshman Geometry students may enroll in this class as sophomores to prepare for Honors Calculus as juniors and BC Calculus as seniors. The focus of this course is an extensive and in-depth study of functional analysis, mathematical analysis and analytical geometry. This integration of Algebra II, trigonometry and functional analysis intends to broaden the students' mathematical background and provide the mathematics needed for success in Calculus. Graphing calculators will be used for graphical investigations and explorations hence a TI83+ or TI84+ graphing calculator is required. Prerequisites: 3.67 in 527 in Grade 9 **OR** 4.0 in 515/517 in Grade 9 and 3.67 in 524/527 in Grade 10.

Functions, Statistics and Trigonometry

542func QP4.33 GR 11, 12 YEAR 1CREDIT

This course serves either as a transition between Algebra II and 546 Pre-Calculus or as the final course in the math sequence. This course integrates work with functions and trigonometry to introduce the student to the topics in 546 Pre-Calculus. It also challenges the student to think mathematically. The Statistics part of the curriculum is done with the technology available at Sacred Heart Academy: the laptops, the internet and the graphing calculator will be utilized to complete this section of the course. Required: TI83+ or TI84+ Graphing Calculator. Pre-prerequisite: 534

AP Statistics (Advanced Placement)

544statAP QP 5.0 GR 11, 12 YEAR 1 CREDIT

Collecting, representing and processing data are activities of major importance to contemporary society. Topics covered in this course include the description and analysis of population distributions, change and growth of data, correlation, experiment design, probability models, linear regression, hypothesis testing and confidence intervals. Graphing calculators and computers are used as tools for the facilitation of statistical tests on significant bodies of data. Advanced Placement Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Ideas and computations presented in this course have immediate links and connections with actual events. Computers and calculators will allow students to focus deeply on the concepts involved in statistics. The material studied in this course prepares students to take the AP Statistics Examination. The TI83+ or TI84+ calculator is required and is used as the technical tool to allow the student to calculate any tests or data required. Prerequisite: 3.0 in 534/537/539. An AP course fee applies.

Mathematical Applications

545mathapp QP 4.33 GR 11, 12 SEM 1, 2 .5 CREDIT

This course explores the mathematics of personal and business matters with an emphasis on rational decision making. Topics in personal finance include analyzing budgets, banking, insurance, credit, taxes, real estate and investments. Students research a range of investment opportunities and financial instruments from a variety of sources including the Internet. Pre-requisite: Completion of 534/537/539. Book fee applies.

Pre-Calculus

546precalc QP 4.33 GR 11, 12 YEAR 1 CREDIT

This course covers the advanced techniques of Algebra as well as the integration of functional analysis, analytic geometry and trigonometry. The trigonometric functions are thoroughly presented, including graphing, solving identities, and applications. This course also includes an introduction to probability and counting problems. Technology allows the focus of the course to be on functional investigations and exploration. Heavy emphasis is on the use of the overhead graphing calculator-projector and digital lesson investigations with the Smart Board. Since this course includes in-depth use of hand-held graphing calculators, the TI83+ or TI84+ graphing calculator is required. Prerequisite: 2.67 in 534/537/539. Students taking this course may qualify for Honors Calculus or AP Calculus AB.

Honors Pre-Calculus ECE

547precalcH QP 4.67 GR 11, 12 YEAR 1 CREDIT

3 college credits from UCONN. UCONN will bill students separately for UCONN ECE tuition in the fall.

All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program that allows students to earn 3 college credits for the fall semester. This course is an integration of an intensive study of trigonometry, geometry, and advanced algebra intended to broaden the student's mathematical background prior to the study of calculus. This course also includes an introduction to probability and counting problems. The three fundamental areas of functional analysis, mathematical analysis and analytic geometry are investigated in depth through the use of a myriad of technological aids such as the overhead graphing calculator, the Smart Board and digital lessons. Each student is required to have either a TI83+ or TI84+ graphing calculator since extensive use of graphing technology is incorporated as an investigative tool. Prerequisite: 3.67 in 537/539.

Honors Calculus ECE

590calc QP 4.67 GR 11, 12 YEAR 1 CREDIT

6 college credits from UCONN. UCONN will bill students separately for UCONN ECE credit in the fall and spring.

