

Saint Joseph High School



Course Catalog 2022-2023

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*Departments and field of study are in alphabetical order, but the list of courses is ordered by grade level.

Scheduling Basics

Incoming Freshmen

During the spring, committed (students who have submitted commitment deposit) incoming freshman will receive a Course Selection Form as well as a Mathematics Recommendation and Selection form that is to be completed by the student's current math teacher.

Transfer Students

Transfer students will be placed in courses in accordance with their high school transcripts, records, class availability, and the transferring student's input with regard to preferences and academic pursuits. This process will take place after the student is officially accepted and enrolled for the school year.

Current Students

Students currently enrolled at Saint Joseph High School will work with the School Counselor on scheduling for the following year. Scheduling will take place electronically in the Spring. Students may be required to obtain a teacher's recommendation for certain classes.

Schedule Changes

Changing courses may affect class size and teaching assignments. However, circumstances might arise which necessitate a change. If a teacher finds that a student has been placed incorrectly in a class, the teacher will initiate the change and complete the Course Change Form.

If a student requests a course change, the student must:

- ❖ Complete a Course Change Form within first 2 weeks of class
- ❖ Have Parent/Guardian sign the form
- ❖ Meet with the Guidance Counselor
- ❖ Have the approval of the Principal or Assistant Principal

Course Levels

College Preparatory (CP)

College Preparatory courses are a part of a comprehensive curriculum that is offered as an option in all content areas to students in grades 9-12. The college preparatory courses are designed to prepare a student for college upon graduation by challenging them within the required program of studies.

Advanced (ADV)

Advanced courses are more rigorous than College Preparatory courses. These courses are weighted and require a teacher recommendation based upon successful work in prior courses.

Advanced Placement (AP)

Advanced Placement (AP) courses are college-level courses approved by the College Board and subject to syllabus review every three to five years. Students who register for AP courses are required to take the AP Exam in May of each year. The College Board sets the exam schedule and fee. The School Counseling Department and the teacher of the AP course will provide specific information on AP course registration, exam date, and fee to the student.

College in High School (CHS)

In conjunction with Carlow University, Duquesne University, La Roche College, Seton Hill University, Saint Vincent College, and the University of Pittsburgh, students have the opportunity to take courses through concurrent enrollment which enables them to receive college credit. Students who complete these courses will receive transcripts from these colleges and universities that often are transferable to other colleges and universities.

CHS classes require the payment of fees determined by the college or university and are not covered by SJHS tuition. Successful completion of college courses may require students to attend programs outside of regular school hours and to complete work in addition to that required for high school credit. Students enrolled in the college credit classes must meet the requirements of the program to receive college credit.

Grading

Our grading philosophy (in non-College in High School courses) reflects that no more than 50% of a course grade should come from tests and quizzes, but rather challenge students to demonstrate knowledge in other ways, which may include project based learning, labs, competitions and written assignments. At St. Joseph High School, we view the first and 3rd quarter report cards as progress reports. Our grading quarters roll or accumulate to give students the opportunity to improve and maximize grades throughout the year. The first and second semesters are then averaged for a final course grade, and it is the final grade that is recorded on the student's transcript. To calculate the Q.P.A. quality points are assigned to letter grades, this sum is divided by the number of course credits. Over the course of four years Q.P.A.'s are cumulative. Quality points are as follows:

Academic Courses	Weighted Courses	CHS & AP Courses
A = 4	A = 4.5	A = 5
B = 3	B = 3.5	B = 4
C = 2	C = 2.5	C = 3
D = 1	D = 1.5	D = 2
F = 0	F = 0	F = 0

Honors

Honor Roll Cards are distributed at the end of each semester. To qualify for the Honor Roll, a student must have attained the following with a minimum of 70% average in any subject:

- ❖ Highest Honor: 4.0 grade point average
- ❖ High Honor: 3.75 grade point average
- ❖ Honor: 3.5 grade point average

Graduation Requirements

No student receives a cap and gown or participates in graduation ceremonies for Saint Joseph High School unless they have earned a passing grade in all courses required for graduation.

The successful completion of a Saint Joseph High School prescribed course of study includes:

Course	Credits	Course	Credits
Electives	4	Mathematics	4
English	4	Physical Education	1
Foreign Language	3	Religion	4
History	4	Science	4

Graduation Honors

The Valedictorian, Salutatorian, and Honors designation at graduation will be based on a cumulative GPA through the fourth quarter of the senior year. Gold cords are awarded to seniors who earn a cumulative grade point average of 4.00 or higher.

Electives

Computer Programming

Level	Course Name	Grade	Semester	Credits
CP	Introduction to Computer Programming - Python	9-12	Year Long	1

Python is known for its productivity and simplicity. Python is a highly versatile programming language used in many applications. Python offers a balance between productivity, speed, and readability. Students will write small programs that will allow them to accomplish useful goals.

Level	Course Name	Grade	Semester	Credits
CHS	Introduction to Computer Programming - Python	11-12	Year Long	1

College/University: University of Pittsburgh

This course is recommended for those students who wish to learn the fundamentals of programming. It is also useful to students intending to major in computer science. The focus of this course is on problem analysis, the development of algorithms and computer programs in python.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from the University of Pittsburgh.

