

# Program of Studies 2020-2021

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## VISION

St Joseph High School strives to be the premier college preparatory school in Southern Connecticut. The school provides a learning environment that embraces the Gospel values of the Roman Catholic faith and promotes a commitment to family and community. The school prepares our young women and young men to realize their potential, helps them excel in higher education and provides a foundation to guide them throughout their lives.

## VALUES

To support our vision, St Joseph High School will provide an environment where the faculty, Administration, support organizations, and students, by example and program, actively promote: • Roman Catholic teaching and values (faith, morals, ethics, and responsibility)

- Family values
- Community responsibility
- Respect and diversity
- Developing educated and creative thinkers who exhibit superior intellectual and communication skills
- Instilling passion for learning and teaching in a safe and secure environment
- competitive higher learning institutions
- healthy competition

• Providing a strong, holistic foundation to enable all students to enter and succeed in

• Providing a strong program for social and physical development in an atmosphere of



# Academic Directory

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Ms Margo Sheehan	Curriculum and Instruction Registrar	x 302	jcirisoli@sjcadets.org
<u>Department Chairpersons</u>			
Mrs Angelica Abelson	Business	x 321	aabelson@sjcadets.org
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Mrs Kathleen Cardillo	Fine Arts	x 222	kcardillo@sjcadets.org
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Mrs Robin Berry	Mathematics	x 248	rberry@sjcadets.org
Dr Daniel Walsh	Science	x 231	dwalsh@sjcadets.org
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Director

Counselor

Counselor

Counselor

Counselor

Social Worker

Associate Director

#### College & School Counseling

Mr Timothy Nash
Mrs Megan Baird
Ms Margo Sheehan
Ms Cristin Clark
Mr Jack Nogueira
Ms Laura Schiels
Mrs Kathleen Seperack

#### **College-Credit Course Coordinators**

_	onege creati course coordinators			
Ν	As Margo Sheehan	Sacred Heart University	x 302	jcirisoli@sjcadets.org
		World Religions		
Ν	As Cristin Clark	University of Connecticut/	x 318	cclark@sjcadets.org
		ECE		
		AP Statistics		
		• US History (Honors)		
		International Relations		
Ν	Ars Colleen Piatak	University of Iowa	x 223	cpiatak@sjcadets.org
		Exploring		
		Entrepreneurship		

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x 317

x 316

x 302

x 318

x 315

x 314

x 457



Each student must meet the base requirements for graduation which include:

- English: 4.0 credits, 1 credit per year
- Mathematics: 4.0 credits, 1 credit per year
- Theology: 4.0 credits, 1 credit per year
- Social Studies: 3.5 credits (including Civics)
- Science: 3.0 credits
- World Language: 2.0 credits of same language o College recommending: 3.0 credits
- General Electives: 3.5
- Grade 9 & 10 Required Electives: 2.0
  - o Grade 9 electives: Choir or Band or Technology 680 and Health & Wellness
  - Wellness

#### **Total Credits for Graduation: 26**

Core Curriculum may be required in each discipline. These credit requirements meet the recommended minimum credit requirements for students applying to most liberal arts college programs. Other academic programs, for example engineering or nursing, may have additional credit requirements. Before selecting courses, students should check college admission requirements for various programs and factor this into their consultation with their College & School Counselor.

#### **Transfer Students**

Transfer students are placed accordingly as determined by the St Joseph High School curriculum and requirements for graduation. In some cases, transfer students may be required to take classes with a different grade level. Transfer student credit requirements will be determined on a case-by-case basis during the admission process. To earn their diploma from SJHS, transfer students must meet the following requirements:

- 1.0 credit in British Literature
- 1.0 credit in U.S. History
- 0.5 credit in Civics (or 1.0 credit in AP US Government & Politics)
- 1.0 credit or equivalent in Algebra 2
- (Chemistry or Physics)
- 2.0 credits in the same World Language

#### Minimum Credit Enrollment

Students must maintain a minimum credit enrollment per academic year to ensure successful completion of requirements. Students in Grade 9 and 10 must maintain 7.0 credits. Students in Grades 11 and 12 must maintain 6.0 credits. Any variation to this credit requirement must be approved by the Assistant Principal for Curriculum and Instruction.

# Graduation Requirements

### **ACADEMIC CREDIT REQUIREMENTS**

o Grade 10 electives: Choir or Band; or Art or Theater and Technology & Innovation or Health &

• 3.0 credits in Science, including 1.0 in biological science (Biology or Anatomy) and 1.0 in a physical science

#### **Overage Credit Enrollment**

Juniors and seniors may elect to take a credit overage of 0.50 - 1.0 credit in place of their study hall. The Registrar will announce which classes are eligible for overage each year. Students must demonstrate high academic achievement in conjunction with their parent/guardian permission and counselor recommendation for consideration. All overages are approved by the Assistant Principal for Curriculum and Instruction.

**Please note:** taking an overage of credits, though attractive to college admissions, does not allow for early graduation from St Joseph High School.



St Joseph High School offers a selection of challenging academic levels to meet the needs and goals of all students. Academic placement is determined by the Assistant Principal of Curriculum and Instruction in conjunction with Department Chairs, and test scores/middle school grades. Placement takes into consideration the demonstrated academic ability that meets all course prerequisites. Placement is individualized to highlight student interest as well as academic achievement.

#### Advanced Placement (AP):

AP courses are college-level courses taught according to the College Board Advanced Placement program curriculum. AP courses require an exceptional quality of work and requires the approval of the Department Chair and/or College Counselor. All students enrolled in an AP course may elect to take the AP exam in May; all fees are covered by St Joseph High School.

#### College Level (CL):

CL courses are college-level courses which give students the opportunity to earn college credits. CL courses are offered through UCONN/ECE, Sacred Heart University, and the University of Iowa. CL courses require an exceptional quality of work and requires the approval of the Department Chair and/or College Counselor.

#### Honors (H1/H):

Honors placement requires superior quality work, successful completion of a challenging workload and academic achievement. Placement requires the approval of the Department Chair and/or College Counselor.

#### Honors 2 (H2):

Honors 2 placement requires above average quality work, successful completion of an advanced workload and academic achievement. Placement requires the approval of the Department Chair and/or College Counselor. *This level is offered in Science only for the classes of 2021, 2022, and 2023*.

#### College Prep/College Prep 2 (CP/CP2):

CP placement (the majority of students) requires quality work, successful completion of assigned work and academic achievement.

#### Academic Level Requirements

Students in an Advanced Placement-level course of study are expected to maintain a high level of academic achievement consistent with the rigor of a college-level course. Students must maintain an average of 80 to remain in an advanced placement course of study.

Students who are placed in an honors-level course are expected to maintain a high level of academic achievement consistent with the rigor of an honors placement. Students must maintain an average of 80 to remain in an honors course of study.

Students who are placed in college-prep courses and earn an average of 90 or higher and the approval of the department chair may elect to advance to an honors course of study.

All placements are at the discretion of the Assistant Principal of Curriculum and Instruction.

#### **COURSE WEIGHTING**

Student grades are reported as raw scores on all transcripts and report cards. Students who are enrolled in Advanced Placement, College-level, or honors courses receive a multiplier towards their adjusted (weighted) grade point average. Students must earn a 65 or higher to receive the multiplier. The Registrar's Office updates each student's grade point average annually to reflect the multiplier.

1.07

1.00

The multipliers are as follows:

- Advanced Placement/College-Level 1.10
- Honors/Honors 1
- Honors 2 1.05
- College Prep

#### HONOR ROLL

The following honor roll designations are awarded at the end of each academic quarter. Students who earn President's Honor Roll two or more times in the first three quarters will be recognized annually at the Academic Awards Banquet in May.

- **President's Honor Roll:** a weighted quarter average of 95 with no grade less than a 90
- Principal's Honor Roll: a weighted quarter average of 88 with no grade less than 80

### SIHS FRANCIS XAVIER INTERNATIONAL SCHOLARS PROGRAM

St Joseph High School has initiated the SIHS Francis Xavier International Scholars Program, with the goal of broadening student awareness of the global mission of the Church while also helping them traverse, with confidence, the distances between culture, economics, religion, and geography. In our increasingly interconnected, co-dependent world, students with global perspective and experience will be better able to become successful and responsible leaders in the emerging global economy.

Students pursuing this certificate program will be involved in intensive world language study, take a minimum of three courses directly related to cross-cultural understanding and global perspectives, and participate in two (2) or more SJHS domestic or international immersion trips.