All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program that allows students to earn 6 college credits for the year. This course is designed for students who want to have preparation for and experience with calculus especially those planning to enter fields of medicine, nursing, business, economics, management, and the social sciences. It focuses on the development of conceptual understanding of real-life situations involving change so the material is data driven and technology based. Topics include functions and linear models, non-linear models, rates of change, derivatives, analysis of change, limits and integration. Extensive use of graphing technology is incorporated hence a TI83+ or TI84+ graphing calculator is required. Overhead graphing-calculator projectors, the Smart Board and digital lessons via the projector are used in most classes. Prerequisites: 3.67 in 546 OR 3.33 in 539/547.

AP Calculus AB (Advanced Placement and ECE)

593calcAP QP 5.0 GR 12 YEAR 1 CREDIT

6 college credits from UCONN. UCONN will bill students separately for UCONN ECE credit in the fall and spring.

All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program which allows students to earn 6 college credits for the year. This course provides an intuitive understanding of the concepts of calculus, and experience with its applications and methodology. Course content generally follows the AP syllabus for Calculus AB, which is more extensive, and of greater breadth and depth than the 590 Calculus curriculum. Students who take this course are required to take the Advance Placement Calculus Exam. This course includes the study of elementary functions, limits, the derivative and its applications, and integral Calculus including anti derivatives and their applications. Overhead graphing calculators, the Smart Board and digital lessons are used in most classes. The TI83+ or TI84+ graphing calculator is required. This challenging course is meant only for the serious math student. Prerequisite: 4.0 in 539/546/547. AP course fee applies.

AP Calculus BC (Advanced Placement)

594calcAP QP 5.0 GR 12 YEAR 1 CREDIT

Calculus BC is a full-year course in the calculus of functions of a single variable. It includes all topics covered in Calculus AB plus additional topics. Both the AB and BC courses represent college-level mathematics for which most colleges grant advanced placement and college credits. The Calculus BC exam has a Calculus AB sub-score so the students enrolled in this class will be receiving two AP scores. The content of Calculus BC is designed to qualify the student for college placement and credit in Calculus II, which is one course beyond that granted for Calculus AB.

Prerequisites: 4.0 in Honors Calculus 590. AP Course fee applies.

Introduction to Engineering

123engnrg QP 4.33 GR 11,12 SEM 1, 2 .5 CREDIT

This course focuses on the fundamentals of modern engineering and technology in the information and communications age. Students explore the engineering design process as they learn and apply math and science concepts to design and test an array of high-tech digital devices. The course will show students how engineers use advanced development tools in everyday engineering work: Designing, developing, testing, debugging, and finally producing a finished product that works. Prerequisite: 3.67 in Algebra II. (Engineering may be used to fulfill science or math credit requirements.)

AP Computer Science (Advanced Placement) (2011-2012)

190cmprAP QP 5.0 GR 10-12 YEAR 1 CREDIT

In today's innovation-driven economy, complex problem solving and analytical reasoning skills are important for building a foundation for numerous careers, including jobs in math, science, engineering, and technology-related fields. This course emphasizes object-oriented programming with a concentration on problem solving and algorithm development. Students take the AP Computer Science Exam in May. Prerequisite: 3.67 or higher in current full-year math and science courses. AP Course fee applies. (This course counts for math credit.)

PHYSICAL EDUCATION

The Physical Education courses are designed to develop physical fitness, cardiovascular fitness, strength, flexibility, and agility as well as proper health and wellness. The Physical Education courses encourage a positive self-image in all students. One credit is required for graduation.

Physical Education I

615physed I QP 4.33 GR 9 SEM 1, 2 .5 CREDIT

This course is designed to develop physical fitness skills and those mentioned in the above introduction by participation in the National Physical Fitness Challenge and activities suitable to the season. Health and wellness activities are incorporated into the course.

Physical Education II

635physed II QP 4.33 GR 11,12 SEM 1, 2 .5 CREDIT

This course is designed to reinforce the importance of physical fitness and those skills mentioned above in the introduction by participation in group activities typical for the season and peer instruction. Current health issues are incorporated into this course.