Engineering/Robotics

Level	Course Name	Grade	Semester	Credits
CP	Engineering/Robotics I	9-12	Year Long	1

Students learn engineering design practices and use that knowledge to successfully design, build, test, and use a robot. Additional topics covered include building and prototyping techniques, basic programming and logic, elementary mechanics, and technical writing.

Recommended prerequisite: Algebra I

Level	Course Name	Grade	Semester	Credits
CP	Engineering/Robotics II	10-12	Year Long	1

Students use techniques from Engineering/Robotics I to build larger and more complex machines with more difficult tasks to complete.

Prerequisite: Engineering/Robotics I

English

Level	Course Name	Grade	Semester	Credits
CP	Fundamentals of Journalism	9-12	Year Long	1

In this elective course, students will demonstrate how to find, create, and present credible data. Students will learn the fundamentals of Journalism, including the basics of journalistic writing and the skills needed to think critically about the news. As both producers and consumers of social media,

students will analyze what constitutes healthy interaction with information. Project-based learning opportunities both in and outside the classroom will complement various learning-styles.

Fine Arts

Level	Course Name	Grade	Semester	Credits
CP	Introduction to Art	9-12	Year Long	1

This course provides the opportunity for students to build foundational art and studio skills through a variety of mediums. This project based class will establish critical concepts related to the elements and principles of art, drawing skills, and color theory. In addition to creating unique works of art, students will critically analyze their own work and artistic process. Art history and contemporary visual media are explored in relation to society and personal art making. Upon successful completion of this course students will be prepared for advanced art courses.

Level	Course Name	Grade	Semester	Credits
CP	Introduction to Illustration	9-12	Year Long	1

This course provides the opportunity for students to build foundational art skills through the lens of contemporary commercial art practices. This project based course will establish critical concepts related to the elements and principles of art, composition, and color theory. Traditional and digital mediums will be used to create unique projects such as animations, illustrations, and pattern designs. Students will study the concepts and practices of contemporary working artists. A focus will be placed on reflective critical analysis as well as group critiques. Upon successful completion of this course students will be prepared for advanced art courses.

Level	Course Name	Grade	Semester	Credits
CP	Ceramics/Sculpture	10-12	Year Long	1

This course provides an advanced study in three dimensional arts for students who have completed an Introduction to Art or Illustration course. Students will create a variety of original pieces using fundamental hand-building skills. Emphasis will be put on sculptural forms, functionality, surface design, and glazing procedure. Students will expand their skills by experimenting with non-clay sculptural materials. In addition to creating unique works of art, students will critically analyze their own work and artistic process.

Prerequisites: Introduction to Art or Introduction to Illustration

Level	Course Name	Grade	Semester	Credits
CP	Drawing and Painting	10-12	Year Long	1

Students taking Painting and Drawing completed the Introduction to Art course and felt an interest in the two dimensional forms of art. This year long course will study in depth various forms of drawing and prepare students with the proper technique to begin painting. Drawing and Painting will teach students the elements and principles of art while unleashing their inner creativity through open project prompts and learning activities. The students will all participate in various art shows throughout the year and have multiple opportunities for scholarships within the local area. Drawing and Painting provides students a

vehicle for self-expression and opportunity to learn an in depth study of two dimensional arts in an open and creative environment.

Prerequisites: Introduction to Art or Introduction to Illustration

Level	Course Name	Grade	Semester	Credits
CHS	Music Appreciation	11-12	Year Long	1

College/University: Saint Vincent College

A survey of classical music of Western culture is the focus. Representative composers and works of the major periods of classical music will be discussed. The goals of the course are to have the student learn how to appreciate music of all styles, periods and genres, through an understanding of various forms, compositional techniques, historical factors and musical practices.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from Saint Vincent College.

Level	Course Name	Grade	Semester	Credits
CHS	Art History	12	Year Long	1

College/University: La Roche University

This college level course provides students the opportunity to examine, in depth, the history of art starting with the European Renaissance to modern day. Students will explore the work of artists from the major art movements to better understand the social and historical context in which art was being created. Through lecture and class discussions, students will learn how to analyze and interpret various forms of art from painting and sculpture to architecture. Art History is a writing intensive course and will require proof of understanding through research papers, projects and four exams throughout the year. This course will familiarize students with the historical context in which art has transformed throughout time and teach students to be well versed in the visual communication of art.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from La Roche University. This course is for seniors in place of a fourth year language course

Level	Course Name	Grade	Semester	Credits
AP	Senior Studio Art	12	Year Long	1

This course is designed to meet the needs of students who wish to learn advanced drawing and painting techniques and build upon skills learned in their previous art courses. Students will select a theme that guides their work for a semester or the year and create a body of work that can act as a portfolio. The students will all participate in various art shows throughout the year and have multiple opportunities for scholarships within the local area. Senior Studio Art provides students a vehicle for self-expression and opportunity to learn an in depth study of two dimensional arts in an open and creative environment.