Students who fulfill these requirements will graduate with distinction as "SJHS Francis Xavier International Scholars." They will also be acknowledged at Graduation and special documentation will accompany their high school transcript.

#### Francis Xavier Program Coordinator:

Mrs Maureen Anderson, MARS Director of Co-Curricular Activities manderson@sjcadets.org (203) 378-9378 x 354

#### **Requirements:**

- Four years of World Language study
- Participation in two or more SJHS International or Domestic Immersion Trips
- 3 Courses from those listed below:
  - o World Religions
  - o Catholic Social Teaching
  - o Multicultural Literature/Women in Litera
  - o Economics
  - o AP Economics
  - o Introduction to International Relations
  - o Contemporary Political Philosophy
  - o Peer Ministry

	(0.50 credit)
	(0.50 credit)
ature	(1.00 credit)
	(0.50 credit)
	(1.00 credit)
	(0.50 credit)
	(0.50 credit)
	(1.00 credit)

#### **FUTURES INTERNSHIP PROGRAM**

The Futures Internship Program is an opportunity for students to enhance their learning by exploring their career interests outside of the traditional classroom. The goal of the program is for students to gain experience in their desired fields and obtain a favorable referral or recommendation from their site that will assist in procuring future internships.

#### **Futures Internship Program Coordinator:**

Ms Cristin Clark, MA, LPC College & School Counselor cclark@sjcadets.org (203) 378-9378 x 318

#### **Program Details:**

- Students will participate in a three week, unpaid internship taking place during the last few weeks of the academic year. Dates are announced at the start of each academic year for student planning purposes.
- Internships will consist of 20-25 hours per week according to the schedule determined by the site ٠ supervisor and the student. Schedules must be approved by faculty mentors.
- Students will be matched with available internships in their skill and interest areas.
  - o Sites may request to interview students during the selection process.
  - o Students may also self-design their own internship and apply for approval.
- Students will work with a faculty mentor in addition to their site supervisor during the internship to track ٠ progress. Students must submit a one page reflection paper and an activity log to their assigned faculty mentor each week.
- Students will receive 0.25 credit on their final transcript upon completion of the internship. ٠
- Students will complete a final reflection project to present during the Internship Fair at the end of May.



<u>Subject</u>	<u>Grade 09</u>	<u>Gra</u>
<b>THEOLOGY</b> 4.0 required credits	Old Testament/ Introduction to Catholicism	New Testar Christology
<b>ENGLISH</b> 4.0 required credits (5.0 if CP2)	World Literature & Composition Academic Writing & Skills (CP2 only)	American L
	Elective: Broadcast Journ	alism
<b>MATHEMATICS</b> 4.0 required credits	Algebra I Geometry Algebra 2	Geometry Algebra 2 Precalculus
<b>SOCIAL STUDIES</b> 3.5 required credits	Global Studies	US History AP US Hist
<b>SCIENCE</b> 3.0 required credits	Biology	Chemistry

# Curriculum Sequence

This is the typical curriculum sequence for a four-year program of study. As course placement is highly individualized, not all students will adhere this sequence and may see a variation in course planning as a result.

<u>Brade 10</u>	Grade 11	<u>Grade 12</u>		
tament/ ogy	Catholic Social Teaching Morality	Bioethics Faith & Reason World Religions Prayer/Spirituality Christian Lifestyles Peer Ministry		
1 Literature	British Literature AP English Language & Composition	Senior English AP English Literature & Composition <b>Elective:</b> Creative Writing		
y 2 us	Algebra 2 Precalculus Calculus AP Calculus AB AP Calculus BC	Precalculus Calculus AP Calculus AB AP Calculus BC AP Statistics Statistics		
ory listory	AD European AP US Gover			
	<b>Electives:</b> Psychology, AP Economics, AP Psychology, Economics, Contemporary Political Philosophy, International Relations			
гу	Physics AP Biology AP Chemistry	AP Physics AP Biology AP Chemistry AP Environmental Science		
	<b>Electives:</b> AP Environmental Science, Environmental Science, Microbiology, Genetics, Anatomy			



# Curriculum Sequence

<u>Subject</u>	<u>Grade 09</u>	<u>Grade 10</u>	Grade 11	<u>Grade 12</u>	
WORLD LANGUAGE 2.0 required credits (3.0 college recommending)	Mandarin 1, 2 French 1, 2 Spanish 1, 2 Italian 1	Mandarin 2, 3 French 2, 3 Spanish 2, 3 Italian 2	Mandarin 3, 4 French 3, 4, 5 Spanish 3, 4, AP Italian 3	Mandarin 4, 5 French 4, 5, AP Spanish 3, 4, 5, AP Italian 4	
BUSINESS*		Electives: Graphic Desig	Marketing, Graphic D	Literacy, Entrepreneurship, esign, International Business	
TECHNOLOGY & INNOVATION	IDEA: Innovation, Design, and Engineering Applications		Engineering, Principles of Computer Coding Electives: Robotics & Automated Systems, Principles of Engineering, Engineering Design Project, Software Development & Integration, Aviation & Flight Science, Technology & Innovation Capstone Project (Grade 12 only)		
FINE ARTS*	Band Choir	Band Choir Advanced Band Advanced Choir Fundamentals of Art Fundamentals of Theatre	Electives: Band, Choir, Advanced Band, Advanced Choir, Acting, Studio Art, Multimedia Design		
HEALTH/ WELLNESS*	Intro. to Health & Wellness	Personal Health & Fitness Body Flow	ss, Introduction to Strength & Conditioning, Nutrition, and		

\*Required credits for Business, Fine Arts, Technology & Innovation, and Health & Wellness vary based on student selection.



The business and entrepreneurship curriculum focuses on developing real-world business acumen, entrepreneurial readiness and innovative skills in students. Students learn about marketing, finance, management and entrepreneurship through introductory business courses, attending the multiple business and entrepreneurial events held throughout the year, and by participating in the St. Joseph's DECA chapter. Students also have the opportunity to complete traditional introductory and advanced coursework in economics.

#### Accounting (CP)

Business 654 (Grades 11, 12) 0.50 Credit An entry-level course focusing on the accounting cycle as it applies to a sole proprietorship by teaching the basic principles of accounting and the financial operations of a business. Students record, classify, summarize, analyze and communicate financial information.

### Financial Literacy (CP)

Business 657 (Grades 11, 12) 0.50 Credit

This course emphasizes the knowledge and skills required to handle personal finances including banking, the stock market, insurance, employee benefits, consumer buying, financing, taxes and legal issues. Students work with the H & R Block online budget challenge simulation that incorporates real-world money management skills including paying bills, managing expenses, saving money, and investing in retirement.

### Introduction to Marketing (CP)

Business 659 (Grades 11, 12) 0.50 Credit

This entry-level business course integrates language arts, mathematics, social studies and social sciences while covering four core areas: Business Administration, Marketing, Marketing Pathways and Marketing Job Specialties. Topics covered include distribution, marketing-information management, pricing, product/service management, promotion and selling.

### Introduction to Graphic Design (CP)

Technology 662 (Grades 10, 11, 12) 0.50 Credit

This course familiarizes students with computer design and its applications by working on individual and group-based design projects geared to various target markets that students select from emphasizing teamwork, presentation, and evaluation and communication skills. Software applications include the Adobe suite: Photoshop, Dreamweaver and InDesign and Apple Pages, iPhoto, and iMovie.

## Business (cont'd)

### **Exploring Entrepreneurship (CL)**

Business 664 (Grade 12) 0.50 Credit

Learn the "entrepreneurial mindset" by encouraging creativity, innovation, critical thinking, and problem-solving by bridging connections between STEM (Science, Technology, Engineering, and Mathematics) and economic development. Through a research-driven approach, as well as strategic collaborations, students explore an entrepreneurial culture which enhances economic development. This course will include business planning, market research, marketing, business operations and opportunity recognition while equipping students with the skills necessary to succeed and excel in the 21st century. Students can register to earn 3 college credits from the University of Iowa. This course is offered in the fall semester only. Pre-requisites: approval of the department chair.

#### International Business (CP)

Business 665 (Grade 11, 12) 0.50 Credit

The course will provide students with an understanding of how and why businesses choose to expand their operations into other countries. This course exposes students to the unique challenges facing firms doing business internationally and to the potential opportunities and markets that are lost to firms that choose not to do business in the global marketplace. International Business broadens student understanding of how businesses operate and how they grow and thrive in our ever-changing world.