Physical Education Assistants

651peass't QP 4.33 GR 12 SEM 1, 2 .5 CREDIT

A senior with an interest in pursuing a Physical Education career may elect to be an assistant in a PE I class. Responsibilities may include attendance, group facilitating and fitness charting. Students are required to develop lesson plans for physical, mental and social health activities, as well as keep journals of class activities. Prerequisite: PE II and Departmental Approval. ***This course does not fulfill the PE II requirement.***

Personal Fitness

666fitness QP 4.33 GR 12 SEM 1, 2 .5 CREDIT

Students design a fitness program suited to their needs, follow the program, and evaluate their progress. They will research topics in the areas of physical, mental and social health. ***This course does not fulfill the Physical Education II requirement.***

THEOLOGY

The Theology Department requires all students to complete four years of the required or core theology courses, a retreat day per year, and 20-25 hours of Christian Service. The theology curriculum provides students with the opportunity to participate in the sacramental and liturgical life of the Church. Each course develops and enhances the student's relationship with God through different types of prayer.

Theology I: Our Catholic Faith

714relig I QP 4.33 GR 9 YEAR 1 CREDIT

The freshman curriculum provides an introduction to the life and teachings of Jesus Christ, a study of the Sacraments, a brief history of the Catholic Church, an introduction to World Religions, and recognition of elements of personal growth, development, and human sexuality. The curriculum also includes a study of the basic elements of the Catholic faith: worship, Church structure, the liturgical calendar, and devotional prayer forms.

Theology II: Scripture

724religII QP 4.33 GR 10 YEAR 1 CREDIT

The sophomore course consists of an introduction to Scripture. Students examine the Old Testament with a focus on inspiration and authorship. An effort will be made to help students appreciate the value of the Jewish roots of the Christian faith. New Testament study includes the Gospel portrait of Jesus, the Biblical roots of the Sacraments, and Jesus' message to the Church.

Service Requirement: In order to receive credit for sophomore theology and advance to junior year, 20-25 hours of service must be completed by May 1 of sophomore year.

Theology III

734religIII QP 4.33 GR 11 YEAR 1 CREDIT

The junior curriculum is taught in two sections. Each semester course is .5 credit and students must pass both courses for 1 credit of Junior Theology.

Peace and Justice

This course applies Gospel spirituality and values to daily living. The message of the Gospels is viewed in connection with the active response required of Christians called to discipleship. Special attention is given to the Church's responses to peace and justice issues as well as current social problems in American society and the worldwide community. The mysteries and doctrine of the Mystical Body of Christ are emphasized through solidarity with the poor and suffering.

Conscience Formation and Morality

The course exposes the adolescent to the major principles and traditional teachings of Catholic morality. It provides a method of moral-decision making through critical thinking to help students form a Christian conscience and to guide them in making ethical choices. This course highlights moral issues facing the Christian in the 21st century and emphasizes the example of those working toward solutions to the issues studied.

Theology IV

744religIV QP 4.33 GR 12 YEAR 1 CREDIT

The senior curriculum is taught in two sections. Each semester course is .5 credit and students must pass both courses for 1 credit of Senior Theology.

Prayer and the Christian Life

This course utilizes contemporary theology and provides practical guidelines for living the Christian life more fully and concretely. Students investigate the importance of developing a Christian attitude and living a Christian lifestyle. The course focuses on the vision of self, others, life, the world, and God, with special emphasis on the Christian perspective as found in the life and teachings of Jesus. This course seeks to enhance a student's relationship with God through a deeper exploration of prayer.

Contemporary Moral Issues

This course studies moral issues facing the Catholic Christian in the contemporary world. Consequently, topics are drawn from various fields of concern: medical ethics, criminal justice, sexual morality, social justice, and environmental affairs. A seminar format offers students the opportunity to articulate and analyze moral perspectives in response to primary sources.

Honors Comparative World Religions

747wldrelH QP 4.67 GR 11,12 SEM 1, 2 .5 CREDIT

Especially in a world marked by change, diversity and conflict, there is a pressing need toward respect and openness to the truth expressed by all world religions in the universal search for salvation. In addition to nurturing our own faith life rooted in the Christian tradition, this course offers a stimulating survey of the modern religious world by

examining the following particular religious traditions: Hinduism, Buddhism, Daoism and Confucianism, Shinto, Judaism, Christianity, Islam, and Sikhism as well as new religious movements in the 21st century. The basic elements of each religion--teachings, sacred stories, rituals, and its stance on the fundamental questions of life will be examined. The course will also explore the changing nature of each religion, the spread of religious pluralism, the rise in violence in the name of religion, and the movement toward interfaith dialogue as called for by the Second Vatican Council. *This is an elective and may be taken in addition to 734 and/or 744.*

SCIENCE

The Science Department requires all students to complete a minimum of 3 credits in science for graduation, but students are encouraged to take 4 (or more) credits. These must include Biology and Chemistry. Any student who intends to pursue studies in a science field is strongly encouraged to take physics and a second year of chemistry before graduation.