Prerequisites: Successful completion of Introduction to Art and at least one year of Drawing and Painting

Foreign Language

Level	Course Name	Grade	Semester	Credits
CP	Introduction to French	12	Year Long	1

This course is intended for students in their senior year who have taken 3 years of another foreign language and wish to learn the basics of French. Students learn a variety of French language rules, grammar and vocabulary, and are introduced to the diversity of the French-speaking world through culture that is presented in context along with daily instruction. Students learn how to use appropriate vocabulary and grammar to express greetings, introductions, farewells, and to talk about friends and family, food, shopping, clothing, travel, sports and hobbies. Listening, speaking, reading and writing skills are reinforced through daily study and homework assignments. Evaluation is done through oral and written quizzes, unit exams, cultural projects and presentation.

Mathematics

Level	Course Name	Grade	Semester	Credits
CHS	Statistics	10-12	Year Long	1

College/University: La Roche University

Statistics is the science concerned with developing and studying methods for collecting, analyzing, interpreting and presenting empirical data. Probability is a mathematical language used to discuss uncertain events and probability plays a key role in statistics. Discrete and continuous distributions, sampling theory, linear correlation, regression, statistical inference, estimation and analysis of variance are included.

Prerequisites: Completion of Algebra II with a B or better and teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from La Roche University.

Science

Level	Course Name	Grade	Semester	Credits
CHS	Chemistry	12	Year Long	1

College/University: Duquesne University

This course includes the first semester General Chemistry I and General Chemistry Laboratory I classes taught at Duquesne University. This rigorous class requires a strong math background and foundation in Chemistry. Students will participate in a variety of required labs, complete Duquesne Exams each quarter, and take a comprehensive final exam and lab practical at the end of the year. Topics include chemical foundations, chemical formulas and nomenclature, stoichiometry, solutions, gas laws, thermochemistry, atomic structure, and bonding theory.

Prerequisites: Students must have earned an A average (or equivalent of a B in the weighted section) for Chemistry and Biology, a B average in Algebra II, and the CHS Chemistry teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 5 college credits from Duquesne University.

Level	Course Name	Grade	Semester	Credits
CP	Science Research	9-11	Year Long	1

Each student conducts an original and independent science research project. Students present their work in the form of a formal paper, a presentation board and a PowerPoint presentation. All students participate in the SJHS science fair. Additionally, they present their work at outside competitions.

Social Sciences

Level	Course Name	Grade	Semester	Credits
CP	Global Issues	9-12	Year Long	1

In this course, students examine and analyze national and international events and trends. These are approached from historical, political, economic and social perspectives. There is greater emphasis on watching and reading about the news, rather than more traditional homework and tests. As an alternative to a textbook, news magazines, TV and internet news provide sources of information.

Recommended prerequisite: A genuine interest in what is happening in the nation and other parts of today's world, and the willingness and ability to watch, read and talk about it.

Level	Course Name	Grade	Semester	Credits
CHS	Introduction to Psychology	11-12	Year Long	1

College/University: Saint Vincent College

This course is designed to give students a broad overview of the field of Psychology. Psychology is the scientific study of mind, body, and behavior. Topics include the history of Psychology, research methods, biological bases of behavior, personality, learning, memory, social behavior, development across the lifespan, and psychological disorders and their treatment.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from Saint Vincent College.

Level	Course Name	Grade	Semester	Credits
CHS	Child Development: Conception Through Early Childhood	12	Year Long	1

College/University: University of Pittsburgh

This course is designed to give students an understanding of children's needs, functioning, care, and developmental changes from conception through early childhood within contexts of family, daycare/school, community, and culture. Topics are focused on patterns of development, individual and social differences, influences on development, and developmentally and culturally appropriate practices.

Prerequisites: An A in Introduction to Psychology must be achieved. If Introduction to Psychology was not taken as a junior, a B+ average in Biology I must be achieved along with a recommendation from the Biology I teacher is required.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from the University of Pittsburgh.

Core Classes

English

Level	Course Name	Grade	Semester	Credits
CP	Language & Literature	9	Year Long	1

Students will read and analyze various forms of literature including novels, plays, poetry, and short stories. Composition responses will include narrative and formal essays that are driven by thesis statements. Grammar review and vocabulary development will reinforce and develop writing skills. Students will also develop speaking and listening through prepared Socratic seminars and formal oral presentations.

Level	Course Name	Grade	Semester	Credits
CP	American Literature	10	Year Long	1

Students will explore history, culture, and heritage through the lens of American authors by reading and analyzing novels, short stories, plays and poetry. Composition will focus on thesis-driven essays that use evidence to support claims based on literary themes including the American dream and individuality.

Level	Course Name	Grade	Semester	Credits
CP	Topics in Literature	11	Year Long	1

Students will practice college-level reading, research, writing, and revision. Students will read and analyze poetry, fiction, non-fiction, and drama. They will also be exposed to literary criticism (e.g., moral criticism, new historicism). Students will complete a research project, learning how to build an argument through the integration of outside sources and how to navigate the research process from beginning to end.