#### Principles of Business (CP)

Business 667 (Grade 10, 11, 12) 0.50 Credit

A broad-based introductory course designed to give the student exploratory experiences as they relate to the world of business. Students will explore all aspects of business through problem solving, role-playing, critical thinking, and the development of projects and activities. This course will provide students the opportunity to make intelligent career decisions. Students will learn strategies that will assist them as they develop into responsible citizens, wageearners and consumers.



The St Joseph High School English Department presents students with a challenging curriculum that focuses on reading, writing, and critical thinking skills. The goals of the English curriculum are to provide a four-year literaturebased program to assist in the development of excellence in writing and speaking skills, learning to critically analyze challenging literature and original source texts, as well as building vocabulary and grammar skills. We employ 21st century technology to promote media literacy and to develop students who are prepared to meet their future academic and career goals in an ever-changing technological world.

#### World Literature & Composition (CP, CP2, H)

English 104; 105; 106 (Grade 9) 1.0 Credit

This literature-based course introduces students to the rich complexity of World Literature and varied literary genres such as poetry, novels, drama, the epic and the short story, focusing on the basics in reading, oral, and written communication. Students study grammar and vocabulary and apply this knowledge in expository, creative, and research writing as well as oral presentations.

#### Academic Writing and Language Skills (CP2)

English 117 (Grade 9) 1.0 Credit

This course offers fundamentals in grammar and writing that complements English 106 CP2 World Literature & Composition. Designed for students who need strengthening in grammar, vocabulary and study skills, the class also focuses on in-class reading assignments and writing prompts. Students enrolled in this course do not take a world language in their freshmen year.

#### American Literature (CP, CP2, H)

English 120; 121; 122 (Grade 10) 1.0 Credit

American Literature is an exploration of the development of the unique heritage of our American literary voice. This course takes the student on a journey through the literary genres and stylistic movements from the 1600's to present day that make up the rich and varied American literary canon. Through an examination of major American writers students continue to develop reading comprehension, vocabulary, grammar, literary interpretation and critical thinking skills. Students are expected to apply this knowledge in analytical, expository, creative and research writing as well as in oral presentations.

#### British Literature (CP, CP2, H)

English 130; 131; 136 (Grade 11, 12) 1.0 Credit

This course offers an introduction to the major literary movements and writers of Great Britain beginning in the Anglo-Saxon Period followed by Medieval, Renaissance, Elizabethan, Restoration Victorian and Modern 20th Century eras. Through an examination of major British writers students continue to develop reading comprehension, vocabulary, grammar, literary interpretation and critical thinking skills. Students are expected to apply this knowledge in analytical, expository, creative and research writing as well as in oral presentations.

## English (cont'd)

#### AP English Language and Composition

English 103 (Grade 11) 1.0 credit

AP English Language and Composition mirrors a college-level rhetoric and writing curriculum. The focus is on evidence-based analytic and argumentative essays. Students will be required to evaluate, synthesize, and cite research to support their arguments. Students also read and analyze rhetorical elements in non-fiction texts from a cross section of time periods. This course has an additional focus on British Literature and incorporates literary analysis. Students will have the option to take the AP exam which will be administered in May. Pre-course summer assignments are required.

#### **AP English Literature and Composition**

English 101 (Grade 12)

1.0 Credit

AP English Literature and Composition mirrors an introductory college-level literary analysis course. College Board has redesigned the course to focus on close reading and critical analysis of works of literary merit from the 17th century to modern day, including units on Short Fiction, Poetry, and Long Fiction and Drama. Students learn to dissect a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Students will have the option to take the AP exam which will be administered in May. Pre-course summer assignments are required.

#### Senior English: Controversial Literature/Literature and War (H)

English 170 (Grade 12)

1.0 Credit

The first half of this course investigates the issue of literature censorship in schools from multiple perspectives and requires historical, social, and psychological understanding on the part of the student so that they can better understand the psyche of literary censorship. The second half of this course examines the intricate and powerful effect war has on citizens. Students analyze both fiction and nonfiction prose and poetry that provide insight to the psyche and emotions of war-torn people. The course explores psychological, emotional, and historical effects of tragedy and subjects such as beauty amid violence, loss, fear and horror, patriotism, dehumanization, and identity through a compilation of short stories, poems, and novels.

#### Senior English: Controversial Literature/Shakespeare's Comedies and Tragedies (H)

English 172 (Grade 12)

1.0 Credit

The first half of this course investigates the issue of literature censorship in schools from multiple perspectives and requires historical, social, and psychological understanding on the part of the student so that they can better understand the psyche of literary censorship. The second half of this course students read and analyze the sonnets, histories, comedies and tragedies written by William Shakespeare in an interactive classroom environment. Students learn to read text accurately and imaginatively, and learn to appreciate Shakespeare's dramatic dimensions.

#### Senior English: Women in Literature/Multicultural Literature (CP)

English 175 (Grade 12)

1.0 Credit

Historically, women have been marginalized in terms of human and political rights. This course begins with a consideration of the historical events for this marginalization and the literature and art of women in response to it.



This course introduces students to female authors of fiction, non-fiction, poetry and critical theory from around the world. The second half of this course provides an introduction to the academic study of the multicultural genre through poetry, fiction, non-fiction, plays and music to gain an understanding of the historical and social development of writers of different ethnic, cultural, and racial backgrounds.

#### Senior English: Literature and War/Short Story (CP)

English 176 (Grade 12)

1.0 Credit

The first half of this course studies the development of the short story, including history, plot, character, setting, point-of-view, narration, tone, style and theme. The class includes literary analysis as well as writing an original short story and oral presentations. The second half of this course examines the intricate and powerful effect war has on citizens. Students analyze both fiction and nonfiction prose and poetry that provides insight into the psyche and emotions of war-torn people. The course explores psychological, emotional, and historical effects of tragedy and explores subjects such as beauty amid violence, loss, fear and horror, patriotism, dehumanization, and identity through a compilation of short stories, poems, and novels.

### Senior English: Sports Literature and Writing/Science Fiction Literature (CP)

English 179 (Grade 12)

1.0 Credit

The first half of the courses examines the unique relationship between sports and society through literature by contemporary authors, columnists and other media. The course affords students the opportunity to examine the historical influence sports has on society and the impact it plays on developing character through universal themes of struggle, conflict, victory and defeat. The second half of this course includes a selection of genres within Science Fiction literature including apocalyptic and post-apocalyptic, dying earth, military, time travel, space colonization and social science fiction. Students explore differences between science fiction and other fantastical works, identify and analyze techniques used to convey imaginary places, beings and ideas, and discuss/compare the evolution of science fiction from its original models to more modern works.

#### Creative Writing (CP)

English 137 (Grades 11, 12) 0.50 Credit

This course teaches students the elements of creative writing including short story, poetry, expository essay and character study through weekly writing assignments, peer editing and story conferencing.

#### Broadcast Journalism

English 196 (Grade 9, 10, 11, 12) 1.0 Credit

Broadcast Journalism is a unique course offering at SJHS that is open to all grades. Students learn all aspects of broadcasting through hands-on operation of a real television studio. Subject areas include research, writing, producing, recording, and airing news, features, public service, and entertainment. Students become proficient in performance and the operation of all studio equipment in the planning, production, and delivery of a daily program for the entire SJ community. This course meets before school at 7:00 a.m.

# English (cont'd)

### **Elective Course Offerings**



St Joseph High School believes that every student is entitled to a well-rounded education that includes exposure to the arts, including courses in art, music, theatre and interdisciplinary courses. A foundation in the arts develops cognitive, analytical, problem solving and task completion skills. The arts allow students to develop self-expression through visual, aural and performance mediums. Upon completion of the program, students should possess a basic understanding and appreciation of the arts in their world and how the arts relate to history, society and cultural awareness.

#### VISIUAL AND STUDIO ART

#### Fundamentals of Art (CP)

Visual Art 780 (Grade 10) 0.50 Credit

This course provides a general overview of the visual arts with an emphasis on design, historical significance and artistic intent. Students work with two and three-dimensional mediums creating realistic and abstract works including: pencil, pastel, marker, clay, paint and sculptural mediums. The hands on work combines with text, multimedia presentations, and class discussion to help students gain an understanding of the societal importance of art.