Biology

814bio QP 4.33 GR 9 YEAR 1 CREDIT

This is a basic course in life sciences for the college bound student. The approach is from the perspective of molecular biology and focuses on the units of life – cells, gene and the biochemical processes therein. The course emphasizes human and cellular biology.

Honors Biology

817bioH QP 4.67 GR 9 YEAR 1 CREDIT

This lab-oriented course offers an in-depth analysis of the molecular and biochemical processes that characterize living organisms. The structure-function correlation is also illustrated through discussions that feature various organ systems in the human body. Scientific article analysis and a class research project are used to supplement class materials. Prerequisites: Performance on the High School Placement Test

Chemistry

834chem QP 4.33 GR 10 YEAR 1 CREDIT

This course stresses abstract reasoning, mathematical analysis, and the investigation of chemical systems. Topics include atomic theory, structure of matter, periodicity, bonding, nomenclature and chemical reactions. Laboratory experience accompanies and supports conceptual material.

Honors Chemistry

837chemH QP 4.67 GR 10 YEAR 1 CREDIT

This course includes an intensive study of fundamental theoretical and experimental principles, stressing inductive reasoning in the investigation of chemical systems. Topics studied include those of 834chem plus gases, solution concentrations and solubility. Mathematical applications of chemical concepts and laboratory experience form an essential part of this course. An independent research project is required. Prerequisites: Minimum 3.67 average in Algebra I and 3.33 in biology.

Chemical Analysis

838chemanl QP 4.33 GR 11,12 YEAR 1 CREDIT

This course supplements Chemistry and further prepares students for college chemistry and to take the SAT II Chemistry exam. Topics include gases, solution concentrations, solubility, kinetics, thermodynamics, and organic chemistry. Regular laboratory work reinforces the concepts and provides experience in recording data and writing laboratory reports. Prerequisite: Chemistry

Physics

844physics QP 4.33 GR 11,12 YEAR 1 CREDIT

This course provides a basic foundation in physics. The major areas of mechanics, wave motion as applied to sound and light, electricity and magnetism are studied in varying degrees. Both mathematical and practical applications of physical concepts form an integral part of the course. Lab work reinforces the concepts. Prerequisites: minimum 2.67 average in previous math course; Completion of Algebra II.

Honors Physics

847physH QP 4.67 GR 11,12 YEAR 1 CREDIT

This course includes an intensive study of classical and physical concepts, including mechanics, wave motion as applied to sound and light, electricity and magnetism. Challenging mathematical and practical applications of physical concepts form an integral part of the course and will serve to reinforce topics. Lab work is an essential part of this course. Students will learn to apply the scientific method effectively and independently. Prerequisite: minimum 3.67 average in math and science courses; chemistry and completion of Algebra II.

Microbiology

852microbio QP 4.33 GR 10-12 SEM 1, 2 .5 CREDIT

This course surveys microorganisms that cause human infection: bacteria and archaea, protozoans, fungi, viruses and prions. The study compares common diseases of the human body, their natural defense mechanisms, and the various anti-microbial drugs administered as treatment. The laboratory exercises involve microscopy and experiments with non-pathological organisms readily used in educational environments.

Anatomy and Physiology

859a&p QP 4.33 GR 11, 12 YEAR 1 CREDIT

This lab-oriented course studies body organization and the structure and functions of cells, tissues, and each of the human systems, giving attention to health issues and diseases. Dissections of the sheep larynx, heart, brain, and pregnant pig uterus are required. Students will be expected to master medical terminology.

Honors Anatomy and Physiology

861a&pH QP 4.67 GR 11, 12 YEAR 1 CREDIT

This course offers more intensive study of the structure and function of the human body. Gross to microscopic anatomy will be studied in light of physiological function. Heavy emphasis will be given to the cellular and molecular bases of physiology. Clinical case studies, virtual labs, and dissections will supplement the class activities. Prerequisite: 3.67 in biology.

Genetics

865gen QP 4.33 GR 10-12 SEM 1, 2 .5 CREDIT

This semester course covers classical and molecular genetics. It presents an integrated approach to the study of genes (genotypes) and how mutations (alterations) therein can have profound effects on the cells and the proteins (phenotypes). The course also includes an introductory unit on forensics that serves to highlight the importance of DNA in modern day criminal investigations. Genetics or Gene Discovery is recommended for those who plan to take AP Biology.