Level	Course Name	Grade	Semester	Credits
CHS	Topics in Literature	11	Year Long	1

College/University: Seton Hill University

Students will practice college-level reading, research, writing, and revision. Students will read and analyze poetry, fiction, non-fiction, and drama. They will also be exposed to literary criticism (e.g., moral criticism, new historicism). Students will complete a research project, learning how to build an argument through the integration of outside sources and how to navigate the research process from beginning to end.

Students in both classes will follow the same curriculum, but the college-in-high-school (CHS) class will include supplementary reading and more complex assignments. Students will be held to a higher standard for their written work, as well.

Students taking the class without CHS credit will complete the same work as the college-credit students and will receive the same GPA class weighting. However, they will not incur the costs of the course nor receive credit from Seton Hill University.

Prerequisite: A teacher recommendation is required.

Note: Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from Seton Hill University.

Level	Course Name	Grade	Semester	Credits
CP	Diversity in Literature	12	Year Long	1

Students will engage with works of both world and American authors who have used writing as an expression of culture and identity. Students will use the lens of their Catholic faith along with literary criticism (e.g., postcolonial criticism, women’s literary criticism) to explore literature that portrays people of various cultural, religious, and socioeconomic backgrounds. Students will compose college-level papers that cite and analyze the text, supporting claims with scholarly research to enhance critical thinking and foster cultural awareness.

Level	Course Name	Grade	Semester	Credits
CHS	Diversity in Literature	12	Year Long	1

College/University: Duquesne University

Students will engage with works of both world and American authors who have used writing as an expression of culture and identity. Students will use the lens of their Catholic faith along with literary criticism (e.g., postcolonial criticism, women’s literary criticism) to explore literature that portrays people of various cultural, religious, and socioeconomic backgrounds. Students will compose college-level papers that cite and analyze the text, supporting claims with scholarly research to enhance critical thinking and foster cultural awareness.

Students in both classes will follow the same curriculum, but the college-in-high-school (CHS) class will include supplementary reading, more complex assignments, and a final. Students will also be held to a higher standard for their written work.

Students taking the class without CHS credit will complete the same work as the college-credit students and will receive the same GPA class weighting. However, they will not incur the costs of the course nor receive credit from Duquesne University.

Prerequisite: A teacher recommendation is required.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from Duquesne University.

Foreign Language

French

Level	Course Name	Grade	Semester	Credits
CP	French I	9	Year Long	1

This course introduces the student to the language and culture of the Francophone world. Listening, speaking, reading and writing skills are reinforced through daily study, along with regular grammar drills and homework assignments. Evaluation is done through oral and written quizzes, unit exams, projects and presentations.

Level	Course Name	Grade	Semester	Credits
CP	French II	10	Year Long	1

This course continues the development of the language of the Francophone world and further explores the Francophone culture. Grammar is emphasized through listening, speaking, reading and writing, allowing for more creative oral and written expression. Homework is assigned regularly to reinforce teaching. Evaluation is done through oral and written quizzes, unit exams, projects and presentations.

Level	Course Name	Grade	Semester	Credits
CP	French III	11	Year Long	1

This course offers a continuation of the basic skills in French with increased emphasis on developing listening, speaking, reading and structural writing skills. Grammar points are reviewed and expanded. The students are given an insight into Francophone culture through varied selections from Francophone literature. Homework is assigned regularly to reinforce teaching. Evaluation is done through oral and written quizzes, unit exams, projects and presentations.

Level	Course Name	Grade	Semester	Credits
ADV	French IV	12	Year Long	1

This course serves as a synthesis of the knowledge acquired in levels 1, 2 and 3. Students review grammar, expand vocabulary and explore Francophone culture, all work taking place via a communicative approach to the theme being studied. Interviews, authentic texts, music and short films offer a dynamic learning experience. A grammar review and practice book is used for homework assignments and preparation for the communicative activities found in the textbook. Evaluation is done through oral and written quizzes, unit exams, projects and presentations.

Prerequisite: A teacher recommendation is required.

Latin

Level	Course Name	Grade	Semester	Credits
CP	Latin I	9	Year Long	1

This course introduces students to the world and language of the Roman people. Students will begin to read with basic translations, sharpen and improve English language skills, and increase and enrich their English vocabulary.

Level	Course Name	Grade	Semester	Credits
CP	Latin II	10	Year Long	1

This course continues the students' progress in learning the skills needed to communicate in more complex and involved situations by continuing to learn Latin syntax. As students develop these skills they respond to Latin authors of more complicated translations.

Level	Course Name	Grade	Semester	Credits
CP	Latin III	11	Year Long	1

This course expands the students work on advanced grammar and the knowledge acquired in levels I and II. Students practice using the grammar that they have learned in Latin II, along with new grammatical constructions to be able to read original Latin texts which is necessary for understanding the "elite" Latin authors of Rome's "Golden Age". These skills are essential in preparation with "Vergil's Aeneid" in Latin IV.

Level	Course Name	Grade	Semester	Credits
CHS	Latin IV	12	Year Long	1

College/University: University of Pittsburgh

This course is taken at a college equivalency level through the University of Pittsburgh. The focus is on the epic work of Vergil's Aeneid, the most famous and influential epic poem written in Latin. It is a class in both language and literature.