#### Studio Art (CP)

Visual Art 781 (Grades 10,11,12) 0.50 Credit

This course provides the opportunity for students who have demonstrated talent and interest in art to expand on the drawing and painting concepts introduced in Fundamentals of Art. Emphasis will be placed on more advanced experiences with design principles, drawing techniques and painting techniques. Coursework is designed to build mastery in technique, composition, design, and creative problem solving. Students will also experiment with various computer art programs such as fresco, procreate and sketchbook. Outside work will be required and an active journal/ sketchbook is a critical course requirement.

#### Multimedia Design (CP)

Visual Art 782 (Grades 11,12)

0.50 Credit

This course will explore three-dimensional art using the element of form. Students will work with paper, clay, cardboard, wire, foam, tape, wood and other found objects. Emphasis will be placed on design elements, function, aesthetics, creativity and craftsmanship. Current trends in three-dimensional art, along with the role of technology in the production of art will be explored. Students will be required to keep a journal/sketchbook for project research and skill improvement.

#### Ceramics/Pottery (CP)

Visual Art 778 (Grades 11, 12) 0.50 Credit

Students explore the various processes in clay, learning to use the pottery wheel to create open and closed form vessels, lids and handles. Advanced skills involve throwing off the hump and hand building techniques such as slab, pinch and coil methods. Students also create large freestanding sculptures using realistic and abstract themes.

# Fine Arts (cont'd)

#### Concert Band (CP)

Music 732 (Grades 9, 10, 11, 12) 1.0 Credit

Concert Band provides students the opportunity to develop their musical and spiritual potential with an emphasis on fulfilling musical objectives. Students engage in activities designed to give them a thorough grounding in instrumental playing and musical literacy, instrumental technique, performance practice and sight-reading. The band performs at St. Joseph High School events. Concert Band requires attendance at all after school rehearsals and performances. *Pre-requisite: Students must have prior instrumental experience and an understanding of sheet music.* 

#### Steel Drum Ensemble (CP)

Music 725 (Grades 11, 12) 0.50 Credit

Steel Drum Ensemble allows students to learn and perform world music on authentic steel pan percussion instruments. Music selections draw on cultures from Latin America, the Caribbean, and the United States. Steel Drum Ensemble requires attendance at all after school rehearsals and performances. *Prerequisite: Prior music experience preferred*.

#### Concert Choir (CP)

Music 733; 734 (Grades 9, 10, 11, 12) 1.0 Credit

The Concert Choir ensemble is for the student with a love of singing, no previous vocal training required. Students work on sacred and secular choral literature while studying music notation, sight singing, music vocabulary and vocal technique. In addition to ensemble rehearsal, students receive bi-weekly small group lessons for instruction designed to address individual student needs. Concert Choir requires attendance at all after school rehearsals and performances.

#### Advanced Band (H)

Music 738 (Grades 10, 11, 12) 1.0 Credit

Advanced Band builds on the concepts of Concert Band while challenging students to further their musicianship skills through intensive technique building. Advanced Band's goal is to prepare students for outside auditions (Regional, All State Ensembles and College), and to develop an advanced repertoire. The band performs at St. Joseph High School events. Advanced Band requires attendance at all after school rehearsals and performances. *Prerequisite: Audition in spring semester; admittance based on audition scores and ensemble needs.* 

#### Advanced Chamber Choir (H)

Music 739 (Grades 10, 11, 12) 1.0 Credit

The Chamber Choir builds on the concepts of Concert Choir while challenging students to further their musicianship skills through intensive technique building. Chamber Choir's goal is to prepare students for outside auditions (Regional, All State Ensembles and College), and to develop an advanced repertoire. Advanced Chamber Choir requires attendance at all after school rehearsals and performances. *Prerequisite: Audition in spring semester; admittance based on audition scores and ensemble needs. This course is offered before-school at 7:00 a.m.* 

## **MUSIC**

## Fine Arts (cont'd)

### **THEATER**

#### Fundamentals of Theater (CP)

#### Theater 719 (Grade 10) 0.50 Credit

Fundamentals of Theater introduces students to a basic understanding of the skills and art of theater. The course focuses on public speaking, scene studies, improvisation, script construction and performance techniques, as well as exploring how theater has shaped societies since ancient times. Students will learn basic stage combat, backstage skills, as well as directing and acting.

### The Art of Acting (CP)

Theater 773 (Grades 11, 12)

#### 0.50 Credit

This course provides an in-depth study of the various skills an actor needs in order to be successful, including an awareness and appreciation of acting both as a participant and an observer. Emphasis is placed upon ensemble and scene work, as well as improvisation. Students study texts for clues to character behavior and motivation and are assigned classic and contemporary theater works. Students perform monologues, two-person scenes, improvised scenarios, as well as learning how to audition.



St Joseph High School believes in educating the whole student, spiritually, academically and physically. Health & Wellness offers physical activities that emphasize cardiovascular endurance, muscular strength, flexibility and agility and that students can participate in for a lifetime of health and wellness. Teamwork, positive attitude, good sportsmanship and interactions with classmates are emphasized.

The Health and Wellness curriculum encompasses topics such as cardio and weight training, basic human anatomy and musculature, nutrition and healthy eating habits, weight management, and program design and development. All classes will have practical applications through sporting and exercise activities including volleyball, basketball, soccer, track and field, yoga, cycling, etc. with full access to the St Joe's gymnasium, athletic fields and the new Health and Wellness Center.

#### Introduction to Health and Wellness (CP)

Health & Wellness 823 (Grade 9) 0.5 Credit

The overall goal of the Health and Wellness curriculum is to introduce St Joseph's incoming freshman into the basics of health, fitness, nutrition and creating healthy lifestyles using the SJHS gymnasium, fields, and the Health and Wellness Center. At the conclusion of this course students will be able to navigate the Wellness Center, understand the basics of nutrition, weight management, proper hygiene essentials and how to develop a personalized plan to create "fitness for life." This course will introduce students to the Plt4m digital application which will track student progress as they are introduced to weightlifting and basic athletic development.

#### Personal Health and Fitness (CP)

Health & Wellness 845 (Grades 10, 11, 12) 0.5 Credit

This course is a hybrid health and physical education course. During this half semester course, students will gain knowledge in various decision making skills for a healthy lifestyle. We will utilize the Seven Dimensions of Wellness to have students apply principles of social, economic, emotional, physical, spiritual, psychological and environmental into their everyday life. Students will also learn how to create basic exercise programs, nutrition plans and healthy lifestyle habits. Exercise participation is required by all students.

#### Introduction to Strength and Conditioning (CP)

Health & Wellness 846 (Grade 10, 11, 12) 0.5 Credit

This half year course takes an in depth look at the effects of exercise on the body. Various training principles related to speed, power, endurance, biomechanics, mobility and program design will be taught as well as how to apply this knowledge to their own physical fitness. This class will be a hybrid class consisting of course work, lab work in the health and wellness center and final project. This course will prove very beneficial for students who are interested in pursuing a career field in exercise science or strength and conditioning.

## Health & Wellness (cont'd)

### Nutrition (CP)

Health & Wellness 846 (Grades 10, 11, 12) 0.5 Credit

This half year course will introduce students to nutritional principles and guidelines for developing a healthy lifestyle. We will learn about the importance of macronutrients, how culture and society develops our eating habits, healthy weight management, diet- related diseases, how our nutrition changes throughout our life and ways to ensure we always create a nutritious and healthy lifestyle.

### Body Flow (CP)

Health & Wellness 847 (Grades 10, 11, 12) 0.5 Credit

Body Flow will be a physical education class with emphasis on various principles of yoga, Pilates, tai chi, meditation and basic stretching. Students will gain understanding in importance of the connection of the spirit, mind and body.



The philosophy of the Mathematics Department is to enhance and expand on mathematical knowledge that students have gained throughout their education. We strive to offer a learning environment that fosters analytical thinking, logical reasoning, and problem-solving skills. The department and its faculty strive to inspire in each student an appreciation of mathematics and its practical real-world applications.

Students enrolled in all Mathematics classes need access to a graphing calculator daily.

### Algebra 1 (H, CP, CP2)

Mathematics 208; 210; 213 (Grade 9) 1.0 Credit This course is an introduction to the basic concepts and operations of Algebra. Topics covered include language, axioms, equations, inequalities, graphing, problem solving, and laws of exponents, multiplication, division, factoring and square roots.