AP Biology (Advanced Placement and ECE)

890bioAP QP 5.0 GR 11, 12 YEAR 1 CREDIT

8 college credits from UCONN. UCONN will bill students separately for UCONN ECE credit in the fall and spring. All students enrolled in this course will have mandatory concurrent enrollment in the University of Connecticut Early College Experience Program that allows students to earn 8 college credits for the year. This college level course explores in depth the biological concepts learned in the previous biology course: cell and molecular biology, evolution and natural selection, genetics, classification, and populations, and will be of particular interest to those wishing to major in science or the health

professions. All students in this course must take the AP exam. Prerequisites: Biology and Chemistry; 4.0 average in Biology or a 3.67 in Biology and a 4.0 in an Honors level Science course. AP Course fee applies.

AP Chemistry (Advanced Placement)

892chemAP QP 5.0 GR 11,12 YEAR 1 CREDIT

This college level course expands on the principals and techniques learned in the first year of chemistry. An emphasis will be placed on matter, kinetic theory of gases, chemical equilibria, chemical kinetics and thermodynamics. Students wishing to major in science, engineering, the health professions or who must take chemistry in college are strongly encouraged to take this course. A strong lab component is integrated into the course. All students in the course are required to take the AP exam in May. Prerequisites: 3.67 average in chemistry or previous full-year science and 3.67 average in math. AP Course fee applies.

Human Gene Discovery Laboratory

895genes QP 4.33 GR.10 SEM 1,2 .5 CREDIT

In this introductory course, students investigate a human disease gene as a class laboratory project while they research, using Government websites. The entire semester consists of continuous biotechnology experiments, done collaboratively in a problem-solving format, which develop basic research skills and incorporate the use of specialized lab equipment. Gene Discovery or Genetics is recommended for those who plan to take AP Biology. Book fee applies.

Honors Biotechnology Research Project

898biotecH QP 4.67 GR 11,12 YEAR 1 CREDIT

In this laboratory course the class becomes a research team extracting DNA from an organism, then amplifying and sequencing a gene of interest for the focus of their study. Time permitting, the students will incorporate the use of both haplotyping and microarray technology. The class designs their own experiments, master the skills of PCR, purification and quantitation, automated sequencing, and bioinformatics. After analysis, they submit the results to GenBank for publication and submit a scientific abstract for formal presentations to the scientific community. Prerequisites: 3.67 in a previous full-year science course. Book fee applies.

Introduction to Astronomy

860astron QP 4.33 GR 11,12 SEM 1,2 .5 CREDIT

This course will give the students an overview of the structure, beauty, and the plan of the created universe. Emphasis will be on the formation of our galaxy and our solar system. The life cycle of a star will be traced from proto-star to a black hole. The universe will be explored through the use of a virtual planetarium.

Introduction to Engineering

123engnrg QP 4.33 GR 11,12 SEM 1, 2 .5 CREDIT

This course focuses on the fundamentals of modern engineering and technology in the information and communications age. Students explore the engineering design process as they learn and apply math and science concepts to design and test an array of high-tech digital devices. The course will show students how engineers use advanced development tools in everyday engineering work: Designing, developing, testing, debugging, and finally producing a finished product that works. Prerequisite: 3.67 in Algebra II. (Engineering may be used to fulfill science or math credit requirements.)

SOCIAL STUDIES

The Social Studies Department requires students to complete 3 credits in Social Studies. These include Constitutional Foundations, U.S. History, Western Civilization, and one half-credit elective. The Social Studies curriculum provides students with a broad knowledge of the past and skills in the critical process of gathering, analyzing and interpreting historical information.

Constitutional Foundations

916const QP 4.33 GR 9 SEM 1,2 .5 CREDIT

This course is designed to introduce students to the United States Constitution. Included in this study will be the goals of the Constitution and the structure of government as set forth by the Constitution. Concepts such as "Checks and Balances," "Separation of Powers," and "Federalism" will be discussed. Students will become familiar with the Bill of Rights through actual court cases involving freedom of speech, religion, search warrants, and what the Constitution means by Civil Rights and Civil Liberties. Students will be actively engaged in this class through debate, discussion, online research, note-taking, and perhaps a "mock trial" in class. This course will give each student a sense of what it means to be a citizen of the United States of America.