Students need all of their accumulated knowledge from the past 3 years to handle this level of the ancient Roman language. This classic of Roman Literature is one of the most copied and important pieces of Roman thought throughout the Middle Ages. Students follow the syllabus from the Classics Department at the University of Pittsburgh. Each exam, including the final, is based on the material covered in each unit.

Prerequisite: A teacher recommendation is required.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from University of Pittsburgh.

Spanish

Level	Course Name	Grade	Semester	Credits
CP	Spanish I	9	Year Long	1

This course introduces the student to the language and culture of the Spanish-speaking world. Listening, speaking, reading, and writing skills are reinforced through daily activities. Similarities and cultural differences. Evaluation includes oral and written assignments, exams, cultural projects, and presentations. Videos of cultural festivities are used to engage in cultural discussions.

Level	Course Name	Grade	Semester	Credits
CP	Spanish II	10	Year Long	1

This course continues the development of the language and culture of the Spanish-speaking world. Grammar is emphasized through listening, speaking, reading, and writing skills. Evaluation includes oral and written assignments, exams, essays, cultural projects and presentations. Videos of cultural festivities are used to engage in cultural discussions.

Level	Course Name	Grade	Semester	Credits
CP	Spanish III	11	Year Long	1

This course offers a continuation of the basic skills in Spanish with increased emphasis on developing speaking, reading, and structural writing skills. The student is given an insight into the Spanish language and culture in not so traditional ways.

Level	Course Name	Grade	Semester	Credits
CHS	Spanish IV	12	Year Long	1

College/University: University of Pittsburgh

This CHS course provides the student with the guidance needed to continue discovering, learning and using the language in a meaningful and communicative way. Students express their ideas in both written and spoken form, and listening comprehension is greater. The grammar review is a tool for communication not necessarily a grammar lecture. Students read and analyze a variety of texts and are exposed to contemporary authors and their writings as well as everyday news and musical compositions.

Prerequisites: A teacher recommendation is required.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from the University of Pittsburgh.

History

Level	Course Name	Grade	Semester	Credits
CP	Civilizations: World History	9	Year Long	1

In Civilizations, students study past and present world regions, including East Asia, the Indian Subcontinent, the Middle East, Europe, Saharan and Sub-Saharan Africa and Latin America. The students explore themes such as government and power, economies, religious and ethical systems, revolution, environmental interaction, cultural diffusion, empire building, and science and technology. Activities include reading assignments utilizing on-line text, class discussions, PowerPoint presentations and document-based primary source writings. Students will develop skills including listening/notetaking, critical reading, viewing and interpreting documentaries, and verbal participation.

Level	Course Name	Grade	Semester	Credits
CP	Foundations of the Republic	10	Year Long	1

This is a U.S. History Survey course covering the Age of Exploration to 1865. Through extensive reading, writing, and discussion, students will learn to think and write as historians. Social, intellectual, political, economic, and diplomatic history will be covered. The decision making process of our leaders and alternative policies will be examined through debate and research. Students will utilize a textbook and volumes of documents.

Level	Course Name	Grade	Semester	Credits
CHS	Foundations of the Republic	10	Year Long	1

College/University: La Roche University

This is a U.S. History Survey course covering the Age of Exploration to 1865. Through extensive reading, writing, and discussion, students will learn to think and write as historians. Students will utilize AP US History rubrics for essay and short answer writing. Social, intellectual, political, economic, and diplomatic history will be covered. The decision making process of our leaders and alternative policies will be examined through debate and research. Students will utilize a college level textbook and volumes of documents.

Prerequisites: Student must have earned in A in 9th Grade Civilizations: World History and have a teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from La Roche University.

Level	Course Name	Grade	Semester	Credits
CP	Emergence of Mass Democracy	11	Year Long	1

This is a U.S. History Survey course covering the 1865 - Present. Through extensive reading, writing, and discussion, students will learn to think and write as historians. Social, intellectual, political, economic, and diplomatic history will be covered. The decision making process of our leaders and alternative policies will be examined through debate and research. Students will utilize a textbook and volumes of documents.

Level	Course Name	Grade	Semester	Credits
CHS	Emergence of Mass Democracy	11	Year Long	1

College/University: La Roche University

This is a U.S. History Survey course covering the 1865 - Present. Through extensive reading, writing, and discussion, students will learn to think and write as historians. Students will utilize AP US History rubrics for essay and short answer writing. Social, intellectual, political, economic, and diplomatic history will be covered. The decision making process of our leaders and alternative policies will be examined through debate and research. Students will utilize a college level textbook and volumes of documents.

Prerequisites: Student must have earned in A in Foundations of the Republic or maintained a B or higher in CHS Foundations of the Republic and have a teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from La Roche University.

Level	Course Name	Grade	Semester	Credits
CP	American Government and Politics	12	Year Long	1

This is a political science course that focuses on the development of political thought throughout United States History. Students will do an in depth study of the Founding Era with particular emphasis placed upon the founding documents and the Constitutional Convention. In order to trace the development of political thought over time, students will study and present key Supreme Court Cases, examine the changing roles of Congress and the Executive branch, and analyze the effects of interest groups and lobbyist upon our political system. Students will be expected to write essays, case summaries, current event analysis, and participate in a civic engagement project.