#### Geometry (H, CP, CP2)

Mathematics 215; 220; 223 (Grades 9, 10) 1.0 Credit Two and three-dimensional geometric figures are explored through the use of definitions, postulates and theorems. Inductive and deductive reasoning are developed in the formulation of proofs and through group activities. *Prerequisites: Algebra 1* 

### Algebra 2 (H, CP, CP2)

Mathematics 225; 230; 233 (Grades 9, 10, 11) 1.0 Credit An extension of Algebra 1, students are introduced to the transcendental functions (exponential, trigonometric and logarithmic). Matrices, algebraic fractions, functions, introduction to sequences and series, and probability. *Prerequisites: Geometry* 

### Pre-Calculus (H, CP)

Mathematics 231; 253 (Grades 10, 11, 12) 1.0 Credit This course covers circular, algebraic, exponential, and logarithmic functions as well as Trigonometry and its applications, analytic Geometry, sequences and series and vectors. *Prerequisites: Algebra 2* 

# Mathematics Department

# Mathematics (cont'd)

#### **AP Statistics**

Mathematics 202/ UCONN ECE STAT 1100Q (Grade 12) 1.0 Credit

AP Statistics is a class for any students who wants to learn how to make sense of the world around him/her through the use of authentic data. A standard approach to statistical analysis primarily for students of business and economics; elementary probability, sampling distributions, normal theory estimation and hypothesis testing, regression and correlation, exploratory data analysis. Learning to do statistical analysis on a personal computer is an integral part of the course. This is a college level course and follows the standard syllabus prescribed by the College Board. Students will have the option to take the AP exam which will be administered in May. This course is also a dual-enrollment course with the UCONN. Prerequisites: Algebra 2

#### AP Calculus, AB

Mathematics 201 (Grades 11, 12) 1.0 Credit

The first semester emphasizes a thorough study of derivatives. Students become proficient both explicit and implicit derivatives of polynomial, rational trigonometric, logarithmic and exponential functions. Derivative applications are studied through motion, curve fitting, extrema and related rates. The second semester stresses the study of the integral. Applications are stressed through the investigation of volumes, length of curves, volumes of solids of revolution and surface area. This is a college level course and follows the standard syllabus prescribed by the College Board. Students will have the option to take the AP exam which will be administered in May. Prerequisites: Precalculus

#### AP Calculus, BC

Mathematics 203 (Grades 11, 12) 1.0 Credit

This covers all of the topics from Calculus AB as well as Taylor and Maclaurin series, advanced methods of integration, polar coordinates and equations as well as parametric equations. This is a college level course and follows the standard syllabus prescribed by the College Board. Students will have the option to take the AP exam which will be administered in May. Prerequisites: Precalculus

#### Calculus (H)

Mathematics 241 (Grades 11, 12) 1.0 Credit

Calculus topics begin with study of limits. The derivative is introduced through the study of the tangent line problem and the limit definition of the derivative is developed. Students' become proficient at both explicit and implicit derivatives of polynomial, rational, trigonometric, exponential and logarithmic functions. Derivative applications are studied through motion, curve fitting, extrema, and related rates. The course continues with antidifferentiation and its applications. Prerequisites: Precalculus

#### Statistics (H, CP)

Mathematics 256; 257(Grade 12) 1.0 Credit

Statistics is the science of collecting and analyzing data. This course covers descriptive statistics, axiomatic probability, probability distributions (including the normal binomial), inferential statistics (confidence intervals and hypothesis tests), and curve fitting. Prerequisites: Algebra 2



The Science Department at St Joseph High School strives to prepare students for life in a technologically advancing society. Students are taught the importance of science in everyday life as well as an understanding and appreciation of the laws of nature and the universe. Science is a process of inquiry rather than a collection of facts. Through laboratory work, students are taught how to ask the right questions about nature and learn how the sciences interconnect. The department goal is to prepare students to understand the mysteries of the planet, the ecosystems, and the various species populating Earth, and themselves as human beings.

#### Biology (H, CP, CP2)

Science 411; 420; 421; 415; 416 (Grades 9, 10) 1.0 Credit The study of Biology encompasses biochemistry, cellular structure and function, genetics, evolution, and ecology. Lecture is complemented by a complete program of laboratory experiments.

#### Elements of Chemistry (CP)

Science 450 (Grades 10, 11, 12) 1.0 Credit This course deals with chemistry as it relates to modern life. The organization of elements based on the Atomic Theory is studied though class lectures and laboratory work. The descriptive aspects of chemistry are emphasized. Prerequisites: Biology and Algebra 1

#### Principles of Chemistry (H2)

Science 455 (Grades 10, 11, 12) 1.0 Credit This course deals with chemistry as it relates to modern life. The organization of elements based on the Atomic Theory is studied though class lectures and laboratory work. Prerequisites: Biology and Algebra 1

#### Modern Chemistry (H1)

Science 453 (Grades 10, 11, 12) 1.0 Credit This course treats the science of Chemistry in a modern theoretical manner. Students study chemical theory and descriptive chemistry with an emphasis on the electronic structure and periodicity of the elements and apply them in laboratory work. Prerequisites: Biology and Algebra 1

#### **Conceptual Physics (CP)**

Science 440 (Grade 11, 12) 1.0 Credit

This courses introduces students to the fundamental principles of physics and shows how physics is applied to practical solutions. The course encourages comprehension of physics and scientific communication skills without the use of complex mathematics. The basic rules of the universe: force, motion, energy, light, sound, heat and the interior of the atom are covered through discussion and activity. Prerequisites: Chemistry and Algebra 1

## Science (cont'd)

#### Physics (H1)

Science 441 (Grade 11, 12) 1.0 Credit

This course, for students with strong math and science aptitude, provides a comprehensive study of motion and force, energy, sound, light, and electromagnetics; laboratory work provides inquiry. Prerequisites: Chemistry and Algebra 2 or Precalculus

#### Physics (H2)

Science 443 (Grade 11, 12) 1.0 Credit

This course emphasizes the physical concepts of motion and force, energy, sound, light, and electromagnetics; laboratory work examines their practical applications. Prerequisites: Chemistry and Algebra 2 or Precalculus

#### **AP** Environmental Science

Science 400 (Grades 11, 12)

1.0 Credit

This course investigates how humankind can become a better steward of the Earth and its resources. The course covers biodiversity, agriculture, water and air pollution, climate change, and fossil fuels versus renewable energy sources. Laboratory experiments and fieldwork are required. Students will have the option to take the AP exam which will be administered in May. Prerequisites: Biology and Chemistry and approval of the department chair

#### AP Biology and Lab

Science 401 & 402 (Grades 11, 12) 1.0 Credit (Grades 11, 12)

This course emphasizes biological principles from the AP Biology curriculum, including biochemistry, cell metabolism, molecular genetics and genetic engineering, evolution, population biology, plant and animal physiology, and ecology. Extensive laboratory work is required. Students will have the option to take the AP exam which will be administered in May. Prerequisites: Honors Biology or Honors Human Anatomy & Physiology and approval of the department chair.

#### AP Chemistry and Lab

Science 403 & 404 (Grades 11, 12) 1.0 Credit

This course expands on topics from Science 453, Modern Chemistry, and covers nuclear chemistry, electrochemistry, and rates of reactions, thermodynamics and the involvement of chemistry in environmental and societal issues. Extensive laboratory work is required, involved calculating and interpreting results based on quantitative date. Students will have the option to take the AP exam which will be administered in May. Prerequisites: Honors Chemistry and approval of the department chair.

#### **AP** Physics C: Mechanics

Science 405 (Grades, 11, 12) 1.0 Credit

This course covers kinematics, Newton's laws of motion: work, energy, power; systems of particles and linear momentum, circular motion and rotation, and oscillation and gravitation. Students will have the option to take the AP exam which will be administered in May. Prerequisites: Honors Physics, completion of, or concurrent enrollment in Calculus and approval of the department chair.

#### Sports Medicine (CP)

Science 454 (Grades 11, 12) 0.50 Credit

This course is designed for students interested in the medical/health fields. Students learn medical terminology, prevention, treatment, rehabilitation of sports injuries, emergency procedures, and basic first-aid. Practical skills include wrapping, basic, first-aid and emergency procedures. Students have the opportunity to assist with the development and application of rehabilitation of St Joseph High School athletes.

#### Human and Comparative Anatomy and Physiology (H1)

Science 451 (Grades 11, 12) 1.0 Credit

This course, designed for students interested in medicine/health, provides detailed coverage of the structure and functions of the human body, including the injuries and diseases that affect each organ system. Emphasis is placed on the human body, but comparisons are made to other vertebrates. Major dissections are an essential part of the course. Prerequisites: Successful completion of biology and chemistry.