Western Civilization

934wciv QP 4.33 GR 10 YEAR 1 CREDIT

This course is a study of major European events and movements from ancient to medieval and modern times. In addition to class-work, students prepare oral presentations and independent writing assignments.

Honors Western Civilization

937wcivH QP 4.67 GR 10 YEAR 1 CREDIT

This course covers major events, key trends, and progressive issues in history from ancient to medieval to modern times. Students are expected to read primary source materials, write analytical papers, and recognize the significance of important dates. This course is required for students planning to take Advanced Placement U.S. History. Prerequisites: Minimum 3.67 in 916

United States History

924ushis QP 4.33 GR 11 YEAR 1 CREDIT

This is a survey of American history. Emphasis is placed on the political, economic, and cultural development of our nation. Social studies skills and historical research skills are strengthened throughout the course.

Honors U.S. History

927ushisH QP 4.67 GR 11 YEAR 1 CREDIT

This course is a survey of American history. It covers major events, key trends, and progressive issues in history from pre-revolutionary times to the present. Emphasis is placed on the political, economic, and cultural development of our nation. Students will read primary source documents and analyze historical data. Writing of analytical papers is expected. Prerequisite: Minimum 3.67 in Western Civilization.

AP U.S. History (Advanced Placement)

992ushisAP QP 5.0 GR 11 YEAR 1 CREDIT

This course covers the history of the United States in a manner designed to prepare students to take the required Advanced Placement exam in May. Students read and analyze primary source documents and write analytical and research papers. Prerequisites: 4.0 in 937 OR 4.33 in 934. AP Course fee applies.

AP U.S. Government (Advanced Placement)

964govAP QP 5.0 GR. 12 YEAR 1 CREDIT

This course provides students with an in-depth knowledge of the intricacies of the United States government, including the founding of the government, the Constitution, political behavior and political parties, interest groups, the media, the institutions of government and the formulation of domestic and foreign policy. In addition, students acquire the sophisticated analytical skills needed for social science courses taken at the college level. Students write research and policy papers and are required to take the AP U.S. Government exam in May. Prerequisites: 4.0 in 992 OR 4.33 in 924/927. AP Course fee applies.

Psychology

983psych QP 4.33 GR 12 YEAR 1 CREDIT

This course provides an introduction to psychology to students who have completed the social studies department requirements. Topics include neuroscience, nature versus nurture, human development, sensation and perception, states of consciousness, learning, memory, thinking and language, intelligence, motivation, emotion, personality, disorders and therapy, and social psychology. Requirements include readings and experiential learning projects.

AP Psychology (Advanced Placement)

993psychAP QP 5.0 GR 12 YEAR 1 CREDIT

The aim of this Advanced Placement course is to provide students with the equivalent to that obtained in college introductory psychology courses. This study focuses on topics such as the biological bases of behavior, states of consciousness, motivation and emotion, personality theory, intelligence, abnormal behavior, and therapy. Outside readings and interactive on-line modules are incorporated. The AP exam in May is required. Prerequisites: Minimum 4.0 in 924/927/992. AP Course fee applies.

Middle Eastern Studies

946mideast QP 4.33 GR 10,11 SEM 1,2 .5 CREDIT

This course introduces students to the religion, politics, and culture of the Middle East. Historical roots of the current problems in the region as well as geography will be explored. The course considers the rise and spread of Islam and varied roles of women in Islamic culture. The emphasis is on 20th century politics of the region: the new states which arose after the collapse of the Ottoman Empire; the impact of the discovery of oil, and the creation of the state of Israel.

Asian Studies

963asian QP 4.33 GR. 10-12 SEM 2 .5 CREDIT

This course is an introduction to the major countries of Asia: China, and Japan. Topics covered include history, geography, culture, and a focus on contemporary issues and current events.

Issues in the U.S. 1945-Present

965issues QP 4.33 GR. 12 SEM 1 .5 CREDIT

This course examines U.S. history from 1945 to the present, focuses on foreign policy through the Cold War to the present, and considers domestic issues that have shaped our nation today, such as the Civil Rights movement, the Women's movement, the decade of the sixties, and the conservative resurgence.

Economics

966econ QP 4.33 GR 11, 12 SEM 1,2 .5 CREDIT

This one semester course is an introduction to economic concepts, theories, and practices. Topics include: comparative economic systems, supply and demand, elasticity, the business cycle, money and banking, the Federal Reserve System, public finance, and international trade and finance.