Level	Course Name	Grade	Semester	Credits
CHS	American Government and Politics	12	Year Long	1

College/University: La Roche University

This is a political science course that focuses on the development of political thought throughout United States History. Students will do an in depth study of the Founding Era with particular emphasis placed upon the founding documents and the Constitutional Convention. In order to trace the development of political thought over time, students will study and present key Supreme Court Cases, examine the changing roles of Congress and the Executive branch, and analyze the effects of interest groups and lobbyist upon our political system. Students will be expected to write essays, case summaries, current event analysis, and participate in a civic engagement project. Students will be evaluated according the rubrics and standards of the AP U.S. Government and Politics course.

Prerequisites: Student must have earned in A in Emergence of Mass Democracy or maintained a B or higher in CHS Emergence of Mass Democracy and have a teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from La Roche University.

Mathematics

Level	Course Name	Grade	Semester	Credits
CP	Algebra I	9	Year Long	1

Students will study the basics of Algebra such as real numbers, the order of operations, functions and equations, solving equations, linear and nonlinear functions, systems of linear equations and inequalities, and statistics. Students develop problem solving and critical thinking skills, build a mathematical foundation that will transfer to future math classes and identify mathematical concepts in everyday living.

Level	Course Name	Grade	Semester	Credits
CP	Geometry	9-10	Year Long	1

Students master the basic concepts and skills associated with Geometry. Students study the following topics: basic geometry terms and definitions, how to write a logical proof, parallel and perpendicular lines, triangle congruence, the properties of two and three-dimensional figures, theories of similarity and circles and applications of probability. Students solve geometry problems using a variety of strategies and techniques and gain confidence in doing mathematics and thinking mathematically.

Level	Course Name	Grade	Semester	Credits
CP	Algebra II	9-11	Year Long	1

Students master the basic concepts and skills associated with Algebra II. Students use symbolic, numeric, and graphical approaches to study linear, quadratic, polynomial, exponential and logarithmic functions and relations. Additional topics include: systems of equations and matrices, conic sections, an introduction to trigonometric functions and trigonometric identities, and a review of descriptive statistics. Students solve Algebra II problems using a variety of strategies and techniques and gain confidence in doing mathematics and thinking mathematically.

Level	Course Name	Grade	Semester	Credits
ADV	Advanced Algebra II	9-11	Year Long	1

Students master the basic concepts and skills associated with Algebra II. Students use symbolic, numeric, and graphical approaches to study linear, quadratic, polynomial, exponential and logarithmic functions and relations. Additional topics include: systems of equations and matrices, conic sections, an introduction to trigonometric functions and trigonometric identities, and a review of descriptive statistics. Students solve Algebra II problems using a variety of strategies and techniques and gain confidence in doing mathematics and thinking mathematically. In addition, students complete independent study assignments for weighted credit requiring reading, problem solving, and extrapolation.

Prerequisites: A teacher recommendation is required.

Level	Course Name	Grade	Semester	Credits
ADV	Pre-Calculus Mathematics	10-11	Year Long	1

This course provides the foundation for the study of college calculus. The course is divided into 2 semesters. One semester starts with an overview of the fundamentals studied in the functions of Algebra III. Functions and their inverses are studied, as well as a more in depth study of polynomial, rational, exponential, and logarithmic functions. Conic sections are studied, along with a brief study of probability and statistics, and select calculus topics involving partial fractions and summation.

The second semester (although it may be taught as the first semester) will be a college level course in trigonometry. This semester will involve all the same trigonometry taught in a college level one semester trigonometry class.

Prerequisites: A teacher recommendation is required.

Level	Course Name	Grade	Semester	Credits
AP	Calculus BC	12	Year Long	1

This is an Advanced Placement (AP) course that covers material in calculus 1 & 2. AP courses in calculus consist of a full high school academic year of work and are comparable to calculus courses in colleges and universities. Students that receive college credit are required to pass the Advanced Placement test in May. Those students who pass the AP Exam in May will receive 8 college credits in Mathematics, 4 credits for Engineering Calculus and 4 more credits for passing the AP test.

Prerequisites: Successful completion of Engineering Calculus, and teacher recommendation.

Level	Course Name	Grade	Semester	Credits
CHS	Engineering Calculus	11-12	Year Long	1

College/University: University of Pittsburgh

This course is the standard first course in a basic calculus sequence required for all mathematics, science, engineering, and statistics students. Topics covered in this course include functions and graphs, limits, derivatives, trigonometric functions, application of the derivative, integral, applications of the integral, techniques of integration, and exponential and logarithmic functions.

Prerequisites: Successful completion of Pre-Calculus Mathematics and teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 4 college credits from the University of Pittsburgh.

Level	Course Name	Grade	Semester	Credits
CHS	Business Calculus	11-12	Year Long	1

College/University: University of Pittsburgh

This course provides an introduction to calculus for students interested in managerial, social, or biological science. Topics include functions, limits and continuity, differentiation, applications of differentiation, integration, exponential and logarithmic functions, and an introduction to multivariable calculus.