#### Human Anatomy and Physiology (CP)

Science 452 (Grade 11, 12) 1.0 Credit

This course is designed for students interested in medicine/health but who do not meet the prerequisite for Science 451. The course focuses on detailed coverage of the structure and functions of the human body and the injuries and diseases that affect each organ system. Major dissections are an essential part of the course. Prerequisite: Successful completion of biology.

#### **Environmental Science (CP)**

Science 448 (Grades 12) 0.5 Credit This course is a study of the fundamental principles of land and marine ecology. Students study various ecosystems, habitats and environmental problems. Discussion includes current topics and issues.

# Science (cont'd)

## Science (cont'd)

#### Genetics (CP, H)

Science 444; 445 (Grades 11, 12) 0.50 Credit

This course examines how physical traits are coded for and expressed in organisms, how traits are inherited from one generation to the next, and how changes in the genetic material, past and present, have led to biological diversity. The course focuses on DNA and how it regulates all processes of the body. *Prerequisites: Successful completion of biology and chemistry*.

#### Microbiology (H)

Science 449 (Grades 11, 12)

0.50 Credit

Focus is on the cellular and biological aspects of various species of microorganisms. Emphasis is placed on the characteristics, both beneficial and pathogenic, that each type manifests, and the industrial and medicinal effects that the organisms have on everyday life. *Prerequisites: Successful completion of biology and chemistry*.



# Social Studies Department

The Social Studies Department promotes liberal arts instruction that leads to informed citizenship and an inculcation of Christian principles and moral values. Historical knowledge can serve as a bridge to the present, explaining and illuminating how we have developed as a civilization. Students are introduced to a thought-provoking process of investigation and analysis centered on social issues: racism, poverty, gender, minorities, war, tolerance, equality and social justice, to develop critical thinking skills, diversity of opinion and moral sensibility.

#### Global Studies (H, CP, CP2)

Social Studies 318; 319; 329 (Grade 9) 1.0 Credit

A comprehensive survey course designed to provide students with a global perspective on multicultural issues. All major areas of the world are explored with emphasis on human geography. Topics include physical geography and climate, economic systems, language, religion, and culture to provide students with a better understanding of people and how they live in an interconnected global society.

#### **AP United States History**

Social Studies 301 (Grade 10) 1.0 Credit

This college-level course follows the standard syllabus approved by the College Board from pre-Columbian origins to the present day. Emphasis is on critical reading skills and the ability to work independently. Students will have the option to take the AP exam which will be administered in May. *Pre-course summer assignments are required*.

#### United States History, 1860-Present (CP, CP2)

Social Studies 320; 322; (Grade 10) 1.0 Credit This course analyzes the development of American society from the Civil War to the present. Emphasis is placed on American politics, economic life, social and cultural events, and the role of America in world affairs.

#### United States History Since 1877 (H)

Social Studies 321/UCONN HIST 1502 (Grade 10) 1.0 Credit

This UConn ECE course is academically rigorous and analyzes the development of American society from Reconstruction to the present. Emphasis is placed on American politics, economic life, social and cultural events, and the role of America in global affairs. *Prerequisites: approval of the department chair*.

#### **AP** European History

Social Studies 303 (Grade 11) 1.0 Credit

This college-level course follows the standard syllabus approved by the College Board and focuses on the study of European History from the Renaissance to modern times. Emphasis is on critical reading skills and the ability to work independently. Students will have the option to take the AP exam which will be administered in May. *Pre-course summer assignments are required*.

# Social Studies (cont'd)

#### The Western Tradition (CP, CP2, H)

Social Studies 330; 339; 331 (Grade 11) 1.0 Credit

This survey course focuses on the development of European civilization from the ancient Greeks through the Second World War. Emphasis is placed on the social, economic, and political trends that affected European history and contributed to the political evolution of western European nations. Note: Social Studies 331 (H) requires significant reading and independent study.

#### **AP** United States Government and Politics

Social Studies 302 (Grade 12) 1.0 Credit

This college-level course follows the standard syllabus approved by the College Board and is designed to provide students with an analytical perspective on government and politics in the United States. Students develop a critical understanding of the strengths and weaknesses of the American political system, as well their rights and responsibilities as citizens. Students will have the option to take the AP exam which will be administered in May. This course fulfills the Civics requirement. Pre-course summer reading required.

#### Civics (CP; H)

Social Studies 312; 313 (Grade 12) 0.50 Credit

This course is an intensive study of the constitutional framework, institutions, and political processes of the United States government. Students focus on the duties, rights, and responsibilities of citizenship and develop a critical understanding of the political, economic, and social challenges in governing a pluralistic society. Case studies of historical and current issues are utilized to provide students an analytical perspective on the evolution of the United States government. Social Studies 312/313 is a required senior course.

#### **AP** Psychology

Social Studies 305 (Grades 11, 12)

#### 1.0 Credit

This is a college-level course providing students an overview of the diverse social and biological science of psychology through multiple perspectives and interpretations. This course emphasizes critical thinking skills in application to the social sciences by immersing students in modern psychological research, techniques, and methodologies. Some topics of study include: research methods, learning and cognition, developmental psychology, abnormal behavior and social psychology. This course follows a syllabus approved by College Board and students can elect to take the AP exam in May.

#### **AP** Economics

Social Studies 307 (Grades 11, 12) 1.0 Credit

This full-year course provides a thorough understanding of the principles of economics, with particular attention focused on the American economic system. It covers both microeconomics and macroeconomics. Students will have the option to take the AP exam which will be administered in May.

# Social Studies (cont'd)

#### Introduction to Psychology (CP)

Social Studies 343 (Grades 11, 12) 0.50 Credit

A survey course that introduces students to human development, the brain, the nervous system, statistics, testing, learning, emotions, and communication through supervised experiments and written reports. Emphasis is placed on current theories that apply to major social problems in the modern world.

#### Economics (CP)

Social Studies 350 (Grades 11, 12) 0.50 Credit This is a survey course designed to provide students with a fundamental understanding of the workings of the global economic system and the important role played by economics in the modern world.

#### Introduction to International Relations (CL)

Social Studies 358/UCONN POLS 1402-801D (Grades 11, 12) 0.50 Credit

Students in this course prepare for involvement in the Model United Nations (MUN) conferences through country delegate positions, bloc positions and prior United Nations policies. Students are required to become delegates for the selected conference. Pre-course summer reading and writing assignments are required.

#### Contemporary Political Philosophy (H)

Social Studies 359 (Grades 11, 12) 0.50 Credit

This second semester course will cover the major philosophies that affect the global community. Traditional topics such as Marxism, Fascism and Democracy will be examined. The course will also address major religious and economic theories and the application of liberal and conservative points of view on the solution of global issues. This course is offered in the spring semester only.



#### IDEA: Innovation, Design, and Engineering Applications

Technology 680 (Grade 9)

0.50 Credit

This course introduces freshmen students to technology-centered, hands-on, inquiry-based learning. Through assorted projects, students will gain the software and technical skills necessary for success in high school, college and beyond. Students will have repeated opportunities to use design mindset, learn collaboratively, practice task-management, and cultivate teamwork, communication, and critical-thinking skills.

#### Robotics and Automated Systems (CP)

Technology 670 (Grades 11, 12) 0.50 Credit

Students will establish a baseline understanding of how electronics, mechanics, and software come together in the 21st century, leading to articulated and automated systems design. In addition to the hands-on, project-based modules of the course, students will be introduced to the basics electronics, mechanical systems, articulation and mechanics, motors and servos, system integration, 3D modeling, graphical programming, and coding. Students interested in technology; specifically mechanical assembly and movement, hardware/software functionality, coding and programing are encouraged to take this course. No prior experience required.

#### Principles of Engineering (CP)

Technology 682 (Grade 10, 11, 12)

0.50 Credit

This survey course exposes students to major concepts that will be covered in a college-level engineering course. Topics include mechanisms, energy, statics, materials and kinematics. Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that they document and communicate.

#### Principles of Computer Coding & App Development (CP)

Technology 671 (Grades 10, 11, 12)

0.50 Credit

Students learn the basics of algorithmic thinking, and design programs to solve simple problems. A number of different programming environments are used including highly structured programming environments such as Switch and CS First. Students gain familiarity with robust programming languages and learn the basics of variables, loops, conditional statements and standard data structures such as arrays and dictionaries. This course will focus on skills needed for success in this highly digitalized world.

## Technology & Innovation (cont'd)

#### **Engineering Design Project**

Technology 683 (Grades 11, 12) 0.50 Credit

Milestone C's EDP curriculum has been carefully crafted with a sharp technical focus to groom future design engineers. Student teams will embark on an extended design project emulating a real-world engineering program complete with requirements analysis, milestone reviews, schedule and budget management, and a detailed test program prior to fielding a complex, physical end-product. Students will benefit from the technical and soft skills acquired during this course for years to come, regardless of the career path they choose. Students interested in applying the thought process of an engineer while designing, building and testing a prototype to meet a customer's need are encouraged to take this course. No prior experience required.

#### Software Development and Integration

Technology 684 (Grades 11, 12) 0.50 Credit

In today's global technology network, software is the single common thread tying all disciplines together. All STEM industries, without exception, benefit from the efforts of software developers, engineers, and integrators on a daily basis. This lighting-paced course will introduce students to how corporate software projects are developed, managed, integrated, and fielded. An interface-oriented approach to software development eliminates the need for any prior coding experience. Students will navigate this complex world following a project-based roadmap and leave with a significant sense of accomplishment and key professional skills after creating professional-caliber apps, games, and control algorithms. SDI graduates will establish a solid foundation in software development principles. More importantly, they will gain big-picture understanding of interface management and the engineering process at large. Students interested in understanding how software and hardware affect each other and how software projects are developed in the real world are encouraged to take this course. No prior coding experience required.

#### Aviation and Flight Science

Technology 685 (Grades 11, 12) 0.50 Credit

The primary objective of the Aviation and Flight Science course is to put high school math and science classes into applied context through the thrilling real-world framework of aviation. The secondary objective is to equip students with key college & career soft skills including critical thinking, public speaking, task management, and effective teamwork & communication. Through extensive ground school studies and strenuous flight training on highly-realistic desktop simulators, graduates of this course will be able to boast a significant portion of the same training civilian and military pilot candidates receive in flight school without leaving the safety of the classroom environment. Students interested in aviation, physiological effects aircraft on the human body, application of physics and math in the real world are encouraged to take this course. No prior experience required.

#### Technology & Innovation Capstone Project (CP)

Technology 690 (Grade 12) 0.50 Credit

Students who take a minimum of 3 STEM related courses can register for the Capstone Project the spring of senior year. Students will be expected to solve a problem/ defend a thesis using the skills and knowledge acquired in the above STEM related courses. A mentor will be assigned to the students who will be expected to present their final project to a panel. Students interested in applying skills they have learned throughout their high school years in a real world project of their choice are encouraged to take this course. *This course is offered in the spring only*.



The mission of the Theology Department is to proclaim the Gospel of Jesus Christ through the magisterial teachings of the Roman Catholic Church. It is the department goal that students be able to articulate the Faith, develop a closer relationship with the Triune God, and manifest the Gospel values in their lives.

Students are required to take a full credit of Theology each year. In the senior year, students will choose two halfcredit courses during advising to meet the requirement; or enroll in the year-long Peer Ministry course.

#### Introduction to Catholicism/Old Testament (CP)

Theology 012 (Grade 9)

1.0 Credit

Through an exploration of the Apostles' and Nicene Creeds, students learn the basic doctrines of the Catholic Church. An overview of the Old Testament provides the students with a solid foundation in the Biblical roots of the Christian tradition. Students learn to integrate Scripture into prayer life and moral decision-making.

#### New Testament/Christology (CP)

Theology 026 (Grade 10) 1.0 Credit

In this course, students learn of God's revelation through an examination of the writings of the New Testament, and by studying the person, role, nature and message of Jesus Christ. Emphasis on the development of Christology from the first century to the modern age, and an exploration of the Acts of the Apostles and the epistles illustrate the role of the early Christian community in the formation of the Church. Students learn to integrate Scripture into prayer life and moral decision-making.

#### Morality: Our Response to God's Love (CP)

Theology 032 (Grade 11)

0.50 Credit This course focuses on the Church's moral teac

This course focuses on the Church's moral teachings as they apply to contemporary life, a study of decision-making, formation of conscience, and current moral topics.

#### Catholic Social Teaching (CP)

Theology 033 (Grade 11)

0.50 Credit

This course examines the history of Roman Catholic social teaching with an emphasis on Church Documents promulgated by Popes and Bishops. With an emphasis on the principles of Catholic social teaching using reflection, judgment, and action, topics include justice and society, the right to life, prejudice, racism, peace, work, and the environment.

#### Christian Lifestyles (CP)

Theology 040 (Grade 12) 0.50 Credit This course examines Christian r

This course examines Christian relationships and the development of a person's ability to form relationships, including analysis of marriage and the Holy Orders as sacraments, the study of vocations, and the Catholic perspective on family and its importance in society.

#### Introduction to World Religions (CL)

Theology 041/SHU TRS265 (Grade 12) 0.50 Credit

This college-level course examines the origin and expression of the religious impulse from pre-history to modern times. Emphasis is placed on defining religion in general and a study of the world's major religions, including Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Islam and Christianity. Each religion is examined from the viewpoints of Theology, Cosmology, History, Anthropology, and Sociology. Students are eligible to apply to receive 3 credits from Sacred Heart University. *Prerequisites: Approval of the Department Chair.* 

#### Faith and Reason (H)

Theology 045 (Grade 12)
0.50 Credit
This course examines profound philosophical and theological questions through ancient and contemporary primary sources spanning the Catholic intellectual tradition, with an emphasis on the interrelation of faith and reason.
Prerequisites: Approval of the Department Chair.

#### Prayer and Spirituality (CP)

Theology 046 (Grade 12) 0.50 Credit This course explores the various spiritual expressions throughout the history of the Church from meditation to contemplation, with an emphasis on the experience of prayer to allow students to encounter the Sacred in their lives.

#### Peer Ministry (CP)

Theology 055 (Grade 12) 1.0 Credit

This course trains its participants to embrace servant leadership and its application outside of the classroom. The course begins with a required summer workshop called the St Joe's Leadership Institute. The course instructs students in effective leadership skills, counseling techniques and scenarios, group dynamics, public speaking, and emphasizes Roman Catholic Social Teaching as a foundation. All lessons are in response to the Gospel, the teaching of the Church, and the larger mission of Saint Joseph High School. Topics range from diversity and stereotypes to perception and behaviors of concern. These skills are used in leading small groups, retreats, workshops, and directed service to their peers. Students will also help coordinate and lead school retreats for students in grades 9, 10, and 11. *Prerequisite: students must apply for admission to this course and receive approval from the Director of Campus Ministry*.



# Theology (cont'd)

#### Bioethics: From Basics to the Future (H)

Theology 056 (Grade 12)

0.50 Credit

The course focuses on the key Catholic approaches to health care ethics health care issues. Topics include the history of the Church's medical ethics, ethical methodologies, the development of virtues and key medical ethics issues including: reproductive technologies, abortion, genetic engineering, cloning, death and dying, euthanasia, the role of physician as healer, and organ donation. *Prerequisites: Approval of the Department Chair*.

#### World Religions (CP)

Theology 070 (Grade 12) 0.50 Credit

This course is designed to help students develop religious literacy in accord with the directive of the Second Vatican Council declaration Nostra Aetate to examine the Church's relationship to non-Christian religions with the intention of "promoting unity and love among men." Students will learn to identify the similarities and differences between Catholicism, other Christian denominations, and religions such as Judaism, Islam, Hinduism, and Buddhism and how to respectfully navigate these differences.



The mission of the World Languages Department is to educate the whole student through the teaching of language, grammar, and culture. ACTFL National Standards of Communication, Connections, Comparisons, Cultures, and Communities are integrated within all World Language pedagogical initiatives. Interpretive, Presentational, and Interpersonal Modes of Communication are also incorporated in all language curriculums as to guide learners in reaching higher communication achievements in speaking, writing, reading, and listening. Additional emphasis is placed on cultural themes, topics, and issues of target language countries. The department of World Languages encourages students to look beyond their own community and embrace respect, empathy, and diversity in a multicultural society.

St Joseph High School offers the following world languages: French, Italian, Mandarin and Spanish. Latin 1 & 2 are available through the Virtual High School Program.

#### French 1 (CP)

French 510 (Grades 9, 10, 11, 12) 1.0 Credit

This course introduces students to the sound systems and intonations of the French language with emphasis on the development of audio-lingual skills. Students are introduced to basic structures within a defined vocabulary selection in order to engage in simple conversation and develop a reasonable ability to read and write French. Students are also introduced to French culture through geography, history, and art.