Prerequisites: Successful completion of Pre-Calculus Mathematics and teacher recommendation.

Note: Upon completion and a passing grade, registered CHS students will earn 4 college credits from the University of Pittsburgh.

Level	Course Name	Grade	Semester	Credits
CP	College Algebra	12	Year Long	1

This course is designed to strengthen both the conceptual and procedural knowledge of Algebra. Although many topics are reviewed the first month of the course, this will not be a repeat of a high school algebra course. This course will focus on the functional and visual approach to Algebra. The trigonometry functions will definitely be introduced to some degree depending on time with hopes of covering their identities and graphs.

St. Joseph High School is committed to preparing students for the rigors and challenges of a college math course. This course has been developed to be the minimum graduation requirement for seniors at SJHS. Although the name implies a college course, there is no college credit given in College Algebra.

Level	Course Name	Grade	Semester	Credits
CHS	College Algebra	12	Year Long	1

College/University: La Roche University

This course is designed to strengthen both the conceptual and procedural knowledge of Algebra. Although many topics are reviewed the first month of the course, this will not be a repeat of a high school algebra course. This course will focus on the functional and visual approach to Algebra. The trigonometry functions will definitely be introduced to some degree depending on time with hopes of covering their identities and graphs. All exams will be at the same level of difficulty as those at La Roche University.

Prerequisites: Successful completion of Pre-Calculus and teacher recommendation

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from La Roche University.

Level	Course Name	Grade	Semester	Credits
CP	Trigonometry	11-12	Year Long	1

Trigonometry is the branch of mathematics that deals with the relationship between ratios of the sides of a right-angled triangle with its angles. The ratios used to study this relationship are called trigonometric ratios, namely, sine, cosine, tangent, cotangent, secant, cosecant. This is presented in the first half of the school year. The second half of the school year is concentrated on algebra, covering topics such as matrices, logarithms, composites and imaginary numbers. This course is conducted at a slower pace than the Pre-Calculus course.

Physical Education

Level	Course Name	Grade	Semester	Credits
CP	Physical Education	9-12	Year Long	.25

The Health and Physical Education Department at Saint Joseph High School is dedicated to the principle of a sound mind in a sound body. Through sports, games and movement experiences, we encourage the acquisition and development of leadership, character, teamwork, motor skills, and personal fitness. All students are strongly encouraged to make physical fitness and wellness an integral part of their lives, both now and in the future.

Note: Required for all students in every grade, .25 credit is earned per year.

Religion

Level	Course Name	Grade	Semester	Credits
CP	Freshman Theology: Jesus Christ in Scripture	9	Year Long	1

The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. In the course students will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. Students will become familiar with the portions of Sacred Scripture that highlight the minor and major covenants between God and the chosen people (i.e. Creation, Abraham, Moses, David, the Prophets, and Jesus Christ). The course will also delve into the Mystery of Jesus Christ, the Living Word of God, the second Person of the Blessed Trinity. The students will pay particular attention to the Gospels where they may grow to know and love Jesus Christ more personally. Students will understand that Jesus Christ is the ultimate revelation to us from God. In learning about who He is, the students will also learn who He calls them to be.

Level	Course Name	Grade	Semester	Credits
CP	Sophomore Theology: The Paschal Mystery	10	Year Long	1

The purpose of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Students will learn, through Scripture, that for all eternity, God has planned for us to share eternal happiness with him which is accomplished through the Redemption Christ won for us. Students will learn that they share in this Redemption only in and through Jesus Christ and what that entails for their own spiritual journey. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails. The students will come to know that the Church is the living Body of Christ today. This Body has both Divine and human elements. Students will learn not only about the events in the life of the Church, but about the sacred nature of the Church as well.

Level	Course Name	Grade	Semester	Credits
CP	Junior Theology: Sacramental Theology	11	S-1	.5

The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the Liturgy and through the Sacraments. A major focus of this course is on the Mass and how it draws us to the mystery of the Incarnation and opens us up to the sacramental life of grace. Students will also examine each of the Sacraments in detail so as to learn how they may encounter Christ throughout life. The course will also spend significant focus on canon law and the necessary nuances of the sacraments and how these particular movements reveal important theological concepts.

Level	Course Name	Grade	Semester	Credits
CP	Junior Theology: Life in Christ	11	S-2	.5

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. This course focuses heavily on the moral implications of decisions and actions as well as how to identify what makes an action right or wrong. The material focuses on teachings from the catechism in regards to conscience formation, moral truth, blameworthiness, good and evil, and freedom. The information addressed in this class is often applied to personal decision making and ultimately leads the student toward what is true and good.

Level	Course Name	Grade	Semester	Credits
CP	Senior Theology: Catholic Social Teaching	12	S-1	.5

This course explores the body of literature known as Catholic Social Teaching as the voice of the Church raised to address social problems in the world. Often described as “the Church’s best kept secret” the documents of Catholic Social Teaching offer insight into the profound revelation of God’s justice demanding the dignity of persons who suffer injustice and the challenge to address injustice in social structures that threaten the mystery and dignity of persons and communities. Students will utilize papal documents to gain an understanding of the Church’s teaching on major social concerns in the world.