#### French 2 (CP)

French 520 (Grades 9, 10, 11, 12)1.0 CreditThis course strengthens a student's speaking, reading, writing, and listening skills. New grammatical structures and verb formations are introduced while also improving listening comprehension. Further study is developed regarding French history, civilization, and society.

#### French 3 (H)

French 536 (Grades 10, 11, 12)
1.0 Credit
This course continues introducing more advanced structures of the French language while furthering language acquirement/comprehension through listening, speaking, reading, and writing skills. Basic structures are reviewed as necessary. This is a continued study of French culture.

#### French 4 (H)

French 541 (Grades 10, 11, 12) 1.0 Credit

This course is for the advanced student who would like to strengthen and further develop language skills. Oral, written, and grammar study are conducted in French. This intermediate-high level course is designed as an interactive communicative approach focusing on meaningful contexts that develop and consolidate a student's speaking, listening, reading, writing, and cultural competencies.

# World Languages Department

# World Languages (cont'd)

#### French 5 (H)

French 551 (Grades 11, 12) 1.0 Credit

This semi-independent study course is for the advanced student and is designed to develop listening, speaking, reading, and writing skills using literary and conversational materials. This course also strengthens and develops student language skills in order to achieve interpersonal, interpretive and presentational modes of communication. All class work and discussion is in French.

#### **AP** French Language

French 501 (Grade 12)

#### 1.0 Credit

This online college-level course follows the standard syllabus approved by College Board and is designed to develop listening, speaking, reading and writing skills using literary and conversational materials. The class is currently taken online. Students will have the option to take the Advanced Placement Exam which is administered in May. Prerequisites: Approval of the Assistant Principal for Curriculum and Instruction.

#### Italian 1 (CP)

Italian 512 (Grades 9, 10, 11, 12) 1.0 Credit

This course introduces the student to the sound systems and intonations of the Italian language with emphasis on the development of audio-lingual skills. Students are introduced to basic structures within a defined vocabulary selection in order to engage in simple conversation and to develop a reasonable ability to read and write Italian. Students are also introduced to Italian culture through geography, history, and art.

#### Italian 2 (CP)

Italian 522 (Grades 9, 10, 11, 12) 1.0 Credit

This course strengthens a student's speaking, reading, writing, and listening skills. New grammatical structures and verb formations are introduced while also improving listening comprehension. Further study is developed regarding Italian history, civilization, and society.

#### Italian 3 (H)

Italian 532 (Grades 10, 11, 12) 1.0 Credit

This course continues introducing more advanced structures of Italian grammar while furthering language acquirement/comprehension through listening, speaking, reading, and writing skills. Basic structures are reviewed as necessary. There is also a continued study of Italian culture.

#### Italian 4 (H)

Italian 543 (Grades 11, 12) 1.0 Credit

This course is for the advanced student who would like to strengthen and further develop language skills. Oral, written, and grammar study are conducted in Italian. This intermediate-high level course is designed as an interactive communicative approach focusing on meaningful contexts that develop and consolidate a student's speaking, listening, reading, writing, and cultural competencies.

# World Languages (cont'd)

#### Mandarin 1 (CP)

Mandarin 516 (Grades 9, 10, 11, 12) 1.0 Credit

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#### Mandarin 2 (CP)

Mandarin 517 (Grades 9, 10, 11, 12) 1.0 Credit

This course strengthens oral comprehension, speaking, writing, and reading skills. Focus is placed on the creation and use of Mandarin characters as well as pinyin. Students make comparisons and connections with other cultures and communities within China while examining cultural themes, topics, and issues.

#### Mandarin 3 (H)

Mandarin 538 (Grades 9, 10, 11, 12) 1.0 Credit

This course continues in introducing more advanced structures of Mandarin grammar while furthering language acquirement/comprehension through listening, speaking, reading, and writing skills. This course also requires the application of language fundamentals through paired and group activities. Exposure to adapted texts complements interpretive skills of written and spoken Chinese language.

#### Mandarin 4 (H)

Mandarin 540 (Grades 9, 10, 11, 12) 1.0 Credit

This course is for the advanced student who would like to strengthen and further develop his or her language skills. Oral, written, and grammar study are conducted in Mandarin. This intermediate-high level course is designed as an interactive communicative approach focusing on meaningful contexts that develop and consolidate a student's speaking, listening, reading, writing, and cultural competencies.

#### Mandarin 5 (H)

Mandarin 542 1.0 Credit (Grade 11, 12)

This course is designed to strengthen and develop student language skills and is conducted primarily in Mandarin. Students interact and negotiate meaning in conversations to share information, reactions, emotions, and opinions. Students also view, research, and discuss the importance of various Chinese cultural figures through short films, texts, and current publications.

This course introduces the student to the correct pronunciations and use of conversational patterns of Mandarin. Emphasis is placed on oral comprehension, speaking, writing, and reading skills. Students learn the creation and use of Mandarin characters and pinyin. Students are also introduced to Chinese culture through geography, history, and

# World Languages (cont'd)

### Spanish 1 (CP, CP2)

Spanish 514, 560 (Grades 9, 10, 11, 12)

### 1.0 Credit

This course introduces students to the sound systems and intonations of the Spanish language with emphasis on the development of audio-lingual skills. Students are introduced to basic structures within a defined vocabulary selection in order to engage in simple conversation and develop a reasonable ability to read and write Spanish. Students are also introduced to Spanish culture through geography, history, and art.

#### Spanish 2 (CP, CP2)

Spanish 524, 561(Grades 9, 10, 11, 12) 1.0 Credit

This course strengthens a student's speaking, reading, writing, and listening skills. New grammatical structures and verb formations are introduced while also improving listening comprehension. This is a further study of Spanish history, civilization, and society.

### Spanish 3 (H, CP, CP2)

Spanish 544, 537, 562 (Grades 10, 11, 12) 1.0 Credit

This course introduces more advanced structures of Spanish grammar while furthering language acquirement/ comprehension through listening, speaking, reading and writing skills. This course also incorporates Hispanic literature, culture, and current publications. The course is conducted primarily in Spanish.

### Spanish 4 (H, CP, CP2)

Spanish 545, 549, 563 (Grades 11, 12) 1.0 Credit

This course is for the advanced student who would like to strengthen and further develop his or her language skills. Oral, written, and grammar study are conducted in Spanish. This intermediate-high level course focuses on meaningful contexts that develop and consolidate a student's speaking, listening, reading, writing, and cultural competencies. Students also view, research, and discuss the importance of cultural figures through short Hispanic films, Spanish texts, and current publications. This course is conducted almost entirely in Spanish.

#### **AP** Spanish Language and Culture

Spanish 503 (Grades 11,12)

1.0 Credit

This college level course follows the standard syllabus approved by College Board. Conducted entirely in Spanish, students use two programs specifically directed toward the AP Spanish Language and Culture Curriculum guidelines as published by College Board. The majority of homework, quizzes, tests, and projects are completed online at the vhcentral.com website. This is an interactive communicative approach that focuses on real communication in meaningful contexts. The course continues to develop a student's speaking, listening, reading, writing, and viewing skills as well as their cultural competencies. Students will have the option to take the AP exam which is administered in May.



St Joseph High School offers Advanced Placement courses in collaboration with The Virtual High School, a nonprofit organization based in Maynard, Massachusetts, which serves as a portal through which schools and teachers throughout the world offer online courses. Our partnership with VHS allows us to expand our AP course offerings to provide students with the most challenging and extensive academic curriculum possible taught by certified teachers in accredited schools.

#### **VHS Coordinator:**

Mr Scott Clough Assistant Principal for Curriculum and Instruction sclough@sicadets.org (203) 378-9378 x 301

VHS online AP courses present a rigorous curriculum and are best suited for independent, self-motivated students. Students who are successful at taking online courses must be organized, independent learners, who can advocate for themselves when a problem arises.

Students may consider VHS AP courses that are not currently offered at St Joseph High School and are relevant to the student's intended major or career path.

#### **Eligibility**

Students must apply to take a VHS course by submitting: 1. An application for enrollment

2. An interview with the Assistant Principal for Curriculum and Instruction

Approval to enroll in an online VHS class will be made by the Assistant Principal for Curriculum and Instruction.

#### Grading

VHS course grades are posted on student report cards, transcripts and factor into honor roll status and cumulative GPA. Please note, the passing grade for VHS courses is 60, however, St Joseph High School students must earn a 65 to earn a passing grade and credit. See the VHS information on Plus Portals for further requirements.

# Virtual High School (VHS)

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