Note: This course can be taken for CHS credit through Carlow University.

Level	Course Name	Grade	Semester	Credits
CP	Senior Theology: Discernment and Vocations	12	S-2	.5

This course aims to direct the student to an answer to the questions “what am I being called to do in life?” and “how can I live as a Christian in today’s society?” The course examines important themes which include community, balancing self-care and self-gift, spiritual advancement (the purgative, illuminative, and unitive ways), theology of the body, the sacrament of matrimony, general discernment, and living the contemplative life. All of these topics are addressed from the perspective of Catholic teaching and the teachings of some of the great saints of the Church. Students will learn what it requires to live a life for the benefit of others and the value of discerning life’s biggest questions with a theological perspective.

Science

Level	Course Name	Grade	Semester	Credits
CP	Conceptual Physics	9	Year Long	1

Conceptual Physics is a course designed to introduce students to fundamental science concepts needed for future science courses. Five major units are covered and include: Nature of Science, Atomic Structure, Thermodynamics, and Waves. Students complete activities and labs that develop their understanding of the various concepts. Algebraic math is used throughout the course, but at a minimum level.

Level	Course Name	Grade	Semester	Credits
CP	Chemistry	10	Year Long	1

Chemistry is a course designed to introduce students to the basic concepts of matter and its properties. Topics covered include atomic theory, measurement and dimensional analysis, electron arrangement and quantum theory, properties of the periodic table, names and formulas of compounds, chemical reactions, stoichiometry, gas laws, and the Church's teaching about science. Students also learn the basic skills of writing laboratory reports. This course uses math in its study of matter and requires Algebra I skills.

Level	Course Name	Grade	Semester	Credits
ADV	Advanced Chemistry	10	Year Long	1

Advanced Chemistry is a course designed for a more in depth study of the basic concepts of matter and its properties. The course uses a more mathematical approach for studying matter and involves the development of strong problem solving skills that extend the student's understanding of the material to new situations. Topics covered in this class include a deeper understanding of atomic theory, measurement and dimensional analysis, electron arrangement and quantum theory, properties of the periodic table, names and formulas of compounds, chemical reactions, stoichiometry, gas laws, and the Church's teaching about science. Students will also be required to develop and enhance scientific writing skills. Since this course requires strong math skills, a strong foundation of Algebra I skills is required.

Prerequisites: Students must have a minimum of a B average for Conceptual Physics, concurrently taking Algebra II or higher, and Conceptual Physics teacher recommendation.

Level	Course Name	Grade	Semester	Credits
CP	Biology	11	Year Long	1

Biology is a junior level course, exploring life at all levels, from molecules and cells to ecosystems and the biosphere. Student exploration, research and problem solving are emphasized throughout the course. Students learn to communicate in a concise and technical manner both orally and in a written format.

Level	Course Name	Grade	Semester	Credits
ADV	Biology with Applied Research	11	Year Long	1

In addition to accomplishing the objectives set forth in the Biology curriculum, students apply and develop research skills to explore advanced topics in science. Students develop their research skills, explore an area of science in detail, further develop written and verbal communication skills and network with STEM professionals.

Prerequisite: Science Research class taken in 9th or 10th grade and earned at least a B average or at least a C average in Physics I and Chemistry I and a signed agreement stating parental permission for taking the class.

Level	Course Name	Grade	Semester	Credits
CP	Biology II	12	Year Long	1

Students explore the workings of the human body and human diseases and disorders. Students work on short and long term projects in order to develop research skills, practice laboratory techniques and improve communication skills.

Level	Course Name	Grade	Semester	Credits
CHS	College Physics	12	Year Long	1

College/University: Duquesne University

The course covers basic kinematics (motion, velocity, acceleration) and dynamics (forces, work, energy, momentum and impulse, collisions, and rotational motion). This course is listed in the Duquesne University catalogue as 211 General Analytical Physics.

Prerequisite: The basic requirement for the course is the students to must have completed Engineering Calculus I or is taking Engineering Calculus I concurrently with the Physics course. A good check on qualifications for the CHS Physics Course is if the student's math grades are 90% or higher.

Note: Upon completion and a passing grade, registered CHS students will earn 3 college credits from Duquesne University.

Level	Course Name	Grade	Semester	Credits
CP	Physics II	12	S-1	.5

The Physics II course is analogous to a 101 college level course covering the topics of basic kinematics (motion, velocity, acceleration) and dynamics (forces, work, energy, momentum and impulse, collisions, and rotational motion). This course is an algebra driven course with basic trigonometry skills needed for the vector portion of the course.

Level	Course Name	Grade	Semester	Credits
CP	Material Science	12	S-2	.5

Students will examine the world around them as it is made up of Materials. Everything used throughout the day: an iPod, computer, the shoes on their feet, even the food consumed. Materials Science is an interdisciplinary field at the crossroads of the natural sciences and engineering, that seeks to understand this stuff, engineer new types of stuff and even improve the quality of stuff. (Princeton University) Topics covered include: solids, metals, ceramics, polymers, and composites.